

Curriculum Responsiveness Model of BS Criminology Program: Basis for Curriculum Enhancement

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Abstract

This study examined the curriculum responsiveness and curriculum relevance of the Bachelor of Science in Criminology program as a basis for curriculum enhancement. Specifically, it assessed the level of curriculum responsiveness and relevance in terms of societal and industrial relevance, pedagogical approaches, and emerging trends, determined significant differences in the assessments of deans and faculty members, industry practitioners, and graduates, and identified the challenges encountered under the current curriculum.

The study employed an explanatory sequential mixed-methods design. The quantitative phase utilized a descriptive approach involving 400 respondents composed of deans, Program Heads and/or faculty members, industry practitioners, and graduates from the National Capital Region. Data were analyzed using weighted mean, standard deviation, and one-way analysis of variance. The qualitative phase involved seven (7) selected academic deans and program heads, with data analyzed through Braun and Clarke's thematic analysis to explain and elaborate the quantitative findings.

Findings revealed that the Bachelor of Science in Criminology curriculum was generally responsive and relevant. Societal and industrial relevance and pedagogical approaches were assessed as highly responsive, while emerging trends were assessed as responsive. A significant difference was found in the respondents' assessment of curriculum responsiveness, whereas no significant difference was found in curriculum relevance. The qualitative findings identified challenges related to communication competencies, innovative instructional approaches, correctional administration, intelligence-led policing, and the integration of emerging criminological trends.

The study resulted in a proposed curriculum enhancement designed to enhance the responsiveness and relevance of the Bachelor of Science in Criminology program.

Chapter 1

Introduction

1. 1 Background of the Study

1.1.1 Introduction

To guide higher education institutions (HEIs) in maintaining curriculum quality, the Commission on Higher Education (CHED) as mandated by Republic Act No. 7722 (Higher Education Act of 1994), issued CHED Memorandum Order (CMO) No. 05, Series of 2018, which prescribes the Policies, Standards, and Guidelines (PSGs) for the Bachelor of Science in Criminology (BSCrim) Program to promote relevant and quality higher education.

The PSGs are grounded in the outcomes-based and typology-based quality assurance system of CHED under CMO No. 46, Series of 2012, which requires that curricula be designed, implemented, assessed, and continuously improved based on defined learning outcomes, stakeholder needs, and institutional mission. Under this framework, curriculum evaluation is not limited to inputs or compliance, but focuses on the achievement of intended outcomes and the capacity of educational programs to respond to developmental and professional realities.

While CHED Memorandum Order (CMO) No. 05, s. 2018 sets the policies, standards, and guidelines for the Bachelor of Science in Criminology program based on an outcomes-based education framework, critics have noted that its current structure may not fully respond to the rapid technological changes and emerging crime trends of the 21st century. To note, CMO No. 05 was promulgated in accordance with Republic Act No. 7722 which aims to ensure that BS Criminology graduates should possess core competencies relevant to law enforcement, corrections, forensic science, and criminal justice administration as prescribed by CHED's quality assurance system. However, recent evaluations of criminal justice education's quality indicate areas for improvement particularly in facilities, laboratory holdings, and program resources, suggesting that existing standards may need refinement to align with modern demands (Patalinghug et al., 2023).

Scholarly discourse further supports the call for curriculum modernization. Studies on criminal justice education highlighted the widening gap between traditional criminology curricula and the needs emerging from cybercrime and information-driven offenses. For example, research on curriculum relevance points to the necessity of integrating science and technology courses to prepare students for evidence-based and digital investigations (Manuel Jr and Paglinawan, 2025). Likewise, literature examining the interface between criminology and information technology argues that traditional frameworks of criminal justice education must evolve to include content on cybercrime patterns, digital forensics, and interdisciplinary methods that bridge criminology with information security disciplines (Estrada et al., 2024). International education scholarship also underscores this trend, advocating for curricular responsiveness to global shifts in crime complexity and technological innovation to cultivate graduates capable of meeting contemporary policing and investigative challenges.

Moreover, recurring challenges persist in foundational competencies such as communication skills as many graduates continue to demonstrate weaknesses in oral and written communication, which compromises professional performance and reporting accuracy despite strong technical knowledge. While some attribute this to shortcomings in general education or earlier schooling, the persistence of this issue among employed graduates highlights a possible gap in the alignment of criminology curricula with industry expectations for communication competence, suggesting the need for subjects or modules specifically designed to enhance communication within professional criminology contexts.

1.1.2 International Background

In recent years, the global landscape of criminal justice education has undergone significant transformation. Criminology and criminal justice programs in the United States, Europe, and other educational systems have increasingly responded to complex contemporary security environments characterized by rapid technological innovation, transnational crime, cybercrime, digital evidence, and data-driven policing. Curricula have consequently expanded beyond traditional criminological knowledge to incorporate areas such as forensic science, cybercrime investigation, digital forensics, crime analytics, and evidence-based policing. These developments reflect the growing expectation that criminology

graduates should possess not only theoretical knowledge but also practical, technological, analytical, and professionally applicable competencies.

However, international curriculum development has not progressed uniformly, creating a significant gap between the changing nature of crime and the competencies formally embedded in criminology and criminal justice education. A recent study examining 50 undergraduate criminal justice programs in the United States found that only 6% required a cybercrime course, while 34% offered cybercrime only as an elective. The study consequently identified a gap between evolving patterns of crime and formal academic preparation. Similarly, a recent systematic mapping study of digital-forensics education and training found that educational provision remains highly uneven, particularly in relation to curriculum scope, explicit learning objectives, standardized curricula, instructional resources, infrastructure, and assessment practices. Although hands-on methodologies are increasingly emphasized, the study noted that relatively few programs provide clearly articulated and standardized educational structures for digital-forensics preparation.

These international findings reveal that the problem is not simply whether criminology programs have begun incorporating emerging topics, but whether curriculum content, pedagogical approaches, practical experiences, and graduate competencies are sufficiently and consistently aligned with the rapidly changing requirements of contemporary criminal justice practice. The continuing emergence of cybercrime, digital evidence, artificial intelligence, crime analytics, and technology-assisted investigation creates an ongoing need for criminology programs to periodically examine whether their curricula remains current, professionally relevant, and responsive to actual workplace requirements.

The problem also extends beyond technological competencies. International criminal justice education increasingly emphasizes the development of practice-oriented and employability-related competencies, requiring students to connect theoretical knowledge with authentic professional situations. Thus, curriculum responsiveness involves not only adding new subjects but also strengthening experiential learning, instructional innovation, faculty capability, industry engagement, and opportunities for students to apply knowledge in realistic criminal justice settings. This concern is reflected in recent studies of criminology education, which continue to recommend stronger experiential learning, curriculum enhancement, and industry partnerships to improve practical skills and graduate employability.

The international gap, therefore, lies in the continuing difficulty of ensuring that criminology curricula remain systematically aligned with rapidly evolving criminal justice competencies, technologies, professional practices, and workforce expectations. While many institutions have responded by introducing contemporary subjects and technology-oriented competencies, evidence indicates that the incorporation of these areas remains uneven and, in some cases, insufficiently integrated into required curriculum and practical learning experiences. This international concern establishes the need to examine curriculum responsiveness and relevance within specific national and institutional contexts.

Within the Philippine context, this international concern becomes particularly significant for the Bachelor of Science in Criminology program. The need to determine whether the existing curriculum adequately responds to societal and industrial demands, pedagogical developments, and emerging criminological trends provides the rationale for examining the curriculum from the perspectives of graduates, academe, and industry practitioners. More importantly, identifying areas where the curriculum remains strong as well as specific gaps requiring enhancement can provide an evidence-based basis for continuous curriculum improvement.

1.1.3 National Background

In the Philippine context, criminology education occupies a pivotal role in preparing competent professionals who contribute to criminal justice administration, law enforcement, and public safety. The enactment of Republic Act No. 11131 (Philippine Criminology Profession Act of 2018) established a comprehensive legal framework for the regulation, standardization, and professionalization of the criminology profession, defining criminology as an exclusive domain for licensed criminologists and prescribing qualifications, scope of practice, and ethical standards for practice.

Despite Republic Act No. 11131, establishing that only licensed criminologists may practice criminology and perform functions such as law enforcement administration and forensic investigation, however in practice, major law enforcement agencies like the Philippine National Police (PNP) continue to hire individuals without criminology backgrounds into operational and line functions. A recent study of non-criminology graduate police officers in the PNP found that while they share a strong commitment to service and can adapt through training, their lack of formal criminology education results in varied competency levels compared to criminology graduates which raises questions about professional alignment with the specialized knowledge expected of law enforcement practitioners (Dapitan, et. al., 2023). Furthermore, descriptive comparative research indicates that criminology graduates tend to exhibit slightly higher levels of work performance and professionalism than their non-criminology counterparts, suggesting an educational background effect on job effectiveness within law enforcement roles (Octavio and Nitifan, 2025).

While it's true that criminology graduates have higher competencies on the field than non-criminology graduates, still agencies are hiring the latter. These hiring practices have implications for curriculum relevance as educators and industry stakeholders have reported that many graduates demonstrate weaknesses in soft skills, particularly communication, that compromise professional performance and reporting accuracy, a concern that dovetails with broader national skills-mismatch findings in Philippine higher education linking employability gaps to deficits in communication and other soft skills (Oblianda and Nabi, 2024). However, despite curricular guidelines like CHED CMO No. 05, s. 2018 emphasizing outcomes-based education, these observations reveal a gap between curriculum design and real-world expectations in the field, especially where professional communication and practical policing competencies are concerned, necessitating targeted curriculum enhancement to strengthen both technical and soft skills among BS Criminology graduates.

1.1.4 Local Background

The Bachelor of Science in Criminology program operates within a regulatory environment that requires higher education institutions to maintain alignment with prescribed standards while responding to the changing requirements of the criminal justice profession. The implementation of the program therefore involves a dual responsibility: compliance with national quality assurance and program standards and continuous adaptation to the evolving needs of criminal justice practice.

Within this national context, the National Capital Region (NCR) presents a particularly important setting for examining curriculum responsiveness. NCR is characterized by a concentration of higher education institutions offering BS Criminology and by a highly diverse criminal justice and public safety environment. The presence of multiple institutions offering the same professional program creates an environment in which criminology programs must not only comply with common national standards but also demonstrate the capacity to provide relevant, current, and professionally meaningful learning experiences.

The NCR context is particularly significant as criminology graduates are prepared for professional environments characterized by diverse and increasingly complex criminal justice functions. The region provides exposure to law enforcement, corrections, public safety, security, forensic, investigative, and other criminal justice-related institutions. Consequently, criminology programs operating in NCR face the continuing challenge of preparing graduates whose competencies are not limited to prescribed academic requirements but are also applicable to the actual demands of professional practice. Institutions therefore need to continually examine whether their curriculum content, instructional approaches, practical training, and emerging competencies remain aligned with workplace expectations.

Another concern is the variation in the capacity of higher education institutions to translate prescribed curriculum requirements into actual learning experiences. The existence of a common national curricular framework does not necessarily guarantee uniformity in curriculum implementation, faculty capability, laboratory resources, experiential learning opportunities, technology integration, or industry exposure. Evidence from Philippine higher education has also shown variation in criminology program outcomes across schools, suggesting that institutional characteristics and educational resources may influence the quality of program implementation. A UP CIDS analysis using PRC and CHED data, for example, documented substantial differences in criminology licensure examination performance across school characteristics, including school size and program-fee categories. While these findings are based on earlier data and should not be interpreted as a current NCR performance measure, they demonstrate the importance of examining differences in institutional capacity and curriculum implementation when evaluating criminology education.

The challenge for NCR, therefore, is not simply the availability of BS Criminology programs but the continuing need to ensure that these programs remain sufficiently responsive and relevant despite differences in institutional capacity, student needs, faculty capability, learning resources, practical exposure, and industry expectations. This becomes particularly important as the criminal justice sector increasingly incorporates digital investigation, forensic technologies, crime analytics, artificial intelligence, intelligence-led policing, and other technology-assisted practices. Consequently, criminology programs must continually examine whether these developments are adequately reflected not only in curriculum documents but also in actual classroom instruction, laboratory activities, field immersion, internship experiences, and professional competency development.

The NCR setting also presents a curriculum alignment challenge. While CHED provides common program standards, individual institutions may differ in how they interpret, contextualize, and implement these standards. A curriculum may therefore be formally compliant while still requiring enhancement in specific areas such as communication competencies, emerging criminological knowledge, experiential learning, innovative instructional approaches, technology integration, and exposure to contemporary criminal justice practice. This distinction between formal curriculum compliance and actual curriculum responsiveness provides an important basis for examining the experiences and assessments of graduates, academe, and industry practitioners within the NCR context.

Thus, there is a need for a systematic assessment of the curriculum responsiveness and relevance of BS Criminology programs within the NCR setting. Examining the curriculum from the perspectives of graduates, academe, and industry practitioners provides an opportunity to determine whether the existing curriculum adequately responds to societal and industrial demands, pedagogical developments, and emerging criminological trends. More importantly, identifying both the strengths and specific gaps in

curriculum implementation can provide an evidence-based basis for curriculum enhancement, rather than assuming that compliance with prescribed standards alone is sufficient.

1.2 Related Literature

Articles of related literature are added in this section to strengthen the discussion on matters that need to be addressed, especially regarding the curriculum responsiveness and curriculum relevance of the current BS Criminology Program.

1.2.1 Foreign Literature

Recent international literature emphasizes that curriculum responsiveness in higher education is no longer optional but essential, especially in professionally oriented programs such as criminology and criminal justice. Vreuls (2023) describes “responsive curriculum development” as a process that continuously aligns program outcomes, content, and assessments with changing professional and societal demands, highlighting the need for systematic stakeholder involvement and iterative redesign. In a similar vein, Kumar (2022) argues that a responsive higher education curriculum must be deliberately designed to accommodate disruptive innovation, technology-driven shifts, and new labor-market expectations, rather than only revising existing syllabi superficially.

Recent studies further stress competency alignment as a core feature of responsive curricula. Wheelahan and Moodie (2021) argue that vocationally oriented degree programs must ensure coherence between academic knowledge and occupational standards through structured curriculum mapping and continuous industry validation. Jackson (2021) likewise emphasizes that employability-oriented curriculum design must explicitly embed digital literacy, communication competence, and problem-solving skills in program outcomes rather than assuming these skills develop implicitly.

According to Van Bommel (2020, 2025), Curriculum design shows that designing a responsive curriculum in teacher education requires clear outcome framing, extensive consultation with field partners, and mechanisms that allow periodic recalibration of program structures when professional standards or contexts change. Annala et al. (2023) further emphasize the role of academic agency in curriculum change, noting that effective redesign occurs when faculty are empowered to exercise professional judgment within supportive institutional structures, instead of being mere implementers of top-down policies. Research by Schweisfurth and Gu (2022) adds that rigid curriculum structures often heighten stakeholders’ assessment of reform urgency, particularly when technological demands outpace institutional flexibility. Regarding curriculum content, international studies highlight the need to integrate emerging domains such as cybercrime, digital forensics, and online victimization into criminology programs. The growing field of digital criminology underscores how crime and justice are fundamentally reshaped by digital technologies, calling for new content on online offending, surveillance, predictive analytics, and data-driven policing. Holt, Bossler, and Seigfried-Spellar (2022) argue that criminal justice curricula must systematically embed cybercrime investigation and digital evidence handling rather than treating them as peripheral topics. Miró-Llinares and Moneva (2021) further emphasize that data-driven policing and predictive analytics require statistical and computational literacy among criminal justice graduates.

Sarkar et al. (2023) provide a comprehensive review of cybercrime policing, arguing that criminal justice curricula must expand technical, analytical, and collaborative competencies related to digital evidence and online investigations. Whelan (2025) and Khan (2024) both stress that policing for cybercrime requires re-conceptualized training that blends legal, technological, and ethical content beyond traditional law-and-order instruction. Quintana (2024) likewise identifies specific cybersecurity skills, knowledge, and

abilities that criminal justice graduates need, recommending targeted courses or modules explicitly addressing these competencies.

Global literature also stresses alignment between higher education curricula and real-world labor-market needs in terms of curriculum relevance. Tomlinson (2021) notes that graduate employability increasingly depends on visible signals of digital fluency, communication proficiency, and adaptability. Reports on future workforce skills (2022) similarly highlight technological literacy and analytical thinking as key competencies required in modern professions. Huey, Nhan, and Broll (2021) found that police recruits reported insufficient preparation for handling cyber-enabled crimes, demonstrating a tangible gap between delivered and industry-required competencies.

Literature on content, structural, and instructional interventions further clarifies mechanisms for enhancing curriculum responsiveness. Bond et al. (2020), in a meta-analysis of digital technologies in higher education conclude that effective technology integration requires coordinated content updates, structural alignment, and instructional redesign. Rapanta et al. (2020) similarly emphasize that online and blended curriculum success depends on faculty digital competence, assessment redesign, and institutional support systems.

Haque and David (2022) identify barriers such as misaligned assessment and insufficient professional development, recommending structural and instructional reforms. Alexander et al. (2020) assert that high-quality curriculum implementation depends on coherent instructional materials and sustained coaching to translate written curriculum into effective pedagogy.

Instructional intervention literature highlights active and experiential approaches. A 2020 synthesis on higher education pedagogy shows that simulations, problem-based learning, and collaborative digital tasks enhance higher-order thinking. McNulty et al. (2021) propose culturally responsive curriculum assessment tools to improve alignment between content and diverse learner needs. Maharajan (2025) demonstrates that student-as-partner models increase curriculum dynamism and responsiveness, particularly in professional programs.

Higher education institutions are expected to design curricula that respond to societal needs and labor market demands. Curriculum responsiveness refers to the ability of educational programs to adapt to changes in industry requirements, technological advancements, and societal challenges. According to Darling-Hammond et al. (2020), modern educational systems must ensure that academic programs are aligned with real-world professional requirements to produce competent graduates. In criminology education, this alignment is particularly important since graduates are expected to serve in various sectors of the criminal justice system.

The societal and industrial relevance of academic programs is also emphasized in global educational frameworks. The Organization for Economic Cooperation and Development (OECD) highlights that higher education institutions must develop curricula that are responsive to labor market demands and societal expectations to improve graduate employability and professional competence (OECD, 2021). Similarly, the World Bank (2020) stresses that higher education programs should continuously update their curricula to ensure that graduates possess the knowledge and skills required in modern workplaces. Pedagogical approaches also play a crucial role in ensuring the effectiveness of academic programs. Contemporary educational research emphasizes the importance of learner-centered pedagogies, such as experiential learning, problem-based learning, and collaborative learning, in improving student engagement and knowledge retention (Darling-Hammond et al., 2020). These instructional strategies help

students develop critical thinking, analytical skills, and practical competencies necessary for professional practice.

In the field of criminology education, modern pedagogical approaches often involve simulations, case studies, and field-based learning experiences. These methods allow students to apply theoretical concepts in real-world contexts, thereby enhancing their professional preparedness (Roberts & Roberts, 2021). Simulation-based learning, for example, has been shown to improve investigative and decision-making skills among criminal justice students.

Another important aspect of curriculum development is the integration of emerging trends. Rapid technological advancements and evolving crime patterns require criminology programs to incorporate modern topics such as cybercrime investigation, digital forensics, and crime analytics (Brown, 2022). These emerging areas of study are essential in preparing graduates to address contemporary criminal justice challenges.

Furthermore, UNESCO (2021) emphasizes the importance of transforming higher education curricula to address emerging societal issues and technological developments. Universities are encouraged to integrate interdisciplinary knowledge and digital competencies to ensure that graduates are equipped with skills relevant to the modern world. Continuous curriculum evaluation is also necessary to ensure academic programs remain relevant.

According to Altbach and de Wit (2020), higher education institutions must regularly review and revise their curricula to maintain alignment with global developments and professional standards. Such evaluation helps institutions identify gaps in course content, teaching strategies, and professional training.

1.2.2 Local Literature

Within the Philippine context, the BS Criminology program is governed by CHED Memorandum Orders institutionalizing outcomes-based education aligned with national standards. While CMO No. 5, s. 2018 predates 2019, later issuances such as CMO No. 4, s. 2020 on flexible learning underscore the need for responsive curricula amid technological shifts and crises. Bernardo (2021) argues that Philippine HEIs must institutionalize continuous curriculum quality review mechanisms to maintain industry alignment. Malbas and Casas (2022) found that while OBE is structurally adopted, gaps persist in instructional alignment and faculty preparedness, affecting curriculum responsiveness.

Toquero (2020) discusses higher education challenges during the COVID-19 pandemic emphasizing curriculum redesign for digital delivery and emerging global risks. Local flexible learning studies (2021–2023) further stress the need for structural interventions such as modularized courses, blended delivery, and faculty digital training. Specific to criminology, recent tracer studies (2021–2024) consistently reported that graduates are employable in law enforcement and security sectors but lack advanced digital investigation skills, analytical reasoning, and professional communication competence. A 2023 institutional study in Northern Luzon found that technology application and communication were rated as the weakest competencies among criminology students, recommending curriculum revision and enhanced digital integration.

A 2024 study on mapping course outcomes for an enhanced criminology educational plan similarly revealed underrepresentation of technological and communication competencies, reinforcing the need for content and instructional intervention.

In the Philippine context, criminology education plays a significant role in preparing professionals for the criminal justice system. The Bachelor of Science in Criminology program is designed to equip students with competencies in law enforcement administration, criminal investigation, forensic science, and

correctional administration. These competencies aim to prepare graduates for careers in agencies such as the Philippine National Police, Bureau of Fire Protection, and Bureau of Jail Management and Penology. The implementation of criminology education in the Philippines is guided by policies issued by the Commission on Higher Education (CHED). CHED Memorandum Order No. 5, series of 2018 provides the policies, standards, and guidelines for the BS Criminology program, emphasizing competency-based education and alignment with professional requirements (CHED, 2018). The policy also encourages institutions to integrate emerging trends and modern teaching strategies in criminology education.

The professionalization of criminology in the Philippines is further strengthened by Republic Act No. 11131, also known as the Philippine Criminology Profession Act of 2018. The law aims to ensure that criminology graduates possess the competencies required for professional practice in the criminal justice system. Scholars in Philippine higher education emphasize the importance of curriculum evaluation to maintain program quality. Continuous curriculum assessment helps ensure that academic programs remain responsive to societal needs and industry requirements (Pascua, 2021). It stresses that curriculum responsiveness is essential in preparing graduates who possess competencies aligned with industry and societal needs.

Studies by Darling-Hammond et al. (2020) and OECD (2021) suggest that modern educational systems must integrate interdisciplinary knowledge, technological competencies, and innovative teaching strategies to enhance student learning and professional readiness. Similarly, UNESCO (2021) emphasizes the need for higher education institutions to redesign curricula that respond to contemporary global challenges and technological innovations.

Another significant theme is the role of pedagogical approaches in improving the effectiveness of educational programs. Researchers highlight the importance of learner-centered teaching strategies such as experiential learning, simulation-based instruction, and collaborative learning in enhancing students' analytical and problem-solving skills. These approaches help students connect theoretical knowledge with practical applications, thereby improving their preparedness for professional practice. The literature also underscores the importance of integrating emerging trends into academic programs. Scholars note that modern criminology education must incorporate topics such as cybercrime investigation, digital forensics, crime analytics, and intelligence-led policing to ensure that graduates are equipped to address contemporary criminal justice challenges.

In the Philippine context, criminology education is guided by national policies and professional standards that emphasize competency-based education and curriculum alignment with industry requirements. CHED Memorandum Order No. 5, series of 2018, provides the policies and standards for the Bachelor of Science in Criminology program, ensuring that academic institutions implement curricula that respond to societal needs and professional expectations. Republic Act No. 11131 further strengthens criminology education by promoting the professionalization of criminologists and ensuring that graduates possess competencies necessary for effective service in the criminal justice system.

Furthermore, the integration of modern technologies in criminology education has become increasingly important in the Philippines. Topics such as cybercrime investigation, digital forensics, and crime analytics are gradually being incorporated into criminology programs to address modern criminal activities.

1.2.3 Synthesis of the Related Literature

Foreign and local literature converge on several key points aligned with the study's problem variables. First, curriculum design must be outcomes-based, participatory, and flexible to adapt to technological

change. Second, curriculum content must move beyond traditional criminology domains to integrate cybercrime, digital forensics, data analytics, and techno-communication competencies. Third, curriculum relevance depends on continuous alignment between delivered competencies and evolving industry requirements.

Moreover, the importance of ensuring quality higher education curricula remains responsive and relevant to societal needs, industry demands, and emerging developments in professional fields. Various scholars highlight that higher education institutions must continuously adapt their academic programs to address rapid technological advancements, changes in labor market requirements, and evolving societal expectations.

1.3 Related Studies

This includes studies that have significant impact on the betterment of this paper. Giving emphasis and highlighting the chosen variables as to how they provided insights in the future discussion intended to refine this study.

1.3.1 Foreign Studies

Empirical studies after 2020 provide strong evidence supporting the need to evaluate curriculum responsiveness in professionally oriented programs such as criminology and criminal justice. Vreuls (2023), in a multi-case study of higher professional education institutions in the Netherlands, identified stakeholder co-creation, flexible program structures, and structured feedback loops as key determinants of responsive curriculum development. Programs that maintained active partnerships with industry and embedded iterative review cycles were found to be more aligned with labor-market demands. These findings directly support examining the level of curriculum responsiveness in terms of curriculum design, content, and relevance.

Van Bommel (2020; 2025), through design-based research in teacher education, demonstrated that iterative curriculum design cycles and collaborative faculty teams significantly improved alignment between program outcomes and professional standards. The study emphasized that responsiveness improves when curriculum review is systematic rather than episodic. Similarly, Annala et al. (2023) found that curriculum reform efforts are more successful when academic agency is supported by institutional structures, suggesting that structural components significantly influence curriculum change outcomes.

Studies examining delivered versus industry-required competencies further reinforce the importance of the research problem. Huey, Nhan, and Broll (2021), in a survey of police recruits and training officers, reported that graduates felt underprepared in cybercrime investigation, digital evidence handling, and online intelligence gathering. The study concluded that pre-service education did not sufficiently reflect contemporary policing realities. Holt, Bossler, and Seigfried-Spellar (2022) similarly found gaps between criminal justice curricula and emerging cybercrime trends, recommending structured integration of digital investigation modules.

Miró-Llinares and Moneva (2021) conducted an empirical study on predictive policing and data analytics training needs, showing that criminal justice professionals increasingly require statistical literacy and technological proficiency. Their findings suggest that traditional curricula emphasizing legal theory without data-driven competencies may contribute to competency mismatches.

In relation to techno-driven curriculum enhancement, Bond et al. (2020), through a meta-analysis of digital technology integration in higher education, concluded that technology adoption alone does not improve learning outcomes unless accompanied by instructional redesign and structural alignment. Institutions that

implemented coordinated content updates, faculty training, and assessment redesign showed significantly improved student engagement and higher-order thinking. Rapanta et al. (2020) likewise found that faculty digital competence and institutional support systems predict the effectiveness of online and blended curriculum implementation.

Research examining predictors of assessed urgency for reform also provides relevant empirical grounding. Schweisfurth and Gu (2022) found that stakeholder dissatisfaction increases when curriculum rigidity limits adaptation to technological and social change. Le Grange (2021) reported that assessing curriculum irrelevance significantly predicts calls for structural and instructional reform.

Regarding technological and communication-related challenges, Crawford et al. (2020), in a cross-national study of universities during the pandemic transition, documented challenges including limited digital infrastructure, inconsistent communication channels, and insufficient faculty preparedness. Dhawan (2020) identified similar barriers, emphasizing the digital divide and inadequate instructional design as major obstacles to effective curriculum delivery.

A study conducted by Roberts and Roberts (2021) explored the effectiveness of experiential learning in criminal justice education and found that students who participated in simulations and field-based activities demonstrated higher levels of engagement and practical competence compared to those who relied solely on traditional lecture-based instruction. Similarly, Brown (2022) investigated the integration of digital technologies in criminology education and found that incorporating cybercrime and digital forensic courses significantly improved students' preparedness for modern law enforcement roles.

Another study by Smith and Barton (2020) examined the alignment between criminal justice curricula and industry requirements. The findings revealed that academic programs that actively collaborate with industry practitioners tend to produce graduates with stronger professional competencies and higher employability. In a related study, Johnson (2021) analyzed the role of curriculum innovation in criminal justice education. The study emphasized that integrating emerging crime trends and technological developments into academic programs enhances students' understanding of contemporary criminal justice issues.

Furthermore, Anderson and Carter (2020) examined the impact of problem-based learning in criminology courses and found that students exposed to this approach developed stronger analytical and problem-solving skills compared to those taught through conventional teaching methods. Research conducted by Walker (2022) also highlighted the importance of curriculum flexibility in higher education. The study concluded that academic programs that regularly revise their curricula are better able to respond to societal and technological changes.

1.3.2 Local Studies

In the Philippine context, empirical research on criminology curriculum responsiveness has increased after 2020, particularly in relation to graduate employability and flexible learning.

A 2024 tracer study of BS Criminology graduates in Davao City examined employment outcomes and assessed curriculum adequacy. Using a descriptive-survey design, the study found that while graduates demonstrated competence in routine law enforcement functions, deficiencies were reported in advanced investigative techniques, research skills, digital evidence handling, and professional communication. The authors recommended curriculum content updates and enhanced instructional strategies to address these gaps. This study directly supports examining significant differences between curriculum-delivered and industry-required competencies.

Similarly, a 2024 study on mapping course outcomes as the basis for an enhanced criminology educational plan at Wesleyan University-Philippines utilized curriculum mapping and stakeholder validation. Findings revealed that competencies related to technology utilization, analytical reasoning, and technical writing were underrepresented in the formal curriculum. The study proposed revisions in course outcomes and the inclusion of technology-enhanced modules thereby reinforcing the need for content and structural intervention.

Bernardo (2021), in a study on outcomes-based education implementation in Philippine HEIs, found that while curriculum documents reflect compliance with OBE frameworks, actual instructional delivery and assessment practices often remain traditional. The study concluded that curriculum responsiveness requires alignment not only at the design level but also at the instructional level. Malbas and Casas (2022) likewise reported that faculty preparedness and institutional support significantly influence the effectiveness of curriculum implementation, suggesting that structural and instructional factors predict responsiveness.

Studies on flexible learning implementation in Philippine higher education (2020–2023) documented technological and communication challenges encountered during the pandemic. Common findings included unstable internet connectivity, limited access to digital tools, insufficient training in online pedagogy, and difficulties in supervising practicum requirements remotely. These studies highlighted structural and instructional intervention needs particularly relevant to criminology programs that require laboratory and field-based components.

Recent institutional studies (2023–2024) in Northern Luzon and Central Luzon further reported that criminology students rated communication skills, research competence, and technology application as areas requiring improvement. Stakeholders from law enforcement agencies emphasized the need for graduates proficient in digital documentation, cyber investigation, and inter-agency communication.

Habiatan (2022) conducted a study on the relevance of the criminology curriculum to the jobs of graduates from Isabela State University. The findings revealed that the criminology curriculum was highly relevant to the professional duties of graduates working in law enforcement agencies. The study also recommended the inclusion of additional competencies such as computer-related courses and communication skills to enhance graduate employability.

Another study by Mendoza and Torres (2021) investigated the employability of criminology graduates in Metro Manila. The results indicated that most graduates were employed in criminal justice agencies, demonstrating the relevance of criminology education to professional practice. Similarly, a tracer study conducted by Garcia (2020) revealed that criminology graduates generally found their academic preparation relevant to their professional roles, particularly in areas such as criminal investigation and law enforcement administration.

A study conducted by Ramos and Bautista (2022) examined the effectiveness of teaching strategies used in criminology programs. The findings showed that practical training activities, such as simulations and field exercises, significantly improved students' learning outcomes and professional readiness.

In addition, Cruz (2023) analyzed the integration of emerging technologies in criminology education in selected Philippine universities. The study found that institutions that incorporated digital forensics and cybercrime courses were better able to prepare students for modern criminal justice challenges.

Curriculum relevance also plays a central role as responsiveness depends on the degree of alignment between academic preparation and labor-market expectations, professional standards, and regulatory frameworks. Empirical findings highlight that when curricula are regularly validated against industry

requirements, graduates demonstrate stronger workplace preparedness. Beyond design and content, structural factors which include institutional flexibility, faculty capability, administrative support, and adequate resource allocation are substantially affecting the successful implementation of responsive curricula.

Without supportive structures, even well-designed programs may struggle to achieve intended outcomes. Finally, instructional factors such as pedagogical innovation, technology integration, and assessment redesign further determine the effectiveness of curriculum delivery. Research indicates that learner-centered strategies, digitally enabled instruction, and aligned assessment systems enhance higher-order thinking and professional readiness. Collectively, these factors illustrate that curriculum responsiveness is multidimensional, requiring coordinated attention to design, content, relevance, structure, and instruction to remain aligned with contemporary professional demands.

Studies also confirm measurable gaps between delivered and industry-required competencies, particularly in digital investigation, analytical reasoning, and communication proficiency. Furthermore, empirical evidence suggests that curriculum rigidity, competency misalignment, and technological unpreparedness significantly predict stakeholder assessment of reform urgency.

Foreign studies demonstrate that innovative pedagogical approaches significantly enhance student learning outcomes and professional competencies. Research conducted by Roberts and Roberts (2021) found that experiential learning strategies such as simulations, case studies, and field-based training improve students' engagement and practical skills in criminal justice education. Similarly, Brown (2022) highlighted the importance of integrating technological innovations such as cybercrime and digital forensic courses to prepare students for modern law enforcement roles.

Other international studies also emphasize the importance of industry collaboration in curriculum development. Smith and Barton (2020) found that academic programs that collaborate with criminal justice agencies in curriculum design produce graduates who are better prepared for professional practice. Additionally, Johnson (2021) reported that curriculum innovation and the integration of emerging crime trends enhance students' understanding of contemporary criminal justice issues.

Local studies also support the relevance of criminology education in preparing graduates for employment in the criminal justice system. Habiatan (2022) found that the criminology curriculum of Isabela State University was highly relevant to the professional responsibilities of graduates employed in law enforcement agencies. However, the study also recommended strengthening the curriculum by incorporating additional competencies such as computer-related courses, communication skills, and stress management training.

Similarly, Mendoza and Torres (2021) found that most criminology graduates in Metro Manila were employed in criminal justice agencies, indicating that the academic preparation provided by criminology programs is generally aligned with professional practice. Ramos and Bautista (2022) also reported that practical training activities, such as simulations and field exercises, significantly enhance students' professional readiness.

Despite the significant contributions of these studies, most existing research focuses primarily on graduate employability or curriculum relevance. Few studies have comprehensively examined the level of curriculum responsiveness and relevance of criminology programs using multiple indicators such as societal and industrial relevance, pedagogical approaches, and emerging trends. Moreover, limited studies have explored the assessment of multiple stakeholders, including deans and faculty, industry practitioners, and graduates.

1.3.3 Synthesis of the Related Studies

Foreign and local empirical studies consistently demonstrate that curriculum responsiveness is shaped by multiple interrelated factors. Foremost among these are curriculum design factors, which include active stakeholder involvement, clearly articulated program outcomes, and systematic iterative review processes that allow continuous refinement of the curriculum. Studies emphasize that when curriculum design is participatory and outcomes-based, programs are better positioned to respond to evolving professional and societal demands.

In addition, curriculum content factors significantly influence responsiveness, particularly the deliberate integration of emerging domains such as cybercrime, digital forensics, data analytics, and professional communication skills. These content areas reflect the growing technological complexity of criminal justice practice and the need for graduates to possess both technical and communicative competence.

1.4 Theoretical Framework

This study is anchored on Human Capital Theory, Constructivist Learning Theory, and Constructive Alignment Theory, which collectively explain the importance of aligning educational curricula with societal needs, effective teaching strategies, and emerging developments in the field of criminology. These theories provide a conceptual foundation for examining the level of curriculum responsiveness of the Bachelor of Science in Criminology program.

Human Capital Theory, proposed by Schultz (1961) and further developed by Becker (1964), posits that education serves as a critical investment that enhances individuals' knowledge, skills, and competencies necessary for productivity and workforce development. According to this theory, educational institutions play an essential role in preparing graduates who possess the competencies required by society and various industries.

In the context of criminology education, the curriculum must equip students with relevant knowledge and practical skills necessary for employment in the criminal justice system, including law enforcement, corrections, forensic science, and community safety institutions. Thus, Human Capital Theory supports the dimension of societal and industrial relevance, emphasizing that the criminology curriculum must be aligned with the demands and expectations of criminal justice agencies and society at large.

Another theoretical foundation of this study is the Constructivist Learning Theory, advanced by Piaget (1970) and Vygotsky (1978). Constructivism suggests that learners actively construct knowledge through interaction, experience, and problem-solving rather than passively receiving information from instructors. This theory emphasizes the importance of learner-centered teaching strategies that encourage active participation, collaboration, and critical thinking.

In criminology education, pedagogical approaches such as case analysis, crime scene simulations, field exposure, investigative exercises, and problem-based learning allow students to connect theoretical knowledge with real-world situations. Through these strategies, students develop deeper understanding and practical competencies relevant to criminal justice practice. Therefore, Constructivist Learning Theory provides support for evaluating the pedagogical approaches used in the criminology program.

Furthermore, this study is grounded in Constructive Alignment Theory, introduced by Biggs (1996), which emphasizes the alignment between intended learning outcomes, teaching and learning activities, and assessment methods. According to this theory, an effective curriculum ensures that teaching strategies and learning activities are designed to help students achieve the intended competencies. Constructive

alignment also highlights the need for continuous curriculum development to address evolving professional standards and societal changes.

In the field of criminology, emerging developments such as cybercrime investigation, digital forensics, transnational crime, and crime analytics require the integration of updated knowledge and technological competencies into the curriculum. Consequently, Constructive Alignment Theory supports the dimension of emerging trends, emphasizing the need for the curriculum to adapt and incorporate new developments in criminology and criminal justice.

As a whole, these theories provide a comprehensive framework for evaluating the responsiveness of the BS Criminology curriculum. Human Capital Theory explains the need for alignment between education and societal or industrial demands; Constructivist Learning Theory supports the adoption of effective pedagogical approaches that enhance learning experiences; and, Constructive Alignment Theory highlights the importance of integrating emerging developments in the field into the curriculum.

These theoretical perspectives collectively guide the assessment as to how responsive the BS Criminology program is in addressing societal needs, employing appropriate teaching strategies, and adapting to current and future trends in criminology education.

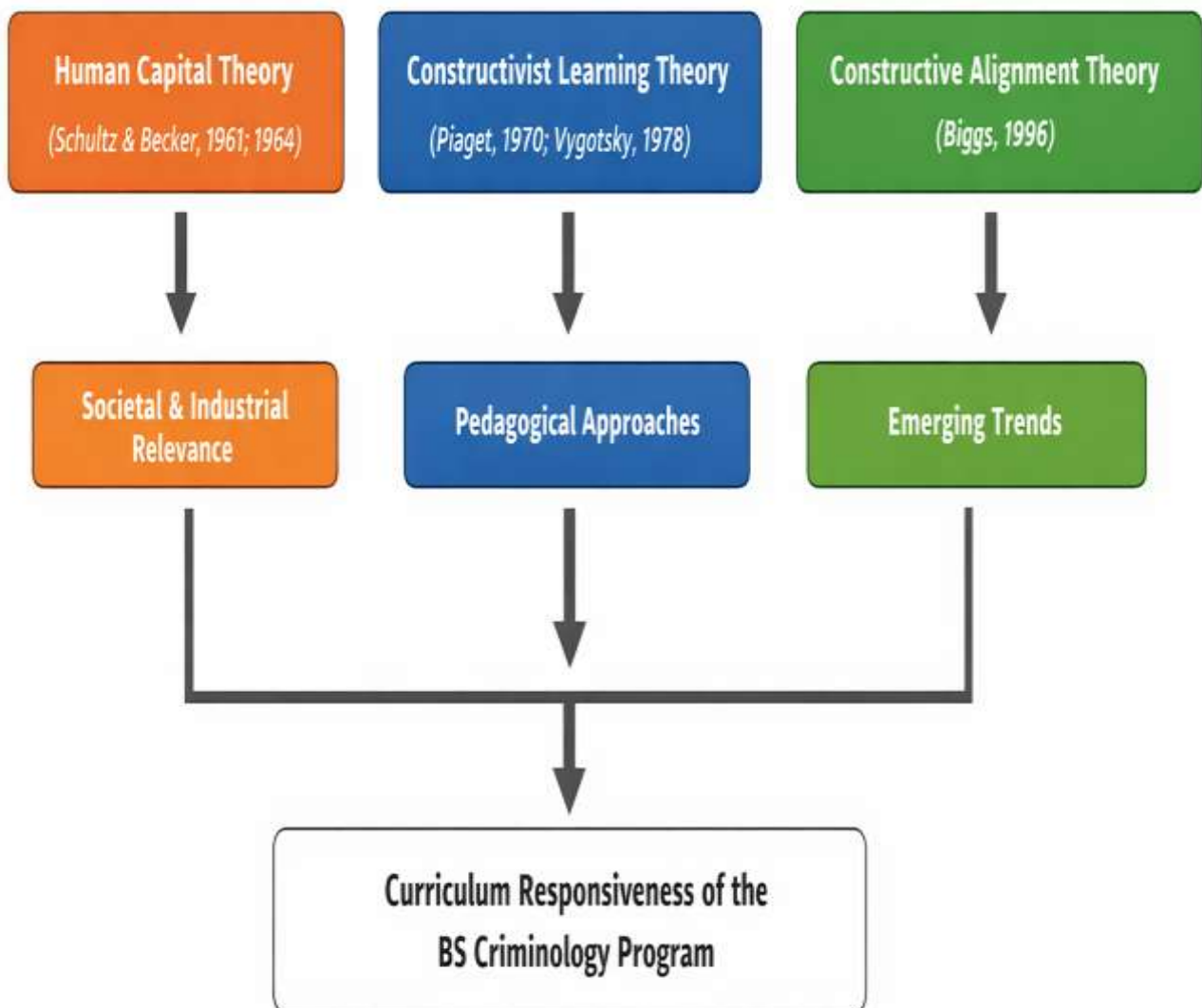


Figure 1. Schematic diagram showing the different theories incorporated in the study.

1.5 Conceptual Framework

This study is anchored on the Input–Process–Output (IPO) Model, which provides a structured framework for examining how established policy requirements, curriculum dimensions, and identified areas for enhancement are systematically assessed and transformed into an evidence-based model for curriculum improvement. In this study, the IPO framework is used to examine the responsiveness and relevance of the Bachelor of Science in Criminology curriculum within the context of Philippine higher education and the evolving demands of the criminal justice profession.

The Input component consists of three major elements: legal and policy foundations, curriculum dimensions, and curriculum challenges or areas requiring enhancement. These inputs provide the standards, dimensions, and contextual concerns through which the BS Criminology curriculum is examined.

The legal and policy foundations include the 1987 Philippine Constitution, particularly Article XIV, Section 1, which recognizes the State's responsibility to protect and promote the right to quality education; Republic Act No. 7722 or the Higher Education Act of 1994, which established the Commission on Higher Education and provides the broader statutory framework for higher education quality and development; Republic Act No. 11131 or the Philippine Criminology Profession Act of 2018, which provides for the standardization and regulation of criminology education; CHED Memorandum Order No. 46, Series of 2012, which establishes an outcomes-based and typology-based quality assurance framework; and CHED Memorandum Order No. 5, Series of 2018, which provides the Policies, Standards and Guidelines for the Bachelor of Science in Criminology program. RA 11131 specifically identifies CHED's role in policy standards and monitoring of criminology education and recognizes the need for criminology education and professional competence to respond to developments in the profession. CMO No. 5, s. 2018 likewise requires BS Criminology programs to establish program outcomes, curriculum maps, outcomes-based syllabi, program assessment, and continuous quality improvement mechanisms.

The curriculum dimensions consist of societal and industrial relevance, pedagogical approaches, and emerging trends. Societal and industrial relevance refers to the extent to which the curriculum aligns with the needs of society, the criminal justice sector, and professional practice. Pedagogical approaches refer to the teaching and learning strategies through which the intended competencies are developed. Emerging trends refer to the extent to which contemporary developments in criminology, criminal justice, technology, and professional practice are incorporated into the curriculum.

The areas requiring curriculum enhancement represent the curriculum concerns identified in the study, including communication competency gaps, gaps in correctional and rehabilitation education, insufficient integration of emerging criminological competencies and technologies, predominance of traditional teacher-centered instruction, limited experiential and hands-on learning opportunities, outdated and insufficient curriculum content, and limited exposure to contemporary criminal justice practice. These areas provide the substantive basis for determining where curriculum enhancement may be necessary despite the generally favorable assessment of curriculum responsiveness and relevance.

The Process component consists of the systematic procedures used to assess and interpret the curriculum. Quantitative data are collected through a structured questionnaire to determine the level of curriculum responsiveness and curriculum relevance across the three curriculum dimensions. The quantitative data are analyzed using appropriate descriptive and inferential statistical procedures, including the mean for describing the level of responsiveness and relevance, One-Way Analysis of Variance (ANOVA) for determining significant differences among respondent groups, and the Tukey HSD post hoc test when a

significant difference is established. The Shapiro–Wilk test is used as part of the assessment of distributional assumptions.

Following the quantitative phase, qualitative data are collected through semi-structured interviews among selected key informants. The qualitative data are analyzed using Braun and Clarke's thematic analysis, with MAXQDA used to support the organization and coding of the qualitative data.

The quantitative and qualitative findings are subsequently integrated in accordance with the explanatory sequential mixed-methods design. The quantitative phase establishes the overall pattern of curriculum responsiveness and relevance, while the qualitative phase explains and contextualizes the findings by identifying the specific curriculum challenges and gaps underlying the observed patterns. This integration provides a more comprehensive evidence-based for the development of the proposed model.

The Output of the conceptual framework is therefore not merely a list of statistical findings or identified challenges. Rather, these findings are synthesized into a Proposed Evidence-Based Model for Curriculum Responsiveness and Curriculum Relevance. The model translates the empirical findings, legal and policy requirements, curriculum dimensions, and identified areas for enhancement into a systematic process that may guide continuous curriculum improvement.

The proposed model incorporates the three major curriculum dimensions which includes societal and industrial relevance, pedagogical approaches, and emerging trends. This provides a cyclical enhancement process consisting of Assess, Identify, Prioritize, Enhance, Monitor, and Sustain. The model is intended to provide a practical basis for maintaining curriculum responsiveness and relevance while addressing specific areas requiring enhancement.

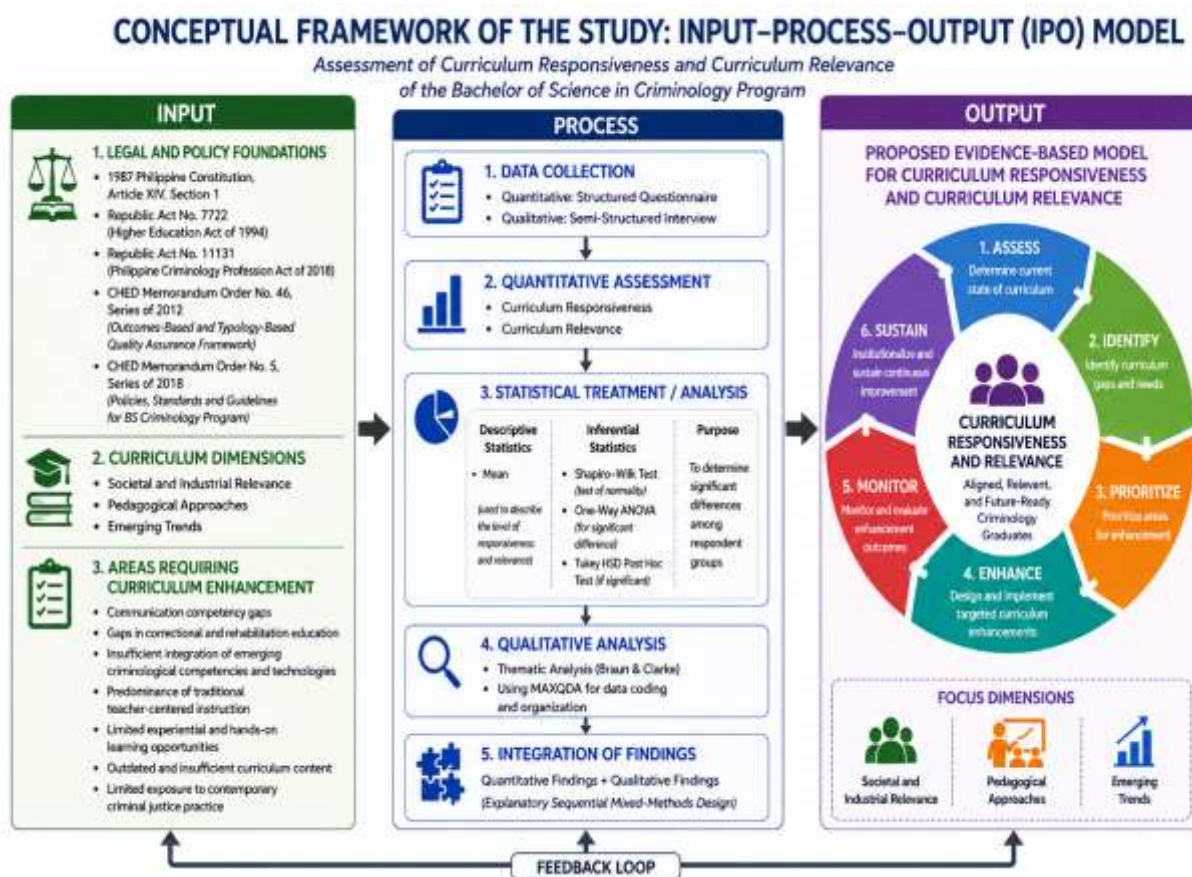


Figure 2. Schematic diagram showing the Input - Process - Output of the Study

1.6 Significance of the Study

This study was significant as it provided empirical and theoretical insights into the curricular responsiveness of the Bachelor of Science in Criminology (BSCrim) Program, particularly in the context of the Commission on Higher Education (CHED) Memorandum Order No. 5, Series of 2018 and the implementation of Republic Act No. 11131, otherwise known as the Philippine Criminology Profession Act of 2018. Its findings contributed to enhance the quality, relevance, and adaptability of criminology education in the Philippines.

Commission on Higher Education (CHED). The results of this study can serve as a valuable basis for reviewing and possibly amending CMO No. 5, s. 2018, particularly in integrating emerging areas that includes discussion on digital forensic. It may guide CHED in updating curricular policies, ensuring alignment with global trends and digital innovations in the field of criminal justice education.

Higher Education Institutions (HEIs) offering Criminology Program. The study helped criminology schools assess whether their curriculum design, content, and instructional approaches remain relevant to industry and societal needs. Findings on the content, structural, and instructional interventions can serve as a framework for curriculum enhancement, faculty development, and program accreditation. This enabled HEIs to produce more competent, ethical, and technologically capable criminology graduates.

Law Enforcement Agencies. The study allowed law enforcement agencies to be oriented as to the possible modifications and curriculum alignment with the actual needs of the different bureau. This also facilitated meaningful collaboration between the HEIs and the different law enforcement offices.

Professional Regulatory Board of Criminology. The research benefited the Professional Regulation Commission (PRC) by identifying existing competency gaps between criminology graduates and field requirements. It also shed light on the continuing issue of non-criminology graduates occupying line functions despite the presence of RA 11131. Insights gained can inform recruitment, qualification standards, and training programs to ensure professional alignment.

Faculty Members. The research informed the faculty members as to the existing needs and curriculum gap that must be addressed. This allowed them to contribute and update the existing syllabus aligning to the current demands of the different industries.

Future Researchers. Areas not covered in the conduct of this research and those that are not explored as specified and limited in the scope and limitations may be explored by future researchers. This study therefore opened another avenue for future researches that may be considered relevant to curriculum enhancement of BS Criminology program

1.7 Definition of Terms

The following terms are defined operationally based on the conduct of the study.

CHED Memorandum Order No. 5, s. 2018 (CMO 5, s. 2018). Refers to the policy issued by the Commission on Higher Education (CHED) that prescribes the revised curriculum and standards for the Bachelor of Science in Criminology program. It serves as the primary policy framework for evaluating the responsiveness and relevance of the BSCrim curriculum.

Challenges Encountered. Refers to the difficulties, issues, or limitations identified by the respondents regarding the current implementation of the BS Criminology curriculum. These include but are not limited to the gaps in course content, limitations in teaching strategies, lack of integration of emerging criminology trends, or misalignment with the needs of the criminal justice industry.

Content Intervention. Refers to curriculum adjustments focused on revising or updating subject matter to ensure it remains current and meaningful. In this study, it involves identifying new topics or areas of specialization, such as forensic science or digital forensics, to be integrated into the criminology curriculum based on stakeholder feedback.

Curriculum Content. Refers to the body of knowledge, skills, attitudes, and values included in an academic program. It focuses on the specific criminology subjects, course materials, and competencies prescribed in the BSCrim curriculum, including forensic science, law enforcement, criminal investigation, and correctional administration.

Curriculum Design. Refers to the systematic arrangement of learning experiences, instructional goals, and assessment strategies that guide the educational process. It pertains to how the Bachelor of Science in Criminology program is structured in terms of the sequencing of subjects, integration of outcomes-based education (OBE), and alignment with CHED Memorandum Order No. 5, series of 2018.

Curriculum Enhancement. Refers to the proposed improvements, revisions, or innovations recommended based on the findings of the research to strengthen the BS Criminology program. These enhancements may include but are not limited to updating course content, integrating emerging criminology trends, improving teaching strategies, and aligning the curriculum with industry and societal needs.

Curriculum Relevance. In this study, curriculum relevance refers to the degree to which the BS Criminology curriculum is appropriate, useful, and aligned with the needs and expectations of the criminal justice system and society.

Curriculum Responsiveness. Refers to the extent to which the Bachelor of Science in Criminology program adapts and responds to the changing needs of society, the criminal justice industry, and developments in criminology.

Deans Program Heads, and Faculty. Refers to all academic administrators and teaching personnel responsible for the implementation and delivery of the BS Criminology program who are involved either in curriculum planning, instruction, and program management..

Emerging Trends. Refers to the integration of contemporary developments and innovations in criminology and criminal justice within the curriculum. These include but are not limited to topics such as cybercrime investigation, digital forensics, crime analytics, and transnational crime.

Graduates. Refers to individuals who have completed the Bachelor of Science in Criminology program from the institution who just recently graduated from the institution.

Industry Practitioners. Refers to the professionals who are currently working in the criminal justice system or related fields, such as law enforcement officers, correctional personnel, forensic specialists, and other public safety professionals.

Instructional Intervention. Refers to modifications in teaching strategies, delivery methods, and assessment techniques designed to improve learning outcomes. It focuses on integrating modern pedagogical approaches, including digital learning, simulations, field immersion, and outcome-based instruction in the criminology program.

Pedagogical Approaches. Refers to the teaching methods and instructional strategies used by faculty members in delivering criminology courses. These include learner-centered and practice-oriented strategies such as simulations, forensic laboratory activities, scenario-based training, and technology-assisted instruction.

Republic Act No. 11131. Refers to the law that regulates and strengthens the practice of criminology in the Philippines, ensuring that only licensed criminologists perform line functions in the field and serves as a legal basis for examining the alignment between criminology education and professional practice.

Societal and Industrial Relevance. Refers to the extent to which the subjects and learning experiences offered in the BS Criminology curriculum are aligned with the needs of society and the criminal justice sector, including law enforcement agencies, correctional institutions, and other public safety organizations.

Stakeholders. Refers to individuals or groups who have an interest or influence in the success and quality of an educational program. These include but are not limited to criminology faculty members, students, alumni, law enforcement officials, and administrators who provide insights and evaluations of the BSCrim curriculum.

Structural Intervention. Refers to reforms in the organization and framework of an academic program. This pertains to the possible restructuring of the BSCrim curriculum such as developing new degree tracks, revising course sequences, or offering specialized programs to enhance alignment with professional standards and global trends.

1.8 Statement of the Problem

The following problem statements are generated in response to the research gap that the researcher intends to address, to wit:

What is the level of curriculum responsiveness of BS Criminology program in terms of:

1.1 societal and industrial relevance

1.2 pedagogical approaches

1.3 emerging trends

Is there a significant difference in the level of curriculum responsiveness of the BS Criminology program according to the respondents (deans and faculty, industry practitioners, graduates)?

What is the level of curriculum relevance of BS Criminology program in terms of:

1.1 societal and industrial relevance

1.2 pedagogical approaches

1.3 emerging trends

Is there a significant difference in the level of curriculum relevance of the BS Criminology program according to the respondents (deans and faculty, industry practitioners, graduates)?

What challenges are encountered by the informants under the current curriculum?

Based on the findings, what output may be recommended?

Chapter 2

Methodology

2.1 Research Design

This study employed an explanatory sequential mixed-methods research design, wherein quantitative data were collected and analyzed first, followed by the collection and analysis of qualitative data to explain, elaborate, and provide deeper understanding of the quantitative findings. In this design, the quantitative phase established the overall assessment of the curriculum's responsiveness and relevance and determined whether significant differences existed among the respondent groups. The qualitative phase subsequently explored the experiences and perspectives of the informants regarding the challenges and areas for

improvement in the BS Criminology curriculum. The findings from both phases were then integrated to provide a more comprehensive understanding of the curriculum and to serve as the basis for the proposed curriculum enhancement.

Further, the integration of both phases ultimately provided the empirical basis for the proposed Evidence-Based Criminology Curriculum Enhancement Model and the corresponding Curriculum Enhancement Framework. The quantitative phase established the overall level of curriculum responsiveness and relevance, while the qualitative phase identified and explained specific curriculum gaps and challenges. Together, these findings provided a comprehensive basis for recommending targeted curriculum enhancements.

2.2 Research Method

This study employed a mixed method approach, wherein quantitative data are collected and analyzed first, followed by a qualitative phase designed to further clarify, elaborate, and contextualize the quantitative results.

The quantitative phase utilized a non-experimental descriptive-comparative research design. The descriptive component was employed to determine the assessment level of curriculum responsiveness and curriculum relevance of the BS Criminology program in terms of societal and industrial relevance, pedagogical approaches, and emerging trends. The comparative component was used to determine whether significant differences existed in the assessments of the three respondent groups.

Following the quantitative phase, the study employed a qualitative case study approach to provide an in-depth explanation of the quantitative findings and to explore the challenges encountered in the implementation and delivery of the BS Criminology curriculum.

The case study approach was appropriate as the study examined the BS Criminology curriculum within its actual educational and professional context, recognizing that curriculum responsiveness and relevance cannot be fully understood through quantitative ratings alone. The qualitative phase allowed the researcher to examine the experiences and explanations underlying the quantitative findings and to identify contextual factors that may contribute to the strengths and challenges of the current curriculum.

Thereafter, the two phases were connected through the explanatory sequential process. The quantitative findings served as the basis for determining the areas that required further qualitative exploration. In particular, comparatively lower-rated indicators and areas requiring clarification were examined through the qualitative interviews. The qualitative findings were then used to explain and contextualize the quantitative results by identifying recurring experiences, challenges, and curriculum gaps reported by the informants.

2.3 Population of the Study

The quantitative component involved three group of respondents selected through quota sampling based on their involvement in criminology education and practice:

Academe, which includes criminology educators teaching in higher education institutions, Program Heads, and Deans. They are the implementers of the relevant CMOs and policies.

Graduates, who are those who recently finished the program under CMO 5, series of 2018, or recent board exam passers between 2022 to 2025..

Industry practitioners includes personnel from the any law enforcement offices. They are the recipient and the evaluators if the graduates are competent enough in the field or actual practices.

The sample size was capped at 400 individuals. Using quota sampling, the researcher divided the population into mutually exclusive subgroups and then selected the participants based on specific proportions, ensuring key demographic groups are proportionally represented in the final sample. Further, the sample size was distributed as follows:

Table A. Sample Size of the Study

RESPONDENTS	SAMPLE SIZE
Academe	130
Graduates	140
Industry Practitioners	130
TOTAL	400

The number of quantitative respondents was based on the maximum possible sample size that was yielded using Slovin's formula since the actual population size is unknown. The formula is as follow:

$$n = \frac{N}{1 + N \cdot E^2}$$

- **n** is the sample size
- **N** is the total population size
- **E** is the margin of error

For the qualitative phase, the target key participants were seven (7). All came from the Academe who have been teaching at least five (5) years and supervisory responsibility of at least three (3) years.

These participants provided expert perspectives on curriculum issues, gaps or challenges of CMO No. 5, s. 2018. This included as well insights if there were needed subjects / courses to be modified, added in the curriculum or create another specific allied program.

2.4 Locale of the Study

This study was conducted in the National Capital Region (NCR), which serves as a strategic and appropriate setting for examining the curriculum component's responsiveness of the BS Criminology program. NCR hosts a high concentration of higher education institutions (HEIs) offering criminology programs, including both private and public universities making it one of the most active academic hubs for criminology education in the Philippines. The region also houses major law enforcement agencies, such as the Philippine National Police (PNP), National Bureau of Investigation (NBI), Bureau of Jail Management and Penology (BJMP), and Bureau of Fire Protection (BFP), providing a rich environment for gathering insights from practitioners directly engaged in criminal justice operations. These characteristics make NCR an ideal locale for obtaining diverse and representative perspectives from both the academic and industry sectors.

Moreover, NCR is the most suitable setting for these groups since it accommodates a diverse pool of faculty, trainees, and practitioners, ensuring that the curriculum's responsiveness can be assessed from multiple interconnected roles within the criminal justice system. It also served as the administrative center for these agencies, providing access to decision-makers and experts who can articulate the issues, gaps, and challenges associated with CMO No. 5, s. 2018.

2.5 Scope and Limitation of the Study

The study primarily focused on evaluating the curriculum responsiveness of the Bachelor of Science in Criminology (BSCrim) Program among Higher Education Institutions (HEIs) within the National Capital

Region (NCR) covering all state universities and private colleges currently offering the said program. The scope of the study covers only the Academic Years 2022 – 2025, representing a period in which CMO No. 5, s. 2018, has been actively implemented and evaluated by criminology schools in NCR. The study limits its focus to the curriculum components of the BSCrim program and if there is a necessity in conducting curriculum enhancement.

The study primarily relied on the assessment and self-reported data of respondents (selected through quota sampling) and participants / key informants which may be influenced by personal experience or institutional context. Second, since the study was confined to HEIs located within Metro Manila, findings may not fully represent the experiences and practices of criminology programs in other regions of the Philippines. Lastly, while the study proposes curriculum enhancement and / or policy interventions, these are recommendatory in nature and are not implemented or experimentally tested.

2.6 Data Gathering Tool/s

The data gathering tool for this study was composed of questions intended for quantitative approach and another set for qualitative one.

For quantitative instruments, a structured questionnaire was the primary tool for data gathering and composed of three (3) main components. The first part was the particular group of respondents, whether they are from the academe, industry practitioners, or graduates.

The second part was composed of questions regarding societal and industrial relevance, pedagogical approach, and emerging trends. This was used to check the level of curriculum responsiveness of the BS criminology program. Also, to determine if it was statistically significant if grouped according to respondents.

The third part was composed of questions coming from the same variables but with different indicators. This was used to determine the level of curriculum relevance of the BS Criminology program. Also, to determine if it was statistically significant if grouped according to respondents.

Prior to the actual data collection, the research instrument was subjected to Content Validity Index (CVI) among experts or those who have a strong background in the curriculum. The Item-Level CVI (I-CVI) and Scale-Level CVI (S-CVI) was also computed, with only items meeting acceptable thresholds (I-CVI ≥ 0.78 ; S-CVI ≥ 0.90) being retained or refined.

Thereafter, the research instrument was pilot-tested in Region X among 30 respondents who were not part of the final sample but possessed similar characteristics to the target respondents. Afterwards, the questionnaire was subjected to reliability testing using Cronbach's Alpha coefficient to ensure the consistency and reliability of the research instrument. Reliability refers to the degree to which an instrument consistently measures the variables it intends to measure. According to Taber (2018) and Bonett and Wright (2021), Cronbach's Alpha is one of the most commonly used statistical measures for determining the internal consistency of survey instruments composed of multiple Likert-scale items.

Further, the responses obtained from the pilot test were encoded and analyzed using statistical software. Cronbach's Alpha coefficient was computed for each section of the questionnaire to determine the internal consistency of the items measuring the variables societal and industrial relevance, pedagogical approaches, and emerging trends. A Cronbach's Alpha value of 0.70 or higher was considered acceptable, indicating that the items in the instrument reliably measure the intended constructs (Taber, 2018; Bonett & Wright, 2021).

Moreover, the computed Cronbach's Alpha coefficients ranged from 0.830 to 0.880 for the different dimensions, while the overall reliability coefficient of the instrument was 0.857, interpreted as good

reliability. This indicates that the items included in the questionnaire were highly consistent in measuring the intended variables of the study. Therefore, the instrument was considered reliable and suitable for data gathering. In this manner, the reliability test ensures that the research instrument produces stable and consistent results, thereby strengthening the credibility and validity of the data gathered in assessing the curriculum responsiveness and curriculum relevance of the BS Criminology program.

For the qualitative component of the study, a semi-structured interview guide was utilized as the primary research instrument to elicit rich and detailed insights from key informants. The guide consisted of open-ended questions focusing on participants' challenges on the current curriculum responsiveness and curriculum relevance with respect to societal and industrial relevance, pedagogical approach, and emerging trends. For alignment, the probing questions generated cover the lowest indicators in the quantitative findings per variable.

To ensure the clarity of the guide questions before the actual conduct of the interview, an expert validation was done composed of a panel of subject-matter experts in criminology educators, curriculum specialists, and practitioners assessed each interview item in terms of relevance, clarity, and alignment with the study objectives. The comment and suggestion also of the adviser was taken to ensure that questions were properly aligned with the quantitative findings. This validation process ensures that the interview questions accurately represent the constructs under investigation and strengthens the credibility of the data obtained.

2.7 Data Gathering Procedure

The data gathering procedure for this study follows a sequential explanatory mixed-method design, consisting of two major phases: the quantitative phase and the qualitative phase. This approach allows the researcher to first collect and analyze numerical data to identify patterns and relationships among variables, followed by qualitative data collection to provide deeper insights and explanations of the quantitative findings.

During the quantitative phase, the researcher prepared a structured survey questionnaire. After securing approval from the research adviser and the panel members during the proposal of the study, the researcher converted the survey questionnaire to a Google Form format to easily gather the responses online. Upon approval, the expected respondents were informed about the purpose of the study, confidentiality of their responses, and their right to voluntary participation. Thereafter, the validated survey questionnaires which were converted to Google Form, were distributed online. Following the concept of quota sampling, the projected number per group of respondents were gathered. Thereafter, collected data was encoded, tabulated, and statistically analyzed using appropriate quantitative techniques such as descriptive statistics and analysis of variance (ANOVA) to address the stated research questions.

After establishing the quantitative data, qualitative interview questions were formulated following explanatory-sequential approach to ensure continuity of alignment with the quantitative phase. After the questionnaire was finalized, formal letters were sent to the selected participants or Key Informants in the National Capital Region (NCR) and / or Region X to formally request and ask permission to conduct the qualitative interview. This phase ensured that the researcher gained comprehensive insights into the challenges of the current curriculum responsiveness and curriculum relevance.

Using purposive sampling, the participants were established involving only those who have supervisory experience in the academe at least 3 years and at the same time currently teaching major and professional courses. Further, consent was taken and upon confirmation, discussions were audio-recorded and transcribed verbatim for thematic analysis. Also, interviews were conducted either face-to-face or through

a secured online platform. Upon completion of both phases, the researcher triangulated the findings to ensure the credibility and validity of results. Quantitative findings were substantiated with qualitative insights to identify areas of convergence or divergence. To add, qualitative data were added and incorporated to quantitative findings to either support or contradict a particular idea or concept.

2.8 Treatment of the Data

To comprehensively provide proper interpretation of the data tabulated, appropriate statistical tools were used. Quantitative data were analyzed using various statistical tools. Meanwhile, qualitative data were analyzed through thematic analysis to identify recurring patterns and key themes.

To determine the appropriate statistical analysis used in the study, the normal tendency test was done. Considering the large sample size ($N = 400$) and the relatively small magnitude of the skewness and kurtosis values, the distributions were considered sufficiently symmetric for the application of parametric statistical procedures.

For problems 1 and 3, descriptive statistics specifically mean were used to check the level of curriculum responsiveness and curriculum relevance of the BS Criminology Program.

The scoring procedure utilized a four-point Likert scale as follows:

Table B. Scoring Procedure to check the level of Curriculum Responsiveness of the BS Criminology Program

Scale	Range	Description	Interpretation
4	3.26 - 4.00	Highly Responsive	Curriculum is highly responsive the needs and demands of the program
3	2.51 - 3.25	Responsive	Curriculum is responsive to the needs and demands of the program.
2	1.76 - 2.50	Moderately Responsive	Curriculum is moderately responsive to the needs and demands of the program
1	1.00 - 1.75	Not Responsive	Curriculum is not responsive to the needs and demands of the program

Table C. Scoring Procedure to check the level of Curriculum Relevance of BS Criminology Program

Scale	Range	Description	Interpretation
4	3.26 - 4.00	Highly Relevant	Curriculum is highly relevant the needs and demands of the program
3	2.51 - 3.25	Relevant	Curriculum is relevant to the needs and demands of the program.
2	1.76 - 2.50	Moderately Relevant	Curriculum is moderately relevant to the needs and demands of the program

1	1.00 - 1.75	Not Relevant	Curriculum is not relevant to the needs and demands of the program
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For problems 2 and 4, inferential statistics were used to determine if there were significant differences in the respondents' responses on the level of curriculum responsiveness and curriculum relevance according to their group.

For Problem 5, qualitative data were analyzed using Braun and Clarke's Thematic Analysis. This method was selected since the study sought to identify, analyze, and interpret recurring patterns and themes from the participants' responses rather than to explore the essence of their lived experiences. Braun and Clarke's approach is particularly appropriate for explanatory sequential mixed-methods research as it enables the qualitative findings to explain and elaborate the quantitative results obtained during the first phase of the study.

Further, the qualitative analysis followed Braun and Clarke's (2006) six-phase thematic analysis process: (1) familiarization with the data, (2) generation of initial codes, (3) searching for themes, (4) reviewing themes, (5) defining and naming themes, and (6) producing the report.

To facilitate the analysis, MAXQDA software was utilized for data management, coding, categorization, and theme development. Interview transcripts were imported into MAXQDA, where initial codes were generated and organized according to recurring concepts and patterns. Through an iterative coding process, related codes were grouped into broader categories and themes that reflected the challenges encountered under the current BS Criminology curriculum. The software served as an analytical support tool by enhancing the systematic organization, retrieval, and interpretation of qualitative data while maintaining transparency and rigor throughout the thematic analysis process.

The resulting themes provided deeper explanations of the quantitative findings and served as the basis for identifying curriculum gaps, areas for enhancement, potential inclusion of additional course offerings, stronger integration of emerging competencies, and possible development of specialized academic programs within criminology and criminal justice education.

After which, the themes formulated were converted and presented in a manner accepted or in accordance with the institutional template. Findings were then summarized and interpreted in relation to the curriculum component's responsiveness, and determined the necessity for curriculum enhancement.

2.9 Ethical Considerations

The study strictly adhered to ethical standards in research involving human participants and in compliance with institutional and CHED ethical guidelines.

Thus, all respondents and participants received a letter of consent explaining the study's objectives, procedures, voluntary nature of participation, and their rights to withdraw at any given time. Consent was secured therefore prior to data collection.

To add, personal identifiers were not disclosed at all cost. Interview recordings and transcripts were stored securely and accessible only to the researcher. This ensures compliance with the Data Privacy Act of 2012 (RA 10173) ensuring that all personal and institutional data were protected.

Moreover, participation in both the quantitative and qualitative phases were entirely voluntary. No coercion, compensation, or undue influence were involved. Data were collected and reported honestly without fabrication or manipulation.

As manifested, prior approval was obtained from concerned institutions, respondents and key informants.

Lastly, all sources, instruments, and references used in the research were properly cited to uphold academic integrity.

2.10 Dissemination of the Research Outcome

The research outcomes were disseminated to the key stakeholders and intended beneficiaries of the study, particularly the administrators and faculty members of the BS Criminology program, graduates, industry practitioners, and other relevant stakeholders in the criminal justice sector. A copy of the research findings and the proposed Evidence-Based Model for Curriculum Responsiveness and Curriculum Relevance was provided to the concerned academic administrators and curriculum committee for consideration in curriculum review, program assessment, and continuous quality improvement initiatives.

The identified curriculum gaps and the corresponding Curriculum Enhancement Framework were also presented to relevant stakeholders to facilitate discussion on possible enhancements in curriculum content, pedagogical approaches, experiential learning, emerging criminological competencies, and industry alignment. The findings were likewise to be presented through appropriate research conferences, academic forums, curriculum review activities, and professional development activities, as applicable, to promote knowledge sharing among criminology educators and criminal justice practitioners.

To extend the contribution of the study beyond the immediate research locale, the research findings were prepared for publication in a peer-reviewed national or international academic journal. This provided an avenue for wider dissemination of the findings and the proposed curriculum enhancement model to researchers, criminology educators, higher education institutions, and criminal justice professionals who could use the study as a reference for curriculum assessment and enhancement.

The dissemination of the research outcomes was intended not only to communicate the findings but also to support their utilization in evidence-based curriculum review and continuous quality improvement. Feedback and recommendations obtained from academic administrators, faculty members, practitioners, graduates, and other relevant stakeholders were considered in identifying possible areas for future curriculum enhancement.

CHAPTER 3

RESULTS AND DISCUSSION

This chapter presented the results of study, provided interpretation thereof, and substantiated the same to better understand the discussions. Likewise, presented the data in a manner that can be best appreciated as the researcher discussed the findings per problem.

Problem 1. What is the level of curriculum responsiveness of BS Criminology program in terms of:

1.1 societal and industrial relevance

1.2 pedagogical approaches

1.3 emerging trends

Table 1.1 presents the assessment of the respondents on the level of curriculum responsiveness of the BS Criminology program in terms of societal and industrial relevance.

Table 1.1 Mean Distribution on the Level of Curriculum Responsiveness of the BS Criminology Program in terms of Societal and Industrial Relevance

Indicators	Gra dua tes	Aca de me	Pra ctiti one rs	Ove rall Me an	Description
1. The extent to which the curriculum adapts to the evolving needs of law enforcement agencies.	3.35	3.42	3.28	3.35	Highly Responsive
2. The extent to which the curriculum responds to current issues related to community safety and crime prevention.	3.26	3.43	3.26	3.32	Highly Responsive
3. The extent to which the curriculum is updated to address the demands of the criminal justice system.	3.29	3.37	3.25	3.30	Highly Responsive
4. The extent to which the curriculum incorporates feedback from criminal justice practitioners in curriculum improvement.	3.26	3.32	3.26	3.28	Highly Responsive
5. The extent to which the curriculum prepares students for competencies required in police service.	3.49	3.23	3.36	3.36	Highly Responsive
6. The extent to which the curriculum responds to the industry's growing demand for stronger communication competencies .	3.34	3.23	3.14	3.24	Responsive
7. The extent to which the curriculum aligns with competency requirements of security institutions.	3.46	3.23	3.23	3.31	Highly Responsive
8. The extent to which the curriculum adapts to societal changes affecting crime and public safety.	3.36	3.25	3.16	3.29	Highly Responsive
9. The extent to which the curriculum prepares students to address emerging criminal justice challenges.	3.14	3.42	3.39	3.34	Highly Responsive
10. The extent to which the curriculum reflects the needs of national and local law enforcement agencies.	3.32	3.33	3.34	3.33	Highly Responsive

Overall Mean	3.31	3.36	3.26	3.31	Highly Responsive
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Legend: 3.26 – 4.00 = Highly Responsive

2.51 – 3.25 = Responsive

1.76 – 2.50 = Moderately Responsive

1.00 – 1.75 = Not Responsive

As reflected in the table, the overall mean of **3.31** indicates that the respondents assessed the curriculum as **highly responsive** in terms of societal and industrial relevance. Among the three respondent groups, the academe generally provided the highest ratings, followed by the practitioners and graduates. Despite these slight differences, all three groups consistently assessed the curriculum as responsive to the needs of the criminal justice system and society. This implies that the BS Criminology curriculum generally aligns with the expectations, needs, and competency requirements of society and the criminal justice industry. The finding suggests that the program effectively prepares students for professional practice by equipping them with competencies relevant to law enforcement, criminal investigation, correctional administration, and other public safety services. It further indicates that the curriculum remains connected to the evolving expectations of criminal justice institutions and the broader societal demand for competent criminology professionals.

Among the indicators, the statement “**The extent to which the curriculum prepares students for competencies required in police service**” obtained the highest mean of **3.36**, interpreted as highly responsive. This finding implies that the curriculum effectively develops the competencies and practical skills necessary for police service and other criminal justice professions. The result suggests that students are provided with knowledge, training, and learning experiences that contribute to their readiness for employment in law enforcement agencies and related institutions. This may be attributed to the integration of professional subjects, practical exercises, simulations, and field exposure within the curriculum that strengthen students’ understanding of police operations, criminal investigation, public safety, and crime prevention.

The finding supports the study of Habiatan (2022), which revealed that the criminology curriculum was highly relevant to the professional duties and responsibilities of graduates employed in law enforcement agencies. Similarly, Mendoza and Torres (2021) found that most criminology graduates were employed in criminal justice agencies, indicating that the academic preparation provided by criminology programs remains aligned with professional practice and industry expectations. The result also supports Human Capital Theory proposed by Schultz (1961) and Becker (1964), which explains that education serves as an investment in developing competencies, skills, and knowledge necessary for workforce productivity and professional success. Therefore, the high assessment in this indicator demonstrates that the curriculum contributes positively to the professional preparedness and employability of criminology students.

Likewise, the indicator “**curriculum adapts to the evolving needs of law enforcement agencies**” obtained a high mean of **3.35** described as **Highly Responsive**, suggesting that the program responds effectively to the changing demands of criminal justice institutions and public safety sectors. This finding implies that the curriculum recognizes the dynamic nature of criminal justice work and attempts to integrate competencies that address contemporary professional challenges. Modern law enforcement agencies increasingly require personnel who possess not only traditional policing competencies but also communication skills, analytical abilities, technological literacy, and adaptability to emerging criminal trends. The positive assessment therefore indicates that the program is responsive to these evolving institutional expectations.

Also, this finding is consistent with the literature of Darling-Hammond et al. (2020), which emphasized that educational systems must ensure alignment between academic programs and real-world professional requirements in order to produce competent graduates capable of responding to societal and occupational demands. Likewise, the OECD (2021) highlighted that higher education institutions should continuously develop curricula responsive to labor market demands and societal expectations to improve graduate employability and professional competence. In addition, Smith and Barton (2020) found that academic programs that collaborate with industry practitioners in curriculum development tend to produce graduates with stronger professional competencies and higher employability. These findings affirm that curriculum responsiveness is strengthened when educational institutions continuously align learning outcomes with the operational realities and competency expectations of the criminal justice sector.

The relatively higher rating among **graduates (3.49)** may be associated with their direct experience of applying the knowledge and skills acquired from the curriculum during their transition to professional practice. Having experienced both academic preparation and the demands of employment, graduates may be in a position to recognize the extent to which the curriculum provided competencies applicable to police-related functions. The **industry practitioners' mean of 3.36** also indicates a highly responsive assessment, although slightly lower than that of the graduates. Their relatively favorable assessment may be attributed to their direct exposure to the competencies required in actual criminal justice practice. As practitioners observe graduates and personnel performing law enforcement functions, their assessment may be influenced by the extent to which the curriculum provides foundational knowledge and skills applicable to workplace responsibilities.

In contrast, the **Academe** recorded the lowest **mean of 3.23**. This does not necessarily indicate that academic personnel considered the curriculum inadequate. Rather, the relatively lower assessment may reflect their closer involvement in curriculum implementation, instructional delivery, assessment, and the identification of competency gaps. Academic personnel may therefore evaluate the curriculum more critically by considering not only whether competencies are included in the curriculum but also whether sufficient instructional activities, faculty expertise, resources, and practical experiences are available to effectively develop those competencies. This interpretation is supported by the qualitative findings, wherein participants identified limited application, faculty training, and the need to focus on the specific requirements of law enforcement agencies as areas requiring improvement. **Participant 2**, for instance, observed that the curriculum is *"more on theories rather than actual"* and recommended that it should *"focus on the specific needs of the specific law enforcement agencies."* **Participant 4** similarly identified a *"lack of application and faculty training,"* suggesting that the presence of competencies in the curriculum does not necessarily guarantee their full development through instruction and practice.

On the other hand, the indicator regarding **"Curriculum responds to the industry's growing demand for stronger communication competencies"** obtained the lowest mean of **3.24**, interpreted as Responsive. However, the graduates obtained a relatively higher mean of **3.34**, indicating a **Highly Responsive** assessment, suggesting that graduates generally assessed that the curriculum provided them with sufficient communication-related preparation. The lower overall rating therefore appears to be influenced by the assessments of the other respondent groups, particularly those who may have evaluated communication competency from the standpoint of institutional or workplace expectations.

The relatively favorable assessment of the **graduates (3.34)** may be associated with their direct experience of completing the curriculum and applying the communication skills developed through their academic preparation. Having experienced the learning process firsthand, graduates may recognize the

communication competencies embedded across different courses and activities. However, their favorable assessment does not necessarily mean that no communication gaps exist. The qualitative findings indicate that participants still identified limited opportunities to develop communication and interpersonal skills, particularly in oral communication, written communication, and communication activities that simulate actual professional situations.

The quantitative finding indicates that, overall, communication competency received the lowest indicator rating under Societal and Industrial Relevance, while the graduates themselves rated the indicator more favorably (3.34). The qualitative findings help explain this apparent difference by showing that the issue may not be the complete absence of communication competencies in the curriculum, but rather the depth, frequency, and authenticity of opportunities to practice these competencies. Participants reported difficulties in oral and written communication and pointed to limited activities that allow students to apply communication skills in realistic criminal justice situations.

This recurring concern is evident in the responses of the participants.

Participant 1 shared that *"Students struggle in writing, speaking English, and expressing their ideas effectively."* **Participant 3** similarly explained that *"Communication skills, both oral and written, remain one of the most difficult competencies for students."* **Participant 6** added that students have difficulty expressing their own ideas in English. Likewise, **Participant 7** stated that *"Reading comprehension and communication skills continue to challenge students, particularly when interpreting legal concepts and technical terminologies."*

The convergence of these responses indicates that communication challenges extend beyond language proficiency. They affect students' ability to comprehend legal concepts, prepare professional reports, present evidence, and communicate effectively within multidisciplinary criminal justice environments. The findings suggest that although communication-related competencies are incorporated within the curriculum, opportunities for authentic practice and continuous reinforcement may still be insufficient to fully develop the level of proficiency expected from future criminologists.

Therefore, the finding should be interpreted as a curriculum enhancement gap rather than a curriculum deficiency. The curriculum already provides communication-related competencies, as reflected in the graduates' favorable assessment, but the qualitative evidence suggests that these competencies can still be strengthened through more authentic communication exercises, case-based activities, report writing, investigative documentation, oral presentations, interviewing simulations, and other practice-oriented activities relevant to criminal justice work.

Overall, the findings indicate that the BS Criminology curriculum remains highly responsive to societal and industrial demands, particularly in preparing students for professional practice in the criminal justice system. The results imply that the curriculum generally succeeds in aligning academic preparation with workforce expectations, professional standards, and societal needs. However, the findings also suggest the importance of continuous curriculum review and enhancement to sustain relevance and responsiveness amid changing criminal justice trends and institutional demands.

Consistent with the explanatory sequential mixed-methods design employed in this study, the quantitative findings were collaboratively supported and further explained by the qualitative findings. Although the curriculum obtained a high level of responsiveness, participants consistently identified several areas requiring improvement which included communication competency gaps. The result likewise supports the assertion of UNESCO (2021) that higher education institutions must continuously redesign and update curricula to address emerging societal issues, technological developments, and workforce expectations.

Table 1.2 presents the assessment of the respondents on the level of curriculum responsiveness of the BS Criminology program in terms of pedagogical approaches.

Table 1.2 Mean Distribution on the Level of Curriculum Responsiveness of the BS Criminology Program in terms of Pedagogical Approaches

Indicators	Gra dua tes	Aca de me	Pra ctiti one rs	Me an	Description
1. The extent to which the curriculum adopts modern teaching strategies relevant to criminology education.	3.39	3.23	3.31	3.31	Highly Responsive
2. The extent to which the curriculum incorporates simulation-based learning activities.	3.29	3.23	3.37	3.29	Highly Responsive
3. The extent to which the curriculum integrates forensic laboratory exercises in course delivery.	3.3	3.23	3.26	3.27	Highly Responsive
4. The extent to which the curriculum responds to technological advancements in teaching and learning.	3.31	3.28	3.37	3.32	Highly Responsive
5. The extent to which the program adopts scenario-based training related to criminal investigation.	3.39	3.23	3.31	3.31	Highly Responsive
6. The extent to which the curriculum utilizes digital learning tools and multimedia resources.	3.31	3.24	3.29	3.28	Highly Responsive
7. The extent to which the curriculum adopts teaching strategies that promote critical thinking.	3.34	3.33	3.28	3.35	Highly Responsive
8. The extent to which the curriculum allows faculty members to implement innovative instructional approaches.	3.2	3.23	3.4	3.26	Highly Responsive
9. The extent to which the curriculum integrates experiential learning such as field immersion and practicum.	3.5	3.23	3.4	3.38	Highly Responsive

10. The extent to which the curriculum allows teaching approaches to continuously improve in enhancing learning outcomes.	3.29	3.42	3.37	3.36	Highly Responsive
Overall Mean	3.32	3.32	3.27	3.30	Highly Responsive

Legend: 3.26 – 4.00 = *Highly Responsive* 2.51 – 3.25 = *Responsive*
1.76 – 2.50 = *Moderately Responsive* 1.00 – 1.75 = *Not Responsive*

As shown in the table, the overall mean of **3.30** indicates that the curriculum is **highly responsive** in relation to pedagogical approaches. Across the three respondent groups, the graduates generally provided the highest ratings, followed by the practitioners and the academe. Despite these slight differences, all respondent groups consistently assessed that the pedagogical approaches adopted in the curriculum contribute positively to the development of students' knowledge, skills, and professional competencies. This implies that the teaching strategies and instructional methods employed in the BS Criminology program are generally effective in facilitating meaningful learning experiences, student engagement, and professional preparation. The result further suggests that the program adopts learner-centered instructional practices that contribute to the development of critical thinking, practical competencies, and analytical skills necessary for criminal justice practice.

The finding supports contemporary educational literature emphasizing the importance of learner-centered pedagogies in higher education. Darling-Hammond et al. (2020) emphasized that instructional approaches such as experiential learning, problem-based learning, and collaborative learning enhance student engagement and knowledge retention while strengthening critical thinking and professional competence. Similarly, Constructivist Learning Theory advanced by Piaget (1970) and Vygotsky (1978) explains that learners actively construct knowledge through interaction, collaboration, and practical experiences rather than through passive learning alone. These perspectives suggest that effective pedagogy is essential in ensuring that criminology students acquire both theoretical understanding and practical competencies relevant to criminal justice work.

Among the indicators, the statement “**The extent to which the curriculum integrates experiential learning such as field immersion and practicum**” obtained the highest mean of **3.38**, interpreted as **highly responsive**. This finding implies that the curriculum effectively provides students with practical learning experiences essential to criminology education and professional preparation. The result suggests that the program recognizes the importance of exposing students to real-world criminal justice environments through field immersion, practicum activities, simulations, and practical exercises that enhance professional readiness.

The **graduates** obtained the **highest mean (3.50)**, followed by the **industry practitioners (3.40)**, while the **Academe** obtained the **lowest mean (3.23)**, interpreted as **Responsive**. The relatively high assessment of the graduates may be associated with their direct experience of field immersion, practicum, and other experiential learning activities during their academic preparation. Likewise, the high rating from industry practitioners may reflect their recognition of the value of field-based and practice-oriented experiences in preparing students for actual criminal justice work.

The comparatively lower rating from the academe may indicate a more cautious assessment of the extent, consistency, or quality of experiential learning implementation. Academic personnel may consider not

only the existence of practicum and field immersion but also whether these activities provide sufficient opportunities for students to apply classroom knowledge, develop professional competencies, and experience diverse criminal justice situations. This interpretation should, however, be presented as a possible explanation rather than a definitive reason for the lower rating unless qualitative data specifically confirms it.

Consistent with the explanatory sequential mixed-methods design, the quantitative finding was further explained by the qualitative findings. Although graduates and industry practitioners viewed experiential learning favorably, the qualitative findings identified insufficient experiential and practice-oriented learning opportunities and limited exposure to contemporary criminal justice practice as continuing challenges. Participants emphasized the need for greater opportunities for students to engage in authentic situations where theoretical knowledge can be applied to actual criminal justice tasks. Thus, the qualitative findings do not contradict the high quantitative assessment; rather, they qualify it by showing that while experiential learning is already present and generally assessed positively, the extent and authenticity of these opportunities can still be strengthened.

The finding supports Roberts and Roberts (2021), who found that students who participated in simulations and field-based activities demonstrated higher levels of engagement and practical competence compared to those who relied solely on traditional lecture-based instruction. Similarly, Ramos and Bautista (2022) reported that practical training activities such as simulations and field exercises significantly improved students' learning outcomes and professional readiness.

Similarly, the indicator regarding **“curriculum’s adoption of teaching strategies that promote critical thinking”** obtained a mean of 3.35 and described as **highly responsive**, indicating that the program encourages analytical thinking, problem-solving skills, and decision-making competencies among students. This finding implies that the instructional practices used in the program help students develop the cognitive and analytical abilities necessary for criminal investigation, crime analysis, evidence evaluation, and law enforcement decision-making. Since criminology professionals are often required to analyze complex situations and make informed judgments, the development of critical thinking skills is essential in preparing graduates for professional responsibilities.

The result is consistent with Anderson and Carter (2020), who found that problem-based learning approaches in criminology courses developed stronger analytical and problem-solving skills among students compared to conventional teaching methods. It also supports the principles of Constructivist Learning Theory, which emphasizes that meaningful learning occurs when students actively engage in problem-solving and experiential activities that encourage deeper understanding and critical reflection.

Meanwhile, the indicator regarding **“faculty members’ implementation of innovative instructional approaches”** obtained the lowest mean of 3.26 but is still described as **highly responsive**. This suggests that while innovative teaching practices are evident in the program, there remains room for further enhancement in instructional innovation, faculty capability development, and technology-assisted instruction.

The result supports the study of Malbas and Casas (2022), which reported that faculty preparedness and institutional support significantly influence the effectiveness of curriculum implementation and responsiveness. Similarly, Rapanta et al. (2020) emphasized that faculty digital competence, assessment redesign, and institutional support systems are essential in ensuring effective online and blended curriculum implementation. In addition, Crawford et al. (2020) identified challenges such as insufficient

faculty preparedness, inconsistent communication systems, and limited digital infrastructure during the transition to technology-assisted learning.

Among the respondent groups, the **industry practitioners obtained the highest mean (3.40)**, followed by the **academe (3.23)**, while the **graduates obtained the lowest mean (3.20)**. Although the overall assessment indicates that the curriculum is highly responsive in providing opportunities for innovative instructional approaches, the variation among the respondent groups suggests differences in how the implementation of instructional innovation is assessed.

The relatively high assessment of the **industry practitioners (3.40)** may reflect their recognition of the importance of innovative approaches in preparing students for contemporary criminal justice practice. From the perspective of practitioners, instructional approaches that expose students to realistic scenarios, current technologies, simulations, and practice-oriented activities may be viewed as valuable mechanisms for developing competencies needed in actual professional settings. Their assessment may therefore be influenced by the increasing need for graduates to adapt to changing technologies and operational practices in the criminal justice sector.

The **Academe** obtained a **mean of 3.23**, indicating a **Responsive** assessment. This relatively moderate rating may reflect the academic personnel's awareness of the practical challenges involved in implementing innovative instructional approaches, including faculty preparedness, availability of instructional resources, technology, training, and institutional support. Since academic personnel are directly involved in instructional implementation, their assessment may take into consideration not only whether innovative approaches are encouraged but also the extent to which faculty members are actually able to implement them consistently.

Meanwhile, the **graduates obtained the lowest mean of 3.20**. This may suggest that, from the students' perspective, innovative instructional approaches were not consistently experienced across their courses. However, this should be interpreted cautiously. The lower graduate rating does not necessarily mean that innovative instruction was absent but rather it may indicate that students experienced varying levels of instructional innovation across subjects, faculty members, or learning activities.

In line with the qualitative findings, participants identified different barriers, nonetheless, they collectively acknowledged that these limitations significantly influence the quality of instructional delivery.

For instance, **Participant 1** explained that *“limited access to updated gadgets, inadequate internet connectivity, and insufficient technological resources prevented both faculty members and students from maximizing innovative instructional approaches”*. Similarly, **Participant 2** observed that *“the lack of instructional equipment, laboratory facilities, and competent instructors constrained the delivery of meaningful practical learning experiences”*. **Participant 3** further emphasized that *“the curriculum remained dependent on outdated syllabi and exhibited misalignment between the CHED curriculum and the licensure examination, limiting opportunities for instructional innovation”*. Likewise, **Participant 4** highlighted *“the lack of faculty training and professional development in adopting innovative teaching strategies”*. **Participant 6** observed that *“many instructors remain highly dependent on traditional teaching approaches and are less receptive to new pedagogical methods.”*

These findings suggest that improving instructional quality requires more than encouraging faculty members to adopt innovative teaching methods. Effective instructional innovation likewise depends on institutional investments in faculty development, technological infrastructure, instructional resources, curriculum enhancement, and administrative support. Without these enabling conditions, even highly

motivated faculty members may encounter difficulties in implementing active, technology-enhanced, and competency-based instructional strategies.

Consistent with the explanatory sequential mixed-methods design, the quantitative finding was further explained by the qualitative findings. The relatively lower assessment of graduates is consistent with the qualitative theme *“Institutional and Faculty Constraints in Implementing Innovative Teaching Approaches.”* Participants identified limitations in faculty training, instructional resources, and the capacity to consistently implement innovative approaches. The qualitative findings also pointed to the predominance of traditional teacher-centered instruction, suggesting that some classroom experiences continue to rely on conventional teaching methods rather than consistently incorporating innovative, technology-assisted, and practice-oriented approaches.

Thus, the qualitative findings help explain why the overall quantitative assessment remained **Highly Responsive (3.38)** although the graduates provided a comparatively lower assessment (**3.20**). The findings indicate that innovative instructional approaches are already present in the curriculum, but their implementation may not be consistent across learning experiences. Consequently, the issue identified by the qualitative phase is not the complete absence of instructional innovation but the need to strengthen faculty capability, institutional support, instructional resources, and opportunities for technology-assisted and experiential teaching.

Overall, the findings indicate that the pedagogical approaches employed in the BS Criminology curriculum are highly responsive and contribute significantly to effective teaching and learning experiences. The results suggest that the program successfully adopts learner-centered and experiential instructional strategies that enhance student engagement, practical competence, and professional readiness. However, the findings also highlight the importance of continuously strengthening innovative teaching practices and faculty capability development to sustain instructional effectiveness amid evolving educational and technological demands.

Specifically, participants reported the predominance of traditional teacher-centered instruction, indicating that some learning experiences continue to rely heavily on lecture-based approaches with limited student engagement. They likewise emphasized the insufficient experiential and practice-oriented learning opportunities, noting that students require more simulations, field-based activities, and authentic learning experiences to strengthen professional competencies. Furthermore, participants identified institutional and faculty constraints in implementing innovative teaching approaches, citing limited faculty training, inadequate instructional resources, and challenges in integrating technology and contemporary instructional strategies. These qualitative findings explain why respondents recognized the curriculum as generally responsive while simultaneously identifying opportunities to enhance instructional innovation and faculty development.

Table 1.3 presents the assessment of the respondents on the level of curriculum responsiveness of the BS Criminology program in terms of emerging trends.

Table 1.3 Mean Distribution on the Level of Curriculum Responsiveness of the BS Criminology Program in terms of Emerging Trends

Indicators	Graduates	Academe	Practitioners	Mean	Description
1. The extent to which the curriculum responds to developments in cybercrime investigation.	3.14	2.84	3.05	3.01	Responsive
2. The extent to which the curriculum integrates topics related to digital forensics.	3.01	2.78	3.03	2.94	Responsive
3. The extent to which the curriculum adapts to emerging global crime trends.	2.98	2.84	2.91	2.91	Responsive
4. The extent to which the curriculum integrates crime analytics and intelligence-led policing.	2.99	2.7	2.98	2.89	Responsive
5. The extent to which the curriculum incorporates modern investigative technologies.	3.07	2.85	3.02	2.98	Responsive
6. The extent to which the curriculum includes contemporary issues in transnational crime.	2.97	2.86	2.96	2.93	Responsive
7. The extent to which the curriculum reflects developments in forensic science.	3.12	2.83	3.05	3.00	Responsive
8. The extent to which the curriculum adapts to technological advancements relevant to criminology.	3.02	2.84	3.05	2.97	Responsive
9. The extent to which the curriculum incorporates modern crime prevention strategies.	3.07	2.82	2.99	2.96	Responsive
10. The extent to which the curriculum continuously updates course content to reflect emerging criminology developments.	3.03	2.76	2.97	2.92	Responsive
Overall Mean	3.02	2.82	3.01	2.95	Responsive

Legend: 3.26 – 4.00 = Highly Responsive

2.51 – 3.25 = Responsive

$1.76 - 2.50 = \text{Moderately Responsive}$ $1.00 - 1.75 = \text{Not Responsive}$

As reflected in the table, the overall mean of **2.95** indicates that the curriculum is responsive in addressing emerging developments in criminology and criminal justice. Among the three respondent groups, the graduates generally provided the highest ratings, followed by the practitioners, while the academe registered comparatively lower ratings across several indicators. Despite these differences, all respondent groups recognized the importance of strengthening the integration of emerging criminological developments to ensure that the curriculum remains responsive to the evolving needs of the criminal justice profession.

This implies that the program is enabled to incorporate modern concepts and contemporary issues relevant to the field. However, the level of responsiveness remains moderate compared to the other dimensions of curriculum responsiveness. The result suggests that the curriculum recognizes the importance of adapting to changes in criminal justice practice, technological advancement, and evolving crime patterns, but there is still a need for continuous enhancement to ensure that graduates remain competitive and professionally prepared for modern law enforcement and public safety roles.

Among the indicators, the statement **“The extent to which the curriculum responds to developments in cybercrime investigation”** obtained the highest mean of **3.01**, interpreted as responsive. This finding suggests that the curriculum acknowledges the increasing prevalence of cybercrime and technology-related offenses by integrating topics associated with digital criminal activities, cyber investigations, and electronic evidence handling.

The finding supports the study of Brown (2022), which emphasized that the integration of cybercrime and digital forensic courses significantly improves students’ preparedness for modern law enforcement roles. Likewise, Holt, Bossler, and Seigfried-Spellar (2022) argued that criminal justice curricula must systematically integrate cybercrime investigation and digital evidence handling since these competencies are already essential in contemporary policing and criminal investigations. Furthermore, Sarkar et al. (2023) emphasized that criminal justice curricula should strengthen technical, analytical, and collaborative competencies related to online investigations and digital evidence processing to respond effectively to emerging criminal trends.

Likewise, the **curriculum’s reflection of developments in forensic science** obtained a mean of **3.00**, indicating that forensic science concepts and advancements are incorporated into the curriculum to support criminology education. This suggests that the program recognizes the importance of scientific investigation and evidence-based criminal justice practices in preparing future criminologists. The integration of forensic science-related competencies enables students to acquire knowledge and practical understanding of evidence collection, crime scene investigation, laboratory procedures, and forensic analysis, which are necessary in modern criminal investigations.

The finding is aligned with CHED Memorandum Order No. 5, series of 2018, which emphasizes that criminology programs should develop and update competencies related to forensic science, criminal investigation, and law enforcement administration to ensure alignment with professional standards and industry expectations. In the same manner, UNESCO (2021) emphasized that higher education institutions must integrate interdisciplinary knowledge and technological competencies into academic programs to ensure that graduates are equipped to address contemporary societal and professional challenges.

On the other hand, the indicator regarding the **“integration of crime analytics and intelligence-led policing”** obtained the lowest mean of **2.89**, interpreted as responsive. Although the result remains

positive, it suggests that crime analytics, predictive policing, and intelligence-led policing are among the areas that require further strengthening within the curriculum. This may imply that while students are exposed to these concepts, the depth of instruction, practical application, and technological integration may still be limited. Considering that modern criminal justice systems increasingly rely on data-driven policing, intelligence gathering, and crime trend analysis, insufficient exposure to these areas may affect graduates' preparedness for technologically advanced law enforcement environments.

The recurrence of this concern was evident across the participants in the qualitative result. Such that, **Participant 2** emphasized that *"there are difficulties in crime scene processing, criminal profiling, forensic updates, and crime data analytics, indicating the increasing complexity of technology-assisted criminal investigation"*. **Participant 3** similarly reported that *"students struggle with cybercrime concepts and emerging forensic technologies"*. **Participant 4** highlighted that *"challenges involving cybercrime, artificial intelligence integration, photogrammetry, and digital presentation of evidence"*. Finally, **Participant 6** identified *"cybercrime laws and the practical application of emerging concepts as continuing challenges"*.

These responses therefore demonstrated a common assessment among the participants that the curriculum should further strengthen the integration of emerging criminological trends and technological competencies. The consistency of these responses suggests that the challenge is not merely the inclusion of new subject matter but ensuring that students develop the competencies necessary to respond to rapidly changing criminal justice environments. Modern policing and criminal investigation increasingly rely on digital technologies, intelligence analysis, data-driven decision-making, cyber investigations, and interdisciplinary collaboration.

The finding supports the study of Miró-Llinares and Moneva (2021), which revealed that criminal justice professionals increasingly require competencies in statistical literacy, technological proficiency, and predictive policing techniques. Similarly, recent institutional studies conducted in Northern Luzon and Central Luzon reported that criminology students still require improvement in technology application, analytical reasoning, and digital competencies necessary for modern criminal justice practice. In addition, Huey, Nhan, and Broll (2021) found that police recruits assessment assessed themselves as underprepared in cyber-enabled investigations and online intelligence gathering, indicating a gap between curriculum-delivered competencies and actual industry requirements.

Overall, the findings imply that the BS Criminology curriculum is responsive to emerging criminological trends and technological advancements, however, continuous curriculum enrichment remains necessary to keep pace with rapidly evolving criminal justice practices and innovations. The result indicates that while the curriculum already integrates several modern developments in criminology education, additional efforts are needed to strengthen technology-oriented competencies, digital investigation skills, and analytical capabilities among students. This may include the inclusion of specialized subjects, enhancement of laboratory facilities, faculty training, stronger industry collaboration, and the integration of technology-assisted instructional approaches.

Consistent with the explanatory sequential mixed-methods design, the quantitative findings were corroborated and further explained by the qualitative findings. Participants consistently pointed to the insufficient integration of emerging criminological knowledge, emphasizing the need to strengthen curriculum content on cybercrime investigation, digital forensics, crime analytics, intelligence-led policing, and other contemporary developments in criminal justice. They likewise identified the limited development of profession-specific competencies, indicating that students require greater exposure to

specialized competencies demanded by modern law enforcement agencies. Furthermore, participants highlighted the presence of outdated and insufficient curriculum content, suggesting that certain topics require periodic revision to reflect current policies, technologies, investigative methodologies, and professional practices.

The findings further support Constructive Alignment Theory introduced by Biggs (1996), which emphasizes that effective curricula must continuously align intended learning outcomes, teaching strategies, and assessment methods with evolving professional standards and societal demands. The result also affirms the position of UNESCO (2021) and OECD (2021), which stress that higher education institutions must continuously redesign and update curricula to ensure responsiveness to technological advancements, labor market expectations, and emerging societal challenges.

Table 1.4 presents the summary of the assessments of the graduates, academe, and practitioners regarding the level of curriculum responsiveness of the Bachelor of Science in Criminology program across the dimensions of societal and industrial relevance, pedagogical approaches, and emerging trends.

Table 1.4 Summary of the Mean Distribution on the Level of Curriculum Responsiveness of the BS Criminology Program

Indicators	Graduates	Academe	Practitioners	Mean	Interpretation
Societal and Industrial Relevance	3.31	3.36	3.26	3.31	Curriculum is highly responsive to the needs and demands of the program
Pedagogical Approaches	3.33	3.32	3.27	3.30	Curriculum is highly responsive to the needs and demands of the program
Emerging Trends	3.02	2.82	3.01	2.95	Curriculum is responsive to the needs and demands of the program
Overall Mean	3.22	3.16	3.18	3.19	Curriculum is responsive to the needs and demands of the program

Legend: 3.26 – 4.00 = *Highly Responsive* 2.51 – 3.25 = *Responsive*
 1.76 – 2.50 = *Moderately Responsive* 1.00 – 1.75 = *Not Responsive*

As can be gleaned from the table, the overall mean of **3.19** indicates that the curriculum responsiveness of the BS Criminology program is generally assessed as **responsive**, suggesting that the program generally addresses the expectations of the criminal justice profession while recognizing opportunities for continuous enhancement. Among the three dimensions, Societal and Industrial Relevance and Pedagogical Approaches obtained the highest overall means, whereas Emerging Trends received the lowest rating, indicating that greater attention should be given to integrating contemporary developments into the

curriculum. Across the three respondent groups, the graduates generally provided the highest assessments, followed by the academe and practitioners, although all groups consistently assessed the curriculum as responsive. This finding implies that the curriculum is capable of addressing the fundamental needs of the criminal justice sector, societal expectations, and developments in criminology education. The result further suggests that the program demonstrates a satisfactory level of adaptability in responding to professional demands, educational standards, and contemporary criminological concerns.

The finding supports the literature emphasizing that curriculum responsiveness is essential in ensuring that higher education programs remain aligned with labor market demands, societal expectations, and technological developments. According to Darling-Hammond et al. (2020), educational institutions must continuously align their curricula with real-world professional requirements to produce competent graduates capable of responding to societal challenges. Similarly, UNESCO (2021) emphasized that higher education curricula must continuously evolve to integrate emerging societal issues, interdisciplinary knowledge, and technological competencies relevant to modern professional practice. These perspectives imply that curriculum responsiveness is a multidimensional process that requires continuous evaluation and improvement to ensure relevance and effectiveness.

Among the indicators, **societal and industrial relevance** obtained the highest mean of **3.31**, interpreted as highly responsive. This finding suggests that the curriculum effectively responds to the evolving needs of law enforcement agencies, criminal justice institutions, and societal concerns related to public safety and crime prevention. The result implies that the curriculum is strongly aligned with the competencies and professional expectations required in criminal justice practice, particularly in areas such as law enforcement administration, criminal investigation, forensic science, and correctional services.

The finding is consistent with CHED Memorandum Order No. 5, series of 2018, which emphasizes that criminology programs must develop competencies relevant to criminal justice agencies and societal needs. Likewise, Habiata (2022) found that the criminology curriculum was highly relevant to the professional duties of graduates working in law enforcement agencies, indicating strong alignment between academic preparation and professional practice. Mendoza and Torres (2021) similarly reported that criminology graduates were generally employed in criminal justice agencies, suggesting that criminology education effectively prepares students for employment in the field. These findings therefore indicate that the BS Criminology curriculum effectively fulfills its role in preparing graduates for careers within the criminal justice system and addressing societal expectations concerning peace, order, and public safety.

Pedagogical approaches also received a high assessment with a mean of **3.30**, interpreted as highly responsive. This implies that the teaching strategies, instructional methods, and experiential learning activities used in the program are responsive to the learning needs of students and are aligned with criminology education standards. The finding further suggests that the program adopts learner-centered instructional practices that help students develop critical thinking, analytical abilities, practical competencies, and professional readiness necessary in criminal justice practice.

This finding supports the Constructivist Learning Theory advanced by Piaget (1970) and Vygotsky (1978), which emphasizes that students learn more effectively through active participation, interaction, problem-solving, and experiential learning activities. The result is also aligned with Roberts and Roberts (2021), who found that experiential learning approaches such as simulations, field exposure, and practicum activities significantly improve students' practical competence and engagement in criminal justice education. Similarly, Ramos and Bautista (2022) emphasized that practical training activities strengthen students' professional readiness and learning outcomes. These findings indicate that responsive

pedagogical approaches are essential in bridging theoretical knowledge and actual criminal justice practice.

Meanwhile, **emerging trends** obtained a mean of **2.95**, interpreted as responsive. This indicates that while the curriculum incorporates developments related to cybercrime investigation, digital forensics, intelligence-led policing, and other modern criminological trends, there is still a need for continuous enhancement to fully address rapidly evolving criminal justice concerns. The finding implies that the curriculum has already initiated efforts to integrate modern technological developments and contemporary criminological concepts, however, additional enrichment may still be necessary to strengthen students' competencies in technology-driven criminal justice practices. Although each participant identified different areas requiring enhancement, they collectively recognized the importance of strengthening the integration of emerging criminological knowledge within the curriculum.

Consistent with the explanatory sequential mixed-methods design, the quantitative findings were corroborated, expanded, and further explained by the qualitative findings. Although the curriculum obtained an overall Responsive rating, the qualitative phase revealed several underlying curriculum challenges that explain the comparatively lower ratings of selected indicators. The findings further support Constructive Alignment Theory introduced by Biggs (1996), which emphasizes that effective curricula must continuously align learning outcomes, instructional strategies, and assessment methods with evolving professional standards and societal expectations.

In the qualitative result, **Participant 2** explained that “*greater emphasis should be placed on crime-data analysis, intelligence-led policing, and specialization aligned with different criminal justice professions*”, highlighting the need for curriculum content that reflects contemporary policing strategies. Similarly, **Participant 4** observed that “*cybercrime, artificial intelligence, digital evidence, and new technologies require greater curricular integration because these competencies have become increasingly relevant in modern criminal justice practice*”. **Participant 7** likewise emphasized that “*cybersecurity, modern policing, and updated laws should receive greater emphasis to ensure that graduates remain responsive to the rapidly changing demands of the profession*”.

These responses indicated that the participants do not assess the existing curriculum as inadequate; rather, they recognize that the continuously evolving nature of crime and criminal justice necessitates regular curriculum review and enhancement. The findings imply that curriculum responsiveness should not only preserve fundamental criminological concepts but should also integrate emerging knowledge and technological innovations that influence contemporary law enforcement, forensic investigation, corrections, and community safety. Such responsiveness enables graduates to remain relevant and competent in increasingly complex criminal justice environments.

The finding supports Brown (2022), who emphasized that integrating more cybercrime and digital forensic courses into criminology programs improves students' preparedness for modern law enforcement roles. Likewise, Holt, Bossler, and Seigfried-Spellar (2022) argued that criminal justice curricula must systematically incorporate cybercrime investigation and digital evidence handling to address emerging forms of crime effectively. Currently, only introduction to cybercrime was incorporated in the curriculum which deals only with the basic concept about what is cybercrime investigation. Thus, further courses or outcomes may be added without dealing with too many technicalities about cybercrime, which are only for the examiner and experts in that field.

Further, Miró-Llinares and Moneva (2021) also stressed that modern criminal justice professionals increasingly require competencies in statistical literacy, predictive policing, and technological proficiency

related to crime analytics and intelligence-led policing. These findings suggest that the integration of emerging trends into the curriculum is necessary to ensure that graduates remain responsive to contemporary criminal justice challenges and technological advancements.

The comparatively lower assessment of emerging trends may further imply that some areas related to technology integration, digital competencies, and advanced investigative techniques still require additional focus within the curriculum. This may involve strengthening subjects related to cybercrime investigation, digital forensics, crime analytics, and intelligence-led policing, as well as enhancing laboratory facilities, instructional technologies, and faculty training programs.

Overall, the findings imply that the BS Criminology curriculum demonstrates responsiveness in addressing the demands of society, industry, and modern criminological developments. The result indicates that the program effectively integrates competencies relevant to criminal justice practice, utilizes responsive pedagogical approaches, and incorporates emerging trends necessary for modern criminology education. However, the findings also highlight the importance of continuous curriculum review, instructional innovation, and technology integration to sustain curriculum responsiveness amid changing societal conditions and evolving professional demands.

Moreover, the result affirms Human Capital Theory proposed by Schultz (1961) and Becker (1964), which explains that education serves as an investment in developing the competencies and skills necessary for workforce productivity and professional effectiveness. Collectively, these theoretical perspectives support the importance of maintaining a responsive criminology curriculum capable of preparing graduates for the dynamic and technology-driven environment of the criminal justice system.

Problem 2. Is there a significant difference in the level of curriculum responsiveness of the BS Criminology program according to the respondents?

Table 2.1 shows the Analysis of Variance (ANOVA) in testing for significant differences in the level of curriculum responsiveness of the BS Criminology program according to the respondents. As shown in the table, the computed p-value of 0.024 is less than the 0.05 level of significance. This means that there is a significant difference in the assessment of the respondents regarding the curriculum responsiveness of the BS Criminology program. Therefore, the null hypothesis is rejected.

Table 2.1 Analysis of Variance (ANOVA) Statistics on the Level of Curriculum Responsiveness According to Respondents

Source of Variation	Sum of Squares	df	Mean Square	F-value	p-value	Interpretation
Between Groups	0.59	2	0.30	3.75	0.024	Significant
Within Groups	6.22	79	0.08			
Total	6.81	81				

significant p-value, reject the null hypothesis

$P > .05$ = difference is not significant, accept the null hypothesis

$P < .05$ = difference is significant, reject the null hypothesis

The finding implies that the respondents do not share a completely uniform assessment regarding the responsiveness of the curriculum. Specifically, deans and faculty members, industry practitioners, and graduates differ in their evaluation as to how responsive the BS Criminology curriculum is in relation to societal and industrial relevance, pedagogical approaches, and emerging criminological trends. This suggests that the respondents' assessments are influenced by their distinct professional roles, institutional responsibilities, practical experiences, and exposure to the criminal justice system.

The result supports the idea presented by Vreuls (2023) that curriculum responsiveness is multidimensional and is often interpreted differently by various stakeholders depending on their involvement in curriculum implementation and professional practice. Similarly, Annala et al. (2023) emphasized that curriculum reform and evaluation are influenced by academic agency, institutional structures, and stakeholder participation, implying that different stakeholders naturally develop varying assessments regarding curriculum effectiveness and responsiveness. These perspectives affirm that curriculum responsiveness cannot be viewed from a single standpoint alone since each stakeholder group evaluates the curriculum based on different expectations and experiences.

Graduates tend to provide higher assessments regarding curriculum responsiveness since they directly experience the applicability of the curriculum in actual professional practice, board examination preparation, and employment settings. Their positive assessment may indicate that the competencies acquired during their academic preparation are generally useful and relevant to their current professional responsibilities within law enforcement agencies, correctional institutions, security organizations, and other criminal justice sectors. Since graduates have already experienced the transition from academic training to workplace application, they are more likely to evaluate the curriculum based on its practical contribution to their employability and job performance.

This finding is consistent with the studies of Habiatan (2022) and Mendoza and Torres (2021), which revealed that criminology graduates generally assessed their academic preparation as relevant to their professional duties and employment within criminal justice agencies. Likewise, Garcia (2020) reported that criminology graduates considered their educational preparation relevant to actual professional practice, particularly in criminal investigation and law enforcement administration. These findings imply that graduates often assess curriculum responsiveness positively since they can directly observe how academic competencies contribute to their professional effectiveness and career opportunities.

Industry practitioners, meanwhile, evaluate the curriculum based on workplace competencies, operational standards, and institutional expectations within the criminal justice system. Their assessment is often anchored on whether graduates possess the practical skills, technological competencies, communication abilities, and professional attitudes necessary for effective performance in law enforcement and public safety institutions. Industry practitioners are more likely to focus on the alignment between curriculum-delivered competencies and actual workplace requirements since they directly supervise or collaborate with criminology graduates in professional environments.

The finding supports Smith and Barton (2020), who emphasized that academic programs that actively collaborate with industry practitioners tend to produce graduates with stronger professional competencies and higher employability. Similarly, Huey, Nhan, and Broll (2021) found that some police recruits assessed themselves as underprepared in areas such as cybercrime investigation, online intelligence gathering, and digital evidence handling, indicating the importance of industry perspectives in evaluating curriculum responsiveness. These findings imply that industry practitioners assess curriculum

responsiveness based on the extent to which the program addresses contemporary workplace demands and modern criminal justice practices.

On the other hand, deans and faculty members may provide relatively more critical assessments due to their direct involvement in curriculum planning, implementation, monitoring, and evaluation. Their participation in academic management and quality assurance processes allows them to identify existing gaps, limitations, and areas requiring improvement within the curriculum. Since they are responsible for ensuring alignment with CHED policies, institutional standards, and emerging criminological developments, they may become more critical in evaluating the adequacy and responsiveness of curriculum content, instructional methods, and technological integration.

This finding supports Bernardo (2021), who found that while many higher education institutions structurally adopt outcomes-based education frameworks, gaps still exist in actual curriculum implementation, instructional alignment, and assessment practices. Likewise, Malbas and Casas (2022) emphasized that faculty preparedness, institutional support, and instructional alignment significantly influence curriculum responsiveness and implementation effectiveness. The findings therefore suggest that academic administrators and faculty members are more likely to recognize deficiencies related to curriculum enhancement, faculty development, instructional innovation, and technology integration due to their active involvement in curriculum management and evaluation processes. With this, deans and faculty members are encouraged to be actively engaged in monitoring the current or new development that could be incorporated in their institutional curriculum.

To add, the significant difference among respondents' assessments may also be attributed to varying levels of exposure to emerging criminological trends and technological developments. Industry practitioners may prioritize operational competencies and technological preparedness, graduates may focus on practical applicability and employability, while faculty members may emphasize curriculum compliance, instructional quality, and academic standards. These varying perspectives naturally create differences in how curriculum responsiveness was assessed

Furthermore, the result supports Human Capital Theory proposed by Schultz (1961) and Becker (1964), which explains that education should develop competencies aligned with workforce and societal needs. Since each stakeholder group interacts differently with the outputs of the curriculum, their assessment of responsiveness may also differ depending on how effectively the program addresses their specific expectations and professional concerns. The finding likewise aligns with Constructive Alignment Theory introduced by Biggs (1996), which emphasizes that effective curricula require continuous alignment between learning outcomes, teaching strategies, assessment methods, and professional standards. Differences in stakeholder assessment may therefore indicate areas where alignment can still be strengthened.

Overall, the result implies that although the BS Criminology curriculum is generally responsive, differences in professional perspectives significantly influence the respondents' assessment of curriculum responsiveness. The finding highlights the importance of involving multiple stakeholders in curriculum review and enhancement processes to ensure that the program remains balanced, relevant, and responsive to both academic standards and industry expectations. It further suggests that continuous collaboration among faculty members, graduates, and industry practitioners is essential in strengthening curriculum quality, improving instructional delivery, and ensuring that the BS Criminology program remains aligned with the evolving demands of the criminal justice system and contemporary society.

As shown in Table 2.2, since the Analysis of Variance (ANOVA) revealed a statistically significant difference among the respondents' assessments of the level of curriculum responsiveness ($F = 3.75$, $p = 0.024$), a Tukey's Honestly Significant Difference (HSD) post hoc test was performed to determine which respondent groups significantly differed.

Table 2.2 Post Hoc Test (Tukey HSD) for Curriculum Responsiveness According to Respondent Groups

Comparison	Mean Difference	p-value	Interpretation
Academe vs. Graduates	0.194	0.019	Significant
Academe vs. Practitioners	0.076	0.554	Not Significant
Graduates vs. Practitioners	-0.118	0.225	Not Significant

Significance level: $\alpha = 0.05$.

The post hoc analysis revealed that a significant difference existed only between the academe and the graduates ($p = 0.019$). This finding indicates that these two respondent groups differed significantly in their assessment of the curriculum responsiveness of the Bachelor of Science in Criminology program. In contrast, no significant differences were found between the academe and practitioners ($p = 0.554$) and between the graduates and practitioners ($p = 0.225$).

The findings suggest that graduates and academic personnel have different assessments regarding the responsiveness of the curriculum. Graduates may evaluate curriculum responsiveness based on their actual transition into employment and the extent to which the curriculum prepared them for professional practice. Conversely, members of the academe may assess responsiveness from the standpoint of curriculum implementation, instructional delivery, and alignment with the prescribed curriculum standards. Meanwhile, practitioners' assessments did not differ significantly from either group, indicating a relatively comparable assessment of curriculum responsiveness.

The present findings are corroborated by previous literature and empirical studies. International literature emphasizes that curriculum responsiveness requires continuous alignment between curriculum outcomes, instructional practices, and evolving industry expectations rather than merely maintaining compliance with prescribed standards. Responsive curricula are expected to undergo systematic review and stakeholder validation to ensure that graduates acquire competencies demanded by the profession.

Likewise, studies reported that criminal justice graduates often assess gaps between academic preparation and workplace requirements, particularly in emerging competencies such as cybercrime investigation, digital evidence handling, analytical reasoning, and communication skills. Similarly, local studies found that although criminology graduates are generally employable, deficiencies remain in digital investigation, professional communication, and advanced investigative competencies, supporting the need for continuous curriculum enhancement.

Consistent with the explanatory sequential mixed-methods design, the qualitative findings further explain this statistical difference. Several participants acknowledged that although the curriculum generally

addresses the competencies expected in the criminal justice profession, certain curriculum components require enhancement to improve responsiveness. For instance, **Participant 2** emphasized that the curriculum is *"more on theories rather than actual"* and suggested that it should *"focus on the specific needs of the specific law enforcement agencies"* and provide *"specific tracks for the graduates."* Likewise, **Participant 3** noted that there is a *"mismatch in the Table of Specifications of the Professional Regulation Commission and the syllabus prescribed by the Commission on Higher Education,"* while **Participant 4** observed that there is *"lack of application and faculty training"* in emerging areas of the curriculum. These qualitative findings help explain why graduates and academic personnel differed in their assessment of curriculum responsiveness, with graduates evaluating the curriculum based on workplace preparedness and academe focusing on curriculum implementation and instructional concerns.

Problem 3. What is the level of curriculum relevance of BS Criminology program in terms of:

1.1 societal and industrial relevance

1.2 pedagogical approaches

1.3 emerging trends

Table 3.1 presents the assessment of the respondents on the level of curriculum relevance of the BS Criminology program in terms of societal and industrial relevance.

Table 3.1 Mean Distribution on the Level of Curriculum Relevance of the BS Criminology Program in terms of Societal and Industrial Relevance

Indicators	Graduates	Academe	Practitioners	Mean	Description
1. The extent to which the subjects/courses offered address the needs of the criminal justice system.	3.39	3.38	3.34	3.37	Highly Relevant
2. The extent to which the subjects/courses prepare graduates for careers in law enforcement.	3.44	3.42	3.37	3.41	Highly Relevant
3. The extent to which the subjects/courses provide competencies required by criminal justice institutions.	3.41	3.39	3.35	3.38	Highly Relevant
4. The extent to which the subjects/courses offered address community safety concerns.	3.37	3.35	3.3	3.34	Highly Relevant
5. The extent to which the subjects/courses align with the functions of criminology professionals.	3.43	3.4	3.36	3.40	Highly Relevant

6. The extent to which the subjects/courses provide knowledge relevant to correctional administration.	3.33	3.3	3.25	3.29	Highly Relevant
7. The extent to which the subjects/courses prepare students to address crime problems in society.	3.39	3.36	3.31	3.35	Highly Relevant
8. The extent to which the subjects/courses offered are applicable to real-world criminal justice practice.	3.43	3.39	3.35	3.39	Highly Relevant
9. The extent to which the subjects/courses contribute to the development of competent criminology professionals.	3.45	3.43	3.38	3.42	Highly Relevant
10. The extent to which the subjects/courses align with professional standards in criminology.	3.4	3.38	3.34	3.37	Highly Relevant
Overall Mean	3.41	3.36	3.3	3.37	Highly Relevant

Legend: 3.26 – 4.00 = *Highly Relevant*
1.76 – 2.50 = *Moderately Relevant*

2.51 – 3.25 = *Relevant*
1.00 – 1.75 = *Not Relevant*

As reflected in the table, the overall mean of **3.37** indicates that the curriculum is **highly relevant** in terms of societal and industrial relevance, suggesting that the curriculum adequately addresses the needs and expectations of the criminal justice profession and society. Among the three respondent groups, the graduates generally provided slightly higher ratings, followed by the academe, while the practitioners gave relatively lower ratings on several indicators. Despite these slight variations, all three respondent groups consistently assessed that the curriculum remains highly relevant in preparing graduates for the evolving needs of the criminal justice system and society. The result further suggests that the program remains aligned with the professional functions and responsibilities expected from criminology graduates in actual criminal justice practice.

The finding supports the view that higher education curricula should remain aligned with labor market demands and societal expectations to ensure graduate employability and professional competence. According to the OECD (2021), higher education institutions are expected to design curricula that respond to societal needs and workforce requirements to strengthen the professional readiness of graduates.

Similarly, the World Bank (2020) emphasized that higher education programs should continuously update their curricula to ensure that graduates possess the knowledge and competencies necessary for modern workplaces and professional environments. These perspectives affirm that curriculum relevance is essential in ensuring that academic preparation remains useful, applicable, and responsive to societal and professional demands.

Among the indicators, the statement **“The extent to which the subjects/courses contribute to the development of competent criminology professionals”** obtained the highest mean of **3.42**, interpreted as **highly relevant**. This finding suggests that the curriculum effectively develops the knowledge, competencies, and professional capabilities necessary in criminology practice. The result implies that the subjects and courses offered in the program successfully provide students with both theoretical understanding and practical competencies relevant to criminal justice work, including criminal investigation, public safety, forensic science, law enforcement administration, and crime prevention.

The finding supports Human Capital Theory proposed by Schultz (1961) and Becker (1964), which explains that education serves as an investment in developing individuals’ competencies, skills, and productivity necessary for workforce participation and professional performance. The result is likewise consistent with Habiatan (2022), who found that the criminology curriculum was highly relevant to the professional duties and responsibilities of graduates employed in law enforcement agencies.

Similarly, Garcia (2020) reported that criminology graduates generally assessed their academic preparation as relevant to their professional roles, particularly in criminal investigation and law enforcement administration. These findings indicate that the curriculum effectively contributes to the development of competent criminology professionals capable of functioning effectively within the criminal justice system.

Similarly, the **curriculum’s preparation of graduates for careers in law enforcement** obtained a high mean of **3.41**, indicating that the program remains aligned with the competency requirements and expectations of law enforcement agencies and criminal justice institutions. This finding implies that the curriculum provides students with relevant competencies necessary for professional practice in agencies such as the Philippine National Police, Bureau of Jail Management and Penology, Bureau of Fire Protection, and other public safety institutions. It further suggests that the program successfully integrates competencies related to criminal investigation, police administration, crime prevention, and public safety management that are essential in law enforcement careers.

This finding supports CHED Memorandum Order No. 5, series of 2018, which emphasizes that criminology programs should develop competencies related to law enforcement administration, criminal investigation, forensic science, and correctional administration to ensure alignment with professional standards and institutional requirements. Likewise, Mendoza and Torres (2021) found that most criminology graduates were employed in criminal justice agencies, indicating that the academic preparation provided by criminology programs remains aligned and relevant with professional practice and industry expectations. These findings therefore suggest that the BS Criminology curriculum effectively fulfills its role in preparing graduates for careers within the law enforcement and criminal justice sectors.

Meanwhile, the indicator regarding **knowledge relevant to correctional administration** obtained the lowest mean of **3.29**, although still interpreted as **highly relevant**. This implies that while the curriculum adequately addresses correctional administration concepts, there remains an opportunity to further strengthen instructional content related to rehabilitation programs, correctional management, inmate rehabilitation, and restorative justice practices. The finding may indicate that students assess correctional administration competencies as relevant but may still require more extensive exposure, practical application, or updated instructional content related to modern correctional systems and rehabilitation strategies.

The recurrence of this challenge was evident across almost all participants in the qualitative result such that **Participant 1** shared that *"students experience difficulty in therapeutic modalities and rehabilitation concepts remain difficult for many learners"*. Similarly, **Participant 3** stated that *"correctional administration and probation and pardon remain difficult as students encounter challenges in understanding the legal and administrative aspects of correctional practice"*. **Participant 5** explained that *"therapeutic discussions remain difficult because students have limited practical exposure."* Consistent with these observations, **Participant 6** added that *"therapeutic modalities are difficult to apply in actual situations."* Lastly, **Participant 7** emphasized that *"correctional manuals and therapeutic modalities are among the most difficult topics."*

The consistency of these responses indicates that the challenge extends beyond students' mastery of theoretical concepts and reflects the complexity of applying rehabilitation principles to authentic correctional settings. The findings suggest that while correctional concepts are included in the curriculum, students may have limited opportunities to contextualize these concepts through experiential learning and practical application.

The finding is supported by recent local studies conducted between 2023 and 2024, which reported that criminology students still require improvement in communication skills, research competence, analytical abilities, and technology application related to modern criminal justice practice. In addition, local tracer studies revealed that although criminology graduates are employable in criminal justice agencies, some deficiencies remain in advanced investigative skills, analytical reasoning, and professional communication competencies. These findings imply that correctional administration subjects may benefit from further curriculum enrichment through updated instructional materials, rehabilitation-focused content, case-based learning activities, and exposure to contemporary correctional practices.

The comparatively lower mean obtained by correctional administration may also reflect the changing nature of correctional systems and rehabilitation programs in contemporary criminal justice environments. Modern correctional administration increasingly emphasizes restorative justice, inmate rehabilitation, reintegration programs, psychological interventions, and evidence-based correctional management practices. As such, criminology curricula are expected to continuously adapt to these developments to ensure that graduates are adequately prepared for responsibilities within correctional institutions and rehabilitation programs.

Overall, the findings imply that the BS Criminology curriculum is highly relevant to the needs of society and the criminal justice industry, particularly in preparing students for professional practice and institutional competency requirements. The result indicates that the curriculum effectively develops competencies necessary for employment in criminal justice agencies and aligns with societal expectations concerning public safety, crime prevention, and law enforcement professionalism. However, the findings also suggest the importance of continuously strengthening curriculum content related to correctional administration and rehabilitation to ensure that all areas of criminology education remain equally responsive and professionally relevant.

The findings further support CHED Memorandum Order No. 46, series of 2012, which emphasizes outcomes-based education and the alignment of higher education programs with societal needs, industry requirements, and professional competencies. Moreover, the result affirms Constructive Alignment Theory introduced by Biggs (1996), which highlights the importance of aligning curriculum content, learning outcomes, and instructional strategies with professional standards and emerging societal demands. Therefore, these findings indicate that the BS Criminology curriculum remains highly relevant

in preparing competent professionals capable of serving effectively within the criminal justice system and contemporary society.

Table 3.2 presents the assessment of the respondents on the level of curriculum relevance of the BS Criminology program in terms of pedagogical approaches.

Table 3.2 Mean Distribution on the Level of Curriculum Relevance of the BS Criminology Program in terms of Pedagogical Approaches

Indicators	Graduates	Academics	Practitioners	Mean	Description
1. The extent to which teaching methods used in criminology subjects/courses are appropriate.	3.43	3.4	3.36	3.40	Highly Relevant
2. The extent to which instructional strategies of the subjects/courses enhance understanding of criminology concepts.	3.44	3.42	3.38	3.41	Highly Relevant
3. The extent to which simulation activities of the subjects/courses help prepare students for law enforcement situations.	3.46	3.44	3.4	3.43	Highly Relevant
4. The extent to which practical exercises of subjects/courses improve investigative skills.	3.41	3.39	3.35	3.38	Highly Relevant
5. The extent to which teaching methods of different subjects/courses promote active student participation.	3.38	3.36	3.32	3.35	Highly Relevant
6. The extent to which technology-assisted instruction of the subjects/courses enhances learning experiences.	3.4	3.38	3.34	3.37	Highly Relevant
7. The extent to which field training activities of the subjects/courses support professional preparation.	3.48	3.46	3.42	3.45	Highly Relevant
8. The extent to which instructional strategies of the subjects/courses help develop critical thinking skills.	3.42	3.4	3.36	3.39	Highly Relevant

9. The extent to which teaching methods of the subjects/courses are aligned with criminal justice competencies.	3.39	3.37	3.33	3.36	Highly Relevant
10. The extent to which teaching styles of the subjects/courses contribute to effective criminology education.	3.37	3.35	3.3	3.34	Highly Relevant
Overall Mean	3.42	3.4	3.36	3.39	Highly Relevant

Legend: 3.26 – 4.00 = *Highly Relevant*

1.76 – 2.50 = *Moderately Relevant*

2.51 – 3.25 = *Relevant*

1.00 – 1.75 = *Not Relevant*

As shown in the table, the overall mean of **3.39** indicates that the curriculum is **highly relevant** in terms of pedagogical approaches, suggesting that the instructional approaches employed in the program remain appropriate and supportive of students' learning and professional development. Among the three respondent groups, the graduates generally provided the highest ratings, followed closely by the academe, while the practitioners recorded slightly lower ratings across several indicators. Despite these minimal variations, all respondent groups consistently assessed that the pedagogical approaches employed in the program are highly relevant in facilitating meaningful learning experiences, developing professional competencies, and preparing students for criminal justice practice.

This finding implies that the teaching strategies, instructional methods, and learning activities employed in the BS Criminology program are highly appropriate and applicable in achieving the intended learning outcomes of criminology education. The result further suggests that the pedagogical approaches used in the program effectively support students' academic development, practical competence, and professional readiness for careers within the criminal justice system.

The finding supports contemporary educational literature emphasizing the importance of learner-centered and experiential teaching approaches in higher education. Darling-Hammond et al. (2020) explained that instructional strategies such as experiential learning, collaborative learning, and problem-based learning enhance student engagement, knowledge retention, analytical thinking, and professional competence. Similarly, Constructivist Learning Theory advanced by Piaget (1970) and Vygotsky (1978) posits that learners actively construct knowledge through interaction, collaboration, and practical experiences rather than through passive reception of information alone. These perspectives affirm that effective pedagogical approaches are essential in preparing criminology students for the realities of criminal justice practice.

Among the indicators, the statement **“The extent to which field training activities of the subjects/courses support professional preparation”** obtained the highest mean of **3.45**, interpreted as highly relevant. This finding implies that field training, practicum, immersion activities, and experiential learning opportunities significantly contribute to the professional readiness of criminology students. The result suggests that students assess actual exposure to criminal justice environments as highly valuable in bridging theoretical concepts and real-world professional practice.

The finding supports Roberts and Roberts (2021), who found that students who participated in simulations, field-based instruction, and experiential learning activities demonstrated higher levels of engagement and

practical competence compared to students exposed primarily to traditional lecture-based instruction. Similarly, Ramos and Bautista (2022) reported that practical training activities such as field exercises and simulations significantly improved students' professional readiness and learning outcomes. These findings imply that experiential learning activities play a crucial role in criminology education since they allow students to apply classroom knowledge in realistic law enforcement and criminal justice situations, thereby strengthening their confidence, communication skills, decision-making abilities, and professional competence.

The high assessment of field training activities may also indicate that the program effectively provides opportunities for students to interact with criminal justice agencies and professional practitioners. Such exposure enables students to develop familiarity with institutional procedures, operational practices, and workplace expectations within law enforcement and public safety organizations. It also allows students to gain firsthand experience in handling situations related to criminal investigation, crime prevention, public safety, and correctional administration, which are essential in strengthening their professional identity and readiness for employment.

Similarly, **simulation activities that prepare students for law enforcement situations** obtained a high mean of **3.43**, indicating that simulation-based instructional strategies effectively enhance students' practical understanding and readiness for criminal justice work. This finding implies that the curriculum effectively integrates simulation exercises, scenario-based learning, mock investigations, and practical demonstrations that allow students to develop analytical thinking, situational judgment, and decision-making competencies relevant to criminal justice practice.

The finding is aligned with Anderson and Carter (2020), who emphasized that problem-based and simulation-oriented instructional approaches significantly improve students' analytical and problem-solving skills in criminology education. Likewise, educational research highlighted in the literature synthesis emphasized that simulations, collaborative activities, and experiential learning approaches improve higher-order thinking skills and practical competence among students. Simulation activities are particularly important in criminology education since many professional responsibilities within the criminal justice system involve high-pressure situations requiring quick judgment, effective communication, and ethical decision-making. Through simulations and scenario-based exercises, students become more familiar with actual procedures and operational environments, thereby reducing the gap between classroom instruction and professional practice. This may explain why respondents assessed simulation-based instructional approaches as highly relevant to criminology education.

Meanwhile, the indicator regarding **teaching styles contributing to effective criminology education** obtained the lowest mean of **3.34**, although still interpreted as highly relevant. This suggests that while teaching styles are generally effective, there remains an opportunity to further improve instructional delivery, faculty teaching strategies, and innovative pedagogical practices. The finding may imply that some instructional approaches remain traditional or that additional faculty development initiatives may still be necessary to strengthen teaching effectiveness and student engagement.

Consistent with the explanatory sequential mixed-methods design, the quantitative findings were corroborated and further explained by the qualitative findings. Participants consistently identified the predominance of traditional teacher-centered instruction, indicating that some classroom practices continue to rely heavily on lecture-based teaching with limited student engagement. They likewise reported insufficient experiential and practice-oriented learning opportunities, emphasizing the need for more simulations, scenario-based activities, field exercises, and authentic learning experiences that closely

resemble actual criminal justice practice. Furthermore, participants highlighted institutional and faculty constraints in implementing innovative teaching approaches, citing limited faculty development opportunities, inadequate instructional resources, and challenges in integrating emerging technologies into classroom instruction. Specifically, **Participant 2** explained that “*actual field exposure and hands-on use of equipment are more effective than purely classroom-based instruction because they allow students to experience real professional situations*”. Similarly, **Participant 4** observed that “*simulations, case studies, and practical exercises significantly improve student engagement as they enable learners to understand concepts through active participation rather than passive listening*”. **Participant 6** likewise emphasized that “*simulations become highly effective when students are challenged to solve analytical problems and generate their own ideas*”. **Participant 7** remarked that “*practical exercises are important because not all theoretical discussions can be fully understood without actual application*”.

These qualitative findings explain why respondents acknowledged the relevance of the current pedagogical approaches while simultaneously recognizing the need for continuous instructional improvement. The result supports Malbas and Casas (2022), who reported that faculty preparedness and institutional support significantly influence curriculum responsiveness and instructional effectiveness. Similarly, Rapanta et al. (2020) emphasized that faculty digital competence, assessment redesign, and institutional support systems are important factors in improving curriculum implementation and instructional delivery. Crawford et al. (2020) likewise identified insufficient faculty preparedness and limitations in digital instructional capability as challenges affecting effective teaching and learning processes in higher education. These findings imply that although the teaching styles used in the program are already effective, continuous faculty development, instructional innovation, and technology integration remain necessary to further strengthen the quality of criminology education.

The comparatively lower assessment of teaching styles may also reflect the increasing expectations placed on faculty members in contemporary higher education. Modern criminology education requires instructors not only to possess subject matter expertise but also to demonstrate competence in technology-assisted instruction, experiential learning facilitation, and learner-centered teaching strategies. As educational environments continue to evolve, faculty members are expected to adapt their instructional methods to accommodate diverse student learning needs and emerging educational technologies.

Overall, the findings indicate that the pedagogical approaches utilized in the BS Criminology curriculum are highly relevant and significantly contribute to meaningful learning experiences and professional preparation among students. The result suggests that the program effectively utilizes experiential learning, field training, and simulation-based instructional strategies that strengthen students’ practical competence, analytical thinking, and professional readiness for criminal justice work. However, the findings also highlight the importance of continuously enhancing instructional delivery and faculty capability development to sustain teaching effectiveness and curriculum relevance.

The findings further support Constructivist Learning Theory, which emphasizes that meaningful learning occurs through active participation, collaboration, and experiential activities that allow students to construct knowledge from real-life experiences. The result likewise affirms CHED Memorandum Order No. 46, series of 2012, which promotes learner-centered and outcomes-based teaching approaches.

Table 3.3 presents the assessment of the respondents on the level of curriculum relevance of the BS Criminology program in terms of emerging trends.

Table 3.3 Mean Distribution on the Level of Curriculum Relevance of the BS Criminology Program in terms of Emerging Trends

Indicators	Graduates	Academics	Practitioners	Mean	Description
1. The extent to which the curriculum includes enough subjects/courses related to cybercrime investigation.	3.45	3.42	3.39	3.42	Highly Relevant
2. The extent to which the curriculum integrates modern forensic science applications.	3.44	3.41	3.38	3.41	Highly Relevant
3. The extent to which the curriculum reflects current developments in criminology.	3.42	3.39	3.36	3.39	Highly Relevant
4. The extent to which the curriculum includes topics related to global crime trends.	3.39	3.36	3.33	3.36	Highly Relevant
5. The extent to which the curriculum incorporates technologies used in criminal investigations.	3.46	3.43	3.4	3.43	Highly Relevant
6. The extent to which the curriculum addresses emerging crime prevention challenges.	3.4	3.37	3.34	3.37	Highly Relevant
7. The extent to which the curriculum includes developments in intelligence-led policing.	3.38	3.35	3.32	3.35	Highly Relevant
8. The extent to which the curriculum integrates innovations in criminal justice administration.	3.41	3.38	3.35	3.38	Highly Relevant
9. The extent to which the curriculum includes contemporary criminological issues.	3.47	3.44	3.41	3.44	Highly Relevant
10. The extent to which the curriculum prepares students to address modern criminal justice challenges.	3.5	3.47	3.44	3.47	Highly Relevant
Overall Mean	3.43	3.4	3.37	3.40	Highly Relevant

Legend: 3.26 – 4.00 = Highly Relevant

2.51 – 3.25 = Relevant

$1.76 - 2.50 = \text{Moderately Relevant}$ $1.00 - 1.75 = \text{Not Relevant}$

As reflected in the table, the overall mean of **3.40** indicates that the curriculum is **highly relevant** in terms of emerging trends. Among the three respondent groups, the graduates generally provided the highest ratings, followed closely by the academe, while the practitioners registered slightly lower ratings across several indicators. Despite these slight variations, the three groups consistently assessed that the curriculum remains highly relevant in addressing emerging developments and contemporary practices in the field of criminology.

This finding implies that the BS Criminology curriculum incorporates contemporary developments, technological advancements, and modern issues related to criminology and criminal justice. The result further suggests that the program recognizes the rapidly evolving nature of crime, criminal investigation, public safety, and law enforcement practices, thereby ensuring that students are exposed to current and emerging concerns within the field.

The finding supports the literature emphasizing the importance of integrating emerging trends into higher education curricula to ensure graduate preparedness and professional relevance. UNESCO (2021) emphasized that higher education institutions must continuously redesign curricula to address emerging societal issues, technological innovations, and interdisciplinary competencies necessary in modern professional practice. Similarly, OECD (2021) highlighted that higher education programs should remain responsive to labor market demands, technological developments, and societal expectations to strengthen graduate employability and professional competence. These perspectives affirm that curriculum relevance depends on the institution's ability to continuously update academic programs according to contemporary professional and societal developments.

Among the indicators, the statement “**The extent to which the curriculum prepares students to address modern criminal justice challenges**” obtained the highest mean of **3.47**, interpreted as highly relevant. This finding implies that the curriculum adequately equips students with the knowledge, competencies, and practical understanding necessary to respond to contemporary criminal justice issues and emerging societal concerns. The result suggests that the program effectively prepares students to handle challenges associated with technological crimes, evolving criminal behavior, public safety issues, and modern investigative practices.

The finding supports Brown (2022), who emphasized that integrating cybercrime and digital forensic courses into criminology education significantly improves students' preparedness for modern law enforcement roles and emerging criminal justice concerns. Likewise, Johnson (2021) reported that curriculum innovation and the integration of emerging crime trends enhance students' understanding of contemporary criminal justice issues and improve their ability to respond to modern professional challenges. Furthermore, Sarkar et al. (2023) emphasized that criminal justice curricula should strengthen analytical, technological, and collaborative competencies related to cybercrime investigation and digital evidence handling to address rapidly evolving criminal activities. These findings imply that preparing students for modern criminal justice challenges requires continuous curriculum enhancement and the integration of technology-oriented competencies.

The high assessment may also indicate that students and stakeholders recognize the curriculum's efforts in integrating the subject / course cybercrime in the curriculum. It may lack but at least it has a related course / subject relevant to the current environment as criminal activities increasingly involve

technological components and complex investigative procedures are needed. The curriculum's ability to expose students to these issues contributes significantly to its assessed relevance.

Likewise, the **inclusion of contemporary criminological issues** obtained a mean of **3.44**, indicating that the curriculum remains updated with current developments and concerns in the field of criminology. This finding suggests that the curriculum successfully incorporates current issues, emerging crime trends, and evolving criminal justice practices that are relevant to both academic preparation and professional practice. The result further implies that the current program is updated with instructional content and learning experiences to ensure that students remain informed about current criminological concerns and developments affecting society and criminal justice institutions.

This finding is aligned with Walker (2022), who emphasized that academic programs that regularly review and revise their curricula are better able to respond to societal and technological changes. Similarly, Vreuls (2023) explained that responsive curriculum development requires continuous alignment of curriculum content, program outcomes, and instructional practices with evolving societal and professional demands. These findings imply that curriculum relevance is sustained through continuous curriculum review, stakeholder consultation, and the integration of emerging developments into instructional content and learning activities.

The inclusion of contemporary criminological issues is particularly important as criminology professionals are expected to understand and address new forms of crime, changing patterns of criminal behavior, and modern law enforcement challenges. Through the integration of current criminological issues, students become more aware of societal realities, technological developments, and emerging threats that may affect criminal justice operations and public safety. This enhances their analytical thinking, adaptability, and professional preparedness in responding to contemporary criminal justice concerns.

Meanwhile, the indicator regarding **developments in intelligence-led policing** obtained the lowest mean of **3.35**, although still interpreted as **highly relevant**. This suggests that while intelligence-led policing concepts are already incorporated in the curriculum, nonetheless, there remains an opportunity for further enhancement and integration of advanced policing strategies, crime analytics, predictive policing techniques, and data-driven investigative approaches. The finding implies that respondents recognize the relevance of intelligence-led policing in modern criminal justice practice but may assess that instructional depth, technological integration, or practical application in this area can still be improved.

The finding supports Miró-Llinares and Moneva (2021), who emphasized that modern criminal justice professionals increasingly require competencies in statistical literacy, technological proficiency, predictive policing, and crime analytics due to the growing reliance on data-driven policing strategies. Similarly, Huey, Nhan, and Broll (2021) found that police recruits assessed themselves as underprepared in areas related to cyber-enabled investigations, online intelligence gathering, and digital evidence handling, indicating a need for stronger integration of intelligence-related competencies in criminal justice education. Furthermore, recent institutional studies conducted in Northern Luzon and Central Luzon reported that criminology students still require improvement in analytical reasoning, technology application, and digital competencies necessary for contemporary criminal justice practice.

The comparatively lower assessment of intelligence-led policing may also reflect the rapid evolution of modern policing systems and investigative technologies. Contemporary criminal justice institutions increasingly rely on digital intelligence, crime mapping, predictive analytics, surveillance technologies, and inter-agency information systems to prevent and investigate crimes effectively. As such, criminology curricula must continuously strengthen technology-assisted learning, analytical training, and practical

exposure related to intelligence-led policing to ensure that graduates remain responsive to evolving professional demands.

Overall, the findings indicate that the BS Criminology curriculum is highly relevant in addressing emerging criminological trends, technological advancements, and modern criminal justice practices. The result suggests that the curriculum incorporates contemporary criminological issues and prepares students to address evolving criminal justice concerns in the current instructional content. However, the findings also highlight the importance of continuously strengthening areas related to intelligence-led policing, crime analytics, and technology-assisted criminal investigation to sustain curriculum relevance amid rapidly changing criminal justice environments.

Consistent with the explanatory sequential mixed-methods design, the quantitative findings were corroborated and further explained by the qualitative findings. Participants consistently emphasized the insufficient integration of emerging criminological knowledge, noting the need to incorporate more comprehensive discussions on cybercrime investigation, digital forensics, crime analytics, intelligence-led policing, and other contemporary developments in criminal justice. They likewise identified the limited development of profession-specific competencies, indicating that students require greater opportunities to acquire specialized competencies demanded by modern law enforcement agencies.

Furthermore, participants pointed to the presence of outdated and insufficient curriculum content, emphasizing the need for periodic curriculum review to ensure that course offerings remain aligned with current technologies, investigative methodologies, legal developments, and professional standards. These qualitative findings explain why respondents acknowledged the curriculum's high relevance while simultaneously recognizing the need for continuous curriculum enhancement. The findings further support Constructive Alignment Theory introduced by Biggs (1996), which emphasizes that curricula must continuously align intended learning outcomes, instructional strategies, and assessment methods with evolving professional standards and societal needs. Likewise, the result affirms CHED Memorandum Order No. 5, series of 2018, which encourages criminology programs to integrate contemporary developments such as cybercrime investigation, digital forensics, and modern crime prevention strategies into the curriculum.

Table 3.4 presents the summary of the assessments of the graduates, academe, and practitioners regarding the level of curriculum relevance of the Bachelor of Science in Criminology program across the dimensions of societal and industrial relevance, pedagogical approaches, and emerging trends.

Table 3.4 Summary of the Mean Distribution on the Level of Curriculum Relevance of the BS Criminology Program

Indicators	Graduates	Academe	Practitioners	Mean	Interpretation
Societal and Industrial Relevance	3.4	3.38	3.34	3.37	Curriculum is highly relevant the needs and demands of the program
Pedagogical Approaches	3.42	3.4	3.36	3.39	Curriculum is highly relevant the needs and

					demands of the program
Emerging Trends	3.43	3.4	3.37	3.40	Curriculum is highly relevant the needs and demands of the program
Overall Mean	3.42	3.39	3.36	3.39	Curriculum is highly relevant the needs and demands of the program

Legend: 3.26 – 4.00 = *Highly Relevant* 2.51 – 3.25 = *Relevant*
 1.76 – 2.50 = *Moderately Relevant* 1.00 – 1.75 = *Not Relevant*

Table 3.4 presents the assessment of the respondents on the level of curriculum relevance of the BS Criminology program. As reflected in the table, the overall mean of **3.39** indicates that the curriculum of the BS Criminology program is **highly relevant**, suggesting that the program effectively addresses the current needs of criminology education, criminal justice institutions, and professional practice. Among the three dimensions, **Emerging Trends** obtained the highest overall mean, followed by Pedagogical Approaches, while Societal and Industrial Relevance received the lowest overall mean. Across the three respondent groups, the graduates generally provided the highest assessments, followed by the academe and practitioners. Despite these slight differences, all respondent groups consistently assess the curriculum as highly relevant in dealing current issues. The result further suggests that the program successfully aligns its curriculum content, instructional approaches, and emerging competencies with the expectations of society, industry stakeholders, and contemporary criminal justice environments.

The finding supports the perspective that curriculum relevance is achieved when academic programs remain aligned with labor market demands, technological developments, and societal expectations. According to the OECD (2021), higher education institutions must ensure that curricula remain relevant to professional competencies and societal needs to improve graduate employability and professional effectiveness. Similarly, UNESCO (2021) emphasized that higher education curricula should continuously integrate interdisciplinary knowledge, technological competencies, and emerging societal concerns to ensure that graduates remain capable of responding to modern professional challenges. These perspectives imply that curriculum relevance is essential in preparing students to become competent professionals capable of adapting to changing criminal justice environments and societal conditions.

Among the indicators, **emerging trends** obtained the highest mean of **3.40**, interpreted as **highly relevant**. This suggests that the curriculum integrates current developments in criminology, including cybercrime investigation, digital forensics, modern investigative technologies, and intelligence-led policing. The finding implies that the curriculum recognizes the increasing importance of technology-driven criminal justice practices and the need to prepare students for emerging forms of crime and modern investigative procedures.

The result supports Brown (2022), who emphasized that integrating cybercrime investigation and digital forensic courses into criminology education significantly enhances students' preparedness for modern law enforcement and criminal justice roles. Likewise, Holt, Bossler, and Seigfried-Spellar (2022) argued that criminal justice curricula must systematically incorporate cybercrime investigation, digital evidence

handling, and technological competencies as these are already essential in contemporary criminal justice practice. Similarly, Sarkar et al. (2023) emphasized that criminal justice education should strengthen analytical, collaborative, and technical competencies related to cybercrime policing and digital investigations. These findings indicate that the integration of emerging trends within the curriculum contributes significantly to its assessed relevance since modern criminal justice institutions increasingly rely on technological expertise and digital investigative competencies.

The high assessment of emerging trends may also reflect the curriculum's efforts to continuously adapt to evolving criminal activities and technological advancements affecting criminal justice operations. Since criminal behavior has become increasingly technology-driven, criminology programs are expected to integrate contemporary topics such as cybercrime investigation, crime analytics, digital forensics, transnational crime, and intelligence-led policing to ensure that graduates remain professionally competent and globally competitive. The finding therefore suggests that the BS Criminology curriculum acknowledges the relevance of technology and cyber - related investigation in the emerging professional and societal demands.

Pedagogical approaches garnered a mean of **3.39**, interpreted as **highly relevant**. This finding implies that the instructional strategies, simulation activities, field training, and technology-assisted learning approaches employed in the program are relevant to criminology education and professional practice. The result suggests that the pedagogical approaches used in the program effectively contribute to meaningful learning experiences, practical competence, analytical thinking, and professional readiness among criminology students.

The finding supports Constructivist Learning Theory advanced by Piaget (1970) and Vygotsky (1978), which emphasizes that learners develop deeper understanding and competencies through experiential learning, interaction, collaboration, and problem-solving activities. Likewise, Roberts and Roberts (2021) found that experiential learning activities such as field immersion, simulations, and practical exercises significantly improve students' engagement and professional competence in criminal justice education. Ramos and Bautista (2022) similarly reported that field exercises and practical training activities contribute significantly to students' professional readiness and learning outcomes. These findings imply that responsive pedagogical approaches are highly relevant as they bridge the gap between classroom instruction and actual criminal justice practice.

The high assessment of pedagogical approaches may also indicate that the program utilizes learner-centered teaching strategies that encourage active participation, critical thinking, and practical application of knowledge. Through simulations, field exposure, and experiential learning activities, students become more capable of analyzing criminal justice situations, making informed decisions, and applying theoretical concepts to real-world scenarios. This strengthens students' confidence and professional preparedness for employment within criminal justice institutions.

Societal and industrial relevance obtained the lowest mean of **3.37**, interpreted as highly relevant. This indicates that the curriculum remains aligned with the needs of criminal justice institutions, law enforcement agencies, and the expectations of the criminology profession. The finding implies that the program effectively prepares students for careers in criminal justice agencies by providing competencies related to law enforcement administration, criminal investigation, forensic science, correctional administration, and public safety management. However, this is the dimension that can be checked for improvement in order to be relevant and more appropriate in the different industrial needs.

This finding is aligned with CHED Memorandum Order No. 5, series of 2018, which emphasizes that criminology programs should produce graduates equipped with competencies necessary for professional practice in the criminal justice system. Similarly, Habiatan (2022) found that the criminology curriculum was highly relevant to the professional responsibilities of graduates employed in law enforcement agencies. Mendoza and Torres (2021) likewise reported that criminology graduates were generally employed in criminal justice institutions, indicating alignment between academic preparation and professional practice. These findings suggest that the curriculum remains professionally relevant as it addresses both societal expectations and industry competency requirements within the criminal justice sector.

Consistent with the explanatory sequential mixed-methods design, the quantitative findings were corroborated, expanded, and further explained by the qualitative findings. Although respondents consistently assessed the curriculum as highly relevant, the qualitative phase revealed several challenges that require continuous improvement to sustain its relevance. Some responses from participants are as follows:

Participant 2 explained that *“students have limited knowledge and practical experience because learning remains largely classroom-based, emphasizing that greater field exposure and actual use of equipment are necessary to improve competency development”*. Similarly, **Participant 3** observed that *“students are not provided sufficient opportunities to apply classroom learning because many agencies restrict student participation due to operational risks, limiting their exposure to real criminal justice situations”*. **Participant 6** likewise remarked that *“many major and professional courses continue to rely heavily on theory-based instruction, with limited site visits and practical exposure, reducing students' opportunities to develop practical competencies before graduation”*.

These responses indicate that stakeholders recognize experiential learning as an indispensable component of criminology education. While theoretical instruction provides students with essential conceptual knowledge, practical learning experiences allow them to apply, evaluate, and refine these concepts within authentic criminal justice settings. The participants' observations suggest that insufficient exposure to real-world environments may limit students' confidence, professional judgment, and readiness to perform the duties expected within law enforcement, corrections, forensic science, and other criminal justice professions.

Although societal and industrial relevance obtained the lowest mean among the three indicators, the result remains highly positive and may simply indicate that stakeholders assess emerging trends and pedagogical approaches as more dynamic and rapidly evolving areas within criminology education. Nonetheless, the high assessment still reflects that the curriculum successfully fulfills its role in preparing graduates for employment, public service, and professional responsibilities within the criminal justice system.

Overall, the findings imply that the BS Criminology curriculum remains highly relevant to the current demands of criminology education and professional practice. The result suggests that the curriculum integrates emerging criminological developments, utilizes relevant pedagogical approaches, and aligns with societal and industrial competency requirements necessary for modern criminal justice work. However, the findings also highlight the importance of continuous curriculum enhancement, technological integration, instructional innovation, and stakeholder collaboration to sustain curriculum relevance amid rapidly evolving criminal justice environments and societal changes.

The findings further support Constructive Alignment Theory introduced by Biggs (1996), which emphasizes that effective curricula must continuously align learning outcomes, instructional strategies,

and assessment methods with evolving professional standards and societal expectations. Likewise, the result affirms Human Capital Theory proposed by Schultz (1961) and Becker (1964), which explains that education serves as an investment in developing competencies and professional capabilities necessary for workforce productivity and societal development.

Problem 4. Is there a significant difference in the level of curriculum relevance of the BS Criminology program according to the respondents?

Table 4. Analysis of Variance (ANOVA) Statistics on the Level of Curriculum Relevance According to Respondents

Source of Variation	Sum Squares	df	Mean Square	F-value	p-value	Interpretation
Between Groups	0.25	2	0.12	2.27	0.105	Not Significant
Within Groups	4.34	79	0.05			
Total	4.59	81				

significant p-value, reject the null hypothesis

$P > .05$ = difference is not significant, accept the null hypothesis

$P < .05$ = difference is significant, reject the null hypothesis

Table 4 shows the Analysis of Variance (ANOVA) in testing for significant differences in the level of curriculum relevance of the BS Criminology program according to the respondents. As shown in the table, the computed p-value of 0.105 is greater than the 0.05 level of significance. This means that there is no significant difference in the assessment of the respondents regarding the curriculum relevance of the BS Criminology program. Therefore, the null hypothesis is accepted.

The finding implies that deans and faculty members, industry practitioners, and graduates generally share similar assessment regarding the relevance of the curriculum. This suggests that despite differences in professional roles, institutional affiliations, and practical experiences, the respondents consistently recognize that the BS Criminology curriculum remains applicable and appropriate in addressing the competencies required in criminology education and criminal justice practice. The result further indicates that the curriculum effectively satisfies the expectations of both academic and professional stakeholders within the field of criminology.

The absence of significant difference among respondents may indicate that the curriculum possesses alignment with professional standards, industry expectations, and contemporary criminal justice demands. Since the respondents came from diverse sectors including academic institutions, criminal justice agencies, and graduate experiences, the consistency in their assessment suggests that the curriculum addresses the common competencies expected from criminology graduates regardless of professional perspective, although there are areas that must be looked into to better improve the curriculum of the program.

The findings support the literature emphasizing the importance of curriculum alignment with societal and industry needs. According to CHED Memorandum Order No. 5, series of 2018, criminology programs are expected to develop competencies related to law enforcement administration, criminal investigation, forensic science, correctional administration, and public safety to ensure alignment with professional practice and criminal justice standards. Likewise, the OECD (2021) emphasized that higher education institutions should develop curricula relevant to labor market demands and societal expectations to improve graduate employability and professional competence. These perspectives imply that when academic programs effectively align with professional competencies and societal expectations, stakeholders are more likely to share consistent assessment regarding curriculum relevance.

The result further suggests that the curriculum has effectively integrated expected competencies, instructional approaches, and contemporary developments that are recognized as valuable across different sectors of the criminal justice system. Graduates may assess the curriculum as relevant due to its applicability to employment, licensure examination preparation, and workplace responsibilities. Industry practitioners may recognize the relevance of the curriculum if graduates demonstrate competencies necessary for law enforcement and criminal justice operations. Meanwhile, deans and faculty members may assess the curriculum as relevant due to its compliance with academic standards, outcomes-based education principles, and institutional expectations.

The consistency in the respondents' assessment may also be attributed to the curriculum's integration of contemporary criminological issues and emerging trends. Modern criminology education increasingly emphasizes cybercrime investigation, digital forensics, intelligence-led policing, crime analytics, and technology-assisted criminal investigation. The inclusion of these contemporary topics within the curriculum may have contributed to the respondents' shared assessment that the curriculum remains responsive and relevant to modern criminal justice practice.

This finding supports Brown (2022), who emphasized that the integration of cybercrime and digital forensic courses enhances students' preparedness for contemporary law enforcement roles and emerging criminal justice challenges. Likewise, Johnson (2021) reported that curriculum innovation and the integration of emerging criminological trends improve students' understanding of contemporary criminal justice concerns and strengthen professional readiness. These findings suggest that curriculum relevance is strengthened when educational programs continuously adapt to evolving criminal justice practices and technological developments.

Furthermore, the findings imply that the curriculum maintains its applicability and usefulness across different professional perspectives. The respondents collectively recognize that the curriculum contributes significantly to professional preparation, criminal justice education, and the development of competencies relevant to law enforcement and public safety. This consistency indicates that the curriculum bridges academic preparation and professional practice by equipping students with competencies necessary for actual criminal justice work.

The finding also supports Human Capital Theory proposed by Schultz (1961) and Becker (1964), which explains that education serves as an investment in developing knowledge, competencies, and professional skills necessary for workforce productivity and societal contribution. Since all respondent groups generally agreed on the relevance of the curriculum, the result suggests that the program successfully fulfills its role in preparing graduates for employment, professional practice, and service within the criminal justice system.

Moreover, the absence of significant difference among respondents may indicate that the curriculum implements outcomes-based education principles. According to CHED Memorandum Order No. 46, series of 2012, higher education institutions are expected to implement learner-centered and competency-based curricula that align with societal needs, industry requirements, and professional standards. The finding therefore suggests that the BS Criminology curriculum operationalizes these principles by ensuring that curriculum content, pedagogical approaches, and emerging competencies remain relevant and responsive to stakeholder expectations.

The result may also imply that the curriculum has established a balanced relationship between theoretical instruction and practical application. Through field training, simulation activities, experiential learning, and the integration of modern criminological concepts, the curriculum appears capable of addressing both academic requirements and workplace competency expectations in the current society. This balance may explain why different respondent groups share similar assessments regarding curriculum relevance.

Overall, the result suggests that the BS Criminology curriculum is generally assessed as highly relevant by all respondent groups, thereby supporting the effectiveness of the curriculum in meeting educational and professional demands. The finding indicates that the curriculum aligns with criminal justice competencies, societal expectations, and contemporary criminological developments necessary for professional practice and public service. However, the result also highlights the importance of sustaining continuous curriculum review, stakeholder collaboration, instructional innovation, and technological integration to ensure that the curriculum remains relevant amid rapidly evolving criminal justice environments and societal changes.

Consistent with the explanatory sequential mixed-methods design, the quantitative findings were corroborated and further explained by the qualitative findings. Across the qualitative interviews, participants commonly emphasized the need to strengthen communication competencies, correctional and rehabilitation education, emerging criminological knowledge and technologies, and profession-specific competencies, while also advocating for greater experiential learning opportunities, instructional innovation, and stronger collaboration with criminal justice agencies. These concerns were expressed not as indications of curriculum irrelevance but as recommendations to sustain and further enhance an already relevant curriculum.

The convergence of the quantitative and qualitative findings therefore demonstrates that the assessed relevance of the BS Criminology curriculum is shared among stakeholders, while the identified challenges provide clear directions for continuous quality improvement. Consequently, these findings reinforce the need for the proposed Curriculum Enhancement Framework, which aims to address the identified curriculum gaps and sustain the long-term relevance of the BS Criminology curriculum in meeting the evolving demands of criminology education and professional practice.

The findings further support Constructive Alignment Theory introduced by Biggs (1996), which emphasizes that effective curricula must continuously align intended learning outcomes, instructional strategies, and assessment methods with professional standards and evolving societal demands. Collectively, these findings indicate that the current BS Criminology curriculum remains consistently relevant and professionally applicable across different stakeholder perspectives within the field of criminology and criminal justice.

Problem 5. What challenges are encountered by the informants under the current curriculum?

Table 5.1 Themes Generated from the Findings of the Qualitative Study in response to Question 1

INTERVIEW QUESTIONS	ACTUAL RESPONSES	THEMES
1. Which parts of the curriculum do you find most challenging? Why?	Participant 1: Students experience difficulty in written and oral communication. Participant 3: Difficulties were noted in oral and written communication. Participant 6: Expressing ideas in English communication Participant 7: Reading comprehension, communication skills.	Theme 1. <i>Communication Competency Gaps</i>
	Participant 1: Students experience difficulty in therapeutic modalities, and rehabilitation concepts remain difficult for many learners. Participant 3: Correctional administration and probation and pardon remain difficult as students encounter challenges in understanding the legal and administrative aspects of correctional practice. Participant 5: Therapeutic discussions remain difficult because students have limited practical exposure (<i>“Wala silang actual experience”</i>). Participant 6: Therapeutic modalities are difficult to apply in actual situations. Participant 7: Correctional manuals and therapeutic modalities are among the most difficult topics.	Theme 2. <i>Gaps in Correctional and Rehabilitation Education</i>
	Participant 2: Students encounter challenges in investigative skills, crime scene processing, criminal profiling, forensic updates, and crime data analytics. Participant 3: Difficulties were noted in cybercrime concepts and emerging forensic technologies.	Theme 3. <i>Insufficient Integration of Emerging Criminological Competencies Trends and</i>

	Participant 4: Challenges include cybercrime, artificial intelligence integration, photogrammetry, and digital presentation of evidence. Participant 6: Respondents identified challenges in cybercrime laws, environmental legislation, and applying concepts in real-life situations.	<i>Technologies</i>
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Theme 1, Question 1: Communication Competency Gaps

The findings revealed that communication competency gaps emerged as one of the most frequently identified challenges encountered under the current Bachelor of Science in Criminology curriculum. Six of the seven participants consistently emphasized that students encounter difficulties in oral communication, written communication, English proficiency, reading comprehension, and the effective expression of ideas. These competencies are indispensable in criminology education as graduates are expected to prepare investigation reports, affidavits, intelligence reports, incident documentation, and courtroom testimonies, all of which require clear and effective communication.

This recurring concern is evident in the responses of the participants.

Participant 1 shared that *"Students struggle in writing, speaking English, and expressing their ideas effectively."*

Participant 3 similarly explained that *"Communication skills, both oral and written, remain one of the most difficult competencies for students."*

Participant 6 added that students have difficulty expressing their own ideas in English.

Likewise, **Participant 7** stated that *"Reading comprehension and communication skills continue to challenge students, particularly when interpreting legal concepts and technical terminologies."*

The convergence of these responses indicates that communication challenges extend beyond language proficiency. They affect students' ability to comprehend legal concepts, prepare professional reports, present evidence, and communicate effectively within multidisciplinary criminal justice environments. The findings suggest that although communication-related competencies are incorporated within the curriculum, opportunities for authentic practice and continuous reinforcement may still be insufficient to fully develop the level of proficiency expected from future criminologists.

This qualitative finding corroborates the literature emphasizing communication competence as an essential graduate attribute in professionally oriented programs. Jackson (2021) argued that employability-oriented curricula should explicitly integrate communication competence into intended learning outcomes instead of assuming that students naturally develop these skills during their academic journey. Similarly, Tomlinson (2021) emphasized that communication proficiency, adaptability, and professional interaction are among the most significant competencies influencing graduate employability.

The present finding is likewise supported by local literature. Recent institutional studies conducted in Northern Luzon and Central Luzon reported that communication skills were among the weakest competencies demonstrated by criminology students, prompting recommendations for curriculum enhancement through greater integration of communication-focused learning activities and technology-assisted instruction. Likewise, Habiatan (2022) recommended strengthening communication competencies within the criminology curriculum to improve graduate preparedness and employability.

From a theoretical perspective, the findings reinforce Human Capital Theory, which posits that educational institutions should develop competencies that increase graduates' productivity and employability. Communication competence represents an essential form of human capital since it directly influences graduates' effectiveness in criminal investigation, report preparation, courtroom testimony, and inter-agency collaboration. The findings also support Constructive Alignment Theory, which emphasizes that intended learning outcomes, teaching and learning activities, and assessment methods should be coherently aligned. Thus, the recurring communication difficulties suggest the need to strengthen instructional activities and assessment strategies that intentionally cultivate oral and written communication competencies throughout the criminology curriculum.

Following the sequential explanatory method, this qualitative theme explains the quantitative finding wherein the indicator ***"The curriculum responds to the industry's growing demand for stronger communication competencies"*** obtained the lowest mean under the dimension of societal and industrial relevance. The convergence of both phases demonstrates that while stakeholders generally assess the curriculum as responsive, communication competency remains one of the priority areas requiring curriculum enhancement. Strengthening communication-focused learning experiences, legal writing, investigative report preparation, oral advocacy, and courtroom simulation activities may further improve graduates' readiness for professional practice within the criminal justice system.

Lastly, the qualitative and quantitative findings indicate that communication competency is not merely an isolated student learning difficulty but a curriculum concern that requires intentional instructional enhancement. Consistent with Human Capital Theory and the principles of outcomes-based education, strengthening communication competencies through authentic learning experiences will better align the Bachelor of Science in Criminology curriculum with the expectations of law enforcement agencies and the broader criminal justice profession.

Theme 2, Question 1: Gaps in Correctional and Rehabilitation Competencies

Another recurring challenge identified by the participants pertains to the development of competencies related to correctional administration and offender rehabilitation. The informants consistently observed that students experience difficulties in understanding therapeutic modalities, rehabilitation programs, correctional administration, probation and parole, offender management, and other correction-centered concepts. These areas require students to integrate legal knowledge with psychological, sociological, and rehabilitative principles, making them among the more complex components of the Bachelor of Science in Criminology curriculum.

The recurrence of this challenge was evident across almost all participants.

Participant 1 shared that *"students experience difficulty in therapeutic modalities and rehabilitation concepts remain difficult for many learners"*.

Similarly, **Participant 3** stated that *"correctional administration and probation and pardon remain difficult as students encounter challenges in understanding the legal and administrative aspects of correctional practice"*.

Participant 5 explained that *"therapeutic discussions remain difficult because students have limited practical exposure."*

Consistent with these observations, **Participant 6** added that *"therapeutic modalities are difficult to apply in actual situations."*

Lastly, **Participant 7** emphasized that *"correctional manuals and therapeutic modalities are among the most difficult topics."*

The consistency of these responses indicates that the challenge extends beyond students' mastery of theoretical concepts and reflects the complexity of applying rehabilitation principles to authentic correctional settings. The findings suggest that while correctional concepts are included in the curriculum, students may have limited opportunities to contextualize these concepts through experiential learning and practical application.

This finding corroborates the work of Wheelahan and Moodie (2021), who emphasized that professionally oriented degree programs should ensure coherence between academic knowledge and occupational competencies through continuous curriculum validation and competency mapping. Likewise, Vreuls (2023) argued that responsive curriculum development requires periodic curriculum redesign based on stakeholder feedback and evolving professional standards. Within the Philippine context, Bernardo (2021) observed that although outcomes-based education is reflected in curriculum documents, instructional implementation often remains a challenge, while Malbas and Casas (2022) highlighted that faculty preparedness and instructional alignment significantly influence curriculum responsiveness.

The findings also reinforce Human Capital Theory, which posits that higher education should develop competencies required by professional practice. Graduates entering correctional institutions are expected to demonstrate competencies in offender rehabilitation, correctional case management, and ethical decision-making. Likewise, the findings support Constructivist Learning Theory, which emphasizes that meaningful learning occurs through authentic experiences and active engagement. The recurring challenges expressed by the participants suggest that students would benefit from richer experiential learning opportunities, such as correctional facility immersions, case analyses, rehabilitation planning activities, and simulations that bridge theoretical concepts with professional practice.

Following the sequential explanatory method, the theme explains the quantitative finding wherein the indicator *"The curriculum provides knowledge relevant to correctional administration"* obtained the lowest mean under the curriculum relevance dimension. The convergence of the quantitative and qualitative findings suggests that although respondents generally assess the curriculum as relevant, greater emphasis should be placed on strengthening correctional and rehabilitation competencies through contextualized instruction and authentic learning experiences.

Theme 3, Question 1: Insufficient Integration of Emerging Criminological Trends and Technologies

The third major theme that emerged from the interviews pertains to the insufficient integration of emerging criminological trends and technologies within the current Bachelor of Science in Criminology curriculum. The participants consistently expressed that students encounter difficulties in understanding rapidly evolving areas of criminology, particularly cybercrime investigation, crime analytics, intelligence-led policing, artificial intelligence, digital forensics, criminal profiling, photogrammetry, environmental laws, and other technology-driven developments in criminal justice. These findings indicate that while the curriculum addresses traditional criminology concepts, stakeholders assess a need to further strengthen the integration of contemporary competencies required in modern law enforcement and criminal justice practice.

The recurrence of this concern was evident across the participants.

Participant 2 emphasized that *"there are difficulties in crime scene processing, criminal profiling, forensic updates, and crime data analytics, indicating the increasing complexity of technology-assisted*

criminal investigation”.

Participant 3 similarly reported that “*students struggle with cybercrime concepts and emerging forensic technologies”.*

Participant 4 highlighted that “*challenges involving cybercrime, artificial intelligence integration, photogrammetry, and digital presentation of evidence”.*

Finally, **Participant 6** identified “*cybercrime laws and the practical application of emerging concepts as continuing challenges”.*

Collectively, these responses demonstrate a common assessment among the participants that the curriculum should further strengthen the integration of emerging criminological trends and technological competencies. The consistency of these responses suggests that the challenge is not merely the inclusion of new subject matter but ensuring that students develop the competencies necessary to respond to rapidly changing criminal justice environments. Modern policing and criminal investigation increasingly rely on digital technologies, intelligence analysis, data-driven decision-making, cyber investigations, and interdisciplinary collaboration. Consequently, criminology education must continuously evolve to prepare graduates who can effectively respond to these emerging professional demands.

These findings corroborate the international literature emphasizing that curriculum responsiveness requires the systematic integration of emerging developments into academic programs. Holt, Bossler, and Seigfried-Spellar (2022) argued that criminal justice curricula should integrate cybercrime investigation and digital evidence handling as core components rather than treating them as peripheral topics. Similarly, Miró-Llinares and Moneva (2021) emphasized that modern policing increasingly depends on statistical literacy, crime analytics, and predictive policing competencies, while Sarkar et al. (2023) recommended expanding students' technological, analytical, and collaborative competencies to effectively address cyber-enabled crimes. Whelan (2025), Khan (2024), and Quintana (2024) likewise stressed that contemporary criminal justice education should prepare graduates for technology-driven policing through the integration of legal, technological, ethical, and analytical competencies.

The findings are likewise supported by local literature and studies as recent institutional studies in the Philippines reported that technology application, communication competence, and analytical reasoning remain among the weakest competencies demonstrated by criminology students, prompting recommendations for curriculum revision and greater integration of technology-enhanced learning. Likewise, Cruz (2023) found that institutions incorporating digital forensics and cybercrime courses better prepared graduates for contemporary criminal justice practice. Furthermore, CHED Memorandum Order No. 5, series of 2018 encourages higher education institutions to integrate contemporary developments such as cybercrime investigation, digital forensics, and modern crime prevention strategies to ensure curriculum responsiveness and graduate preparedness.

Theoretically, this theme strongly supports Constructive Alignment Theory, which emphasizes that intended learning outcomes, teaching strategies, learning activities, and assessment methods should remain aligned with evolving professional competencies. As criminal justice practice continues to evolve through technological advancement, the curriculum must likewise be updated to ensure that graduates develop competencies in cybercrime investigation, crime analytics, intelligence-led policing, and digital forensic applications. The findings also reinforce Human Capital Theory, which posits that higher education institutions should produce graduates equipped with competencies that meet current labor market and societal needs. Failure to adequately integrate emerging technologies into the curriculum may create competency gaps that limit graduates' readiness for professional practice.

Following the sequential explanatory method, this qualitative theme provides a direct explanation for the quantitative findings wherein the indicators *“related to the integration of crime analytics and intelligence-led policing and the incorporation of emerging criminological developments”* obtained the lowest mean scores under the emerging trends dimension. The convergence of the quantitative and qualitative findings indicates that although respondents generally assessed the curriculum as responsive, greater emphasis should be placed on strengthening technology-oriented competencies, curriculum content, faculty capability, and experiential learning opportunities that reflect contemporary developments in criminology and criminal justice.

Lastly, the findings indicate that the challenge lies not only in introducing new topics but also in ensuring their meaningful integration throughout the curriculum. The participants consistently recognized that the rapidly evolving nature of crime requires equally responsive educational programs capable of preparing graduates for technology-driven criminal justice environments. Consistent with Constructive Alignment Theory and Human Capital Theory, continuous curriculum enhancement, faculty development, and technology-integrated instruction are essential to ensure that criminology graduates remain competent, adaptable, and responsive to the emerging demands of the criminal justice profession.

Table 5.2 Themes Generated from the Findings of the Qualitative Study in response to Question 2

Interview Question	Actual Responses	Themes
2. Can you share experiences where instructional methods made learning difficult?	Participant 2: Purely theoretical and classroom-based instruction is less effective than field exposure and hands-on use of equipment. Limited interaction, inadequate laboratory facilities, and insufficient faculty expertise restrict meaningful learning. Participant 5: Teaching methods centered on memorization, recitation, and student reporting without constructive feedback reduce learning effectiveness. Practical exercises and experiments improve competency development. Participant 7: Online discussions become ineffective due to student distractions and connectivity issues. Simulations and practical exercises enhance understanding of theoretical concepts.	Theme 1. <i>Predominance of Traditional Teacher-Centered Instruction</i>
	Participant 2: Purely theoretical and classroom-based instruction is less effective than field exposure and hands-on use of equipment.	Theme 2. <i>Insufficient Experiential and Practice-Oriented Learning Opportunities</i>

	Participant 4: Flexible teaching strategies, faculty development, and active learning approaches improve student engagement. Participant 6: Traditional teaching approaches characterized by excessive discussion and limited student involvement reduce meaningful learning. Faculty adaptability and simulations promote deeper understanding. Participant 7: Simulations and practical exercises enhance understanding of theoretical concepts.	
	Participant 1: Innovative teaching is constrained by inadequate gadgets, poor internet connectivity, and limited technological resources. Participant 2: Limited interaction, inadequate laboratory facilities, and insufficient faculty expertise restrict meaningful learning. Participant 3: Budget constraints, outdated syllabi, and curriculum misalignment with licensure examination competencies hinder effective instruction. Participant 4: Faculty development and active learning approaches are needed to improve student engagement. Participant 6: Faculty adaptability is needed to promote deeper understanding.	Theme 3. Institutional and Faculty Constraints in Implementing Innovative Teaching Approaches

Theme 1, Questions 2: Predominance of Traditional Teacher-Centered Instruction

The first theme that emerged from the participants' responses is the predominance of traditional teacher-centered instructional approaches in the delivery of criminology courses. Participants consistently observed that instructional methods relied heavily on lectures, memorization, recitations, online discussions, and purely theoretical instruction which limit meaningful student engagement and reduce opportunities for competency development. Rather than actively involving students in the learning process, these instructional approaches often position learners as passive recipients of information, making it difficult for them to develop analytical thinking, communication skills, and professional judgment expected of future criminologists.

The recurrence of this concern was consistently evident across the participants. Most informants described instructional approaches characterized by lectures, memorization, online discussions, and limited student participation as barriers to meaningful learning. Although each participant shared unique experiences, they

collectively expressed a common concern regarding the continued predominance of teacher-centered instructional approaches within the current curriculum.

Participant 2 explained that *"pure theoretical and classroom-based approaches" limited meaningful learning because students had minimal opportunities for practical application*".

Similarly, **Participant 5** observed that *"instruction often focused on recitations and memorization rather than application, reducing students' ability to develop practical competencies"*.

Participant 7 likewise noted that *"online discussions" frequently became ineffective because students were easily distracted and less engaged during the learning process*".

These representative responses reflect a shared assessment that traditional instructional approaches limit active participation and meaningful competency development. The responses indicate that students learn more effectively when instructional strategies promote interaction, collaboration, problem-solving, and authentic application of knowledge rather than passive reception of information. The participants recognized that while theoretical knowledge remains essential in criminology education, excessive dependence on lecture-centered instruction limits opportunities for students to develop higher-order thinking skills and professional competencies required in actual criminal justice practice.

The present findings corroborate the literature emphasizing learner-centered pedagogy in higher education. Darling-Hammond et al. (2020) argued that learner-centered instructional approaches improve student engagement, knowledge retention, and critical thinking by encouraging active participation throughout the learning process. Likewise, Roberts and Roberts (2021) found that simulation-based learning and experiential instructional strategies significantly enhance practical competencies compared with traditional lecture-based instruction. Similarly, Anderson and Carter (2020) emphasized that problem-based learning develops stronger analytical and decision-making skills among criminal justice students since it allows learners to solve authentic professional problems.

The findings are likewise supported by Philippine studies. Bernardo (2021) observed that although outcomes-based education has been adopted in higher education institutions, instructional delivery frequently remains traditional, thereby limiting curriculum responsiveness. Similarly, Malbas and Casas (2022) emphasized that faculty preparedness and instructional alignment significantly influence the successful implementation of responsive curricula.

From a theoretical perspective, this finding strongly supports Constructivist Learning Theory, which posits that meaningful learning occurs when students actively construct knowledge through interaction, collaboration, reflection, and authentic learning experiences rather than through passive listening. Likewise, the findings reinforce Constructive Alignment Theory, which emphasizes that instructional strategies should be intentionally aligned with intended learning outcomes and assessment methods to facilitate competency development. When teaching strategies remain predominantly teacher-centered, opportunities to achieve intended learning outcomes become limited.

Following the sequential explanatory method, this qualitative finding explains the quantitative result wherein the indicator ***"Faculty members' implementation of innovative instructional approaches"*** obtained the lowest mean under the pedagogical approaches dimension of curriculum responsiveness. The convergence of the quantitative and qualitative findings indicates that while respondents generally assessed the curriculum as responsive, faculty members need to further diversify instructional strategies by adopting more learner-centered, competency-based, and participatory approaches that actively engage students throughout the learning process.

Further, the findings indicate that effective criminology education requires a gradual transition from predominantly teacher-centered instruction towards a more learner-centered pedagogical approach that actively involves students in constructing knowledge and applying concepts in authentic professional contexts. Consistent with Constructivist Learning Theory and Constructive Alignment Theory, instructional innovation plays a vital role in ensuring that graduates develop the competencies expected of professionals within the contemporary criminal justice system.

Theme 2, Question 2: Insufficient Experiential and Practice-Oriented Learning Opportunities

The second theme that emerged from the participants' responses is the insufficiency of experiential and practice-oriented learning opportunities within the Bachelor of Science in Criminology program. The participants consistently emphasized that students learn more effectively through simulations, case studies, laboratory activities, practical exercises, field exposure, and other experiential learning opportunities than through purely theoretical classroom discussions. They assessed that the limited integration of authentic learning experiences restricts students' ability to apply theoretical concepts to real-world criminal justice situations and develop the professional competencies expected of criminology graduates.

The recurrence of this concern was consistently evident across the participants. Most informants emphasized that meaningful learning occurs when students are provided opportunities to apply concepts through simulations, practical exercises, field experiences, and authentic learning activities. Although each participant highlighted different instructional experiences, they collectively recognized experiential learning as an essential component of effective criminology education.

Participant 2 explained that *“actual field exposure and hands-on use of equipment are more effective than purely classroom-based instruction because they allow students to experience real professional situations”*.

Similarly, **Participant 4** observed that *“simulations, case studies, and practical exercises significantly improve student engagement as they enable learners to understand concepts through active participation rather than passive listening”*.

Participant 6 likewise emphasized that *“simulations become highly effective when students are challenged to solve analytical problems and generate their own ideas”*.

Participant 7 remarked that *“practical exercises are important because not all theoretical discussions can be fully understood without actual application”*.

These responses suggest that experiential learning plays a critical role in developing the practical competencies required in criminology. Through authentic learning experiences, students are able to strengthen investigative skills, analytical reasoning, communication, teamwork, decision-making, and professional confidence. The participants recognized that practical learning activities not only improve comprehension but also prepare students to perform effectively in actual criminal justice environments.

The findings corroborate the literature emphasizing the value of experiential learning in professional education. Kolb's Experiential Learning Theory explains that meaningful learning occurs when learners actively experience, reflect upon, conceptualize, and apply knowledge in authentic situations. Likewise, Roberts and Roberts (2021) found that simulation-based learning significantly improves students' practical competencies and professional readiness since it allows them to apply theoretical concepts within realistic scenarios. Similarly, Anderson and Carter (2020) emphasized that problem-based learning and case-based instruction develop critical thinking, analytical reasoning, and decision-making skills essential for criminal justice professionals.

The findings are likewise supported by local literature. Philippine studies have consistently recommended strengthening experiential learning within criminology education through laboratory activities, field exposure, internship enhancement, and collaboration with criminal justice agencies. Bernardo (2021) emphasized that outcomes-based education should extend beyond curriculum design to include authentic learning experiences that enable students to demonstrate intended competencies. Similarly, Malbas and Casas (2022) highlighted the importance of instructional alignment in ensuring that classroom activities effectively develop professional competencies expected by employers.

From a theoretical perspective, this finding strongly supports Constructivist Learning Theory, which posits that students construct knowledge through active participation, reflection, collaboration, and authentic experiences. It likewise reinforces Constructive Alignment Theory, which emphasizes that teaching strategies and learning activities should be intentionally aligned with intended learning outcomes. The participants' responses indicate that experiential learning activities provide more effective opportunities for students to achieve the competencies expected under outcomes-based criminology education.

Following the explanatory sequential method, this qualitative finding explains the quantitative result wherein the indicator *"Teaching styles contribute to effective criminology education"* obtained one of the lowest mean scores under the curriculum relevance dimension. The convergence of the quantitative and qualitative findings indicates that although respondents generally considered the curriculum relevant, greater emphasis should be placed on expanding experiential and practice-oriented learning opportunities that enable students to meaningfully apply classroom concepts within authentic criminal justice contexts. Lastly, the findings demonstrate that experiential learning is not merely a supplementary instructional strategy but an essential component of competency-based criminology education. The participants consistently recognized that simulations, case studies, laboratory activities, and field exposure significantly strengthen students' ability to integrate theoretical knowledge with professional practice. Consistent with Constructivist Learning Theory and Constructive Alignment Theory, expanding authentic learning experiences will better prepare graduates to meet the complex and evolving demands of contemporary criminal justice practice.

Theme 3, Question 2: Institutional and Faculty Constraints in Implementing Innovative Teaching Approaches

The third theme that emerged from the participants' responses pertains to the institutional and faculty constraints that limit the implementation of innovative teaching approaches within the Bachelor of Science in Criminology program. The participants consistently identified several barriers that hinder faculty members from adopting learner-centered and technology-enhanced instructional strategies. These constraints include inadequate technological resources, insufficient faculty training, limited instructional facilities, outdated curricular materials, budget limitations, poor internet connectivity, and inadequate institutional support. Collectively, these challenges restrict instructors' ability to implement innovative pedagogical practices that effectively develop students' professional competencies.

The recurrence of this concern was consistently evident across the participants. Most informants recognized that although innovative instructional approaches are desirable, their successful implementation depends largely on institutional support, faculty capability, and the availability of adequate learning resources. While the participants identified different barriers, they collectively acknowledged that these limitations significantly influence the quality of instructional delivery.

Participant 1 explained that *“limited access to updated gadgets, inadequate internet connectivity, and insufficient technological resources prevented both faculty members and students from maximizing innovative instructional approaches”*.

Similarly, **Participant 2** observed that *“the lack of instructional equipment, laboratory facilities, and competent instructors constrained the delivery of meaningful practical learning experiences”*.

Participant 3 further emphasized that *“the curriculum remained dependent on outdated syllabi and exhibited misalignment between the CHED curriculum and the licensure examination, limiting opportunities for instructional innovation”*.

Likewise, **Participant 4** highlighted *“the lack of faculty training and professional development in adopting innovative teaching strategies”*.

Participant 6 observed that *“many instructors remain highly dependent on traditional teaching approaches and are less receptive to new pedagogical methods. Consistent with these observations”*.

These findings suggest that improving instructional quality requires more than encouraging faculty members to adopt innovative teaching methods. Effective instructional innovation likewise depends on institutional investments in faculty development, technological infrastructure, instructional resources, curriculum enhancement, and administrative support. Without these enabling conditions, even highly motivated faculty members may encounter difficulties in implementing active, technology-enhanced, and competency-based instructional strategies.

The present findings corroborate the literature emphasizing that curriculum responsiveness depends not only on curriculum content but also on institutional capacity and faculty readiness. Annala et al. (2023) emphasized that curriculum responsiveness requires continuous collaboration among faculty members, administrators, industry stakeholders, and policymakers to ensure that instructional practices remain aligned with contemporary educational and professional needs. Likewise, UNESCO (2021) highlighted that successful educational innovation requires institutional investment in faculty capability development, digital infrastructure, and technology-enhanced learning environments. Similarly, Vreuls (2023) argued that responsive curriculum implementation depends on sustained organizational support and continuous professional development for educators.

The findings are likewise consistent with Philippine studies of Malbas and Casas (2022) who reported that faculty preparedness, instructional capability, and institutional support significantly influence curriculum responsiveness and the successful implementation of outcomes-based education. Likewise, Bernardo (2021) emphasized that curriculum reforms become effective only when accompanied by continuous faculty development, adequate instructional resources, and institutional commitment to quality teaching and learning.

Theoretically, this theme reinforces Constructive Alignment Theory, which emphasizes that intended learning outcomes can only be achieved when teaching strategies, assessment methods, learning activities, and institutional resources are coherently aligned. The findings also support Human Capital Theory, which recognizes faculty members as critical human resources whose continuous professional development directly influences educational quality and graduate competency. Thus, strengthening faculty capability and institutional support becomes essential in ensuring the effective implementation of innovative and competency-based instructional approaches.

Following the sequential explanatory method, this qualitative theme provides additional explanation for the quantitative finding wherein the indicator ***“Faculty members' implementation of innovative instructional approaches”*** obtained the lowest mean under the pedagogical approaches dimension. The

qualitative findings demonstrate that instructional innovation is influenced not only by faculty willingness but also by institutional readiness, faculty competence, curriculum alignment, and the availability of technological and instructional resources. The convergence of both quantitative and qualitative findings therefore suggests that curriculum enhancement should include comprehensive faculty development programs, improved technological infrastructure, updated instructional materials, and stronger institutional support mechanisms.

Lastly, the findings indicate that instructional innovation is a shared institutional responsibility rather than solely an individual faculty concern. Although faculty competence remains a critical determinant of effective teaching, the participants consistently emphasized that meaningful instructional transformation also requires institutional investments in professional development, curriculum updating, learning resources, and technology-enhanced learning environments. Consistent with Constructive Alignment Theory and Human Capital Theory, strengthening both faculty capability and institutional support systems will enable the Bachelor of Science in Criminology program to implement innovative pedagogical practices that are responsive to the evolving demands of criminology education and the criminal justice profession.

Table 5.3 Themes Generated from the Findings of the Qualitative Study in response to Question 3

Interview Question	Actual Responses	Themes
3. Are there topics you feel are outdated, redundant, or lacking?	Participant 2: Crime-data analysis, intelligence-led policing, agency-specific competencies, and specialization aligned with various criminal justice professions require greater emphasis. Participant 4: New technologies, cybercrime, artificial intelligence, digital evidence require greater curricular emphasis. Participant 7: Cybersecurity, modern policing, ethics, updated laws, reading, writing, and oral communication require greater emphasis within the curriculum.	Theme 1. <i>Insufficient Integration of Emerging Criminological Knowledge</i>
	Participant 1: Greater emphasis should be given to communication competencies and crime analytics depending on faculty expertise. Participant 3: Emerging forensic technologies, updated investigative methods, artificial intelligence, internship exposure, and oral and written communication should be strengthened. Participant 4: Communication competencies require greater curricular emphasis.	Theme 2. <i>Limited Development of Profession-Specific Competencies</i>

	Participant 6: Skill-based competencies, report writing, communication, artificial intelligence, cybercrime, and criminology-specific competencies should be strengthened. Participant 7: Reading, writing, and oral communication remain fundamental competencies expected of future criminologists.	
	Participant 3: Emerging forensic technologies, updated investigative methods, artificial intelligence, and outdated forensic practices require strengthening or replacement. Participant 6: Cybercrime concepts remain largely introductory and require greater depth, particularly in relation to artificial intelligence and emerging digital technologies. Participant 7: The curriculum does not adequately cover intelligence-led policing and other relevant contemporary topics, emphasizing the need to incorporate updated laws and modern policing concepts.	Theme 3. <i>Presence of Outdated and Insufficient Curriculum Content</i>

Theme 1, Question 3: Insufficient Integration of Emerging Criminological Knowledge

The first theme that emerged from the participants' responses is the insufficient integration of emerging criminological knowledge within the current Bachelor of Science in Criminology curriculum. The participants consistently assessed that although the curriculum provides a strong foundation in traditional criminological concepts, greater emphasis should be given to contemporary developments such as cybercrime, artificial intelligence, crime analytics, intelligence-led policing, emerging forensic technologies, updated laws, criminological research, and other rapidly evolving areas of criminal justice. These findings suggest that the dynamic nature of crime and technological advancement requires continuous curriculum enhancement to ensure that graduates remain responsive to contemporary professional demands.

The recurrence of this concern was consistently evident across the participants. Most informants emphasized that the curriculum should continuously incorporate current developments in criminology to keep pace with technological advancements, changes in criminal behavior, and evolving professional practices. Although each participant identified different areas requiring enhancement, they collectively recognized the importance of strengthening the integration of emerging criminological knowledge within the curriculum.

Participant 2 explained that “*greater emphasis should be placed on crime-data analysis, intelligence-led policing, and specialization aligned with different criminal justice professions*”, highlighting the need for curriculum content that reflects contemporary policing strategies.

Similarly, **Participant 4** observed that “*cybercrime, artificial intelligence, digital evidence, and new technologies require greater curricular integration because these competencies have become increasingly relevant in modern criminal justice practice*”.

Participant 7 likewise emphasized that “*cybersecurity, modern policing, and updated laws should receive greater emphasis to ensure that graduates remain responsive to the rapidly changing demands of the profession*”.

These responses indicate that the participants do not assess the existing curriculum as inadequate; rather, they recognize that the continuously evolving nature of crime and criminal justice necessitates regular curriculum review and enhancement. The findings imply that curriculum responsiveness should not only preserve fundamental criminological concepts but should also integrate emerging knowledge and technological innovations that influence contemporary law enforcement, forensic investigation, corrections, and community safety. Such responsiveness enables graduates to remain relevant and competent in increasingly complex criminal justice environments.

The present findings corroborate the literature emphasizing that responsive curricula should continuously evolve to address societal changes and professional expectations. Annala et al. (2023) emphasized that curriculum responsiveness requires higher education institutions to regularly review and update curricular content in collaboration with stakeholders to ensure alignment with contemporary societal and industry needs. Likewise, Vreuls (2023) explained that curriculum development should be viewed as a dynamic and continuous process that responds to technological innovations, labor market demands, and changing professional competencies. Similarly, UNESCO (2021) underscored the importance of integrating digital competencies and emerging technologies into higher education curricula to prepare graduates for rapidly evolving professional environments.

The findings are likewise supported by studies focusing on criminology education. Holt, Bossler, and Seigfried-Spellar (2022) emphasized that cybercrime investigation, digital evidence, and technology-assisted policing should become integral components of criminal justice education rather than supplementary topics. Likewise, Miró-Llinares and Moneva (2021) highlighted the growing importance of crime analytics and intelligence-led policing in supporting evidence-based decision-making within modern law enforcement agencies. These studies reinforce the participants' observations regarding the necessity of continuously integrating emerging criminological knowledge into the curriculum.

Moreover, this finding reinforces Human Capital Theory, which posits that higher education institutions should continuously develop competencies that correspond with the evolving needs of society and the labor market. As technological innovations reshape criminal justice practice, graduates must likewise acquire updated knowledge and competencies that enhance their employability and professional effectiveness. The findings also support Constructive Alignment Theory, which emphasizes that intended learning outcomes, curriculum content, instructional strategies, and assessment methods should remain aligned with current professional competencies. Continuous curriculum updating therefore becomes essential in ensuring that criminology graduates develop the knowledge and skills expected within contemporary criminal justice practice.

Following the sequential explanatory method, this qualitative theme provides a clear explanation for the quantitative findings wherein the “**Emerging Trends**” dimension obtained the lowest mean under curriculum responsiveness, particularly on the indicators concerning the integration of crime analytics, intelligence-led policing, and other emerging developments in criminology. The convergence of the quantitative and qualitative findings suggests that while respondents generally assessed the curriculum as

responsive and relevant, they likewise recognized the need for continuous integration of emerging criminological knowledge to sustain curriculum responsiveness amidst the rapidly changing criminal justice landscape.

Lastly, the findings indicate that curriculum responsiveness extends beyond maintaining existing course offerings; it likewise requires the continuous integration of emerging criminological knowledge that reflects technological advancement, evolving criminality, and changing professional expectations. Consistent with Human Capital Theory and Constructive Alignment Theory, regularly updating curriculum content enables higher education institutions to produce graduates who remain competent, adaptable, and responsive to the contemporary and future demands of the criminal justice profession.

Theme 2, Question 3: Limited Development of Profession-Specific Competencies

The second theme that emerged from the participants' responses is the limited development of profession-specific competencies necessary for graduates to effectively perform within the criminal justice profession. The participants consistently emphasized that while the curriculum provides students with foundational criminological knowledge, greater emphasis should be placed on strengthening competencies that are directly applicable to professional practice. These include oral and written communication, report writing, judicial affidavit preparation, crime analysis, intelligence-led policing, and other competencies expected by employers across various criminal justice agencies.

The recurrence of this concern was consistently evident across the participants. Most informants recognized that communication skills and other profession-specific competencies remain areas requiring further emphasis to enhance graduates' readiness for employment. Although the participants referred to different competencies based on their professional experiences, they collectively assessed that the curriculum could further strengthen students' ability to communicate effectively, analyze criminal incidents, and perform professional responsibilities within diverse criminal justice settings.

Participant 1 explained that *“writing and oral communication should receive greater emphasis because effective communication is essential in performing professional duties within the criminal justice system”*. Similarly, **Participant 3** observed that *“oral and written communication, together with the appropriate use of artificial intelligence, should be strengthened to improve students' professional competencies”*.

Participant 4 likewise emphasized the *“importance of developing judicial affidavit writing and legal writing competencies”*.

Participant 6 highlighted the *“need to improve report writing, public speaking, and communication skills specific to criminology practice”*.

Consistent with these observations, **Participant 7** further emphasized that *“reading, writing, and oral communication remain fundamental competencies expected of future criminologists”*.

These responses indicate that stakeholders view professional competency development as extending beyond mastery of theoretical concepts. The participants consistently recognized that graduates are expected to communicate effectively, prepare professional reports, analyze criminal incidents, present evidence, and interact confidently with various stakeholders within the criminal justice system.

The present findings corroborate the literature emphasizing the importance of competency-based education in preparing graduates for professional practice. Tomlinson (2021) emphasized that communication competence, professional adaptability, and transferable skills significantly influence graduate employability. Likewise, Jackson (2021) argued that higher education curricula should intentionally integrate communication competencies throughout instructional activities rather than

assuming students naturally develop these skills. These findings reinforce the participants' observations that communication competencies should remain a continuing focus of curriculum implementation.

The findings are likewise supported by Philippine studies as one local researcher cited that communication skills, analytical thinking, and technology application remain among the competencies requiring continuous enhancement among criminology students. Habiatan (2022) likewise recommended strengthening communication-related competencies to improve graduate preparedness for employment within various criminal justice agencies. Furthermore, studies conducted in Northern Luzon and Central Luzon similarly emphasized the importance of strengthening oral communication, report writing, and professional interaction to improve graduate employability and professional performance.

Theoretically, this finding strongly reinforces Human Capital Theory, which posits that higher education institutions should develop competencies that increase graduates' productivity, employability, and professional effectiveness. Communication, report writing, analytical reasoning, and professional judgment represent essential forms of human capital that directly influence graduates' ability to perform successfully within law enforcement agencies, correctional institutions, forensic organizations, and other criminal justice settings. Likewise, Constructive Alignment Theory emphasizes that intended learning outcomes, instructional activities, and assessment methods should intentionally support the development of these professional competencies throughout the curriculum.

Following the sequential explanatory method, this qualitative theme provides a clear explanation for the quantitative findings wherein the indicator "***The curriculum responds to the industry's growing demand for stronger communication competencies***" obtained the lowest mean under the dimension of societal and industrial relevance. The convergence of the quantitative and qualitative findings indicates that although respondents generally assessed the curriculum as responsive and relevant, communication and other profession-specific competencies remain priority areas requiring continued emphasis to ensure graduates possess the competencies expected by employers within the criminal justice sector.

Lastly, the findings demonstrate that curriculum responsiveness is not measured solely by the breadth of curricular content but also by the extent to which graduates develop competencies directly applicable to professional practice. Consistent with Human Capital Theory and Constructive Alignment Theory, strengthening profession-specific competencies throughout the curriculum contributes to producing graduates who are competent, employable, and responsive to the evolving expectations of the criminal justice profession.

Theme 3, Question 3: Presence of Outdated and Insufficient Curriculum Content

The third theme that emerged from the participants' responses is the presence of outdated and insufficient curriculum content. The participants consistently assessed that while the Bachelor of Science in Criminology curriculum provides students with essential foundational knowledge, certain topics, instructional materials, and learning content no longer fully reflect the current realities and demands of the criminal justice profession. They observed that some course contents remain dependent on outdated concepts and technologies, while other contemporary topics that have become increasingly relevant in professional practice receive limited emphasis within the curriculum.

The recurrence of this concern was consistently evident across the participants. Most informants recognized that curriculum content should be continuously reviewed to ensure that students acquire knowledge that reflects current developments in criminal justice practice. Although each participant identified different examples of outdated or insufficient content, they collectively expressed the need for

curriculum content to remain responsive to technological advancements, contemporary investigative practices, and evolving professional expectations.

Participant 3 explained that “*several traditional forensic practices, including the continued emphasis on fingerprint brushing techniques, bullet comparison microscopy, and darkroom procedures, no longer reflect the technological advancements currently utilized in forensic science*”.

Similarly, **Participant 6** observed that “*cybercrime concepts remain largely introductory and do not provide students with sufficient depth of understanding, particularly in relation to artificial intelligence and emerging digital technologies*”.

Participant 7 likewise noted that “*the curriculum does not adequately cover intelligence-led policing and other relevant contemporary topics, emphasizing the need to incorporate updated laws and modern policing concepts into classroom instruction*”.

These responses indicate that curriculum responsiveness extends beyond introducing new topics; it likewise requires the continuous evaluation of existing curriculum content to determine whether it remains relevant to current professional practice. As criminal justice systems increasingly rely on digital technologies, intelligence-led policing, advanced forensic methodologies, and interdisciplinary approaches, curriculum content must likewise evolve to ensure that graduates possess competencies aligned with contemporary workplace expectations. The participants' observations suggest that maintaining outdated instructional content may limit students' preparedness to respond effectively to emerging challenges within the criminal justice system.

The present findings corroborate the literature emphasizing that curriculum responsiveness requires periodic review and continuous updating of curricular content. Annala et al. (2023) emphasized that higher education curricula should remain dynamic and responsive to societal and professional changes through regular curriculum evaluation and stakeholder engagement. Likewise, Vreuls (2023) explained that curriculum responsiveness involves continuously revising curriculum content to reflect emerging knowledge, technological innovations, and changing workforce expectations. Similarly, UNESCO (2021) underscored the importance of integrating contemporary knowledge and digital innovations within higher education curricula to ensure graduate preparedness in rapidly evolving professional environments.

The findings are likewise supported by criminology-specific literature. Holt, Bossler, and Seigfried-Spellar (2022) argued that criminal justice education should move beyond traditional instructional content by integrating cybercrime investigation, digital evidence, and technology-assisted policing as core curricular components. Likewise, Miró-Llinares and Moneva (2021) emphasized that contemporary policing increasingly depends on crime analytics and intelligence-led approaches, requiring corresponding updates within criminology curricula. These studies reinforce the participants' observations that curriculum content should continuously evolve to reflect current developments in criminal justice education and practice.

From a theoretical perspective, this finding reinforces Constructive Alignment Theory, which emphasizes that curriculum content, intended learning outcomes, teaching strategies, and assessment methods should remain coherently aligned with contemporary professional competencies. When curriculum content is not regularly updated, the alignment between educational outcomes and workplace expectations may gradually weaken. Likewise, Human Capital Theory supports the findings by emphasizing that higher education institutions should continually equip learners with current knowledge and competencies that enhance employability and professional effectiveness within a changing labor market.

Following the explanatory sequential method, this qualitative theme provides additional explanation for the quantitative findings wherein the “*Emerging Trends*” dimension obtained comparatively lower mean scores, particularly on indicators relating to the integration of crime analytics, intelligence-led policing, and other contemporary developments in criminology. The convergence of the quantitative and qualitative findings indicates that while respondents generally assessed the curriculum as responsive and relevant, they also recognized that certain curriculum content requires periodic updating to ensure continued responsiveness to the evolving demands of criminal justice education and professional practice.

Lastly, the findings demonstrate that curriculum responsiveness is sustained through the continuous review and updating of curriculum content. The participants consistently recognized that maintaining relevant and contemporary learning content enables students to develop competencies that correspond with current criminal justice practices and emerging societal needs. Consistent with Constructive Alignment Theory and Human Capital Theory, the periodic evaluation of curriculum content contributes to producing graduates who remain knowledgeable, adaptable, and responsive to the evolving landscape of the criminal justice profession.

Table 5.4 Themes Generated from the Findings of the Qualitative Study in response to Question 4

Interview Question	Actual Responses	Themes
4. Are there enough opportunities for practical or hands-on learning?	Participant 2: Students have limited field exposure and interaction with criminal justice agencies. Internship and crime scene exposure should be strengthened. Participant 3: Students have insufficient opportunities to apply classroom learning due to agency restrictions. Internship and research-related field activities improve professional preparation. Participant 6: Students continue to rely heavily on theory-based learning with limited site visits and practical exposure. Internship across different agencies and greater exposure to contemporary criminal justice practices are needed.	Theme 1. <i>Limited Opportunities for Authentic and Experiential Learning</i>
	Participant 1: Students have limited opportunities to apply classroom learning in communication skills. Participant 3: Communication skills remain largely theoretical. Participant 4: Faculty exposure and instructional capability influence students' communication development. Greater internship opportunities are necessary.	Theme 2. <i>Limited Opportunities to Develop Communication and Interpersonal Skills</i>

	Participant 7: Students require greater exposure to communication activities, leadership development, and interpersonal skills.	
	Participant 3: Students have insufficient opportunities to apply classroom learning due to agency restrictions. Communication skills and crime analysis remain largely theoretical. Participant 5: Practical exposure depends largely on the assigned agency. Internship and exposure to different criminal justice agencies better prepare students for employment. Participant 7: Students require greater exposure to intelligence gathering, leadership development, ethical practice, and contemporary policing practices.	Theme 3. <i>Limited Exposure to Contemporary Criminal Justice Practice</i>

Theme 1, Question 4: Limited Opportunities for Authentic and Experiential Learning

The first theme that emerged from the participants' responses is the limited opportunities for authentic and experiential learning within the Bachelor of Science in Criminology program. The participants consistently assessed that although the curriculum provides adequate theoretical foundations, students have insufficient opportunities to apply classroom learning through authentic, real-world experiences. They emphasized that practical exposure, field immersion, site visits, simulations, and experiential activities are essential in enabling students to develop the competencies expected of future criminal justice professionals. The findings suggest that meaningful learning is enhanced when theoretical knowledge is complemented by practical application in environments that closely resemble actual professional practice. The recurrence of this concern was consistently evident across the participants. Most informants shared that students remain heavily dependent on classroom-based instruction since opportunities for actual field exposure and experiential learning are limited. Although the participants cited different reasons, including agency restrictions, limited institutional partnerships, and safety considerations, they collectively recognized that authentic learning experiences remain insufficient to fully prepare students for professional practice.

Participant 2 explained that “students have limited knowledge and practical experience because learning remains largely classroom-based, emphasizing that greater field exposure and actual use of equipment are necessary to improve competency development”.

Similarly, **Participant 3** observed that “students are not provided sufficient opportunities to apply classroom learning because many agencies restrict student participation due to operational risks, limiting their exposure to real criminal justice situations”.

Participant 6 likewise remarked that “*many major and professional courses continue to rely heavily on theory-based instruction, with limited site visits and practical exposure, reducing students' opportunities to develop practical competencies before graduation*”.

These responses indicate that stakeholders recognize experiential learning as an indispensable component of criminology education. While theoretical instruction provides students with essential conceptual knowledge, practical learning experiences allow them to apply, evaluate, and refine these concepts within authentic criminal justice settings. The participants' observations suggest that insufficient exposure to real-world environments may limit students' confidence, professional judgment, and readiness to perform the duties expected within law enforcement, corrections, forensic science, and other criminal justice professions.

The present findings corroborate the literature emphasizing the importance of experiential learning in professional education. Roberts and Roberts (2021) found that simulations, field-based instruction, and experiential learning significantly improve students' engagement, critical thinking, and professional competence in criminal justice education. Similarly, Darling-Hammond et al. (2020) emphasized that learner-centered instructional approaches that actively engage students in authentic learning experiences promote deeper understanding and improve competency development. Likewise, Ramos and Bautista (2022) reported that practical training activities, including simulations and field exercises, significantly enhance students' professional readiness and ability to apply classroom knowledge within real-world contexts. These findings reinforce the participants' assessment that experiential learning should remain an integral component of criminology education.

Furthermore, the findings strongly support Constructivist Learning Theory, which posits that meaningful learning occurs when students actively construct knowledge through experience, interaction, and reflection rather than through passive reception of information. In criminology education, experiential learning activities such as field immersion, simulations, crime scene exercises, and internship programs provide students with authentic contexts where theoretical concepts are transformed into practical competencies. The findings likewise reinforce Constructive Alignment Theory, which emphasizes that learning activities should be intentionally aligned with intended learning outcomes to ensure that graduates acquire competencies relevant to professional practice.

More importantly, this qualitative theme provides a clear explanation for the quantitative findings wherein respondents gave comparatively lower assessments to indicators related to pedagogical approaches, particularly those concerning experiential learning and the implementation of innovative instructional strategies. The convergence of the quantitative and qualitative findings indicates that although the curriculum was generally assessed as responsive and relevant, expanding authentic learning opportunities would further strengthen students' competency development and professional preparedness.

Lastly, the findings demonstrate that authentic and experiential learning serves as a vital component of curriculum responsiveness in criminology education. The participants consistently recognized that practical exposure, field-based instruction, and experiential learning activities enable students to bridge theoretical knowledge with professional practice. Consistent with Constructivist Learning Theory and Constructive Alignment Theory, increasing opportunities for authentic learning experiences contributes to the development of graduates who are more competent, confident, and responsive to the evolving demands of the criminal justice profession.

Theme 2, Question 4: Limited Opportunities to Develop Communication and Interpersonal Skills

The second theme that emerged from the participants' responses is the limited opportunities to develop communication and interpersonal skills through practical learning experiences. The participants consistently assessed that while communication is recognized as an important competency within the Bachelor of Science in Criminology curriculum, students are provided with insufficient opportunities to practice oral communication, interpersonal interaction, leadership, and other soft skills in authentic learning environments. The findings suggest that communication competencies are frequently discussed during classroom instruction but are not consistently reinforced through practical activities that enable students to develop confidence and professional competence.

The recurrence of this concern was consistently evident across the participants. Most informants emphasized that communication and interpersonal skills are developed more effectively through active participation, collaborative learning, practical exercises, and real-world interaction rather than through lectures alone. Although the participants described different learning experiences, they collectively recognized that opportunities to practice these competencies remain limited throughout the curriculum.

Participant 1 explained that *“students are provided with insufficient activities that develop communication skills, noting that interpersonal communication is commonly discussed in theory but is not consistently practiced in actual learning situations”*.

Similarly, **Participant 3** observed that *“students have limited opportunities to develop communication and interpersonal skills because classroom instruction focuses more on explaining concepts than allowing students to engage in actual communication practices”*.

Participant 4 likewise emphasized that *“the limited professional exposure of some faculty members restricts opportunities for students to develop communication and interpersonal competencies”*.

Participant 7 highlighted that *“students require greater exposure to activities that develop soft skills, leadership, and interpersonal communication to prepare them for professional practice”*.

These responses indicate that communication competency extends beyond the ability to speak or write effectively. Within the context of criminology education, communication involves interviewing, public speaking, report presentation, courtroom communication, interpersonal interaction, conflict resolution, teamwork, and professional engagement with various stakeholders in the criminal justice system. The participants recognized that these competencies are best developed through repeated practice in authentic learning situations rather than through theoretical discussion alone.

The present findings corroborate the literature emphasizing the importance of communication as a core graduate competency. Tomlinson (2021) emphasized that communication, collaboration, and interpersonal competencies are among the most important employability skills expected by employers across professional disciplines. Likewise, Jackson (2021) argued that communication competencies should be intentionally embedded across curricular and co-curricular activities through authentic learning experiences rather than confined to isolated communication courses. Similarly, Darling-Hammond et al. (2020) emphasized that learner-centered instructional approaches encourage students to actively participate, communicate, and collaborate, thereby enhancing both academic learning and professional competence. These studies reinforce the participants' observations that communication skills are strengthened through meaningful participation and authentic engagement.

The findings are likewise supported by local studies reviewed in this research, which consistently reported that criminology students require further enhancement in oral communication, report writing, interpersonal interaction, and professional presentation skills to meet the expectations of criminal justice

agencies and other employers. These studies likewise emphasized that competency development should be supported through practical learning experiences that encourage students to communicate effectively within professional contexts.

From a theoretical perspective, this finding strongly supports Constructivist Learning Theory, which posits that meaningful learning occurs through active interaction, collaboration, and authentic participation. Communication and interpersonal competencies are developed not merely by acquiring knowledge but by engaging in activities that require students to express ideas, solve problems collaboratively, and interact with others in realistic settings. Likewise, Constructive Alignment Theory reinforces the importance of aligning instructional activities with intended learning outcomes to ensure that communication competencies are intentionally developed throughout the curriculum rather than treated as incidental outcomes.

Following the explanatory sequential method, this qualitative theme provides a clear explanation for the quantitative findings wherein the indicator "***The curriculum responds to the industry's growing demand for stronger communication competencies***" obtained the lowest mean under the dimension of societal and industrial relevance. The convergence of the quantitative and qualitative findings indicates that while respondents generally assessed the curriculum as responsive and relevant, greater opportunities for authentic communication and interpersonal skill development remain necessary to enhance students' readiness for professional practice within the criminal justice system.

Lastly, the findings demonstrate that communication and interpersonal competencies are developed most effectively through authentic learning experiences that encourage students to actively participate, collaborate, and engage in professional interaction. The participants consistently recognized that expanding opportunities for communication-focused activities strengthens students' confidence, professionalism, and workplace readiness. Consistent with Constructivist Learning Theory and Constructive Alignment Theory, meaningful communication development requires instructional activities that intentionally integrate authentic practice with the intended learning outcomes of the Bachelor of Science in Criminology curriculum.

Theme 3, Question 4: Limited Exposure to Contemporary Criminal Justice Practice

The third theme that emerged from the participants' responses is the limited exposure to contemporary criminal justice practice. The participants consistently assessed that although the curriculum introduces students to the principles and functions of the criminal justice system, opportunities to observe and participate in current professional practices remain limited. They emphasized that exposure to contemporary law enforcement operations, intelligence gathering, crime analysis, forensic investigations, correctional programs, and other real-world criminal justice activities is essential in preparing students for the dynamic demands of the profession. The findings suggest that meaningful professional preparation requires students to experience current practices that reflect the realities of modern criminal justice agencies.

The recurrence of this concern was consistently evident across the participants. Most informants recognized that practical exposure to contemporary criminal justice settings varies considerably depending on institutional arrangements, internship placements, agency policies, and available learning opportunities. Although the participants described different professional experiences, they collectively emphasized that students would benefit from greater exposure to current operational practices across the various sectors of the criminal justice system.

Participant 3 explained that “many law enforcement and criminal justice agencies limit student participation because of operational risks and confidentiality concerns, thereby reducing opportunities for students to experience actual professional practice during training”.

Similarly, **Participant 5** observed that “students' practical exposure largely depends on the agency where they are assigned, resulting in unequal learning experiences and varying levels of competency development”.

Participant 7 likewise emphasized that “students should be provided with greater exposure to intelligence gathering, leadership activities, ethical decision-making, and contemporary policing practices to strengthen their readiness for future employment within the criminal justice system”.

These responses indicate that exposure to authentic criminal justice environments serves as an important bridge between classroom learning and professional practice. While academic instruction develops foundational knowledge, direct exposure to contemporary criminal justice operations enables students to appreciate the complexity of professional responsibilities, organizational procedures, ethical standards, and decision-making processes encountered within actual work environments. The participants recognized that such experiences enhance students' confidence, adaptability, and professional readiness.

The present findings corroborate the literature emphasizing the importance of strengthening collaboration between higher education institutions and industry partners to improve graduate preparedness. Annala et al. (2023) emphasized that curriculum responsiveness requires sustained engagement with professional stakeholders to ensure that educational experiences remain aligned with evolving industry practices. Likewise, Wheelahan and Moodie (2021) argued that professionally oriented degree programs should provide authentic workplace learning opportunities that enable students to apply disciplinary knowledge within real occupational settings. Similarly, UNESCO (2021) highlighted that higher education institutions should establish learning environments that expose students to current professional practices and emerging workplace expectations. These studies reinforce the participants' observations that meaningful exposure to contemporary criminal justice practice enhances graduates' readiness for professional employment.

The findings are likewise supported by Philippine literature reviewed in this study, which recommends strengthening partnerships between higher education institutions and criminal justice agencies to expand students' opportunities for field exposure, professional immersion, and experiential learning. Local studies likewise emphasize that authentic engagement with law enforcement agencies, correctional institutions, and forensic organizations contributes significantly to graduate competency development and employability.

From a theoretical perspective, this finding strongly supports Human Capital Theory, which posits that educational institutions should develop graduates whose knowledge, skills, and experiences correspond with labor market expectations. Exposure to contemporary criminal justice practice enables students to acquire practical competencies that increase their employability and professional effectiveness. Likewise, Constructivist Learning Theory reinforces the importance of authentic learning experiences, emphasizing that knowledge is more effectively constructed when learners actively engage with real-life situations and reflect on those experiences.

Following a sequential explanatory method, this qualitative theme complements the quantitative findings by explaining respondents' assessment of **curriculum responsiveness and curriculum relevance**, particularly with respect to the practical application of knowledge and responsiveness to industry expectations. The convergence of the quantitative and qualitative findings indicates that although

respondents generally assessed the curriculum as responsive and relevant, expanding students' exposure to contemporary criminal justice practice would further strengthen the implementation of the curriculum and improve graduate preparedness for professional practice.

Lastly, the findings demonstrate that curriculum responsiveness extends beyond curriculum content and classroom instruction to include meaningful exposure to contemporary criminal justice practice. The participants consistently recognized that authentic engagement with current professional environments enables students to integrate theoretical knowledge with practical experience while developing competencies expected of future criminal justice practitioners. Consistent with Human Capital Theory and Constructivist Learning Theory, expanding opportunities for contemporary professional exposure contributes to producing graduates who are adaptable, professionally competent, and responsive to the evolving demands of the criminal justice system.

Problem 6. Based on the findings, what output may be recommended?

Based on the findings of the study, the following output is hereby recommended:

Introduction

Based on the quantitative and qualitative findings of the study, the Evidence-Based Criminology Curriculum Enhancement Model (EBCEM) and its corresponding Curriculum Enhancement Framework were developed to strengthen the responsiveness and relevance of the Bachelor of Science in Criminology curriculum. The EBCEM served as the overarching model that provided a systematic and cyclical process for curriculum enhancement, while the Curriculum Enhancement Framework represented its operational application based on the specific curriculum gaps and challenges identified in the present study.

The EBCEM was developed from the integrated findings of the quantitative and qualitative phases of the study. The quantitative findings established that the BS Criminology curriculum was generally perceived as highly responsive and highly relevant in terms of societal and industrial relevance, pedagogical approaches, and emerging trends. However, the qualitative findings provided further explanation of the specific areas that required strengthening, including communication competency gaps, gaps in correctional and rehabilitation education, insufficient integration of emerging criminological competencies and technologies, predominance of traditional teacher-centered instruction, limited experiential and hands-on learning opportunities, outdated and insufficient curriculum content, and limited exposure to contemporary criminal justice practice.

The EBCEM operationalized the curriculum enhancement process through six interconnected stages: Assess, Identify, Prioritize, Enhance, Monitor, and Sustain. The model recognizes that curriculum responsiveness and relevance are not static conditions but require continuous assessment and improvement in response to changes in professional practice, technology, societal needs, and the criminal justice environment.

The Curriculum Enhancement Framework, as the operational component of the EBCEM, translated the identified curriculum gaps into specific enhancement objectives, strategies and activities, responsible personnel, timeframes, success indicators, monitoring mechanisms, and sustainability measures. Thus, the framework served as a practical guide for implementing targeted curriculum enhancements while maintaining alignment with CHED Memorandum Order No. 5, Series of 2018, the principles of Outcomes-Based Education (OBE), and institutional Continuous Quality Improvement (CQI) practices.

Unlike a curriculum revision that replaces or substantially restructures the existing curriculum, the proposed EBCEM and Curriculum Enhancement Framework focused on strengthening the existing curriculum through targeted, evidence-based enhancements. The model and framework therefore provided a systematic basis for addressing identified gaps while preserving the strengths of the existing BS Criminology curriculum.

Rationale

The Bachelor of Science in Criminology curriculum must continuously evolve to remain responsive to the changing demands of criminology education and criminal justice practice. The quantitative findings of the study revealed that the curriculum was generally assessed as highly responsive and highly relevant. Nevertheless, comparatively lower ratings were observed in specific areas, particularly those related to communication competencies, crime analytics, intelligence-led policing, emerging criminological trends, innovative pedagogical approaches, and practical learning opportunities.

The qualitative findings provided further explanation and corroboration of these quantitative results. Recurring concerns were identified regarding limited integration of emerging criminological knowledge, insufficient opportunities for experiential learning, limited development of communication competencies, outdated and insufficient curriculum content, and limited exposure to contemporary criminal justice practice. These findings demonstrate that a generally high assessment of curriculum responsiveness and relevance does not eliminate the need for targeted enhancement. Rather, the identified gaps provide specific areas where the curriculum can be strengthened.

These findings provided the basis for the development of the Evidence-Based Criminology Curriculum Enhancement Model (EBCEM). The model recognizes that curriculum enhancement should begin with systematic assessment, proceed through identification and prioritization of evidence-based gaps, and lead to targeted enhancement, monitoring, and sustainability. In this manner, curriculum enhancement becomes a continuous process rather than a one-time response to identified deficiencies.

The Curriculum Enhancement Framework operationalized this model by translating the identified gaps into concrete enhancement measures. These measures were intended to strengthen curriculum content, instructional delivery, experiential learning opportunities, emerging professional competencies, and graduate preparation in response to the evolving requirements of law enforcement, corrections, forensic services, public safety, and other criminal justice sectors.

Thus, the EBCEM and Curriculum Enhancement Framework provided a systematic, evidence-based, and sustainable approach to curriculum enhancement, allowing the BS Criminology program to maintain its existing strengths while continuously addressing areas requiring improvement.

Objective

General Objective

The Evidence-Based Criminology Curriculum Enhancement Model (EBCEM) and the corresponding Curriculum Enhancement Framework aimed to strengthen the responsiveness and relevance of the Bachelor of Science in Criminology curriculum through evidence-based and sustainable curriculum enhancement, particularly in the areas of curriculum content, instructional delivery, experiential learning, emerging criminological competencies, and graduate preparation consistent with the evolving demands of the criminal justice profession.

Specific Objectives

The proposed EBCEM and Curriculum Enhancement Framework specifically aimed to:

1. Assess the continuing responsiveness and relevance of the BS Criminology curriculum based on stakeholder feedback, professional requirements, and emerging developments in criminology and criminal justice;
2. Identify specific curriculum gaps and challenges requiring enhancement based on quantitative and qualitative evidence;
3. Prioritize curriculum gaps according to their professional significance, recurrence, urgency, and feasibility of enhancement;
4. Enhance curriculum content, pedagogical approaches, experiential learning opportunities, and emerging criminological competencies through targeted strategies and activities;
5. Monitor the implementation and effectiveness of curriculum enhancement initiatives using measurable performance indicators and existing program assessment mechanisms; and
6. Sustain effective curriculum enhancements by integrating them into curriculum review, faculty development, stakeholder engagement, program assessment, and the College's Continuous Quality Improvement (CQI) processes.

Implementation Plan

Table 6. Curriculum Enhancement Framework

Identified Gap	Objective	Enhancement Strategy / Activity	Course/s Where Embedded	Key Person/s	Time Frame	Success Indicator
Weak oral communication skills	Strengthen students' oral communication competencies.	Conduct oral case presentations, courtroom testimony simulations, investigative briefings, and mock court exercises.	Purposive Communication; Criminal Procedure and Court Testimony; Technical Writing 1 & 2	Dean, Program Head, Course Coordinators, Faculty Members	Every Semester	Improved communication rubric scores; positive internship supervisor evaluation; improved oral presentation performance
Weak written communication skills	Improve students' technical and legal writing competencies.	Integrate police blotter writing, incident reports, judicial affidavits, legal correspondence, and investigative reports.	Technical Writing 1 & 2; Criminological Research 1 & 2	Faculty Members	Every Semester	Improved writing assessment results; quality of legal documents produced by

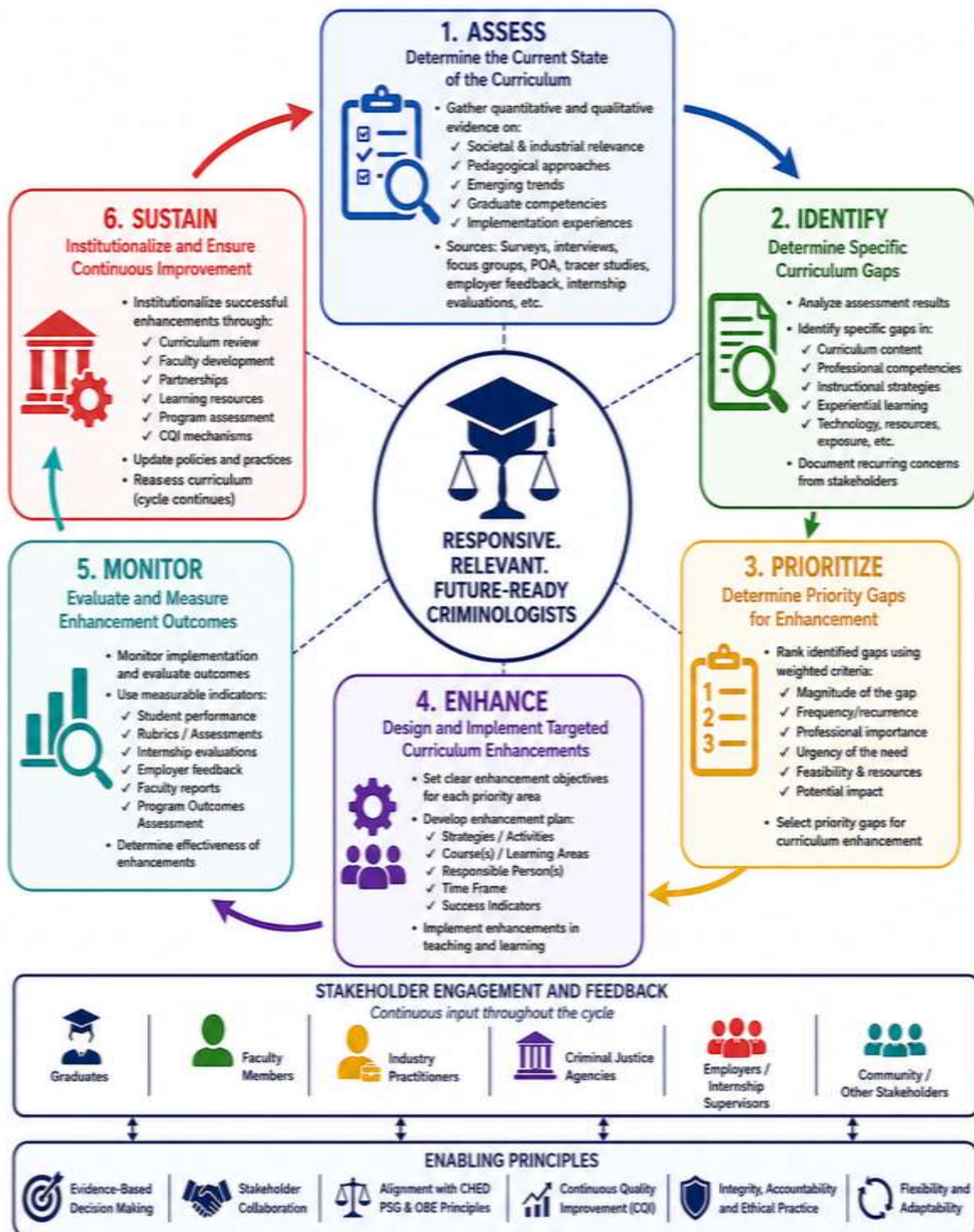
						students
Difficulty expressing ideas professionally	Develop students' confidence in professional communication.	Conduct structured oral defense, investigative briefings, stakeholder presentations, and panel discussions.	Purposive Communication; Fundamentals of Criminal Investigation and Intelligence; Research 1 & 2	Faculty Members	Every Semester	Increased student participation and improved oral defense ratings
Limited exposure to crime analytics	Develop competencies in crime analysis and evidence-based policing.	Integrate crime trend analysis, hotspot mapping, crime statistics interpretation, and crime mapping projects.	Law Enforcement Operations and Planning with Crime Mapping; Research 1 & 2	Program Head, Faculty Members	Every Academic Year	Students successfully complete crime analysis projects using authentic crime data
Limited knowledge of intelligence-led policing	Enhance students' intelligence gathering competencies.	Conduct intelligence gathering exercises, surveillance planning, intelligence cycle workshops, and case analysis.	Fundamentals of Criminal Investigation and Intelligence; Comparative Models in Policing	Faculty Members ; Resource Speakers from Law Enforcement Agencies	Every Academic Year	Students demonstrate competency during practical intelligence exercises
Lack of practical crime analysis activities	Strengthen analytical decision-making skills.	Develop case-based crime analysis projects and investigative problem-solving activities.	Law Enforcement Operations and Planning with Crime Mapping	Faculty Members	Every Semester	Successful completion of crime analysis case studies
Limited cybercrime competencies	Improve students' knowledge of cybercrime	Integrate digital evidence preservation, social media investigation,	Introduction to Cybercrime; Environmental Laws and	Faculty Members ; IT Experts	Every Academic Year	Students successfully perform digital investigation

	investigation.	Open-Source Intelligence (OSINT), and cybercrime simulations.	Protection			exercises
Lack of Artificial Intelligence-related competencies	Introduce emerging AI applications in criminal justice.	Conduct workshops on Artificial Intelligence in criminal justice, AI-assisted investigations, predictive policing, and ethical AI utilization.	Introduction to Cybercrime; Science, Technology and Society	Program Head; Faculty Members ; Industry Experts	Every Academic Year	Students demonstrate responsible use of AI tools in academic activities
Outdated forensic technology exposure and limited understanding of emerging forensic technologies	Update students' knowledge of modern forensic technologies.	Introduce Automated Fingerprint Identification Systems (AFIS), digital ballistics, facial recognition systems, forensic software, digital forensics, and current forensic laboratory practices.	Personal Identification Techniques; Questioned Documents Examination ; Forensic Ballistics; Forensic Chemistry and Toxicology; Forensic Photography ; Lie Detection Techniques	Laboratory Coordinator; Faculty Members	Every Academic Year	Laboratory activities updated to reflect current forensic technologies
Difficulty understanding therapeutic modalities and	Enhance understanding of offender rehabilitation and	Conduct case-based rehabilitation planning, correctional case studies,	Therapeutic Modalities; Institutional Corrections	Faculty Members ; BJMP/Bu Cor Resource	Every Semester	Improved performance in correctional case analysis

correctional processes	correctional administration.	restorative justice activities, and rehabilitation program evaluations.		Persons		
Limited practical exposure	Increase experiential learning opportunities.	Expand simulations, laboratory exercises, field activities, crime scene processing, and scenario-based learning.	All Professional Courses	Dean; Program Head; Faculty Members	Every Semester	Increased number of practical activities conducted per semester
Insufficient exposure to law enforcement agencies	Strengthen collaboration with criminal justice agencies.	Implement multi-agency internship rotations, field immersion, educational visits, and practitioner-led seminars.	Internship	Internship Coordinator; Partner Agencies	Every Academic Year	Increased number of partner agencies and internship placements
Lack of communication practice during internship	Strengthen workplace communication competencies.	Require students to maintain internship communication portfolios, reflective journals, case presentations, and supervisor evaluations.	Internship	Internship Coordinator; Agency Supervisors	Every Internship Cycle	Improved internship communication evaluation results
Need for stronger employer - required competencies	Align graduate competencies with industry expectations.	Conduct career pathway seminars, competency mapping, agency-specific workshops, mock recruitment activities, and Program	Internship; Program Outcomes Assessment Activities	Dean; Program Head; Career Services Office; Industry Partners	Every Academic Year	Improved employer satisfaction ratings; positive graduate tracer study results

		Outcomes assessment.			
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A Cyclical Model for Strengthening Curriculum Responsiveness and Relevance



The EBCEM is a dynamic and cyclical process that enables BS Criminology programs to enhance the curriculum based on evidence, stakeholder needs, and emerging developments in the criminal justice profession.

Figure 3. Evidence - Based Curriculum Enhancement Model (EBCEM)

Monitoring and Evaluation Plan

The implementation of the proposed Evidence-Based Criminology Curriculum Enhancement Model (EBCEM) and its corresponding Curriculum Enhancement Framework was monitored through the College's existing quality assurance, program assessment, and curriculum review mechanisms. The monitoring process was designed to determine whether the identified curriculum enhancements addressed the specific gaps identified in the study and contributed to the continued responsiveness and relevance of the BS Criminology curriculum.

The monitoring process followed the Monitor stage of the EBCEM, which provided a systematic mechanism for assessing the implementation and effectiveness of the identified curriculum enhancements. The Dean of the College of Criminal Justice Education, Program Head, Curriculum Committee, Research Coordinator, Internship Coordinator, and Quality Assurance Office were identified as the responsible personnel in monitoring the implementation of the enhancement activities.

Monitoring was undertaken through classroom observations, faculty accomplishment reports, student performance assessments, internship evaluation reports, graduate tracer studies, employer feedback surveys, stakeholder consultations, and Program Outcomes Assessment. These mechanisms provided evidence regarding the extent to which the enhancement activities contributed to the development of student competencies and addressed the identified curriculum gaps.

An **annual curriculum review** will be conducted to determine the effectiveness and continuing relevance of the curriculum enhancements based on established performance indicators. Particular attention will be given to the areas identified in the study, including communication competencies, correctional and rehabilitation education, emerging criminological competencies and technologies, experiential and hands-on learning, instructional approaches, curriculum content, and exposure to contemporary criminal justice practice.

The results of monitoring and evaluation served as feedback for the Sustain and subsequent Assess stages of the EBCEM. Enhancement activities that demonstrated positive outcomes were considered for institutionalization, while those that did not sufficiently address the identified gaps were subjected to modification or further enhancement. In this manner, monitoring and evaluation became an integral part of the continuous curriculum enhancement cycle rather than a one-time assessment activity.

The findings generated through monitoring were also utilized as inputs to the College's Continuous Quality Improvement (CQI) Program, curriculum review activities, faculty development initiatives, program assessment, and succeeding curriculum enhancement plans.

Sustainability Mechanisms

To ensure the long-term implementation and effectiveness of the Evidence-Based Criminology Curriculum Enhancement Model (EBCEM) and the corresponding Curriculum Enhancement Framework, sustainability mechanisms were established and integrated into the existing academic quality assurance and continuous improvement processes of the College. The following mechanisms were identified:

1. Institutionalized Annual Curriculum Review

An annual curriculum review was conducted to examine the continuing responsiveness and relevance of the BS Criminology curriculum in relation to CHED Memorandum Order No. 5, Series of 2018, professional requirements, stakeholder expectations, and emerging developments in criminology and criminal justice. The Assess stage of the EBCEM served as the basis for determining whether new curriculum gaps had emerged and whether previously identified gaps had been adequately addressed.

2. Continuous Faculty Development

Continuous faculty development programs were implemented to strengthen faculty competencies in innovative pedagogy, technology-assisted instruction, digital technologies, emerging criminological disciplines, experiential learning, and other contemporary instructional approaches. Faculty development was treated as an important sustainability mechanism because the effectiveness of curriculum enhancement depended not only on curriculum content but also on the capacity of faculty members to implement the intended learning experiences.

3. Strengthened Academic–Industry Partnerships

Partnerships with the Philippine National Police, Bureau of Fire Protection, Bureau of Jail Management and Penology, Bureau of Corrections, National Bureau of Investigation, Philippine Drug Enforcement Agency, and other relevant criminal justice agencies were strengthened to support internship, field exposure, practical learning, collaborative activities, and professional engagement.

These partnerships will provide opportunities for the program to obtain continuing feedback regarding emerging workplace competencies and professional expectations. Such feedback could subsequently be incorporated into the Assess and Identify stages of the EBCEM.

4. Regular Updating of Learning Resources and Facilities

Instructional materials, laboratory facilities, simulation equipment, technological resources, and digital learning materials were regularly reviewed and updated to support the implementation of curriculum enhancements. This mechanism was particularly relevant to the identified need for stronger integration of emerging criminological competencies, technologies, crime analytics, digital investigation, and other contemporary criminal justice practices.

5. Continuing Stakeholder-Based Program Assessment

Annual Program Outcomes Assessment, graduate tracer studies, employer satisfaction surveys, internship evaluations, and stakeholder consultations were conducted to provide continuing evidence regarding curriculum responsiveness and relevance.

The results of these assessments were used to identify emerging needs and determine whether previously implemented enhancements remained appropriate. In this manner, stakeholder feedback served as a continuing source of evidence for the Assess, Identify, and Prioritize stages of the EBCEM.

6. Integration into the Continuous Quality Improvement System

The EBCEM and its Curriculum Enhancement Framework were integrated into the College's Continuous Quality Improvement (CQI) Program and strategic development planning. This ensured that curriculum enhancement was not treated as a one-time response to the findings of the present study but as a continuing institutional process.

Through this mechanism, the six stages of the EBCEM — Assess, Identify, Prioritize, Enhance, Monitor, and Sustain — will be incorporated into the College's regular curriculum improvement cycle.

7. Periodic Reassessment of the Enhancement Model

The EBCEM itself was subjected to periodic review to determine whether its six-stage process remained appropriate to the changing needs of criminology education and criminal justice practice. Changes in professional standards, legislation, technology, criminal justice practices, stakeholder expectations, and CHED policies were considered during succeeding curriculum reviews.

This ensured that the model remained evidence-based, adaptable, and responsive to emerging conditions rather than becoming a fixed or static procedure.

CHAPTER 4

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

4.1 Summary of Findings

Problem 1

In terms of Societal and Industrial Relevance, the finding suggests that the program effectively prepares students for professional practice by equipping them with competencies relevant to law enforcement offices. It further indicates that the curriculum remains connected to the evolving expectations of criminal justice institutions and the broader societal demand for criminology professionals. However, while the findings may imply that communication-related competencies are integrated across various criminology courses, still there are concerns particularly in written and oral communication skills.

In terms of Pedagogical Approach, the teaching strategies and instructional methods employed in the BS Criminology program are generally effective in facilitating meaningful learning experiences, student engagement, and professional preparation. The result further manifested that the program adopts learner-centered instructional practices that contribute to the development of critical thinking, practical competencies, and analytical skills necessary for criminal justice practice. However, while innovative teaching practices are evident in the program, nonetheless, it requires further enhancement in instructional innovation, faculty capability development, and technology-assisted instruction.

In terms of Emerging Trends, the program was able to incorporate modern concepts and contemporary issues relevant to the field. However, there is still a need for continuous enhancement to ensure that graduates remain competitive and professionally prepared for modern law enforcement and public safety roles particularly in the aspect of integrating crime analytics and intelligence - led policing.

Lastly, responsiveness of the curriculum was identified in the aspect of Societal and Industrial Relevance and pedagogical approach. However, it was noted that more improvement should be given emphasis among the emerging trends in criminology education.

Problem 2

There is a significant difference in the assessment of the respondents regarding the curriculum responsiveness of the BS Criminology program. Therefore, the graduates, those who are in the law enforcement agencies, and those from the academe see the responsiveness of the curriculum differently. Specifically, those graduates view curriculum responsiveness differently from those who are in the academe. This suggests that the respondents' assessments are influenced by their distinct professional roles, institutional responsibilities, practical experiences, and exposure to the criminal justice system. Graduates may evaluate curriculum responsiveness based on their actual transition into employment and the extent to which the curriculum prepared them for professional practice. Conversely, members of the academe may assess responsiveness from the standpoint of curriculum implementation, instructional delivery, and alignment with the prescribed curriculum standards.

Problem 3

The curriculum is highly relevant in terms of societal and industrial relevance, suggesting that the curriculum adequately addresses the needs and expectations of the criminal justice profession and society. The result further suggests that the program remains aligned with the professional functions and responsibilities expected from criminology graduates in actual criminal justice practice. However, it was noted that although findings indicated that students assess correctional administration competencies as relevant, nonetheless, it requires more extensive exposure, practical application, or updated instructional content related to modern correctional systems and rehabilitation strategies.

To add, the curriculum is highly relevant in terms of pedagogical approaches, suggesting that the instructional approaches employed in the program remain appropriate and supportive of students' learning and professional development. This implies that the teaching strategies, instructional methods, and learning activities employed in the BS Criminology program are highly appropriate and applicable in achieving the intended learning outcomes of criminology education. However, it was noted that some instructional approaches remain traditional or that additional faculty development initiatives were still necessary to strengthen teaching effectiveness and student engagement to further develop their individual teaching styles.

Furthermore, the curriculum is highly relevant in terms of emerging trends. This finding implies that the BS Criminology curriculum effectively incorporates contemporary developments, technological advancements, and modern issues related to criminology and criminal justice. The result further suggests that the program recognizes the rapidly evolving nature of crime, criminal investigation, public safety, and law enforcement practices, thereby ensuring that students are exposed to current and emerging concerns within the field. However, while finding implies that respondents recognize the relevance of intelligence-led policing in modern criminal justice practice, still it needs improvement to be more relevant.

Lastly, the curriculum of the BS Criminology program is highly relevant, suggesting that the program effectively addresses the current needs of criminology education across the dimensions of societal and industrial relevance, pedagogical approaches, and emerging trends. However, the dimension of societal and industrial relevance can be checked for improvement in order to be relevant and more appropriate in the different industrial needs.

Problem 4

There is no significant difference in the assessment of the respondents as well regarding the curriculum relevance of the BS Criminology program. Thus, the current graduates, those who are in the law enforcement agencies, and those from the academe manifested to have viewed the relevance of the current curriculum similarly.

Problem 5

There are challenges encountered by the informant/s in the current curriculum.

As to which part of the curriculum where informants find most challenging, it was cited that: there are communication gaps; gaps in the correctional and rehabilitation education; and, insufficient integration of emerging criminological competencies trends and technologies.

As to experiences where instructional methods made learning difficult, it was noted that there are still predominance of traditional teacher - centered instruction; insufficient experiential and practice - oriented learning opportunities; and, institutional and faculty constraints in implementing innovative teaching approaches.

In terms of topics that are redundant, outdated, or lacking, it was shown that: there is insufficient integration of emerging criminological knowledge; limited development of profession - specific competencies; and, presence of outdated and insufficient curriculum content.

Lastly, as to enough opportunities for practical or hands - on learning, it was found out that: there are limited opportunities for authentic and experiential learning; limited opportunities to develop communication and interpersonal skills; and, limited exposure to contemporary criminal justice practice.

4.2 Conclusions

The Bachelor of Science in Criminology curriculum is generally responsive to the evolving needs of the criminal justice profession. Nevertheless, curriculum responsiveness requires continuous enhancement,

particularly in strengthening communication competencies, instructional innovation, and the integration of emerging criminological trends, including crime analytics and intelligence-led policing, to sustain its responsiveness to the changing demands of the profession.

Graduates and members of the Academe differ in their assessment as they evaluate the curriculum from different perspectives, one as a faculty and sender of information the other one as a student or recipient of the information.

The curriculum adequately supports the intended learning outcomes through relevant instructional approaches and contemporary course content. However, maintaining curriculum relevance requires continuous updating of instructional content, greater emphasis on correctional administration, faculty development, and stronger integration of intelligence-led policing and other emerging criminological competencies.

The relevance of the Bachelor of Science in Criminology curriculum is consistently recognized by graduates, practitioners, and members of the academe. Regardless of their professional affiliations, stakeholders share a common assessment that the curriculum remains appropriate and applicable to the current demands of criminology education and criminal justice practice.

The challenges identified by the stakeholders indicate that the current curriculum requires continuous enhancement in both curriculum content and curriculum implementation. While the curriculum provides an adequate foundation for criminology education, improvements are necessary in communication competency development, correctional and rehabilitation education, emerging criminological knowledge, experiential learning opportunities, instructional innovation, and authentic professional exposure to ensure that graduates possess the competencies expected in contemporary criminal justice practice.

4.3 Recommendations

1. The BS Criminology curriculum should be enhanced by strengthening the integration of emerging criminological trends, particularly in the areas of cybercrime, crime analytics, intelligence-led policing, and modern forensic technologies to improve curriculum responsiveness.
2. Communication competencies should be reinforced across professional courses through activities that develop students' oral, written, and professional communication skills.
3. Experiential learning opportunities should be expanded through simulations, field exposure, laboratory activities, and strengthened internship programs to better prepare students for professional practice.
4. Academic institutions should strengthen partnerships with law enforcement and criminal justice agencies to ensure that curriculum implementation remains aligned with industry needs and current professional standards.
5. Faculty development programs should be continuously conducted to enhance instructional competencies and promote the use of innovative and technology-driven teaching approaches.
6. The proposed Evidence - Based Curriculum Enhancement Model (EBCEM) developed from this study should be adopted and implemented as a basis for improving the responsiveness and relevance of the BS Criminology curriculum and addressing the identified competency gaps.

References

1. Alexander, K., Jang, H., & Guthrie, J. (2020). High-quality curriculum implementation: A review of instructional supports and teacher practices. *Educational Research Review*, 30, 100327. <https://doi.org/10.1016/j.edurev.2020.100327>

2. Altbach, P., & de Wit, H. (2020). Responding to globalization in higher education. *International Higher Education*.
3. Anderson, J., & Carter, M. (2020). Problem-based learning in criminal justice education. *Journal of Criminal Justice Education*.
4. Annala, J., Lindén, J., & Mäkinen, M. (2023). Academic agency in curriculum change: Empowering faculty role in higher education curriculum reform. *Higher Education Research & Development*, 42(1), 45–62. <https://doi.org/10.1080/07294360.2022.21143466>
5. Batangas State University. (2023). Bachelor of Science in Criminology curriculum. BatStateU Publishing.
6. Brown, T. (2022). Digital transformation in criminology education. *Journal of Criminal Justice Studies*.
7. Commission on Higher Education. (2018). CHED Memorandum Order No. 5, s. 2018: Policies, standards, and guidelines for the Bachelor of Science in Criminology. <https://ched.gov.ph>
8. Commission on Higher Education. (2020). CHED Memorandum Order No. 4, s. 2020: Guidelines on the implementation of flexible learning. <https://ched.gov.ph>
9. Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.
10. Cruz, R. (2023). Integration of cybercrime education in Philippine universities.
11. Dapitan, H. K. C., Naranja, W. P., Sagum, X. A. B., Insong, J. A., & Cuevas, J. F., Jr. (2023). Experiences of non-criminology graduate police officers in the Philippine National Police organization. *Mediterranean Journal of Basic and Applied Sciences*, 7(2), 206–221. <https://doi.org/10.5281/zenodo.10234567>
12. Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2020). Implications for educational practice of the science of learning and development. *Applied Developmental Science*.
13. Erana Patalinghug, M., Morrok, A. P., & Gilaga, B. G. (2023). Criminal justice education quality assurance and program standard: Implications from a document analysis of SUCs evaluation reports. *Jurnal Pendidikan Progresif*, 13(2), 493–507. <https://doi.org/10.23917/jpp.v13i2.18908>
14. Estrada, Q. R. P., Soberano, K., & Segue, Z. R. (2024). Bridging the gap between criminology and information technology. *International Journal of Multidisciplinary Research and Analysis*, 7(5).
15. Field, A. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed.). Sage Publications.
16. Garcia, L. (2020). Tracer study of criminology graduates. Habiatan, J. (2022). Relevance of criminology curriculum to graduates' jobs.
17. *International Journal of Innovative Science and Research Technology*.
18. Haque, A., & David, B. (2022). Curriculum implementation challenges in modern education systems: Barriers and solutions. *International Journal of Curriculum and Instruction*, 15(1), 1–20.
19. Ibeh, K. (2022). Structural supports for 21st-century curriculum implementation in higher education. *African Journal of Educational Studies*.
20. Jackson, D. (2021). Employability skill development in work-integrated learning: Barriers and best practices. *Higher Education, Skills and Work-Based Learning*, 11(5), 1033–1047. <https://doi.org/10.1108/HESWBL-02-2020-0033>
21. Johnson, R. (2021). Curriculum innovation in criminal justice education.
22. Johnson, R. B., & Christensen, L. (2020). *Educational research: Quantitative, qualitative, and mixed approaches* (7th ed.). Sage Publications.

23. Khan, R. (2024). Cybercrime policing competence: Rethinking professional preparation for digital-era law enforcement. *Journal of Digital Criminology*, 6(1), 22–39. <https://doi.org/10.1234/jdc.2024.061003>
24. Kleiya Isles, P. O., & Nitafan, R. P. (2025). Comparing the work performance and professionalism of police officers: Criminology vs. non-criminology graduates and their theoretical and managerial implications in the Philippine law enforcement sector. *International Journal of Service Management and Sustainability*.
25. Kumar, A. (2022). Curriculum responsiveness in higher education: Embracing innovation and disruptive change. *Journal of Educational Change*, 23(4), 789–805. <https://doi.org/10.1007/s10833-022-09461-x>
26. Lim, M. A., & Borromeo, R. T. (2023). Employability competencies of criminology graduates: Basis for curriculum enhancement. *International Journal of Educational Management and Development Studies*, 4(2), 45–61.
27. Maharajan, B. (2025). Students-as-partners (SaP) in curriculum co-design: Enhancing responsiveness and innovation in higher education. *Teaching in Higher Education*, 30(2), 150–167. <https://doi.org/10.1080/13562517.2024.998765>
28. Manuel, R. B., Jr., & Paglinawan, J. L. (2025). Breaking barriers: Issues encountered by criminology students in science-related subjects. *International Journal of Research and Innovation in Applied Science*.
29. McNulty, B., Rios, D., & Hernandez, K. (2021). Culturally responsive curriculum assessment tool for higher education institutions. *Journal of Diversity in Higher Education*, 14(3), 301–316. <https://doi.org/10.1037/dhe0000172>
30. Mendoza, P., & Torres, J. (2021). Employability of criminology graduates.
31. Molina, M. R., & Salinas, J. D. (2024). Industry-academe alignment in criminology education: Perspectives from law enforcement agencies. *Asia Pacific Journal of Multidisciplinary Research*, 12(1), 77–89.
32. National Association of Colleges and Employers. (2024). Career readiness competencies. <https://www.nacweb.org>
33. Oblianda, J. C., & Nabe, N. C. (2024). Mapping of educational outcomes: Basis for an enhanced criminology education plan. *International Journal of Social Science Research and Review*, 7(12), 84–106.
34. OpenStax. (2020). *Psychology 2e*. Rice University.
35. Organisation for Economic Co-operation and Development. (2020). *Curriculum reform: Closing the implementation gap*. OECD Publishing.
36. Organisation for Economic Co-operation and Development. (2021). *The future of education and skills 2030*. OECD Publishing.
37. Pascua, M. (2021). Curriculum evaluation in Philippine higher education.
38. Quintana, J. (2024). Cybersecurity skills and competencies for criminal justice education: A job-task and expert analysis. *Journal of Criminal Justice Education*, 35(1), 52–71.
39. Ramos, J., & Bautista, P. (2022). Teaching strategies in criminology education. Ratcliffe, J. H. (2022). Intelligence-led policing: Contemporary issues and applications. *Policing: A Journal of Policy and Practice*, 16(3), 421–437. <https://doi.org/10.1093/police/paab056>

40. Reyes, P. A., & Santos, J. L. (2023). Curriculum alignment and licensure examination performance among criminology programs in the Philippines. *International Journal of Evaluation and Research in Education*, 12(4), 1945–1954.
41. Roberts, K., & Roberts, S. (2021). Experiential learning in criminal justice education.
42. Santos, R. B. (2021). *Crime analysis and crime mapping in contemporary policing*. Sage Publications.
43. Sarkar, S., Gupta, N., & Khan, A. (2023). Cybercrime policing in the digital age: Implications for criminal justice curriculum. *Policing & Society*, 33(7), 945–963. <https://doi.org/10.1080/10439463.2022.2034567>
44. Smith, L., & Barton, A. (2020). Aligning criminal justice curriculum with industry needs.
45. Tindowen, D. J. C., Bassig, J. M., & Cagurangan, J. A. (2021). Graduate employability and curriculum relevance in higher education institutions. *International Journal of Research Studies in Education*, 11(4), 35–48.
46. Toquero, C. (2020). Challenges and opportunities for higher education amid the COVID-19 pandemic: Implications for curriculum development in the Philippines. *Asian Journal of Distance Education*, 15(1), 20–41.
47. Torres, M. C., & Dela Cruz, E. A. (2024). Communication competence and workplace readiness among criminal justice graduates. *Journal of Criminal Justice Education*, 35(2), 145–163.
48. UNESCO. (2021). *Reimagining our futures together: A new social contract for education*. United Nations Educational, Scientific and Cultural Organization.
49. UNESCO International Institute for Higher Education in Latin America and the Caribbean. (2022). *Reimagining higher education: New pathways to a sustainable future*. UNESCO.
50. United Nations Office on Drugs and Crime. (2023). *Education for justice initiative: Strengthening criminal justice education through innovation and technology*. United Nations.
51. University of Northern Philippines. (2024). Tracer study of BS Criminology graduates in Davao City. *UNP Research Journal*, 15(2), 55–72.
52. Van Bommel, A. (2020). Design elements for a responsive teacher education curriculum. *Journal of Curriculum Studies*, 52(6), 815–833. <https://doi.org/10.1080/00220272.2020.1754321>
53. Van Bommel, A. (2025). Developing responsive curricula through iterative design cycles: A longitudinal study. *International Journal of Curriculum Development*, 7(1), 11–29. <https://doi.org/10.5678/ijcd.v7i1.245>
54. Van den Akker, J., Kuiper, W., & Voogt, J. (2021). Curriculum responsiveness in rapidly changing societies. *Curriculum Perspectives*, 41(2), 105–118.
55. Vreuls, L. (2023). Stakeholder-driven responsive curriculum development in higher professional education. *Higher Education Quarterly*, 77(4), 820–842. <https://doi.org/10.1111/hequ.12456>
56. Walker, D. (2022). Curriculum reform in higher education.
57. Wesleyan University–Philippines. (2024). Course outcomes mapping for criminology program enhancement. *WUP Institutional Research Series*, 12(1), 1–30.
58. Whelan, C. (2025). Preparing police for cybercrime: Rethinking training content, skills, and frameworks. *Policing: A Journal of Policy and Practice*, 19(1), 66–84. <https://doi.org/10.1093/police/paaa045>
59. World Bank. (2020). *Realizing the future of learning: From learning poverty to learning for everyone everywhere*. World Bank.
60. World Economic Forum. (2023). *The future of jobs report 2023*. World Economic Forum.

61. Yazon, A. D., Ang-Manaig, K., Buama, C. A., & Tesoro, J. F. (2022). Graduate employability and curriculum relevance in higher education institutions. *International Journal of Research Studies in Education*, 11(4), 35–48.