



LEVEL OF COMPETENCY ON PERSONAL IDENTIFICATION TECHNIQUES TOWARDS AN ENHANCED INSTRUCTIONAL MODULE

Heriberto Gustaman Ulgasan, Jr

*Passi City College
City of Passi, Iloilo, Philippines*

ABSTRACT

This explanatory sequential mixed-methods study evaluated the competency of criminology instructors in using a researcher-developed Instructional Module in Personal Identification, examined the relationship between teachers' demographic profile and competency, assessed the module's acceptability among teachers and students, and identified challenges encountered in teaching Personal Identification Techniques. Participants included 17 criminology instructors, 145 criminology students, and three teacher-implementers from selected higher education institutions in Iloilo Province, with six instructors participating in the qualitative phase. Quantitative data were analyzed using descriptive statistics, the Mann–Whitney U test, and Chi-square analysis, while thematic analysis was employed for qualitative data. Results revealed that instructors demonstrated a Highly Competent level in using the instructional module. No significant relationship was found between demographic profile and competency. Teachers rated the module as Very Acceptable, while students rated it Acceptable, with a significant difference between their evaluations. Qualitative findings identified challenges involving limited instructional resources, diverse learner needs, student engagement, time constraints, institutional barriers, and the need for continuous professional development. The study produced an enhanced teacher-guided Instructional Module in Personal Identification. Further evaluation is recommended to determine its effectiveness in improving students' fingerprint identification competency and to support continuous refinement based on learner feedback and emerging forensic practices.

Keywords: *competency level, personal identification, criminology, instructional module, acceptability level*

INTRODUCTION

Personal Identification Techniques is one of the core courses in criminology education because it equips students with the knowledge and practical skills necessary to identify individuals using scientific methods, particularly fingerprint identification. Despite the rapid advancement of forensic technologies, fingerprint analysis remains one of the most reliable and widely accepted methods of human identification in criminal investigations and judicial proceedings due to its uniqueness and permanence (Houck & Siegel, 2015; Saferstein, 2018). Recent developments in biometric systems and automated fingerprint identification have further strengthened the accuracy and efficiency of fingerprint examination, emphasizing the need for competent instructors capable of teaching both theoretical concepts and practical applications (Kaur & Singh, 2025).

Effective instruction in fingerprint identification requires adequate instructional resources, laboratory facilities, and competent teachers. However, many higher education institutions continue to experience challenges such as limited instructional materials, inadequate laboratory equipment, large class sizes, and insufficient opportunities for specialized faculty training. These conditions reduce opportunities for hands-on learning and affect the quality of forensic instruction (Nilendu, 2024). As student enrollment in criminology programs continues to increase, the demand for quality instructional materials that support both teachers and learners likewise continues to grow (Deng, 2025).

Teacher competence plays a vital role in improving educational quality. Competent instructors possess the knowledge, pedagogical skills, and technical expertise necessary to facilitate meaningful learning experiences. Likewise, well-designed instructional modules promote organized instruction, standardize content delivery, and enhance learner engagement by providing structured learning activities, assessments, and opportunities for self-paced learning (Rani & Kumari, 2021). Studies have also shown that teaching effectiveness depends largely on teachers' pedagogical competence, adaptability, and the quality of instructional materials used during instruction (Martínez, 2022; Engida, 2024).

The importance of quality instruction is further emphasized by Sustainable Development Goal 4, which promotes inclusive and equitable quality education through competent teachers and effective learning resources. UNESCO (2025) recognizes education as a key driver of sustainable development, while the International Task Force on Teachers for Education 2030 (2020) highlights the continuing global shortage of qualified teachers and the need for sustained professional development. In the Philippines, the Commission on Higher Education (CHED, 2020) likewise encourages flexible learning approaches that utilize quality instructional materials to ensure continuity of instruction during emergencies and other disruptions.

Although instructional modules have been widely recognized as effective teaching resources, there remains limited empirical research focusing on the competency of criminology teachers in teaching Personal Identification Techniques and the development of specialized instructional modules for fingerprint identification within the Philippine context. Existing studies generally focus on student learning outcomes or general instructional practices rather than on teacher competency and specialized forensic instruction.

In response to these gaps, this study aimed to determine the competency level of criminology teachers in using instructional materials for Personal Identification Techniques, evaluate the acceptability of the instructional module among teachers and students, identify challenges encountered in teaching the subject, and develop an enhanced Instructional Module in Personal Identification. The findings are expected to contribute to improving instructional practices, strengthening teacher competency, and enhancing the quality of criminology education through a validated teacher-supported instructional resource.

Research Questions

The purpose of this study was to determine the level of competency of teachers toward the enhanced instructional module in Personal Identification.

Specifically, it sought to answer the following questions:

1. What is the demographic profile of the respondents in terms of:
 - 1.1 Age;
 - 1.2 Sex;
 - 1.3 Subject Taught;
 - 1.4 Number of years teaching the subject;
 - 1.5 Highest Educational Attainment; and
 - 1.6 Related Training Attended?
2. What is the respondent's level of competency on the Personal Identification Techniques instructional materials in terms of the following:
 - 2.1 Content;
 - 2.2 Learning Outcomes;
 - 2.3 Learning Strategies and Activities;
 - 2.4 Instructional Quality;
 - 2.5 Technical Quality;
 - 2.6 Accuracy; and
 - 2.7 Assessment?
3. Is there a significant correlation between the demographic profile and competency level of criminology instructors in Personal Identification Techniques?
4. What is the respondent's level of acceptance of the instructional materials used in Personal Identification Techniques in terms of:
 - 4.1 clarity;
 - 4.2 relevance;

- 4.3 effectiveness;
 - 4.4 accessibility;
 - 4.5 engagement;
 - 4.6 applicability?
5. Is there a significant difference between the level of acceptance of the instructional materials among respondents?
 6. What are the challenges encountered by the faculty teaching Personal Identification Techniques?
 7. Based on the findings of the study, what enhanced instructional module maybe proposed?

METHODOLOGY

This study employed an explanatory sequential mixed-methods design using the Design, Test, Evaluate, and Refine (DTER) model. The study was conducted in selected colleges offering criminology programs in Iloilo Province. Respondents included 17 criminology instructors selected through purposive sampling, three teacher-implementers, and 145 second-year criminology students. Quantitative data were collected using three researcher-made instruments: the Teachers' Competency Level (TCL), Teacher's Evaluation Form for Instructional Module (TEFIM), and Student's Evaluation Form for Instructional Module (SEFIM), which measured competency and instructional module acceptability using four-point Likert scales. The instruments underwent expert validation and pilot testing, yielding excellent reliability (Cronbach's alpha = 0.93–0.98). Qualitative data were gathered through semi-structured interviews to explain the quantitative findings. Data were collected through printed questionnaires and Google Forms during the implementation of the instructional module. Quantitative data were analyzed using frequency, percentage, median, interquartile range, Mann-Whitney U test, and Kruskal-Wallis test, while qualitative responses were analyzed using Colaizzi's thematic analysis. The study was limited to participating colleges in Iloilo Province and an eight-week implementation at one institution during the 2024–2025 academic year, which may limit the generalizability of the findings.

RESULTS

The Demographic Profile of the Respondents

Table 1 presents the demographic profile of the respondents. In terms of age, most respondents were 30–39 years old (64.71%), followed by those aged 40–49 years (17.65%), 25–29 years (11.76%), and 50–59 years (5.88%). Regarding sex, the majority were male (82.35%), while 17.65% were female. As to the subject taught, most respondents handled Personal Identification together with other Criminalistic subjects (64.70%), followed by Personal Identification with Law Enforcement Administration (23.50%), while 5.90% each taught Personal Identification with Criminal Jurisprudence and Sociology. In terms of years of teaching the subject, the largest proportion had 1–4

years of experience (41.18%), followed by 11–20 years (35.29%) and 5–10 years (23.53%). Regarding educational attainment, most respondents were master's degree holders (64.71%), whereas 11.76% were doctoral degree holders, 11.76% had units in a doctoral program, and 11.76% had units in a master's program. In terms of related training, the majority had not attended training related to personal identification (70.59%), while 29.41% had attended relevant training.

Table 1
Demographic Profile of the Respondents

Demographic Profile	<i>n</i>	<i>%</i>
Age		
25 - 29	2	11.76
30 - 39	11	64.71
40 - 49	3	17.65
50 - 59	1	5.88
Sex		
Male	14	82.35
Female	3	17.65
Subject Taught		
Personal Identification w/Law Enforcement Administration	4	23.5
Personal Identification w/other Criminalistic Subjects	11	64.7
Personal Identification w/Criminal Jurisprudence	1	5.9
Personal Identification w/Sociology	1	5.9
Number of years teaching the subject		
1-4 Years	7	41.18
5-10 Years	4	23.53
11-20 Years	6	35.29
Highest Educational Attainment		
Doctor Degree Holder	2	11.76
With Units in PhD	2	11.76
Master Degree Holder	11	64.71
With Units in Masters	2	11.76
Related Training Attended		
With Training	5	29.41
No Training	12	70.59

Level of Competency on the Personal Identification Techniques Instructional Materials

Table 2 presents the respondents' level of competency in Personal Identification Techniques. The overall median score was 4 (IQR = 1), described as Highly Competent. The respondents were rated Highly Competent in the areas of Learning Outcomes (Mdn = 4, IQR = 1), Instructional Quality (Mdn = 4, IQR = 1), Accuracy (Mdn = 4, IQR = 1), Assessment (Mdn = 4, IQR = 1), and Content (Mdn = 3, IQR = 1). Meanwhile, Learning

Strategies and Activities (Mdn = 3.5, IQR = 1) and Technical Quality (Mdn = 4, IQR = 1) were described as Competent. The interquartile range of 1 across all indicators indicates a consistent level of responses among the respondents.

Table 2
Respondent's Level of Competency on the Personal Identification Techniques

Level of Competency	Mdn	IQR	Description
Content	3	1	Highly Competent
Learning Outcomes	4	1	Highly Competent
Learning Strategies and Activities	3.5	1	Competent
Instructional Quality	4	1	Highly Competent
Technical Quality	4	1	Competent
Accuracy	4	1	Highly Competent
Assessment	4	1	Highly Competent
Overall	4	1	Highly Competent

Correlation Between the Demographic Profile and Competency Level of Criminology Instructors in Personal Identification Techniques

Table 17 presents the correlation between the respondents' demographic profile and their competency level in Personal Identification Techniques. The results revealed no significant relationship between competency level and age ($H = 0.058$, $p = .972$), sex ($H = 0.375$, $p = .829$), subject taught ($H = 4.236$, $p = .120$), number of years teaching the subject ($H = 1.685$, $p = .431$), highest educational attainment ($H = 5.172$, $p = .075$), and related training attended ($H = 1.177$, $p = .555$), as all obtained p-values were greater than the 0.05 level of significance. These findings indicate that the respondents' competency level did not significantly differ when grouped according to any of the demographic variables examined.

Table 3
Correlation between the Demographic Profile and Competency Level of Criminology Instructors in Personal Identification Techniques

Demographic Profile and Teachers' Competency Level	H(χ^2)	p
Age	0.058	0.972
Sex	0.375	0.829
Subject Taught	4.236	0.12
Number of Years in Teaching	1.685	0.431
Highest Educational Attainment	5.172	0.075
Related Training Attended	1.177	0.555

Note: $p < .05$ = significant, $p < .01$

Level of Acceptance of the Instructional Materials Used in Personal Identification Techniques

Table 24 presents the respondents' level of acceptance of the Personal Identification instructional materials. Among the students, all dimensions—clarity (Mdn = 3, IQR = 0), relevance (Mdn = 3, IQR = 1), effectiveness (Mdn = 3, IQR = 1), accessibility (Mdn = 3, IQR = 0), engagement (Mdn = 3, IQR = 1), and applicability (Mdn = 3, IQR = 1)—were rated Acceptable, resulting in an overall median of 3 (IQR = 1), described as Acceptable. Among the teachers, all dimensions received a median score of 4 with an interquartile range of 0 and were described as Very Acceptable, including clarity, relevance, effectiveness, accessibility, engagement, and applicability. The overall level of acceptance among teachers was also Very Acceptable (Mdn = 4, IQR = 0).

Table 4
Summary of Respondents' Level of Acceptance of the Personal Identification Instructional Materials

Level of Acceptance	Mdn	IQR	Description
Students			
Clarity	3	0	Acceptable
Relevance	3	1	Acceptable
Effectiveness	3	1	Acceptable
Accessibility	3	0	Acceptable
Engagement	3	1	Acceptable
Applicability	3	1	Acceptable
<i>Total</i>	3	1	<i>Acceptable</i>
Teachers			
Clarity	4	0	Very Acceptable
Relevance	4	0	Very Acceptable
Effectiveness	4	0	Very Acceptable
Accessibility	4	0	Very Acceptable
Engagement	4	0	Very Acceptable
Applicability	4	0	Very Acceptable
<i>Total</i>	4	0	<i>Very Acceptable</i>

Difference between the Level of Acceptance of the Instructional Materials among Respondents

Table 25 presents the significant difference in the level of acceptance of the instructional materials between students and teachers. The Mann-Whitney U test revealed a significant difference in the respondents' level of acceptance ($U = 53$, $z = -2.59$, $p = .02$), since the obtained p-value was less than the 0.05 level of significance. This indicates that the level of acceptance of the instructional materials differed significantly between students and teachers.

Table 5
Significant Difference Between the Level of Acceptance of the instructional Materials among Respondents

Significant Difference	U	z	p
Level of Acceptance Between Students and Teachers	53*	-2.59	0.02

Note: $p < .05$ = significant

Challenges Encountered by the Faculty Teaching Personal Identification Techniques

Table 6 presents the major challenges encountered by faculty in teaching Personal Identification Techniques. The findings revealed six major themes generated through thematic analysis. Teachers identified resource constraints and infrastructural limitations, as well as pedagogical challenges in addressing diverse learning styles, as the primary difficulties encountered during instruction. These challenges affected teaching methods and student learning through issues related to student engagement and motivation, time constraints and instructional limitations, environmental and institutional barriers, and the need for continuous professional development. Collectively, these themes highlight the various instructional, institutional, and professional factors influencing the effective delivery of Personal Identification Techniques.

Table 6
Challenges Encountered by the Faculty Teaching Personal Identification Techniques

Research Question	Major Theme	Brief Description
What difficulties do you encounter in teaching Personal Identification Techniques?	1. Resource Constraints and Infrastructural Limitations	Insufficient laboratory facilities, outdated or limited fingerprint equipment, and inadequate instructional resources hinder effective hands-on instruction.
	2. Pedagogical Challenges in Addressing Diverse Learning Styles	Teachers experience difficulty adapting instructional strategies to accommodate students with diverse learning styles, abilities, and needs.

How do these challenges affect your teaching methods and students' learning?	3. Student Engagement and Motivation Issues	Variations in student motivation, participation, and competing responsibilities affect classroom engagement and learning.
	4. Time Constraints and Instructional Limitations	Limited class time reduces opportunities for comprehensive lectures and practical exercises necessary for skill mastery.
	5. Environmental and Institutional Barriers	Environmental conditions and limited institutional partnerships restrict authentic learning experiences and practical fingerprint activities.
	6. Need for Continuous Professional Development	Teachers recognize the need for ongoing training to keep pace with advancements in forensic science and improve instructional effectiveness.

Output of the Study

The study developed an enhanced Instructional Module in Personal Identification to address the limited availability of instructional materials and improve teachers' competency in teaching the subject. The module, consisting of ten lessons, underwent expert validation by academics and SOCO practitioners, was pilot tested, and revised based on feedback. Because teachers rated the module as very acceptable while students rated it as acceptable, it was renamed from a *Self-Learning Module* to an *Instructional Module* to better reflect its role as a teacher-guided resource. Experts recommended organizing the module into four components: introduction, learning objectives, course content, and assessment with performance tasks and scoring rubrics. Overall, the findings indicate that the module is most effective when used with teacher facilitation and has strong potential to enhance instruction in both face-to-face and modular learning environments, although further refinement is needed to improve its suitability for independent student learning.

DISCUSSION

The demographic profile revealed that most respondents were 30–39 years old, male, taught Personal Identification alongside other Criminalistic subjects, had 1–4 years of teaching experience, were master's degree holders, and had not attended specialized training related to personal identification techniques. These findings suggest that the respondents possess adequate academic preparation and professional experience to teach the subject despite limited exposure to specialized training. The results emphasize the importance of continuous professional development in strengthening instructional

competence and keeping educators updated with current forensic practices, consistent with the findings of Albina et al. (2022).

The respondents demonstrated an overall Highly Competent level in using the Personal Identification Techniques instructional materials across the dimensions of content, learning outcomes, learning strategies and activities, instructional quality, technical quality, accuracy, and assessment. These findings indicate that the instructional materials effectively enhanced teachers' pedagogical and technical competencies, leading to the development of an enhanced Instructional Module in Personal Identification. Following expert validation, pilot testing, and revisions, the module was redesigned as a teacher-supported instructional resource rather than a self-learning module, reflecting its greater effectiveness when facilitated by instructors. This finding supports Graham et al. (2021), who emphasized that well-designed instructional materials improve teaching effectiveness and competency development.

The study further revealed that age, sex, subject taught, years of teaching, highest educational attainment, and related training attended had no significant relationship with teachers' competency levels. This indicates that competency in Personal Identification Techniques is influenced more by the quality of instructional materials, institutional support, and continuous professional learning than by demographic characteristics. The findings support Ulgasan (2022), who emphasized that structured instructional modules promote consistent instructional competence regardless of teachers' personal characteristics.

Both students and teachers positively evaluated the instructional materials in terms of clarity, relevance, effectiveness, accessibility, engagement, and applicability. However, teachers consistently rated the module as Very Acceptable, whereas students rated it as Acceptable. These findings suggest that the instructional module effectively supports classroom instruction but is more suitable as a teacher-guided instructional resource than as an independent learning material. Although both groups recognized its educational value, students identified opportunities for improvement in content presentation, learner interaction, practical activities, and digital learning resources. This finding is consistent with Chen and Lee (2022), who reported that instructional materials become more effective when they are closely aligned with learners' needs and authentic learning experiences.

The Mann–Whitney U test further showed a significant difference between students' and teachers' acceptance of the instructional materials ($U = 53.00$, $z = -2.59$, $p = .02$), indicating that teachers evaluated the module more favorably than students. This difference suggests that teachers appreciated the instructional design, organization, and curriculum alignment of the module, whereas students placed greater emphasis on usability, engagement, and clarity. These findings highlight the importance of incorporating learner feedback in the continuous improvement of instructional materials to ensure that they effectively address both instructional requirements and students' learning needs.

The qualitative findings identified six major challenges encountered by faculty in teaching Personal Identification Techniques: resource constraints and infrastructural limitations, pedagogical challenges in addressing diverse learning styles, student engagement and motivation issues, time constraints and instructional limitations, environmental and institutional barriers, and the need for continuous professional development. These challenges indicate that effective instruction requires adequate laboratory facilities, updated instructional resources, institutional support, and sustained faculty development. Consequently, the study produced an enhanced Instructional Module in Personal Identification designed to address identified instructional gaps and provide teachers with a structured and practical instructional resource. The findings reinforce the need for continuous improvement of instructional materials, stronger institutional support, and regular faculty training to improve the quality of criminology education and student learning outcomes, consistent with the recommendations of Kaur and Singh (2025).

Conclusions

Based on the above findings, the following conclusion has been drawn:

Personal identification teachers are generally within a mature and moderately experienced age group, predominantly male, and largely engaged in multidisciplinary teaching roles. Most possess master's-level qualifications, indicating strong academic preparation. However, the limited exposure to specialized training in personal identification suggests a need for targeted professional development programs to further enhance instructional expertise in this specific field.

Teachers demonstrate a high level of competency in personal identification techniques across all domains, including content, learning outcomes, learning strategies, instructional quality, technical quality, accuracy, and assessment. This indicates that teachers possess strong foundational knowledge and are highly capable in applying both theoretical and practical aspects of forensic instruction. The consistency of results further suggests minimal variation among respondents, reflecting uniform competency levels. Overall, the instructional module is effective in enhancing teacher competence and supporting the delivery of accurate, structured, and quality instruction in personal identification techniques, though continued improvement in instructional strategies is recommended to further strengthen teaching effectiveness.

Teachers' competency level in personal identification techniques was relatively consistent across age, sex, teaching experience, educational attainment, and training background, suggesting that the instructional module is broadly applicable, useful, and helpful in improving the teachers' competency in terms of content, learning outcomes, learning strategies, instructional quality, technical quality, accuracy, and assessment.

Personal identification instructional materials are generally effective, accessible, and aligned with instructional objectives, as evidenced by consistently high evaluations from teachers across all dimensions. However, students only rated the materials as

acceptable, indicating a gap between teacher and learner perceptions. This suggests that while the module is well-designed for instructional delivery, it is more teacher-centered than student-centered in its current form. Therefore, the instructional module is most effective when used under teacher facilitation, and there is a need for further enhancement, particularly in clarity, engagement, and real-world application, to better address students' learning needs and improve overall acceptability and effectiveness.

Despite overall acceptability, there are still areas for improvement in clarity, accessibility, and applicability to ensure a more comprehensive learning experience; therefore, continuous evaluation and enhancement of instructional materials are necessary to fully meet students' learning needs.

Teaching fingerprint identification is affected by multiple interconnected challenges, including inadequate resources, limited laboratory equipment, diverse learning needs, low student engagement, time constraints, environmental factors, and insufficient professional development opportunities. These challenges collectively hinder effective instruction, indicating that improvements in resources, pedagogy, institutional support, and teacher training are essential to strengthen instructional delivery and student skill development.

There is a clear need for an enhanced instructional module that integrates improved content, updated technical features, and more interactive and student-centered learning approaches; consequently, the development and implementation of such a module are vital to advancing the quality of instruction in personal identification techniques.

Recommendations

In light of the conclusion derived from the findings of this study, the following recommendations were advanced:

1. In light of the identified gaps in both teacher competency and instructional support, the adoption of an enhanced instructional module in personal identification is strongly recommended. The study's findings indicate that teachers rated the module highly acceptable, underscoring its relevance, clarity, and practical value for instructional delivery. More importantly, the module has demonstrated its effectiveness in enhancing teachers' competency levels, particularly in the teaching of fingerprint identification. These results suggest that integrating a structured, well-designed instructional module can be a vital tool for addressing existing instructional challenges, ensuring consistent content delivery, and supporting continuous professional development among criminology educators. Consequently, its adoption is expected to promote more effective, standardized, and competency-based instruction, ultimately leading to improved teaching performance and better learning outcomes for students in criminology programs.

2. To further strengthen teachers' competency in learning strategies and activities, it is recommended that criminology programs continue to use the validated instructional

module while providing professional development focused on effective pedagogical techniques and student-centered activities. To build on this success and further embed high instructional quality in criminology and forensic education programs, it is recommended that the enhanced instructional module continue to be used as a standard teaching resource across relevant programs. Concurrently, curriculum experts should concentrate on refining instructional design, assessment alignment, and resource adaptation to diverse student needs, especially for technical and practical subjects such as fingerprint analysis. Follow-up peer-review or coaching sessions will help sustain instructional quality. Additionally, a longitudinal study should be instituted to monitor the durability of instructional quality over time and to examine the effect on student outcomes in personal identification competence.

3. It is recommended that the instructional module be sustained and further enhanced as an effective tool for improving teacher competency in personal identification techniques. While overall competency is already high and consistent, targeted enrichment should focus on improving instructional strategies, particularly the integration of innovative, student-centered, and technology-enhanced teaching approaches to further strengthen teaching effectiveness and learner engagement.

4. Curriculum developers and instructors should continuously maintain and refine existing instructional materials to preserve their effectiveness and engagement in supporting student learning. It is recommended that the module be regularly reviewed and iteratively improved based on student feedback to maintain and enhance acceptability. Adding interactive exercises, real-life case studies, and step-by-step guides can increase student engagement and satisfaction, ensuring that the materials are not only acceptable but also highly effective in supporting practical and theoretical learning objectives. Future studies should carefully define and operationalize the constructs of relevance, accessibility, and applicability using clearly aligned and empirically grounded indicators prior to conducting any validation procedures. Establishing precise operational definitions will ensure that each construct is measured accurately and consistently across different contexts.

5. Instructional materials should undergo periodic review and revision to improve clarity, accessibility, and applicability, ensuring they meet the evolving needs of students and align with current educational standards. Moreover, future validation processes should incorporate narrative feedback or explanatory comments for each criterion, as these can provide deeper insights into the rationale behind the ratings and strengthen the overall validity evidence. Including both quantitative and qualitative validation data will enhance the robustness, interpretability, and practical usefulness of the instructional materials being assessed.

6. To address the identified challenges, it is recommended that institutions improve access to laboratory resources, forensic equipment, and learning materials. Additional instructional time should be allocated for practical activities, and flexible teaching strategies should be encouraged to accommodate diverse learning needs. Moreover, continuous professional development programs and stronger institutional support

systems should be implemented to enhance instructional delivery and student skill development.

7. The instructional module will be continuously enhanced by incorporating updated forensic content, improved technical features, and more interactive, learner-centered learning activities. The module should be adopted in teaching personal identification techniques and evaluate its effectiveness and alignment with current forensic standards. Collaboration among educators is also encouraged to ensure continuous improvement and sustained instructional quality.

Compliance with Ethical Standards

The study was conducted in accordance with established ethical principles for research involving human participants. Prior to data collection, permission was obtained from the administrators of the participating colleges offering criminology programs in Iloilo Province. Participation was voluntary, and informed consent was secured from all respondents after they were informed of the study's purpose, procedures, potential benefits, and their right to decline or withdraw from participation at any time without penalty. The researcher ensured that no physical, psychological, or academic harm resulted from participation in the study. Confidentiality and anonymity were strictly observed by assigning codes to participants and excluding personally identifiable information from the research records. Data collected through printed questionnaires, Google Forms, and semi-structured interviews were used solely for academic and research purposes and were securely stored with access limited to the researcher. The findings were presented honestly and objectively, with due regard for the principles of respect for persons, beneficence, justice, privacy, confidentiality, and research integrity throughout the conduct of the study.

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Corresponding author: heribertoulgasan@gmail.com