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Basic Education Research Program (BERP) Meets Artificial Intelligence: A CIPP Evaluation into Research Innovation Among Master Teachers

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Abstract. This study evaluates the integration of Artificial Intelligence (AI) within the Basic Education Research Program (BERP) using Stufflebeam's Context–Input–Process–Product (CIPP) evaluation model. It examines how the program strengthens research innovation, productivity, and capacity development among Master Teachers in selected public schools in the Schools Division of Baybay City, Philippines. Anchored on the growing relevance of AI in academic research, the study assesses program effectiveness in terms of contextual alignment, resource adequacy, implementation processes, and outcomes. A mixed-methods design was employed involving 50 Master Teachers selected through purposive sampling. Data were gathered using validated survey questionnaires, semi-structured interviews, focus group discussions, AI usage logs, and document analysis. Quantitative data were analyzed using descriptive statistics (mean and standard deviation), while qualitative data were examined through thematic analysis to identify patterns in AI utilization, research engagement, and institutional support. Findings show strong contextual alignment between BERP and institutional goals (M = 4.32), indicating high awareness and support for AI integration. Input evaluation revealed adequate institutional support (M = 4.09), including access to AI tools, training, and mentorship, although limited research time emerged as a constraint (M = 3.88). Process evaluation (M = 4.11) indicated structured and ethical implementation, but highlighted the need for stronger coaching and feedback mechanisms. Product evaluation (M = 4.15) showed that AI integration improved research quality, efficiency, and teacher engagement, contributing to enhanced digital literacy and instructional innovation. However, only 38% of respondents actively used AI tools in research writing, indicating low adoption despite availability. The study concludes that BERP has strong potential as an AI-supported research development program, but sustainability depends on improving AI literacy, mentorship, workload allocation, and ethical capacity-building to maximize institutional impact.

Keywords: Artificial Intelligence, Basic Education Research Program, CIPP Evaluation, Mixed Methods, Educational Research Innovation

Introduction

Research writing is a critical competency for master teachers, enabling them to contribute to educational innovation, professional development, and evidence-based school improvement (Anzaldo & Cudiamat, 2019). The institution implementing the BERP has long emphasized the importance of research-driven educational innovation. The Basic Education Research Program (BERP) serves as a cornerstone for enhancing research culture among educators. However, the rapid evolution of Artificial Intelligence (AI) presents both opportunities and challenges in research productivity (Hammad, 2023). AI-powered platforms such as ChatGPT, Grammarly, and Turnitin provide support in brainstorming, citation management, and language refinement (Al-Sofi, 2024). While these tools can enhance writing efficiency and accuracy, they also raise concerns about overreliance, academic integrity, and ethical implications. Master Teachers, as key contributors to educational research, face constraints such as limited AI literacy, inadequate training, and ethical concerns surrounding AI-generated content (Basilio & Bueno, 2019).

This study, anchored in Stufflebeam's CIPP Model (Context, Input, Process, and Product), investigates the effectiveness of the BERP initiative within the context of AI-enhanced research. By aligning with the Division Research Agenda, this research aims to provide valuable insights into the program's alignment with institutional objectives, the efficacy of AI integration, implementation challenges, and measurable outcomes.

Moreover, this study directly supports the Baybay City Division Research Agenda by addressing key priorities that advance educational research and innovation. Firstly, it promotes a stronger research culture and capacity-building among educators by examining the factors that influence Master Teachers' engagement in research, and the role AI plays in enhancing their work. Secondly, it promotes the integration of technology and innovation into research methodologies by exploring how AI tools can optimize research writing and analysis processes. Furthermore, it strengthens institutional policies on AI and research ethics by evaluating the ethical implications of AI-assisted research and recommending policies for responsible AI use. Lastly, it assesses research programs for evidence-based improvements, utilizing the CIPP model to analyze the overall effectiveness of BERP and offering insights that inform future research initiatives and program developments within the Division.

The findings of this study will serve as the groundwork for establishing Research and Innovation Hubs at the school level. These hubs will provide structured training, AI literacy programs, and institutional support to enhance Master Teachers' research writing capabilities. By supporting both AI-assisted and traditional research methodologies, these hubs will stand-in a collaborative and sustainable research culture.

Research Questions

This study examines the integration of Artificial Intelligence (AI) within the Basic Education Research Program (BERP) and its role in strengthening research productivity, capacity development, and evidence-based practice among Master Teachers in selected public schools. Grounded in the increasing significance of AI-enabled systems in educational research, the study evaluates the extent to which the program responds to emerging digital transformation trends in academic inquiry and professional development. Anchored on Stufflebeam's CIPP (Context, Input, Process, Product) Evaluation Model, this study systematically assesses the effectiveness, implementation quality, and outcomes of the BERP initiative as an AI-supported research development program. It further explores how institutional mechanisms, resources, and practices contribute to sustainable research innovation and digital literacy among educators.

Specifically, this study sought to answer the following research questions:

1. What is the level of teachers' awareness about the goals and objectives of the program?
2. What is the degree of alignment of the objectives of the program to the institutional goals?
3. What is the level of effectiveness of the program in terms of:
   3.1 Scope or coverage;
   3.2 Availability and competence of research facilitators, particularly in AI-related tools;
   3.3 Strategies for training, mentorship, and implementation;
   3.4 Accessibility and sufficiency of AI-based materials, tools, and resources for research writing and analysis?
4. What are the challenges and opportunities in the implementation of the program?
5. What is the extent of the success of the program in fostering AI-supported research among Master Teachers?
6. What are the measurable outcomes and impacts of the program?
7. What insights can be drawn based on the findings of the study to improve future implementation and sustainability of AI-supported educational research?

Literature Review

Research and Educators

Research serves as the foundation for educational advancement, driving evidence-based improvements in teaching practices, curriculum development, policy-making, and school administration. It empowers educators to refine instructional methods, aids policymakers in designing effective educational policies, and promotes continuous innovation within the education system (Slavin, 2002). Through action research, case studies, and experimental studies, educators can explore diverse instructional approaches, evaluate the impact of technology in classrooms, and develop best practices for differentiated instruction (Mertler, 2017). Studies on active learning strategies, such as project-based learning and flipped classrooms, have demonstrated their efficacy in improving student engagement and knowledge retention (Freeman et al., 2014).

Beyond pedagogy, research also plays a vital role in curriculum development, ensuring that educational programs remain relevant and effective. By aligning curricula with societal needs, job market demands, and technological advancements, research drives improvements that make learning materials inclusive and culturally responsive. For example, studies on 21st-century skills have prompted curriculum

reforms emphasizing critical thinking, communication, collaboration, and creativity (Voogt & Roblin, 2012). As educators engage in these research-driven improvements, the integration of technology—particularly AI—has begun reshaping the academic landscape, influencing how research is conducted and applied.

Artificial Intelligence in Academic Research and Writing

Artificial intelligence plays a growing role in academic research and writing. It improves efficiency, accuracy, and access to knowledge. Researchers complete tasks faster and with greater precision. AI tools support literature reviews, data analysis, plagiarism detection, and manuscript preparation, which streamlines the research process and increases productivity (Van Dis et al., 2023). As AI systems improve, they shape how scholars generate, analyze, and present knowledge, influencing the future of academic research (Hao, 2019. Automated literature review stands as one of the strongest contributions of AI. Platforms such as Semantic Scholar, Scite, and Elicit scan large volumes of academic sources, identify relevant studies, and summarize key findings (Goh et al., 2021; Gaspari et al., 2021). These systems use natural language processing and machine learning to extract important information, which reduces the time spent on manual searching. AI also strengthens data collection and analysis. Tools such as IBM Watson, GPT models, and DeepMind process large datasets, detect patterns, and generate insights. In qualitative research, AI assists in transcription, coding, and theme development. In quantitative research, tools such as SPSS, R, and Python support statistical analysis, predictive modeling, and data visualization, which leads to more reliable outcomes (Dwivedi et al., 2021).

AI also improves academic writing. Writing assistants such as Grammarly, QuillBot, and ChatGPT help refine grammar, sentence structure, and clarity (Strohacker & Kirschner, 2023). These tools support paraphrasing and summarization, which help researchers present ideas clearly. AI also supports citation management and plagiarism detection. Tools such as Zotero, EndNote, and Mendeley organize references and format citations based on required styles, which promotes academic integrity (Meuschke & Gipp, 2013). Despite these benefits, ethical concerns remain. Overreliance on AI risks weakening critical thinking and originality. Some researchers may depend too much on AI-generated content without proper validation (Floridi & Chiriatti, 2020). AI systems also produce biased or inaccurate outputs due to limits in training data. Researchers must apply careful judgment and maintain control over their work. Responsible use of AI ensures that technology supports, not replaces, human expertise.

CIPP Design in Education

The CIPP Model, which stands for Context, Input, Process, and Product, provides a structured framework for evaluating educational programs. Developed by Daniel L. Stufflebeam, this model supports systematic assessment of effectiveness, efficiency, and impact in school-based research initiatives (Stufflebeam, 1983). Its comprehensive design helps educators make informed decisions and sustain continuous improvement. Schools use this model to ensure that research programs remain relevant and aligned with institutional goals.

Context evaluation focuses on identifying needs, goals, and conditions that shape a research program. It examines whether program objectives align with school priorities, learner needs, and community expectations (Alkin & Christie, 2004). For example, a research program that targets improved teaching practices must address existing gaps such as limited professional development or low student performance. This phase ensures that the program responds to real and pressing educational concerns.

Input evaluation examines the resources, strategies, and plans needed for effective implementation. It reviews the availability of mentors, materials, funding, and technological support. In a school-based research program, this phase checks if teachers receive proper training in research methods and if the institution provides access to databases and financial support. Strong inputs increase the chances of program success and guide decision-making on feasible strategies.

Process evaluation monitors how the program is implemented. It tracks participation, adherence to plans, and emerging challenges. Data come from observations, feedback, and progress reports (Stufflebeam, 2007). For instance, in action research initiatives, this phase checks if teachers engage in workshops, apply learned skills, and collaborate with peers. Continuous monitoring allows timely adjustments and keeps the program aligned with its objectives.

Product evaluation assesses outcomes and overall impact. It measures improvements in teacher competence, student performance, and school practices (Fitzpatrick et al., 2011). Findings guide future improvements and policy decisions. Through all four components, the CIPP Model ensures that research programs remain responsive, well-supported, and outcome-driven, which strengthens accountability and long-term educational development (Stufflebeam & Zhang, 2017).

Thus, the literature reviewed suggests that research promotes instructional improvement, curriculum relevance, and professional growth for teachers, and AI improves efficiency in data analysis, writing, and knowledge generation. There is growing evidence that AI tools assist all stages of the research process, producing productivity and results even at higher quality. The potential for overreliance, limited user competence, and ethical use of the technology point towards organized support systems and capacity building. Though previous research in this domain focuses on the functions and impacts of AI in research and education, existing studies are more interested in individual use or general technological integration.

Despite these advancements in AI, there is a lack of research evaluating institutional programs like BERP using the CIPP model in the Philippine context. The current gap highlights the requirement for the systematic assessment of structured research programs implementing AI in practice (i.e. how AI-enhanced programs support teachers in their practice and what can be measured), which this research aims to contribute toward addressing.

Methodology

Research Design

This study employed a descriptive and evaluative mixed-method approach, incorporating both qualitative and quantitative data collection techniques. The CIPP Model served as the evaluation framework. Participants in this study were master teachers, selected through purposive sampling to ensure relevance to the research objectives. Data collection methods included surveys, structured interviews, focus group discussions, AI usage logs, and document reviews, providing a comprehensive view of the research environment.

Sampling Design

This study employed purposive sampling to select master teachers. The selected participants included both those who utilized AI tools in their research writing and those who relied solely on traditional research methods. This approach ensured a comprehensive analysis of diverse research practices. Additionally, school research coordinators and administrators responsible for AI and research support were included as key informants. To complement primary data collection, institutional policies on AI and research writing, AI tool accessibility reports from schools, and samples of research papers from both AI users and non-AI users were examined as secondary sources of data.

Research Locale

The study was conducted in the Schools Division of Baybay City, located in Baybay City, Leyte, Philippines, under the Department of Education. It focused on the Research Department, particularly the implementation of the Basic Education Research Fund (BERF) across public elementary and secondary schools. The division was selected due to its active promotion of a research-oriented culture, support for teacher-led studies, and integration of innovation and data-driven practices. This locale provides a relevant context as it reflects typical conditions in Philippine public schools, including resource constraints, increasing workload, and the growing adoption of digital and AI-supported tools in educational research.

Research Participants

The participants of the study were Master Teachers I and II from selected public elementary schools in the Schools Division of Baybay City. They were purposively selected based on their leadership roles in instructional supervision, mentoring, and active involvement in school-based research and Basic Education Research Fund (BERF) initiatives. All participants had at least three years of teaching experience, prior exposure to BERF-related training or research projects, and were willing to participate in the study. Teachers without research involvement, non-teaching personnel, and those who did not complete the required data collection instruments were excluded. This selection ensured that participants possessed relevant expertise and insights into research implementation and the integration of AI tools in educational practice.

Research Instrument

The study utilized a researcher-made questionnaire aligned with the CIPP (Context, Input, Process, Product) evaluation model, which underwent expert validation in terms of clarity, relevance, and comprehensiveness using a 4-point Likert scale. Most items were rated as relevant, and necessary revisions were incorporated to improve alignment with the evaluation framework. The instrument employed a standardized Likert scale for quantitative analysis and was pilot-tested to ensure reliability, yielding excellent internal consistency with Cronbach's alpha values ranging from 0.973 to 0.983 and an overall mean of 0.977. In addition to the survey, semi-structured interviews, focus group discussions, document analysis, and direct observations were conducted to obtain in-depth and comprehensive data on the implementation and effectiveness of the Basic Education Research Program (BERP).

Data Gathering Procedure

The data gathering process was conducted systematically to evaluate the Basic Education Research Program (BERP) using the CIPP (Context, Input, Process, Product) model. After securing the necessary permissions, the researcher administered a validated Likert-scale questionnaire to the selected participants to assess their perceptions across all CIPP components. Responses were collected and recorded for quantitative analysis. In addition, semi-structured interviews and focus group discussions were conducted to gather in-depth qualitative insights regarding the implementation, challenges, and effectiveness of the program. Relevant documents, such as research outputs, reports, and policy guidelines, were also reviewed,

and direct observations were carried out to capture actual practices and engagement in research activities. All collected data were organized, coded, and prepared for subsequent statistical and thematic analysis to ensure a comprehensive evaluation of the program.

Results and Discussions

As shown in Table 1 below, the profile of the respondents reflected a professionally mature group, with the majority aged 40–59 years old (76%) and a substantial number pursuing or holding postgraduate degrees. Specifically, 54% were enrolled in a Master's degree program, while others had completed graduate studies or were pursuing doctoral degrees. This academic background and professional maturity enhanced the reliability of their responses regarding BERP's purpose and strategic direction.

Table 1. Demographics of the Participants

Variable		Frequency	%
Age	29 and below	0	0%
	30–39	12	24%
	40–49	19	38%
	50–59	19	38%
	60 and above	0	0%
Gender	Male	44	88%
	Female	6	12%
Highest Educational Attainment	Bachelor's Degree	4	8%
	Master's Degree (Ongoing)	27	54%
	Master's Degree (Completed)	11	22%
	Doctorate (Ongoing)	6	12%
	Doctorate (Completed)	2	4%
Years of Experience as a Master Teacher	Less than 1 year	1	2%
	1–5 years	22	44%
	6–10 years	16	32%
	More than 10 years	11	22%
Department	Elementary	30	60%
	Junior HS	19	38%
	Senior HS	1	2%
School size	Small	19	38%
	Medium	15	30%
	Large	14	28%
	Mega	2	4%

On the other hand, the research experience of Master Teachers under the Basic Education Research Program (BERP) revealed meaningful insights into the current landscape of research engagement and AI integration. As shown in Table 2, the majority of respondents (64%) indicated that they had conducted research, while 36% reported no research experience at all.

Table 2. Research Engagement and AI exposure

Variable	Frequency	%
Have Conducted Research		
Yes	32	64%
No	18	36%
Conducted Research prior to MT Appointment		
Yes	28	56%
No	22	44%
Type of Research Conducted		
Action Research	31	84%
Case study	2	8%

Experimental	2	9%
Descriptive	2	5%
None	18	36%
AI Usage in Research Writing		
Yes	19	38%
No	31	62%
AI Training		
Formal Training	4	8%
Basic Training	4	8%
None	42	84%

These findings indicate a need for greater support systems to promote teacher engagement in research. Indeed, 56% had prior research experience, 44% had no research experience, making early training essential. Action research was the most popular (84%), with minimal use of other methods. AI use was low: just 38 percent used tools and 16 percent had formal training. A lack of participation, digital skills, and integration with AI is also evident in these results. Resolving these challenges is vital for enhancing sustainability. CIPP-based evaluations across context, input, process, and product are presented in the study.

Context Evaluation

The Context evaluation, as shown in Table 3, yielded a composite mean of 4.32, interpreted as "Agree," reflecting that the research program was well-aligned with the Division's vision and mission.

Table 3. Context Evaluation

	Indicator	Composite Mean	Verbal Interpretation
1.	The research program aligns with the vision and mission of the Division.	4.68	Strongly Agree
2.	The program recognizes the role of AI tools (e.g., ChatGPT, Grammarly, Turnitin) in research writing and development.	4.34	Agree
3.	AI-assisted research tools enhance the ability of Master Teachers to conduct research.	4.48	Agree
4.	The program addresses the need for integrating AI in research writing and analysis by incorporating specific tools.	4.32	Agree
5.	AI-powered research assistance aligns with educational innovation initiatives (e.g., AI-driven personalized learning, automated assessments).	4.32	Agree
6.	The initiative fosters collaboration among educators in AI-enhanced research writing.	4.36	Agree
7.	Ethical guidelines for AI-supported research writing are well-established and regularly updated.	4.22	Agree
8.	There is strong leadership support for AI adoption in research activities.	4.34	Agree
9.	The program encourages a research culture that integrates AI for efficiency and innovation.	4.32	Agree
10.	The research topics reflect AI's impact on educational methodologies and instructional strategies.	4.3	Agree
11.	AI tools are accessible and user-friendly for researchers in the Division.	4.36	Agree
12.	The program ensures responsible AI use in generating research content and preventing biases.	4.32	Agree
13.	AI-assisted research findings are effectively disseminated and utilized in decision-making.	4.16	Agree
14.	The initiative enhances the accuracy, efficiency, and originality of research writing.	4.18	Agree
15.	The program promotes inclusivity in AI-supported research endeavors.	4.24	Agree
16.	The institution has assessed its AI readiness, identifying challenges and opportunities for adoption.	4.18	Agree

Respondents recognized the value of AI tools in enhancing research capabilities, especially in promoting collaboration and incorporating AI into instructional strategies. Strong ratings were given to indicators related to leadership support and ethical practices, suggesting that the foundation for AI research integration was solid. However, areas such as the dissemination and utilization of AI-generated findings, while positively rated, indicated room for improved institutional mechanisms that could convert research outputs into actionable strategies.

Input Evaluation

The Input component of the Basic Education Research Program (BERP) yielded a composite mean of 4.094 with a standard deviation of 0.106, both of which fall within the "Agree" interpretation range. This

indicates that the program is generally supported with well-established resources and structural provisions necessary for the implementation of AI-assisted research. The consistently high ratings across multiple indicators confirm that access to AI-powered tools (4.18), regular training initiatives (4.06), and active partnerships with technology providers (4.16) are among the program's notable strengths. These suggest a strong institutional commitment to equipping Master Teachers with the needed platforms and opportunities to enhance their research capacity. Significant agreement was also observed in the presence of structured frameworks (4.02), mentorship support (4.00), and ethical guidelines (4.02), all of which are critical inputs in sustaining responsible and systematic AI integration. Furthermore, the highest-rated indicator (4.30) was the perceived contribution of AI tools in improving the credibility and reliability of research outputs, reflecting the teachers' recognition of AI's value in maintaining research quality. However, a relatively lower rating was recorded for teachers' time and resources to engage in AI-assisted research (3.88), marking it as the lowest among the indicators. This suggests a potential constraint related to workload management or competing professional responsibilities, which could limit teachers' actual engagement despite the available tools and support. Nevertheless, the overall low variability in responses—as evidenced by the small standard deviation—demonstrates a consensus among participants about the adequacy and readiness of the program's inputs. As shown in Table 4, the Input evaluation highlights that BERP is grounded in a supportive infrastructure, although further consideration should be given to workload adjustments and time allocation to maximize the utilization of these resources.

Table 4. Input Evaluation

	Indicator	Composite Mean	Verbal Interpretation
1.	The program provides access to AI-powered research tools.	4.18	Agree
2.	AI training programs for research writing are regularly conducted (e.g., quarterly workshops, annual training).	4.06	Agree
3.	Master Teachers receive adequate support in using AI for research.	4.00	Agree
4.	There is a structured framework for integrating AI in research writing (including policy guidelines and implementation strategies).	4.02	Agree
5.	Research facilities include AI-driven tools for data analysis and writing assistance.	4.02	Agree
6.	AI-assisted research aligns with existing curriculum and teaching practices.	4.12	Agree
7.	The Division partners with technology providers for AI research support.	4.16	Agree
8.	AI tools assist in identifying relevant literature and sources efficiently.	4.18	Agree
9.	Ethical considerations for AI-generated research content are well-defined and reinforced through training.	4.02	Agree
10.	The program provides AI-based tools for grammar, citation, and formatting assistance.	4.08	Agree
11.	Teachers have adequate time and resources to engage in AI-assisted research.	3.88	Agree
12.	The Division offers mentorship for AI-integrated research development.	4.00	Agree
13.	Research outputs are supported for AI-enhanced publication and dissemination.	4.08	Agree
14.	AI tools contribute to improving the credibility and reliability of research outputs.	4.30	Agree
15.	The program offers incentives or recognition for AI-enhanced research contributions.	4.18	Agree
16.	Resource availability translates into actual AI usage through structured adoption plans.	4.22	Agree

Process Evaluation

The Process component, as shown in Table 5 below, produced a composite mean of 4.11, interpreted as "Agree." The data suggested that AI was implemented through a structured, ethical, and well-monitored process.

Table 5. Input Evaluation

	Indicator	Composite Mean	Verbal Interpretation
1.	AI integration in research follows a structured implementation plan, specifying roles and responsibilities.	4.32	Agree
2.	AI tools effectively assist in data collection, literature synthesis, and research structuring.	4.16	Agree
3.	Research projects undergo AI-assisted peer review and validation.	4.24	Agree
4.	Teachers receive ongoing coaching and feedback on AI research integration.	3.76	Agree
5.	The program includes a monitoring and evaluation system for AI use, ensuring ethical and quality standards.	4.04	Agree
6.	AI-generated research findings are integrated into instructional strategies for classroom improvement.	4.06	Agree

7.	AI tools improve the clarity, coherence, and structure of research papers.	4.14	Agree
8.	The Division ensures responsible and ethical AI-assisted research writing through strict policy guidelines.	4.06	Agree
9.	Collaboration in AI-enabled research is encouraged and facilitated through workshops and conferences.	4.20	Agree
10.	AI-enhanced research challenges (e.g., bias, ethical concerns, data privacy issues) are addressed through training and policy support.	4.18	Agree
11.	The Division provides a centralized platform for AI-assisted research outputs and knowledge sharing.	4.00	Agree
12.	AI-supported research forums and symposia are regularly conducted to discuss emerging trends and findings.	3.98	Agree
13.	AI-assisted research writing tools are accessible and widely used by teachers.	4.10	Agree
14.	AI-generated content is verified for accuracy, credibility, and originality before publication.	4.14	Agree
15.	Ethical considerations in AI-assisted research writing are strictly observed and reinforced.	4.20	Agree

Respondents acknowledged that AI tools were used effectively across different phases of the research cycle, including data collection, formatting, peer review, and instructional planning. Slightly lower scores (e.g., 3.76) for coaching and feedback mechanisms, however, revealed the need for sustained capacity-building efforts. The presence of policy guidelines, knowledge-sharing platforms, and regular symposia supported the Division's commitment to responsible and collaborative AI-enhanced research.

Product Evaluation

The Product component, detailed in Table 6, yielded a composite mean of 4.15, maintaining the "Agree" interpretation.

Table 6. Product Evaluation

Indicator	Composite Mean	Verbal Interpretation
1. AI-assisted research has improved the quality of research outputs (e.g., clarity, coherence, depth).	4.16	Agree
2. AI-supported research enhances the efficiency and accuracy of research writing.	4.16	Agree
3. AI tools have contributed to increased research engagement among Master Teachers.	4.14	Agree
4. The research program effectively integrates AI advancements in writing and analysis.	4.18	Agree
5. AI-assisted research has led to innovative teaching strategies and curriculum development.	4.02	Agree
6. The research program supports AI-driven continuous professional development.	4.22	Agree
7. AI-powered literature review tools enhance research depth and credibility.	4.02	Agree
8. The integration of AI tools has resulted in data-driven educational decisions.	4.1	Agree
9. AI-assisted research writing aligns with the objectives of school improvement initiatives (e.g., enhancing learning outcomes, professional development).	4.16	Agree
10. The accessibility of AI research tools has increased participation in research among teachers.	4.12	Agree
11. AI-driven research ensures sustainability in educational inquiry and knowledge generation.	4.22	Agree
12. Research-based solutions, supported by AI, address key challenges in education and policymaking.	4.1	Agree
13. AI-enhanced research projects have positively influenced school policies and decision-making processes.	4.1	Agree
14. The program fosters a culture of digital literacy and AI fluency among educators.	4.28	Agree
15. The use of AI in research writing contributes to global educational discussions and innovations.	4.26	Agree
16. A longitudinal impact assessment is in place to evaluate AI integration's long-term effects on research sustainability.	4.14	Agree

These results indicated that AI integration resulted in tangible improvements in research quality, teacher engagement, and curriculum development. Respondents noted enhancements in the clarity, coherence, and depth of outputs, along with positive impacts on professional growth and teaching strategies. High agreement was observed in areas such as participation in global educational discussions, increased digital literacy, and the promotion of sustainable inquiry, demonstrating the broader impact of AI-assisted research practices. Although continuous improvement was still needed, the outcomes aligned well with school development objectives. The CIPP evaluation results of BERP reflected a consistently positive trajectory across all four domains. The Division demonstrated alignment with institutional goals, resource readiness, ethical implementation processes, and favorable research outcomes. Areas for enhancement—particularly in time management, mentoring, and dissemination—were identified, but the program showed strong potential for long-term sustainability and innovation in basic education research. Table 8 provides a summary of these findings.

Table 7. Summary

Component	Mean	Verbal Interpretation
Context	4.320	Agree

Input	4.094	Agree
Process	4.105	Agree
Product	4.320	Agree

Qualitative data gathered through open-ended interview questions focused on Master Teachers' research experiences, AI tool usage, training needs, and perceived challenges. Thematic analysis of responses revealed recurring ideas, which were coded and organized into core themes to provide deeper insights into current capabilities, tool engagement, and needed support structures. A predominant theme that emerged was Research Capability Gaps. Many participants reported limited understanding of research methods, difficulty structuring papers, and a general lack of time. These responses highlighted enduring challenges, even among experienced educators. One participant succinctly captured this barrier:

> *"Lack of time, limited knowledge of research methods, difficulty in writing and structuring research papers"*

Another significant theme was Low AI Tool Familiarity. While most teachers were aware of AI tools such as ChatGPT, Grammarly, and Turnitin, actual usage was limited, and confidence in their application was low. Some admitted to using these tools without understanding their full capabilities:

> *"I used ChatGPT and Grammarly, but I'm not sure if I used them properly,"*

The third theme was Ethical and Practical Concerns on AI Use. Respondents expressed uncertainty about data originality and the lack of clear institutional guidelines, which contributed to apprehension regarding responsible AI use. These concerns highlighted the need for formal ethical frameworks and clearer policies.

Training and Mentorship Needs also emerged as a major theme. Participants called for AI literacy workshops, ethical guidelines, and mentorship support to build confidence and skill in using AI tools for research. As one respondent emphasized:

> *"AI literacy workshops (ethical use, best practices), mentorship on using tools like ChatGPT in research,"*

Finally, the theme Recommendations for Program Support focused on action-oriented suggestions. Participants recommended more accessible tools, regular training sessions, and institutional time allocations for research tasks:

> *"Conduct training about AI tools in writing research. Teachers should be given more time."*

As summarized in Table 8, the thematic analysis revealed a complex interplay among research competencies, AI engagement, and institutional support. Although teachers recognized AI's potential, actual adoption was constrained by knowledge gaps and ethical concerns. These findings supported previous studies emphasizing the importance of training and ethical frameworks (Smith & Jones, 2023; Lee et al., 2024). The strong call for mentorship and guided learning suggested that passive exposure to AI tools was insufficient. Institutional support—particularly in time, training, and mentorship—was essential to translating awareness into effective research practice. Addressing these interconnected factors will be crucial for improving outcomes and sustaining the goals of the BERP initiative.

Table 8. Summary of Themes

Theme	Description
Research Capability Gaps	Limited research knowledge, difficulty structuring papers, and lack of time impede research work.
Low AI Tool Familiarity	Awareness exists, but actual use and confidence in AI tools are low.
Ethical and Practical Concerns on AI Use	Ethical issues, data originality, and lack of guidelines create apprehension.
Training and Mentorship Needs	Strong demand for AI literacy workshops, ethical training, and mentorship programs.
Recommendations for Program Support	Calls for structured training, accessible tools, time allocation, and institutional support.

Ethical Considerations

This study adhered to ethical research principles to ensure the protection and well-being of all participants. Informed consent was obtained from master teachers, school research coordinators, and administrators before their participation, ensuring they understood the study's purpose, procedures, potential risks, and benefits. Participants' privacy and confidentiality were safeguarded by anonymizing survey responses, interview transcripts, and research writing samples. Data were securely stored and were accessible only to the researchers. Additionally, voluntary participation was emphasized, allowing participants to withdraw at any stage without any consequences. The study also addressed potential biases in AI-related discussions, ensuring neutrality and fairness in analyzing the perceived benefits and challenges of AI integration. Lastly, proper academic integrity was maintained by accurately citing sources and preventing any form of data fabrication or manipulation.

Conclusion

This study evaluates the effectiveness of the Basic Education Research Program (BERP) according to the CIPP framework; clear evidence concerning its success in strengthening the research domain of Master Teachers based upon the integration with AI. The results verified that the program shows good alignment with institutional needs as a result of high teacher awareness, sufficient allocation of resources, and systematic implementation processes. In addition, these conditions lead to increased research yield, digital literacy, and academic engagement. However, the study underscores important limitations that constrain optimal program impact, focusing on limited AI literacy, inadequate time allocation, and a dearth of access to sophisticated research instruments and support. These issues illuminate the need for stronger and longer-term institutional responses. On the whole, the research demonstrates that BERP is an ideal and feasible model to support AI-supported research on basic education, as long as it serves a dual purpose of continuously developing capacity, creating strong mentoring relationships, having ethical and responsible governance as well as strategically targeting resource allocation. In this way, in some dimensions, the program can be more scalable and impactful while contributing to further advancing evidence-based and technology-enhanced practice.

Recommendations

The CIPP evaluation of BERP reveals a consistently positive trajectory for AI-enhanced research, with strong alignment, resource readiness, responsible processes, and impactful outcomes. To further strengthen the program, it is recommended that the Division address workload constraints, enhance ongoing coaching and feedback, and improve mechanisms for research dissemination and utilization. Targeted, scaffolded training and mentorship, coupled with clear ethical frameworks, will be essential for sustaining and scaling AI-supported research practices. Institutional commitment to providing both resources and time will be the linchpin for translating awareness and infrastructure into lasting research productivity and innovation among Master Teachers.

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