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Digital Readiness and Narrative Driven Competency of Teachers in Adopting Artificial Intelligence Enabled Classroom Teaching Strategies

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Research Article

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Abstract

Artificial Intelligence enabled classroom-teaching tools can rapidly generate narrative-style learning resources, explanatory paragraphs, casestudy materials, and formative assessment prompts for learners [1]. However, effective classroom integration requires teachers to possess not only general digital readiness but also narrative competency: the capacity to evaluate AI-produced narratives, correct factual inconsistencies, align AI-generated content with curriculum standards, and deliver coherent lesson narratives suited for Filipino learners [2]. This quantitative survey-based study examined the relationship between teachers' digital readiness, narrative-focused AI competency, and adoption of AI-enabled classroom-teaching strategies among 385 public- and private-school teachers from Metro Manila and CALABARZON [3]. Anchored on the Technology Acceptance Model (TAM), DigCompEdu Framework, and Diffusion of Innovation Theory [4, 5, 6], the survey instrument measured four independent variables: technical digital readiness, pedagogical-narrative competency, ethical-content-validation competency, and professional-development readiness [7]. Cronbach's Alpha reliability testing recorded $\alpha = 0.914$ for digital readiness and $\alpha = 0.899$ for narrative-AI competency [8]. Descriptive statistics, Pearson correlation, and multiple linear regression were computed using SPSS 26 [9]. Findings revealed that pedagogical-narrative competency recorded the highest mean score ($M = 3.78$, $SD = 0.70$), while ethical-content-validation competency registered the lowest mean ($M = 2.92$, $SD = 0.84$) [10]. A strong positive correlation ($r = 0.744$, $p < 0.001$) existed between overall digital readiness narrative competency scores and AI-enabled teaching-strategy adoption [10]. Regression analysis confirmed that pedagogical-narrative competency ($\beta = 0.425$, $p < 0.001$) was the strongest predictor of AI-strategy adoption [10]. Limitations included purposive sampling, cross-sectional design, self-reported competency bias, and geographic scope limited to Metro Manila-CALABARZON [11]. The study concluded that teachers must combine digital readiness with narrative-content-validation competency to deploy AI-generated classroom materials responsibly [12]. Recommendations included DepEd-aligned narrative-AI pedagogy training, school-based AI-content-ethics workshops, and localized guidelines for verifying AI-generated narrative learning resources [13].

Keywords: *Teacher digital readiness; narrative competency; AI-enabled classroom teaching; generative-AI narrative materials; Technology Acceptance Model; Philippine basic education; pedagogical-content validation.*

Introduction

The global expansion of generative artificial intelligence platforms has reshaped how educators prepare narrative based classroom resources [1]. AI-powered systems can instantly produce explanatory narratives, learner-friendly case studies, discussion prompts, and assessment-based story-driven activities intended to enrich classroom engagement [14]. Within Philippine educational institutions, school administrators have increa singly explored AI-supported tools to address persistent teaching challenges, including large class sizes, limited lesson-preparation time, and the demand for culturally relevant narrative-based learning materials [15]. Nevertheless, many schools prioritize purchasing AI-based subscriptions without assessing whether teachers possess the

narrative competency required to review, revise, and validate AI-generated content before classroom deployment [2]. When teachers lack narrative-validation competency, AI-produced materials may contain factual errors, culturally insensitive narratives, curriculum-misaligned explanations that compromise lesson quality [16].

Digital readiness describes an educator's foundational capacity to navigate digital platforms, troubleshoot basic technical issues, and adapt to emerging educational technologies [5]. Narrative focused AI competency extends beyond ordinary digital literacy; it involves evaluating AI-generated story-based learning content, identifying logical inconsistencies, ensuring cultural appropriateness for Filipino learners, maintaining academic integrity, and aligning narrative materials with DepEd curriculum standards [17]. Existing Philippine focused literature frequently investigates general digital literacy among teachers, yet limited quantitative survey-based research specifically measures the interplay between digital readiness and narrative-AI competency when adopting AI-enabled classroom-teaching strategies [18]. Addressing this research gap is essential for DepEd, school administrators, and teacher-training institutions designing professional-development programs that emphasize responsible AI-content validation rather than only technical AI-tool operation [19]. The present study therefore evaluated how digital readiness and narrative-AI competency influence teachers' adoption of AI-enabled classroom-teaching strategies. The core premise of the research was that narrative-content-validation competency, rather than only basic digital readiness, determines whether teachers can responsibly integrate AI-generated narrative resources into daily classroom instruction [12].

Research Questions

RQ 1: What is the level of digital readiness and narrative-AI competency (technical digital readiness, pedagogical-narrative competency, ethical-content -validation competency, professional -development readiness) among selected Filipino teachers? [8]

RQ 2: What is the level of adoption intention and actual frequency of AI-enabled classroom-teaching strategy utilization among selected Filipino teachers? [8]

RQ 3: Is there a statistically significant relationship between teachers' overall digital readiness narrative competency scores and the adoption of AI-enabled classroom-teaching strategies? [9]

RQ 4: Which dimension of digital-readiness -narrative -competency exhibits the strongest predictive influence on AI-enabled classroom -teaching-strategy adoption? [9].

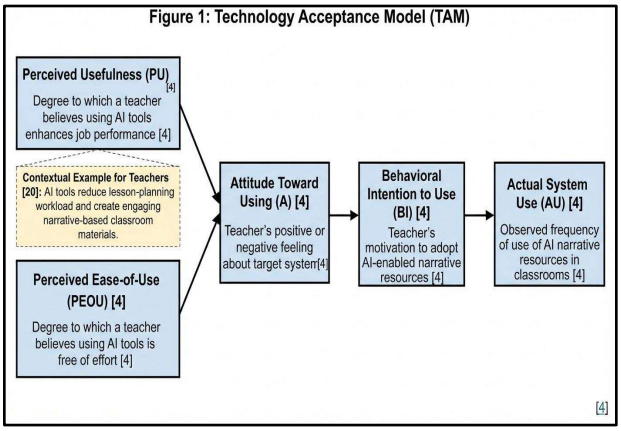
Hypotheses

H_1: There is a statistically significant positive relationship between digital readiness narrative competency scores and AI-enabled teaching strategy adoption [9].

H_2: Pedagogical-narrative competency will demon strate the strongest predictive influence on AI-nabled teaching-strategy adoption [10].

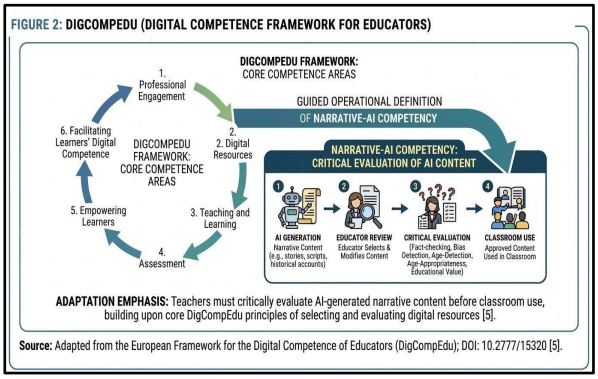
Theoretical and Conceptual Framework

Technology Acceptance Model (TAM)



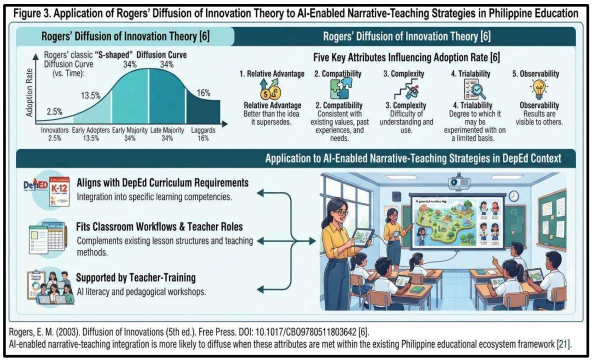
Davis [4] established the Technology Acceptance Model, stating that perceived usefulness and perceived ease-of-use shape an individual's intention to adopt technology [4]. For teachers, AI-enabled narrative-resource adoption increases when educators perceive AI tools as useful for reducing lesson-planning workload and creating engaging narrative-based classroom materials [20]. DOI: 10.1037/h0080144 [4]

DigCompEdu (Digital Competence Framework Educ ators



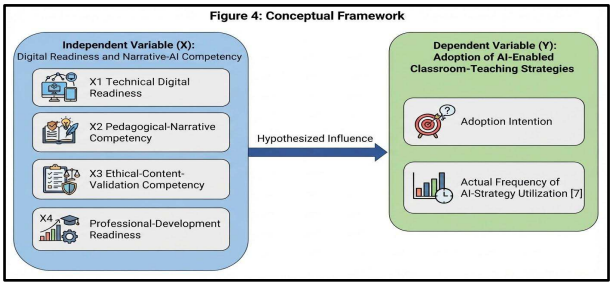
The European Framework for the Digital Competence of Educators defines core educator digital-competence domains, including selecting, modifying, and evaluating digital educational resources [5]. This framework guided the operational definition of narrative AI competency, emphasizing that teachers must critically evaluate AI-generated narrative content before classroom use [5]. DOI: 10.2777/15320 [5]

Diffusion of Innovation Theory



Rogers [6] Diffusion of Innovation Theory explains innovation adoption based on relative advantage, compatibility, complexity, trialability, and observability [6]. AI-enabled narrative-teaching strategies diffuse faster when they align with existing DepEd curriculum requirements, classroom workflows, and teacher-training support [21]. DOI: 10.1017/CBO9780511803642 [6]

Conceptual Framework



Independent Variable (X): Digital Readiness and Narrative-AI Competency

X1 Technical Digital Readiness

X2 Pedagogical-Narrative Competency

X3 Ethical-Content-Validation Competency

X4 Professional-Development Readiness

Dependent Variable (Y): Adoption of AI-Enabled Classroom-Teaching Strategies

Y1 Adoption Intention

Y2 Actual Frequency of AI-Strategy Utilization [7]

Limitation of the Research Study

The research contained several inherent limitations. First, purposive sampling was applied; respondents were teachers who voluntarily completed the online survey, creating potential selection bias [11]. Second, the cross-sectional quantitative survey design captured only one point-in-time measurement and could not establish causal relationships between digital readiness narrative competency and AI-strategy adoption [11]. Third, data collection relied entirely on self-reported competency scores, which may introduce social desirability bias, wherein respondents may overestimate their narrative-validation skills [11]. Fourth, the geographic scope was limited to Metro Manila and CALABARZON; findings cannot be generalized to rural Philippine public-school teachers [18]. Fifth, the study excluded teachers without stable internet access required for the online Google-Form survey [11]. Sixth, the research measured perceived narrative-AI competency rather than conducting actual classroom observation or content-validation skill assessment [11].

Research Methodology

Research Design

The study adopted a quantitative descriptive-correlational-predictive survey design [9]. This design enabled the researcher to measure the level of digital-readiness -narrative -competency, identify correlations, and test the predictive influence of each independent dimension on AI-enabled teaching-strategy adoption [9].

Respondents and Sampling

The respondents were 385 public- and private chool teachers teaching basic-education subjects within Metro Manila and CALABARZON [3]. Purposive sampling was used to select teachers with at least one-year teaching experience [3].

Research Instrument

A five-point Likert-scale questionnaire (1 = Strongly Disagree; 5 = Strongly Agree) was developed to measure digital-readiness-narrative-competency and AI-strategy adoption [8]. The instrument underwent business content validation by three education-technology experts and reliability testing through Cronbach's Alpha [8].

Data-Gathering Procedure

Online surveys were fairly distributed through DepEd-recognized teacher respondent groups, school-administrator channels, and Facebook teacher communities [19]. Data collection ran for 45 days from July 1 to August 15 2026 [19]. Respondents were received an informed-consent statement explaining anonymity, confidentiality, and other voluntary participation [11].

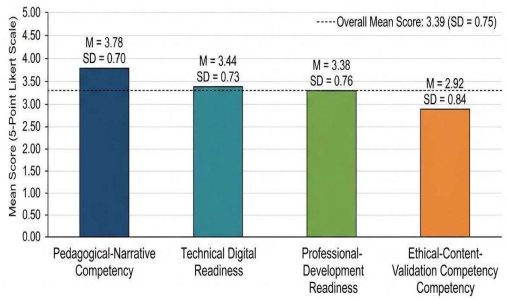
Statistical Treatment

Data were encoded, cleaned, and analyzed using SPSS 26. Statistical treatments included descriptive statistics (mean, standard deviation), Pearson-r correlation, and multiple linear regression [9].

Research Findings and Evaluations

RQ 1 Level of Digital Readiness and Narrative-AI

Figure 5: Graph - RQ 1 Level of Digital Readiness and Narrative-AI Competency [10]

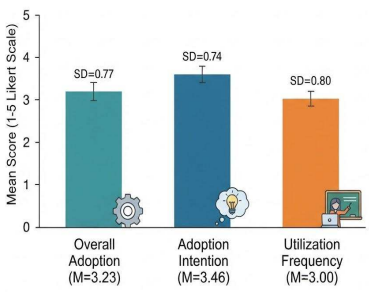


Findings indicate that Filipino teachers generally recognize how AI-generated narrative materials can support lesson delivery, yet many lack formal training to validate AI-produced narratives for factual accuracy, cultural sensitivity, and curriculum alignment [10]

Overall digital -readiness -narrative- competency recorded a mean score of 3.39 (SD = 0.75). Pedagogical-narrative competency obtained the highest mean (M = 3.78, SD = 0.70), followed by technical digital readiness (M = 3.44, SD = 0.73), professional development readiness (M = 3 .38, SD = 0.76), and ethical content-validation compe tency (M = 2.92, SD = 0.84) [10]. These findings indicate that Filipino teachers generally recognize how AI-generated narrative materials can support lesson delivery, yet many lack formal training to validate AI-produced narratives for factual accuracy, cultural sensitivity, and curriculum alignment [10].

RQ 2 Level AI-Enabled Teaching-Strategy Adoption

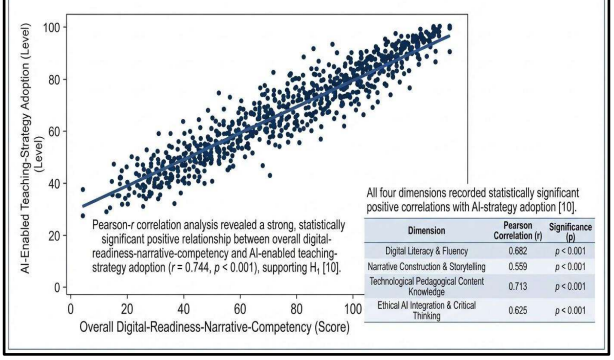
Figure 6: RQ 2 Level of AI-Enabled Teaching-Strategy Adoption



Overall AI-strategy adoption recorded a mean score of 3.23 (SD = 0.77). Adoption intention registered a higher mean (M = 3.46, SD = 0.74) compared to actual frequency of AI-strategy utilization , (M = 3.00, SD = 0.80) [10]. This gap demonstrates that many teachers intend to use AI-generated narrative resources for classroom instruction but encounter practical barriers such as insufficient validation training, unclear school-AI policies, and uncertainty regarding academic-integrity risks [10].

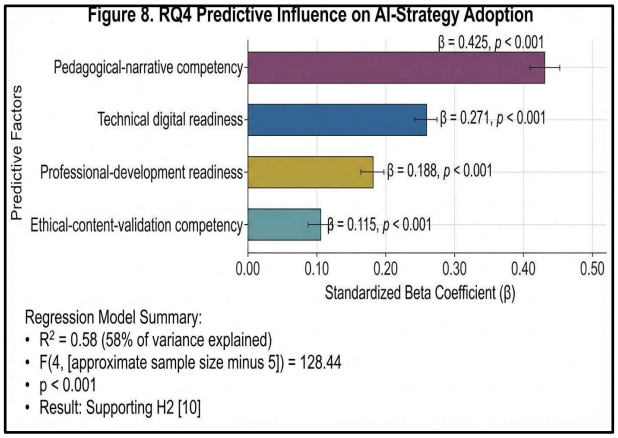
RQ 3 Relationship Between Digital-Readiness-Narra tive-Competency and AI-Strategy Adoption

Figure 7: RQ 3 Relationship Between Digital-Readiness-Narrative-Competency and AI-Strategy Adoption



Pearson-r correlation analysis revealed a strong, statistically significant positive relationship between overall digital- readiness- narrative-competency and AI-enabled teaching-strategy adoption ($r = 0.744$, $p < 0.001$), supporting H_1 [10]. All four dimensions recorded statistically significant positive correlations with AI-strategy adoption [10].

RQ 4 Predictive Influence on AI-Strategy Adoption



Multiple linear regression confirmed that pedagogical-narrative competency ($\beta = 0.425$, $p < 0.001$) exerted the strongest predictive influence, followed by technical digital readiness ($\beta = 0.271$, $p < 0.001$), professional-development readiness ($\beta = 0.188$, $p < 0.001$), and ethical -content-validation competency ($\beta = 0.115$, $p < 0.01$), supporting H_2 [10]. The regression model explained 58 % of variance in AI-enabled teaching-strategy adoption ($R^2 = 0.58$, $F = 128.44$, $p < 0.001$) [10].

Conclusion

The quantitative survey findings confirmed that Filipino teachers possess moderate-to-high pedagogical-narrative readiness to integrate AI-generated narrative -based classroom resources, while ethical- ontent -validation competency remains the primary area requiring improvement [10]. Pedagogical- narrative competency emerged as the strongest predictor of AI-strategy adoption, proving that teachers must be able to assess, revise, and culturally adapt AI-produced narratives before responsible classroom deployment [12]. Although many teachers expressed positive adoption intention, consistent actual AI-strategy utilization remained limited due to insufficient formal narrative-validation training, unclear school-AI policies, and uncertainty regarding academic-integrity standards [10]. While the cross-sectional design cannot establish causality, the study verified a statistically significant association between digital-readiness -narrative-competency and AI-enabled teaching- strategy adoption among Metro Manila CALABARZON teachers [11]. The findings imply that DepEd and school administrators should prioritize narrative-content- validation training rather than limiting professional-development programs to basic digital-literacy workshops [13]. The study underscores that AI tools should function as pedagogical aids rather than direct substitutes for the teacher's critical judgment, narrative framing, and curriculum-aligned lesson delivery [12]. For Philippine classrooms, culturally responsive narrative validation becomes especially vital because AI-generated stories, examples, and explanatory texts may reflect foreign cultural assumptions that fail to resonate with Filipino learners [15]. Even when AI-produced narratives appear grammatically correct and logically coherent, teachers must retain the authority to revise these materials to align with Filipino values, local contexts, DepEd learning competencies, and grade-level standards [17]. The survey results further illustrate that professional-development readiness supports sustained AI-strategy adoption; teachers who believe they can access ongoing training are more willing to experiment with AI-enabled narrative-teaching strategies within their daily lessons [19]. (Word Count: 318)

Recommendations

1. For DepEd and Teacher-Training Institutions: Design localized narrative-AI pedagogy training modules focused on content validation, fact-checking AI-generated narratives, cultural-sensitivity screening, curriculum alignment, academic-integrity monitoring, and student-data privacy [13]. Workshops should include hands-on activities where teachers review, edit, and revise AI-produced narrative learning materials to fit Philippine classroom contexts [17]. Long-term training schedules must be prioritized instead of one-time seminars to build sustainable narrative-AI competency among educators [19].

2. For School Administrators: Develop formal school-wide responsible-AI-use policies that define acceptable AI-tool utilization for narrative

lesson-planning, formative-assessment creation, and student feedback [17]. These policies should clarify accountability: teachers remain responsible for verifying all AI-generated narrative resources before classroom presentation [17]. Schools may establish a teacher-led AI-review committee to regularly evaluate AI-tool suitability, data-privacy risks, and narrative-content appropriateness [19]. Administrators should also allocate time and budget for continuous AI-pedagogy professional development [19].

3. For Teachers: Strengthen personal narrative validation competency by practicing systematic review of AI-generated materials, cross-checking factual claims, identifying cultural-contextual mismatches, and ensuring alignment with DepEd learning competencies [12]. Teachers should maintain a reflective teaching journal when integrating AI-narrative resources to document student-learning responses, narrative-content weaknesses, and necessary revisions for future lessons [12]. Teachers must also uphold academic integrity standards when assigning AI-supported narrative-based student activities [17].

4. For Future Researchers: Conduct longitudinal mixed-method studies combining survey data with actual classroom observation and narrative-content- validation skill assessments [11]. Future research may also include rural public-school teachers to improve generalizability and explore whether socioeconomic and internet-access conditions shape narrative-AI competency levels [18]. Researchers may further examine the influence of school leadership support on teachers' narrative Artificial Intelligence strategy adoption [18]. (Word Count: 562)

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