Development of Neoteric Approach Curriculum Assessment Framework

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ABSTRACT

The transformation of education requires an assessment system that is comprehensive, continuous, and capable of capturing students' academic achievement, skills, values, and holistic development. This study aimed to develop a Neoteric Approach Curriculum Assessment System Framework that systematically records, evaluates, and reports student achievement. Specifically, the study sought to identify assessment elements within the Neoteric Approach Curriculum Standard Document, develop a scoring and rating system, determine the validity and reliability of the framework, and propose a holistic reporting format. A mixed-methods approach was employed, involving document analysis, literature review, Focus Group Discussion (FGD), retrospective study, framework development, and expert evaluation. Qualitative data were analysed thematically, while quantitative data from three experts were analysed using the Item-Level Content Validity Index (I-CVI), mean scores, and percentage of agreement. The synthesis and triangulation of findings identified 17 assessment elements categorized into Input, Process, Output, and Supporting Elements. The framework development resulted in an integrated structure linking curriculum alignment, teaching and learning, assessment planning, evidence collection, interpretation of mastery levels, scoring, recording, feedback, and reporting. Expert evaluation demonstrated an I-CVI of 1.00 across all five assessment aspects, with 100% agreement and an overall mean of 3.73, indicating a very high level of expert acceptance. Expert feedback was subsequently incorporated to refine the framework structure and positioning of its components. The study concludes that the Neoteric Approach Curriculum Assessment System Framework provides a systematic, integrated, and holistic foundation for assessing student development and achievement. Further empirical testing in actual implementation contexts is recommended to establish its applicability and effectiveness.

Keywords: Neoteric Approach Curriculum, assessment framework, holistic assessment, student achievement, content validity, Classroom-Based Assessment

INTRODUCTION

Malaysia's education system undergoes continuous change to ensure educational quality aligns with the aspirations of the National Philosophy of Education and Malaysia Education Blueprint (MEB) 2013–2025. The six student aspirations outlined in the PPPM emphasize the mastery of knowledge, thinking skills, leadership, bilingual proficiency, ethics and spirituality, and national identity. Consequently, assessment must be implemented comprehensively to continuously evaluate students' academic achievement, skills, values, and overall development.

Assessments that are overly examination-oriented fail to provide a holistic picture of student outcomes, as they focus primarily on academic achievement. In this context, the Neoteric Approach Curriculum

emphasizes diverse forms of literacy, 21st-century skills, and holistic student development. These requirements necessitate a systematic assessment framework to evaluate the elements of knowledge, skills, and values outlined in the Neoteric Approach Curriculum Standard Document. Therefore, this study aims to develop a comprehensive assessment system framework for the Neoteric Approach Curriculum to record, evaluate, and report student achievement holistically. The development of the framework involves document analysis, literature review, Focus Group Discussions (FGD), a retrospective study, and expert evaluation to ensure the resulting framework possesses appropriate validity and reliability. The study objectives are to identify assessment elements within the Neoteric Approach Curriculum Standard Document, develop a scoring and rating system that records student outcome domains and provides meaningful feedback, determine the validity and reliability of the Neoteric Approach Curriculum Assessment System Framework, and propose a suitable reporting format that comprehensively reflects student achievement.

This study is grounded in the concept of holistic assessment, which evaluates students' knowledge, skills, values, attitudes, and development through diverse forms of evidence such as projects, portfolios, observations, and presentations. This approach aligns with the implementation of Classroom-Based Assessment, which emphasizes continuous assessment, varied evidence, and feedback to support student development and mastery (Brookhart, 2017; KPM, 2019; Wan Omar, 2019). The development of the framework is further supported by the Theory of Multiple Intelligences, Ecological Systems Theory, Constructivism Theory, Knowledge Integration Theory, and Social Constructivism Theory. These theories provide a foundation for assessment that takes into account diverse potentials, environmental influences, knowledge construction through experience, knowledge integration, and interaction and collaboration in learning (Armstrong, 2018; Bransford et al., 2000; Drake & Burns, 2004; Gillies, 2016; Hattie, 2009). Additionally, Lifelong Learning Theory and the concept of holistic student outcomes complement the framework's foundation by emphasizing the continuous development of knowledge, skills, and values. Collectively, these foundations align with the aspirations of the National Education Philosophy and the Malaysia Education Blueprint, as well as the goals of the Neoteric Approach Curriculum to develop well-rounded students. Consequently, the assessment framework for the Neoteric Approach Curriculum was developed to support the systematic and holistic evaluation of student achievement and development (European Parliament & Council of the European Union, 2018)

METHODOLOGY

This study employs a mixed-methods approach, combining qualitative and quantitative methods to develop a Neoteric Approach Curriculum Assessment System Framework. The study design was implemented in stages, comprising document analysis, literature review, Focus Group Discussion (FGD), a retrospective study, framework development, and expert evaluation. A qualitative approach was used to identify assessment domains, constructs, elements, and requirements, while a quantitative approach was utilized to determine the validity and reliability of the developed framework. The use of both approaches allowed the findings to complement each other in producing a comprehensive assessment framework (Fàbregues et al., 2023; Poth & Shannon-Baker, 2022). The research procedure began with a review of documents related to the Neoteric Approach Curriculum, followed by an analysis of the Neoteric Approach Curriculum Standard Document, the content of Neoteric Approach Curriculum lesson plans, and documents concerning assessment and student outcomes. A literature review was also conducted, covering books, journal articles, research reports, and proceedings related to holistic assessment, student competencies, framework development, and relevant theories. Document analysis was carried out systematically to identify assessment themes, domains, constructs, elements, and indicators (Bowen, 2009). Focus Group Discussions (FGD) and a retrospective study were subsequently employed to strengthen the findings through participant insights and the examination of existing records, reports, evaluation documents, and resources regarding assessment practices within the Neoteric Approach Curriculum. The overall findings were analyzed and synthesized to serve as the basis for developing the draft Neoteric Approach Curriculum Assessment System Framework.

Study participants were selected using purposive sampling based on their expertise and experience in the fields of curriculum, assessment, and education. The Focus Group Discussion (FGD) involved participants with knowledge and experience regarding curriculum development and assessment, while the validity

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assessment involved three experts possessing over five years of experience and relevant academic backgrounds and expertise. The research instruments comprised a document analysis protocol, an FGD protocol, a retrospective study instrument, and an expert validity assessment form. The expert assessment form utilized a four-point Likert scale to evaluate the accuracy, suitability, adequacy, and applicability of the framework components. Expert comments and suggestions were also incorporated into the framework refinement process.

Qualitative data from document analysis, literature reviews, FGDs, and the retrospective study were analysed thematically to identify themes and elements relevant to the framework's development. Expert assessment data were analysed quantitatively using the Item-Level Content Validity Index (I-CVI), mean scores, and percentage of agreement. Scores of 3 and 4 served as the basis for determining item relevance in the I-CVI calculation (Yusoff, 2019; Zamanzadeh et al., 2015). Findings from the expert assessment were used to establish content validity and to refine the framework prior to its finalization. Ethical considerations were also addressed through processes involving research approval, participant consent, information confidentiality, voluntary participation, and secure data storage. All information obtained was used exclusively for research purposes.

Development of A Neoteric-Approach Curriculum Assessment Framework

The development of the Neoteric-Approach Curriculum Assessment System Framework was carried out in stages through document analysis, a literature review, Focus Group Discussions (FGDs), and a retrospective study. Findings from these sources were integrated through processes of mapping, review, and refinement to establish the framework's components, domains, constructs, elements, indicators, and proficiency levels. This approach aligns with the need for assessment that is continuous, comprehensive, and oriented towards student development (KPM, 2025; Maskos et al., 2025).

Needs Analysis Phase

The needs analysis phase was conducted to identify assessment requirements and components through document analysis, a literature review, FGDs, and a retrospective study. The analysis focused on the alignment between curriculum and assessment, the implementation of teaching and learning, the collection and interpretation of evidence, proficiency levels, feedback, and follow-up actions. Findings from these four sources were subsequently compared and integrated to serve as the foundation for developing the framework.

Document Analysis

Document analysis was conducted to identify requirements related to the curriculum, Teaching and Learning, and assessment. The analysis identified ten key aspects: curriculum, teaching and learning, continuous assessment, meaningful tasks, technology, student development, data, mastery levels, topic planning, and feedback. These aspects indicate that assessment needs to be integrated with the learning process, utilize diverse forms of evidence, and support student development and follow-up actions. Table 1 presents the findings and interpretation of the document analysis.

Table 1 Findings and Interpretation of Document Analysis

Aspect	Document Analysis Finding	Interpretation
Curriculum	Assessment aligned with learning outcomes	Assessment based on intended learning objectives
Teaching And Learning	Assessment linked to teaching and learning	Assessment as an integral part of learning

Continuous assessment	Evidence collected throughout the learning process	Student development can be identified
Meaningful tasks	Students apply knowledge	Evidence demonstrates knowledge and skills
Technology	Supports evidence management	More systematic data management
Student development	Considers student progress	Not limited to final achievement
Data	Used for decision-making	Supports teacher judgment and action
Mastery levels	Mastery described in stages	Indicates student achievement status
Topic planning	Assessment based on topics	Integrated with teaching and learning planning

The document analysis identified ten key aspects supporting the development of the Neoteric Approach Curriculum Assessment Framework, namely curriculum, teaching and learning, continuous assessment, meaningful tasks, technology, student development, data, mastery levels, topic planning, and feedback. The findings indicate that assessment should be integrated into the teaching and learning process and conducted continuously to obtain evidence of students' achievement and development. Meaningful tasks enable students to apply their knowledge and skills, while technology supports the collection and management of assessment data. These findings are consistent with the implementation of Classroom-Based Assessment (CBA), which positions assessment as an integral part of the learning process (Arumugham, 2020; KPM, 2019; Lim, 2025).

Overall, the findings indicate that assessment constitutes an integrated process encompassing learning planning, teaching and learnin, evidence generation, data interpretation, determination of mastery levels, and feedback. The use of authentic tasks and diverse assessment strategies supports a more comprehensive evaluation of student learning (Mariappan & Osman, 2023; Ramlan et al., 2025; Zhang et al., 2024; Veugen et al., 2024), while technology supports the systematic management of assessment data (Mohd Fadzil, 2024; Anwar et al., 2024; Ahmad et al., 2025). Therefore, the ten identified aspects provide an initial basis for developing the framework and will be further refined through literature analysis, Focus Group Discussion (FGD), and retrospective study to establish a comprehensive framework based on triangulation (Creswell & Plano Clark, 2018; Poth & Shannon-Baker, 2022).

LITERATURE ANALYSIS

The literature analysis identifies themes, elements, and assessment requirements relevant to the development of the Neoteric Approach Curriculum Assessment Framework. Eleven key themes were identified, covering curriculum-assessment alignment, learning outcomes and standards, constructs and competencies, assessment planning, continuous and formative assessment, authentic assessment, diversity of methods and evidence, interpretation and proficiency levels, feedback and follow-up actions, data and technology, as well as flexibility, culture, ethics, and student development. Collectively, these themes constitute the fundamental elements and requirements for the framework's development, as summarized in Table 2.

Table 2: Themes, Assessment Elements, and Implications for the Framework

Themes and Sub-themes	**Assessment Elements**	**Implications for the Framework**
Theme 1: Curriculum and Assessment Alignment Curriculum-assessment alignment; Teaching and Learning assessment	Learning outcomes, methods, evidence, and criteria	Ensures alignment between evidence and learning outcomes (KPM, 2019; KPM, 2025; Lim,

alignment		2025; Lei & Lei, 2026).
Theme 2: Learning Outcomes and Standards Achievement criteria, indicators, and achievement levels	Learning outcomes and standards	Serves as the basis for determining what is assessed (KPM, 2019, 2025; Lim, 2025; Lei & Lei, 2025).
Theme 3: Constructs and Competencies Knowledge, skills, and competence	Constructs and competencies	Determines the student capabilities being assessed (KPM, 2019; KPM 2025; Zhan et al., 2025; Lei & Lei, 2026).
Theme 4: Assessment Planning Systematic planning	Purpose, timing, methods, instruments, and criteria	Ensuring assessment is planned systematically (KPM, 2025; Lim, 2025).
Theme 5: Continuous and Formative Assessment Assessment throughout Teaching and Learning	Monitoring, assessment as learning, and adjustment	Supports monitoring and the improvement of learning (KPM, 2019, 2025; Jamil & Razali, 2025; Maskos et al., 2025).
Theme 6: Authentic Assessment and Meaningful Tasks	Authentic tasks, projects, problem-solving, and performance	Assesses the application of knowledge in meaningful contexts

Real-world context and application		(Ramlan et al., 2025; Zhan et al., 2025).
Theme 7: Diversity of Methods and Evidence Diverse sources of evidence	Observations, tasks, projects, portfolios, presentations, and digital evidence	Provides a comprehensive overview of achievement (KPM, 2019, 2025; Ahmad et al., 2025; Ramlan et al., 2025; Zhan et al., 2025).
Theme 8: Interpretation of Evidence and Mastery Levels Interpretation and professional judgment	Criteria, rubrics, mastery levels, and professional judgment	Supports judgments regarding student achievement (KPM, 2019, 2025; Lim, 2025; Mohamad Marzaini & Mat Yusoff, 2026; Lei & Lei, 2026).
Theme 9: Feedback and Follow-up Actions Feedback and intervention	Feedback, remediation, enrichment, and teaching and learning improvement	Supports follow-up actions for learning (KPM, 2019, 2025; Jamil & Razali, 2025; Subramaniam & Raghavan, 2025; Maskos et al., 2025).

Theme 10: Data and Technology Data management and digital technology	Data collection, analysis, storage, and digital reporting	Facilitates the management and use of assessment data (Ahmad et al., 2025).
Theme 11: Flexibility, Culture, Ethics, and Student Development Responsive and contextual assessment	Adaptation of methods, student context, ethics, and teacher readiness	Ensures assessment is responsive to student needs (KPM, 2025; Mohamad Marzaini et al., 2025; Zhan et al., 2025).

The literature analysis identified eleven key themes relevant to the development of the Neoteric Approach Curriculum Assessment Framework, namely curriculum–assessment alignment, learning outcomes and standards, constructs and competencies, assessment planning, continuous and formative assessment, authentic assessment and meaningful tasks, diverse assessment methods and evidence, evidence interpretation and mastery levels, feedback and follow-up actions, data and technology, and student development. The findings indicate that contemporary assessment should be planned, continuous, formative, authentic, and integrated with teaching and learning rather than focused solely on measuring achievement. Formative assessment should generate meaningful evidence that can be interpreted to determine students' mastery and inform feedback and subsequent actions (KPM, 2019, 2025; Maskos et al., 2025; Veugen et al., 2024). The literature also highlights the importance of teacher knowledge, assessment literacy, professional development, contextual flexibility, culture, and ethical considerations in supporting effective assessment implementation (Lim, 2025; Ng et al., 2023; Mohd Rosszi et al., 2024; Mat Yusoff et al., 2025; Lei & Lei, 2026). Technology further serves as an enabling element for the systematic management, analysis, and reporting of assessment data (Ahmad et al., 2025; Maskos et al., 2025).

Overall, the literature indicates that assessment should function as an integrated system connecting curriculum, learning outcomes, assessment planning, evidence generation, interpretation, mastery levels, feedback, and follow-up actions. Authentic assessment, meaningful tasks, and diverse evidence provide opportunities to capture students' knowledge and skills more comprehensively (Ramlan et al., 2025; Zhan et al., 2025), while data, technology, assessment literacy, and quality assurance support effective implementation. Elements such as the Topic Assessment Plan and dynamic assessment are therefore more appropriately positioned as outcomes of synthesis rather than independent literature themes, particularly when their conceptual basis emerges across different sources.

Similarly, flexibility, culture, ethics, professional development, and quality assurance can function as supporting elements that strengthen the implementation of core assessment components. These findings provide an important basis for further synthesis with document analysis, Focus Group Discussion (FGD), and retrospective study to refine and validate the components of the Neoteric Approach Curriculum Assessment Framework through triangulation.

Focus Group Discussion (FGD)

Focus Group Discussion (FGD) was conducted during the Needs Analysis Phase to complement findings from document and literature analyses by incorporating the perspectives of participants experienced in education, curriculum, teaching and learning, and assessment. The discussion focused on assessment requirements for the integration of two subjects, covering the mapping of learning outcomes, domains and constructs, evidence, proficiency levels, criteria, rubrics, implementation challenges, as well as feedback and follow-up actions.

Ten participants were involved, comprising three teachers (G1–G3), six researcher-lecturers (P1–P6), and one representative from an educational institution (N1). Thematic analysis yielded six themes and eleven sub-themes, which served as input for the synthesis and triangulation process alongside findings from document analysis, literature review, and the retrospective study. A summary of the FGD findings is presented in Table 3.

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Table 3: Themes, Sub-themes, and Descriptions of FGD Findings

Theme	Sub-theme	Description of Findings
Assessment Mapping	Learning outcomes	Learning outcomes serve as the basis for assessment.
	Domains and constructs	Domains and constructs are mapped based on learning outcomes.
Integrated Assessment	Integration of two subjects	Learning outcomes of two subjects are linked based on content and skills.
	Integrated tasks	A single task can generate evidence for more than one subject.
Evidence and Proficiency	Diversity of evidence	Evidence includes projects, presentations, observations, portfolios, and digital evidence.
	Proficiency levels	Proficiency is determined based on evidence and relevant criteria.
Criteria and Rubrics	Assessment criteria	Clear criteria are required to determine what is being assessed and the weighting.
	Rubrics and descriptors	Rubrics define proficiency levels according to tasks and constructs.
Implementation Challenges	Teacher challenges	Challenges involve mapping, criteria development, evidence, time, and documentation.
	Student challenges	Students face challenges in connectingthe knowledge and skills of two subjects.
Feedback and Follow-up	Feedback and follow-up	Assessment information is used for feedback and follow-up.

The findings indicate that assessment for an approach integrating two subjects requires clear mapping between learning outcomes, domains, constructs, evidence, and mastery levels. This requirement ensures that curriculum integration does not obscure the assessment focus of each subject and remains aligned with principles of learning-outcome-based assessment and student mastery progression (KPM, 2019, 2025; Lim, 2025; Lei & Lei, 2026). Integrated assessment via tasks or projects has the potential to generate evidence for more than one subject. However, clear criteria and rubrics are essential to ensure consistent interpretation of constructs, while diverse evidence supports authentic assessment and a more comprehensive picture of achievement (Zhan et al., 2025; Ramlan et al., 2025). Challenges faced by teachers and students highlight the need for the framework to consider feasibility andspecifically regarding time, documentation, evidence management, mapping, and the demands of integrated tasks. Therefore, the framework must provide guidelines that are systematic yet flexible to support teachers' professional judgment and students' capabilities (Lim, 2025; Mat Yusoff et al., 2025). Feedback and follow-up actions further demonstrate that assessment must link evidence to mastery levels and learning improvements. Overall, the FGD confirms the necessity of mapping 7 clusters and 16 domains, along with diverse evidence, criteria, rubrics, weightings, and feedback mechanisms, as key components in developing the Neoteric Approach Curriculum Assessment Framework (Ahmad et al., 2025; Jamil & Razali, 2025).

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Retrospective Study

A retrospective study was conducted to trace the development of the Neoteric Approach Curriculum Assessment Framework, based on discussion records, development notes, material reviews, presentations, stakeholder meetings, and refinement activities spanning the years 2024 to 2026. This analysis identifies the evolution of ideas, requirements, design decisions, and the framework refinement process. The retrospective records were analysed thematically and categorized into code groups, codes, and themes or sub-themes, as shown in Table 4.

Table 4: Retrospective Study Coding Framework

Code Group	Codes	Theme or Sub-theme
Development Basis	Development history, integrated curriculum, digital technology, and motivation theory	Conceptual Basis and Direction with Framework Development Basis
Conceptual Basis and Direction	Assessment theory, systems concepts, and curriculum integration	Conceptual Basis and Direction with Theoretical and Conceptual Foundation
Needs Analysis	Stakeholder needs, expectations, and document analysis	Needs Analysis and Mapping with Stakeholder Needs
	Content, curriculum, assessment, and topic mapping	Needs Analysis and Mapping with Curriculum and Assessment Mapping
Assessment Design	Integrative, visualistic, and holistic assessment	Integrated Assessment with Integrative and Holistic Design
	Topic Assessment Plan and content	Integrated Assessment with Topic Assessment Planning and Implementation
Gaps and Challenges	Assessment gaps, implementation issues, and challenges	Gaps and Challenges with Implementation Issues
	Stakeholder expectations, framework requirements, and system comprehensibility	Gaps and Challenges with Improvement Needs
Refinement and Validation	Topic Assessment Plan refinement, expert review, and content validity	Refinement and Validation with Expert Review
	Presentation, stakeholder agreement, and coordination	Refinement and Validation with Agreement and Coordination
Data Reporting	Reporting format, assessment data, parental understanding, and ministry requirements	Data Reporting and Usage with Assessment Reporting
Implementation and Coordination	Cluster meetings, Topic Assessment Plan, briefings, and development coordination	Implementation and Coordination with Implementer Readiness

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Findings indicate that the development of the Neoteric Approach Curriculum Assessment Framework proceeded in stages and iteratively through conceptual foundations, needs analysis, mapping, and assessment design. ...integrated. This development underscores the importance of the relationships between curriculum, learning outcomes, evidence, and follow-up actions in establishing an assessment system that supports learning (Sardareh, 2016; Morris et al., 2021; Lei & Lei, 2026).

The use of Topic Assessment Plan and the evolution of integrative and holistic assessment highlight the need for a mechanism capable of systematically linking objectives, domains, competencies, evidence, and levels of mastery. This approach aligns with authentic assessment, which emphasizes meaningful tasks, the application of knowledge, and alignment between tasks, evidence, and criteria (Villarroel et al., 2018; Mariappan & Osman, 2023; Zhan et al., 2025). At the same time, implementation gaps and challenges indicate that the framework must be practical and flexible, while taking into account the capabilities and contexts of those implementing it (Wan Omar, 2019; Mat Yusoff et al., 2025). The processes of expert review, presentation, and stakeholder coordination highlighted the importance of iterative refinement to ensure the suitability of the framework's components. Attention to reporting and data utilization further underscored the need for assessments to generate meaningful information that supports interpretation, feedback, and follow-up actions (Morris et al., 2021; Van Orman et al., 2025).

Overall, the retrospective findings reinforced the need for a framework that is curriculum-aligned, integrated, evidence-based, flexible, and implementable, while also supporting the synthesis of findings from document analysis, literature reviews, and Focus Group Discussions (FGDs).

Data Synthesis and Triangulation

Triangulation involved comparing findings from document analysis, literature reviews, FGDs, and the retrospective study to identify consistent and complementary elements. The synthesis revealed a need for an assessment system that is curriculum-aligned, integrated, evidence-based, flexible, and supportive of student development. The findings were subsequently categorized into Input, Process, Output, and Supporting Elements, resulting in 17 initial elements that serve as the foundation for the Neoteric Approach Curriculum Assessment Framework, as shown in Table 5.

Table 5: Final Synthesis of Neoteric Approach Curriculum Assessment Elements

No.	Category	Assessment Element
1.	Input	Curriculum-Assessment Alignment; Mapping of Learning Outcomes, Domains, and Constructs; Technology Integration
2.	Process	Topic Assessment Plan; Continuous and Formative Assessment; Authentic Assessment and Meaningful Tasks; Diversity of Methods and Evidence; Criteria, Rubrics, and Descriptors; Integrated Assessment; Interpretation of Evidence and Mastery Levels; Feedback and Follow-up Actions
3.	Output	Student Development and Mastery; Data-based Reporting
4.	Supporting Element	Assessment Literacy; Culture and Ethics; Quality Assurance; Flexibility and Responsiveness

A synthesis of these 17 elements reveals that the assessment elements do not operate in isolation; rather, they are interconnected, forming a system that integrates planning, implementation, evidence, interpretation, and reporting. The Input cluster establishes the foundation, the Process drives assessment implementation, and the Output reflects the assessment results. Meanwhile, the support elements span the entire system to ensure the feasibility, quality, and responsiveness of the assessment. Overall, the triangulation results serve as the empirical and conceptual basis for formulating the initial components of the Neoteric Approach

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Curriculum Assessment Framework. This structure is subsequently utilized during the framework development phase to define domains, constructs, elements, indicators, and proficiency levels.

Design Phase

The Design Phase is executed based on the synthesis and triangulation of findings from document analysis, literature reviews, Focus Group Discussions (FGDs), and retrospective studies. The identified elements are organized according to their functions and interrelationships within the assessment system to form a structure comprising Input, Process, Output, and Supporting Elements. Inputs encompass curriculum-assessment alignment, the mapping of learning outcomes, domains and constructs, and technology integration. Processes involve the Topic Assessment Plan, formative, authentic, and integrated assessments, diverse forms of evidence, criteria and rubrics, the interpretation of proficiency levels and feedback mechanisms. Outputs cover student development and proficiency, as well as data-based reporting. The design demonstrates that the Neoteric Approach Curriculum assessment is viewed as a system linking planning, implementation, evidence, interpretation, and reporting. Elements such as assessment literacy, culture and ethics, quality assurance, and flexibility and responsiveness serve as supporting elements that cut across the entire system. This structure forms the foundation for the operationalization and framework development in the subsequent phase.

Development Phase

The Development Phase translates the design structure into more operational assessment components. Development involves mechanisms for mapping learning outcomes to domains and constructs, selecting methods and evidence, and developing Topic Assessment Plan, scoring and rating systems, and the recording of student outcome domains. Diverse forms of evidence such as assignments, projects, observations, presentations, and portfolios which are considered based on their suitability regarding the objectives and constructs being assessed.

Topic Assessment Plan

The Topic Assessment Plan is developed as a mechanism to operationalize the framework at the topic level. The Topic Assessment Plan links clusters, topics, performance objectives, assessment activities, weightings, domains, competencies, proficiency levels, student outcome domains, and soft skills. This structure enables teachers to systematically plan what is to be assessed, the required evidence, and how student achievement is to be interpreted. The Topic Assessment Plan thus functions as an implementation instrument rather than a standalone framework component.

Scoring and Rating System

The scoring and rating system was developed to organize data from various assessment activities and evidence. This data is aggregated to provide an overview of achievement at the construct, domain, and overall levels. The system serves as a supplementary mechanism to existing assessments and does not replace the proficiency levels used in Classroom-Based Assessment.

Recording of Student Outcome Domains

The recording of student outcome domains is developed by mapping evidence to the relevant domains. This mechanism enables information regarding student progress, mastery, and strengths to be recorded systematically and continuously. The data serves as the basis for establishing student outcome profiles and supports feedback and follow-up actions.

Cross-Subject Integration

The framework enables integrated assessment implementation when there is alignment of learning outcomes, objectives, and constructs across subjects. A single activity or task can generate evidence for

more than one learning outcome, provided the connection meets assessment requirements. Examples of subject integration within the PTT serve as operational illustrations rather than fixed components of the framework.

Neoteric Approach Curriculum Assessment Framework

The outcome of the Development Phase is the Neoteric Approach Curriculum Assessment Framework, the study's primary product. This framework links curriculum alignment, Teaching and Learning, assessment planning, evidence collection and interpretation, scoring, recording, and the reporting of student progress. The Topic Assessment Plan functions as the operational mechanism at the topic level, while the scoring and rating system supports the organization of achievement data. Overall, the framework establishes an Input–Process–Output relationship supported by cross-system elements. This structure forms the foundation for an assessment implementation that is integrated, continuous, authentic, and student-development oriented.

Evaluation Phase

The Evaluation Phase is conducted to obtain expert assessment regarding the structure, components, and elements of the Neoteric Approach Curriculum Assessment Framework. Three experts with expertise in curriculum, assessment, and education participated in the evaluation using the developed instrument. The experts also provided comments and suggestions concerning the framework's clarity, suitability, and feasibility. Structured evaluation data were analyzed to determine validity and reliability, while open-ended comments were analyzed to identify aspects requiring refinement. The evaluation findings were subsequently used to retain, clarify, or improve framework components prior to finalizing the definitive version. Thus, the Evaluation Phase serves as a quality control process to ensure the framework possesses conceptual and practical suitability.

DISCUSSION

Content Validity of the Neoteric Approach Curriculum Assessment Framework

The content validity of the framework was determined using the Item-Level Content Validity Index (I-CVI) based on evaluations by three experts across five key aspects. All aspects achieved an I-CVI value of 1.00, as shown in Table 6.

Table 6: Content Validity of the Neoteric Approach Curriculum Assessment Framework

Assessment Aspect	I-CVI	Result
Assessment framework meets Neoteric Approach Curriculum requirements	1.00	Accepted
Assessment framework measures student assessment needs	1.00	Accepted
Assessment framework sufficient for developing an assessment system	1.00	Accepted
Assessment framework assists in monitoring student achievement	1.00	Accepted
Assessment framework assists in assessing holistic student outcomes	1.00	Accepted

An I-CVI value of 1.00 across all aspects indicates full expert consensus regarding the relevance of the framework's content. These findings confirm that the developed components align with Neoteric Approach Curriculum requirements and encompass aspects of assessment and holistic student outcomes. High content validity is crucial to ensure that the included constructs and elements genuinely represent the domains intended for assessment (Dzulkipli et al., 2025; Mohd Razali et al., 2025; Rahim & Mydin, 2026).

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Reliability of the Neoteric Approach Curriculum Assessment Framework

Expert evaluation regarding the acceptance of the framework shows that all five aspects achieved 100% agreement, with mean values ranging from 3.67 to 4.00 and an overall mean of 3.73, indicating a very high level. These findings are presented in Table 7.

Table 7: Expert Acceptance of the Neoteric Approach Curriculum Assessment Framework

Assessment Aspect	Mean	Agreement	Interpretation
Assessment framework meets Neoteric Approach Curriculum requirements	3.67	100%	Very High
Assessment framework measures student assessment needs	3.67	100%	Very High
Assessment framework sufficient for developing an assessment system	3.67	100%	Very High
Assessment framework assists in monitoring student achievement	3.67	100%	Very High
Assessment framework assists in assessing holistic student outcomes	3.67	100%	Very High
Overall Mean	**3.73**	**100%**	**Very High**

An overall mean of 3.73 and 100% agreement indicates a very high level of expert acceptance regarding the framework. These findings demonstrate that the framework is considered suitable, sufficient, and potentially applicable for supporting the Neoteric Approach Curriculum assessment system. Expert consensus further reinforces the viability of the framework's structure in linking curriculum requirements, assessment, achievement monitoring, and the reporting of student progress (Morris et al., 2021; Van Orman et al., 2025). In the context of framework development, expert consensus is also crucial to ensure that the proposed structure possesses conceptual and practical suitability before being finalized (Dzulkipli et al., 2025; Rahim & Mydin, 2026).

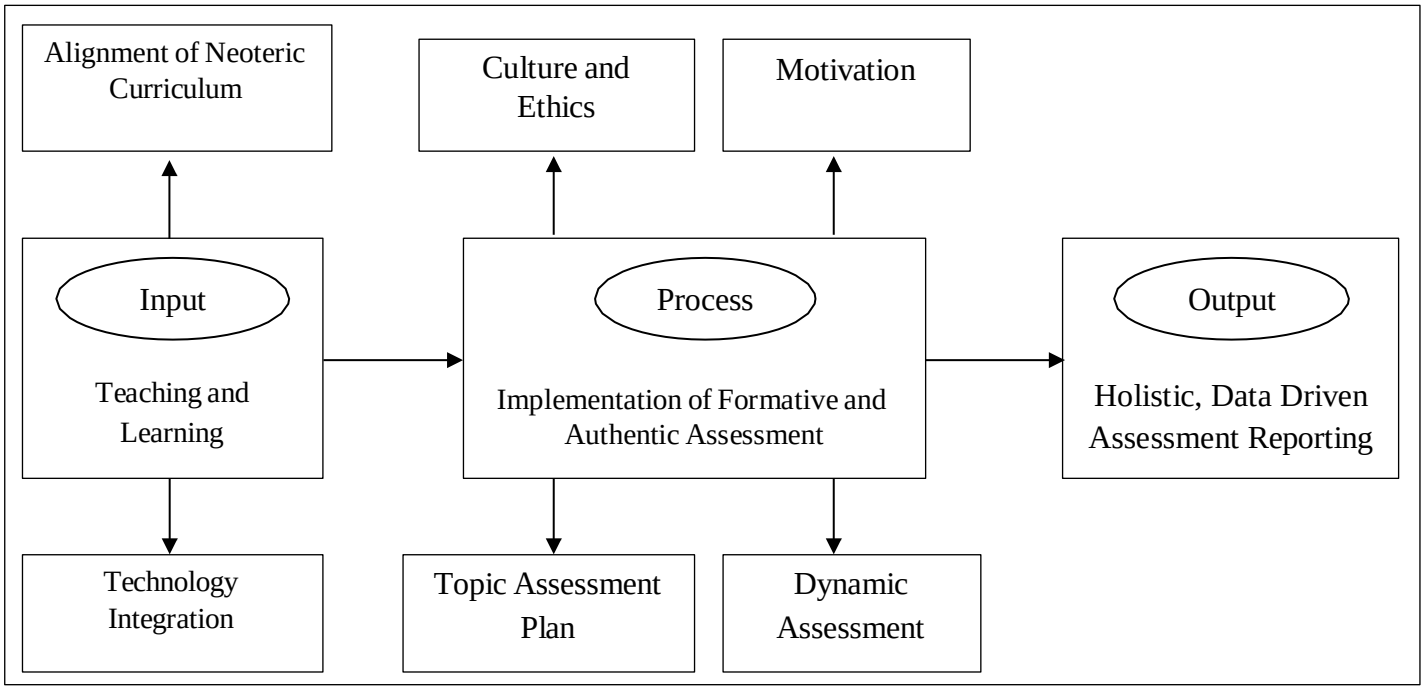
Refinement and Proposed Assessment Framework for the Neoteric Approach Curriculum

The refinement of the framework was carried out based on a combination of quantitative evaluation findings and qualitative insights from an expert panel. Key components were retained, while expert recommendations were utilized to clarify the function and positioning of each component. A major refinement involved placing Student Culture and Ethics and Motivation within the Process component, as both are directly linked to student engagement in learning and assessment. The Topic Assessment Plan was retained as the operational mechanism at the topic level.

The final framework is structured around an Input, Process, Output relationship. Input encompasses Neoteric Curriculum Alignment, Teaching and Learning, and Technology Integration; Process includes Student Culture and Ethics, Motivation, Topic Assessment Plan, Dynamic Assessment, as well as Formative and Authentic Assessment; while Output consists of Holistic Data-Based Assessment Reporting. Figure 1 illustrates the Proposed Assessment Framework for the Neoteric Approach Curriculum.

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Figure 1. Assessment Framework for Neoteric Approach Curriculum



This framework demonstrates the continuity between the curriculum, Teaching and Learning, assessment implementation, evidence generation, and reporting. The Topic Assessment Plan supports assessment planning at the topic level, while dynamic, formative, and authentic approaches facilitate the generation of diverse forms of evidence. Technology integration supports data management and reporting, aligning with Classroom Assessment principles that emphasize using assessment information to support student development (Mat Yusoff et al., 2025). Overall, the refined framework establishes a foundation for an assessment system that is integrated, systematic, and focused on student development.

CONCLUSION

Overall, this study developed the Neoteric Approach Curriculum Assessment Framework to address the need for an integrated, systematic, and evidance-based assessment system. The four research objectives were achieved through the identification of assessment elements aligned with the Neoteric Approach Curriculum Standard Document (DSKPN), the development of scoring and rating mechanism for recording student development, expert evaluation of the framework and the proposal of holistic, data-driven assessment reporting. Findings from document analysis, literature review, focus group discussions and retrospective study informed the framework's development, comprising three interconnected component: Input, Process and Output. Expert evaluation by three experts yielded 100% agreement across all five assessed aspects, with an overall mean score 0f 3.73, indicating a very high level of acceptance. Expert feedback further informed the refinement of component positioning and reinforced the importance of considering student's cognitive, affective and psychomotor domains.

The Topic Assessment Plan (PTT) serves as an operational mechanism for translating the framework into topic-level assessment planning, while holistic, data-driven reporting provides a proposed approach for documenting student achievement, mastery and development. The framework's contibution lies in integrating curriculum alignment, teaching and learning, assessment practice, evidence collection and reporting within a coherent structure tailored to the Neoteric Approach Curriculum. However, the findings represent preliminary evidence based on a limited expert panel and should not be intepreted as definitive evidance of psychometric reliability or effectiveness in practice.

Future research should compare framework systematically with existing assessment models, involve a larger and more diverse group experts, and evaluate its usability and consistency in authentic educational settings.

Such investigations would strengthen the empirical basis for applying the framework to support more comprehensive assessment of student achievement and holistic development.

REFERENCES

1. Ahmad, H., Hand, C. J., & Wujiadai, S. (2025). Formative classroom assessment in Malaysia: Primary vs secondary school comparisons. International Journal of Academic Research in Progressive Education and Development, 14(3), 980–993. https://doi.org/10.6007/IJARPED/v14-i3/26180
2. Arumugham, K. S. (2020). Kurikulum, pengajaran dan pentaksiran dari perspektif pelaksanaan Pentaksiran Bilik Darjah. Asian People Journal, 3(1), 1–10. https://doi.org/10.37231/apj.2020.3.1.175
3. Armstrong, T. (2018). Multiple intelligences in the classroom (4th ed.). ASCD.
4. Bowen, G. A. (2009). Document analysis as a qualitative research method. Qualitative Research Journal, 9(2), 27–40. https://doi.org/10.3316/QRJ0902027
5. Bransford, J. D., Brown, A. L., & Cocking, R. R. (Eds.). (2000). How people learn: Brain, mind, experience, and school. National Academy Press.
6. Brookhart, S. M. (2017). How to give effective feedback to your students (2nd ed.). ASCD.
7. Creswell, J. W., & Plano Clark, V. L. (2018). Designing and conducting mixed methods research (3rd ed.). SAGE.
8. Dzulkipli, M. R., Abu, R., & Shaifuddin, N. (2025). Competency need assessment for academic teaching librarians in higher learning institutions. Journal of Information and Knowledge Management, 15(1), 121–130. https://doi.org/10.24191/jikm.v15i1.5466
9. Drake, S. M., & Burns, R. C. (2004). Meeting standards through integrated curriculum. Association for Supervision and Curriculum Development.
10. European Parliament, & Council of the European Union. (2018). Council Recommendation of 22 May 2018 on key competences for lifelong learning. Official Journal of the European Union, C 189, 1–13.
11. Fàbregues, S., Sáinz, M., Romano, M. J., Escalante-Barrios, E. L., Younas, A., & López-Pérez, B.-S. (2023). Use of mixed methods research in intervention studies to increase young people's interest in STEM: A systematic methodological review. Frontiers in Psychology, 13, Article 956300. https://doi.org/10.3389/fpsyg.2022.956300
12. Gillies, R. M. (2016). Cooperative learning: Review of research and practice. Australian Journal of Teacher Education, 41(3), 39–54. https://doi.org/10.14221/ajte.2016v41n3.3
13. Hattie, J. (2009). Visible learning: A synthesis of over 800 meta-analyses relating to achievement. Routledge.
14. Jamil, H., & Razali, A. B. (2025). Formative assessment practices in Malay language speaking skills: Teachers' feedback and implications for secondary education in Malaysia. Journal of Public Administration and Governance, 15(3). https://doi.org/10.5296/jpag.v15i3.23475
15. Kementerian Pendidikan Malaysia. (2019). Panduan pelaksanaan Pentaksiran Bilik Darjah (Edisi ke-2). Bahagian Pembangunan Kurikulum.
16. Kementerian Pendidikan Malaysia. (2025a). Panduan pelaksanaan Pentaksiran Bilik Darjah. Bahagian Pembangunan Kurikulum.
17. Lei, W., & Lei, Z. (2026). Formative assessment literacy: A systematic review. Language Testing in Asia, 16, Article 7. https://doi.org/10.1186/s40468-025-00418-0
18. Lim, H. L. (2025). Implementation of classroom assessment in Malaysia. Asia Pacific Journal of Educators and Education, 4(3), 209–228. https://doi.org/10.21315/apjee2025.40.3.8
19. Mariappan, V., & Osman, K. (2023). A systematic literature review of authentic assessment in K-12 ESL/EFL education. Malaysian Journal of Social Sciences and Humanities, 8(5). https://doi.org/10.47405/mjssh.v8i5.2303
20. Maskos, K., Schulz, A., Oeksuez, S. S., & Rakoczy, K. (2025). Formative assessment in mathematics education: A systematic review. ZDM–Mathematics Education, 57, 679–693. https://doi.org/10.1007/s11858-025-01696-x
21. Mat Yusoff, S., Mohamad Marzaini, A. F., Zakaria, N., & Lijie, H. (2025). Exploring the implementation of classroom-based assessment in Malaysian secondary schools: Alignment with policy and teacher practices. Malaysian Online Journal of Educational Management, 13(1), 81–101.

https://doi.org/10.22452/mojem.vol13no1.5
22. Mohamad Marzaini, A. F., & Mat Yusoff, S. (2026). A qualitative examination of misalignments in ESL teachers' grading practices within classroom-based assessment in Malaysian schools. Discover Education, 5, Article 51. https://doi.org/10.1007/s44217-025-01009-0
23. Mohd Fadzil, H. (2024). Science teachers' perspective on the criteria of technologyenhanced classroom-based assessment (CBA) tool. Malaysian Online Journal of Educational Sciences, 12(1). https://doi.org/10.22452/mojes.vol12no1.5
24. Mohd Razali, M. N., Hamid, A. H. A., Alias, B. S., & Mansor, A. N. (2025). Validity and reliability: Instruments of teacher competency in the context of small schools in Peninsular Malaysia. Journal of Education and Learning (EduLearn), 19(1), 487–494. https://doi.org/10.11591/edulearn.v19i1.21574
25. Mohd Rosszi, N. S. A., Loo, S. J., Yahya, N. A. H., & Abdul Manaf, N. F. (2024). Tahap pengetahuan, kemahiran dan sikap guru Bahasa Melayu dalam melaksanakan Pentaksiran Bilik Darjah di sekolah rendah. Jurnal Pendidikan Bahasa Melayu, 14(1).
26. Morris, R., Perry, T., & Wardle, L. (2021). Formative assessment and feedback for learning in higher education: A systematic review. Review of Education, 9(3), Article e3292. https://doi.org/10.1002/rev3.3292
27. Poth, C. N., & Shannon-Baker, P. (2022). State of the methods: Leveraging design possibilities of qualitatively oriented mixed methods research. International Journal of Qualitative Methods, 21, 1–13. https://doi.org/10.1177/16094069221115302
28. Rahim, N. A., & Mydin, A. A. (2026). Kesahan kandungan instrumen kompetensi pengajaran guru abad ke-21: Penilaian kritis menggunakan Content Validity Index (CVI). EDUCATUM Journal of Social Sciences, 12(Special Issue 2), 180–191. https://doi.org/10.37134/ejoss.vol12.sp2.16.2026
29. Ramlan, N., Wan Mohammad, W. M. R., & Mahamod, Z. (2025). Pelaksanaan pentaksiran autentik kemahiran lisan Bahasa Melayu sekolah rendah berasaskan pendekatan tematik. e-Bangi: Journal of Social Sciences & Humanities, 22(1). https://doi.org/10.17576/ebangi.2025.2201.11
30. Sardareh, S. A. (2016). Formative feedback in a Malaysian primary school ESL context. Malaysian Online Journal of Educational Sciences, 4(1), 1–8.
31. Subramaniam, N. K., & Raghavan, S. (2025). Integration of an AI-powered feedback system for formative assessment at the Open University Malaysia. Journal of Learning for Development, 12(3), 636–644. https://doi.org/10.56059/jl4d.v12i3.1880
32. Van Orman, D. S. J., Gotch, C. M., & Carbonneau, K. J. (2025). Preparing teacher candidates to assess for learning: A systematic review. Review of Educational Research, 95(3). https://doi.org/10.3102/00346543241233015
33. Veugen, M. J., Gulikers, J. T. M., & den Brok, P. J. (2024). Secondary school teachers' use of formative assessment practice to create co-regulated learning. Journal of Formative Design in Learning, 8(1), 15. https://doi.org/10.1007/s41686-024-00089-9
34. Villarroel, V., Bloxham, S., Bruna, D., Bruna, C., & Herrera-Seda, C. (2018). Authentic assessment: Creating a blueprint for course design. Assessment & Evaluation in Higher Education, 43(5), 840–854. https://doi.org/10.1080/02602938.2017.1412396
35. Wan Omar, S. H. (2019). Pengetahuan, kemahiran, sikap dan masalah guru dalam melaksanakan pentaksiran bilik darjah Bahasa Melayu di sekolah rendah. Jurnal Pendidikan Bahasa Melayu, 9(1).
36. Yusoff, M. S. B. (2019). ABC of content validation and content validity index calculation. Education in Medicine Journal, 11(2), 49–54. https://doi.org/10.21315/eimj2019.11.2.6 Zamanzadeh, V., Ghahramanian, A., Rassouli, M., Abbaszadeh, A., Alavi-Majd, H., & Nikanfar, A.-R. (2015). Design and implementation content validity study: Development of an instrument for measuring patient-centered communication. Journal of Caring Sciences, 4(2), 165–178. https://doi.org/10.15171/jcs.2015.017
37. Zhan, Y., Boud, D., & Du, Z. (2025). Designing for authentic assessment: A scoping review. Higher Education. https://doi.org/10.1007/s10734-025-01588-9
38. Zhang, Y., Ge, X., & Mohd Rashid Bin Mohd Saad, M. (2024). Formative assessment in K12 English as a foreign language education: A systematic review. Heliyon, 10(10), Article e31367. https://doi.org/10.1016/j.heliyon.2024.e31367