The Development of E-Aishi Interactive Professional Quality Module: Strengthening Preschool Teacher Character through Design and Development Research

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DOI: https://doi.org/10.51584/IJRIAS.2025.100900011

Received: 09 Sep 2025; Accepted: 15 Sep 2025; Published: 10 October 2025

ABSTRACT

This study addresses the critical need to strengthen the professional quality and character of preschool teachers amidst rising challenges in early childhood education. Modern educators are increasingly facing stress, technological adaptation demands and evolving expectations from Generation Alpha learners and Generation Y parents. This research aims to develop the e-AISHI Interactive Professional Quality Module using a Design and Development Research (DDR) approach. The module is designed to be self-paced, technology-driven and reflective to support teachers' emotional, professional and pedagogical growth. Through three DDR phases as needs analysis, content validation and usability testing. This study validates the module's relevance and impact. Findings indicate a high consensus among experts and users regarding its usability and potential in addressing emotional burnout, professional efficacy and the holistic character development of preschool teachers.

Keywords: e-AISHI Module, Preschool Education, Teacher Professionalism, Character Building, Design and Development Research (DDR)

INTRODUCTION

Early childhood education (ECE) is widely recognized as a foundational stage for holistic human development. In this context, preschool teachers serve as not only facilitators of learning but also as influential role models who shape children's emotional, moral, and social behaviors. Given their unique position, the character and professional quality of these educators are central to the success of national curriculum objectives such as the *Kurikulum Standard Prasekolah Kebangsaan (KSPK)*, which emphasizes comprehensive development in physical, emotional, spiritual, intellectual, and social domains.

Despite this vital role, preschool teachers today are increasingly burdened by evolving demands. They face children of Generation Alpha which is tech-savvy, inquisitive and highly responsive to digital environments as well as parents from Generation Y, who are highly involved and demand balanced development beyond academics. Mardiana (2022) stated that Generation Y parents demonstrate a high level of awareness regarding the importance of emotional skills in their children's overall development. While academic achievement remains a significant factor, Generation Y parents tend to place greater emphasis on achieving a balance between academic performance and emotional growth. In addition, preschool teachers encounter learners with special needs, children from marginal backgrounds, and emotionally complex classroom dynamics. These realities pose significant threats to teachers' mental well-being, emotional stability, and teaching effectiveness.

Studies (Atiqah, 2020; Tugce, 2020) highlight that teacher character ranges from positive traits (caring, responsible, patient) to negative behaviors (harshness, yelling, emotional detachment), the latter of which has

ISSN No. 2454-6194 | DOI: 10.51584/IJRIAS |Volume X Issue IX September 2025

been linked to reduced student engagement and emotional damage. Coupled with inadequate professional development, technological pressure, and lack of systemic support, these challenges culminate in a risk of burnout, declining motivation, and a compromised quality of early education.

Therefore, this research focuses on developing an innovative solution in the form of the e-AISHI Interactive Professional Quality Module a digital, self-guided training tool aimed at empowering preschool teachers to build, maintain, and reflect on their character and professional competencies in line with the evolving demands of early childhood education.

METHODOLOGY

This study employs the Design and Development Research (DDR), a structured approach commonly used in educational research for the systematic creation and refinement of tools, models or modules. The DDR model was chosen for its comprehensive framework that aligns well with the study's objective of developing a character-based professional training module for preschool teachers. The research was carried out in three main phases: (1) Needs Analysis, (2) Design and Development and (3) Implementation and Evaluation**.**

Phase 1: Needs Analysis

The initial phase focused on understanding the real-world needs and challenges faced by preschool educators regarding character-based professional development. A total of 350 preschool teachers were surveyed using a structured questionnaire. The collected data were analyzed using SPSS version 27, aiming to identify key stressors, gaps in professional competence, and the overall demand for character-driven training programs. This phase was crucial in establishing a strong empirical foundation for the module design, ensuring that the final product would be both relevant and responsive to actual educational needs.

Phase 2: Design and Validation

Based on the findings from the needs analysis, a professional development module was designed. This design integrates core principles such as positive teacher character traits, emotional intelligence, and interactive learning strategies, reflecting the holistic nature of early childhood education. The module was developed using the Design & Development Research (DDR) approach as the framework of the study, supported by the Sidek Module Development Model through a mixed-methods approach combining both quantitative and qualitative methods. Furthermore, the Multimedia Elements Model by Limbong & Simarmata was used as a guide in developing each element within the Interactive Module for Professional Quality e-AISHI. To ensure the validity and content relevance of the module, a panel of 10 subject-matter experts was engaged. The Fuzzy Delphi Method (FDM) was employed to facilitate the consensus-building process among the experts. This method provides a structured mechanism to evaluate and improve the module components based on expert judgment, ensuring alignment with national Early Childhood Education (ECE) standards and pedagogical expectations.

Phase 3: Usability and Reliability Testing

In the final phase, the study assessed the module's usability and reliability to determine its readiness for practical implementation. Three educational experts evaluated the module's structural integrity and internal consistency using the Cohen's Kappa Index, which measures inter-rater reliability. Meanwhile, 21 preschool teachers were involved in a usability test using the Nominal Group Technique (NGT), a consensus-based approach that gathers qualitative feedback in a structured discussion format. This dual testing ensured that the module was not only theoretically sound but also user-friendly, practical, and adaptable to the real-world teaching environment.

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Table 3.1 Data Analysis Methods Table

RESEARCH QUESTION	DATA COLLECTION METHOD	INSTRUMENT	DATA ANALYSIS
1.6.1 Is there a need for the development of the Interactive Professional Quality Module in building preschool teachers' character?	Quantitative	Questionnaire via Google Form	SPSS Version 23
1.6.2 What is the design and development process of the Interactive Professional Quality Module in building preschool teachers' character?	-	-	-
1.6.3 Is there expert consensus on the elements (content) included in the Draft Module: Interactive Professional Quality Module?	Qualitative	Content Validation Form	Fuzzy Delphi
1.6.4 Is there expert validity on the Draft Module: Interactive Professional Quality Module based on expert reviews?	-	Content and Reliability Validation Form	Cohen's Kappa Index
1.6.5 Is the Draft Module: Interactive Professional Quality Module reliable based on expert reviews?	-	-	Cohen's Kappa Index
1.6.6 What is the usability evaluation of the Draft Module: Interactive Professional Quality Module?	Qualitative and Quantitative	Usability Evaluation Form (NGT)	Nominal Group Technique (NGT)

RESULTS AND DISCUSSION

Needs Analysis Findings

The needs analysis showed a significant demand for character-based professional development modules, with over 59.7% of teachers strongly agreeing on 11 critical items. The Cronbach's Alpha value of 0.946 indicates high internal consistency in measuring teacher challenges and training expectations.

Table 3.2: Need Analysis Findings

No.	Item	Mean	Frequency (Scale 5)	Percentage (Scale 5)	SD
1	The module is needed to build the character of preschool teachers.	4.5971	209	59.70%	0.49117
2	The module is needed to enhance the existing positive character of preschool teachers.	4.6943	243	69.40%	0.46137
3	The module is needed to improve the Self Domain of preschool teachers' character.	4.6029	211	60.30%	0.49001
4	The module is needed to improve the Professional Domain of preschool teachers' character.	4.6829	239	68.30%	0.46603

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5	The module is needed to improve the Social Domain of preschool teachers' character.	4.6714	235	67.10%	0.47037
6	The module is needed to help reduce preschool teachers anxiety about the inclusion of children with disabilities in the classroom.	4.6657	233	66.60%	0.47242
7	The module is needed to help reduce preschool teachers anxiety in dealing with children with disabilities in the classroom.	4.7	245	70.00%	0.45891
8	The module is needed to help reduce burnout among preschool teachers caused by managing children behavior.	4.6971	244	69.70%	0.46015
9	The module is needed to help reduce fear or anxiety about classroom management and teaching due to handling children behavior.	4.6714	235	67.10%	0.47037
10	The module is needed to help reduce fear or anxiety in communicating with parents, administrators, and other teachers.	4.76	266	76.00%	0.42769
11	The module is needed to help increase motivation and love for the preschool teaching profession.	4.6829	239	68.30%	0.46603

Validation Outcome

The FDM analysis yielded a threshold value (d) of 0.047 below the acceptable limit of 0.2 demonstrating high expert consensus regarding the module's content validity. This confirms the module's relevance to current classroom challenges, especially in areas of emotional regulation, communication skills and ethical teaching.

At this stage, the objective is to address Research Question 1.6.3: *Is there a consensus among experts regarding the elements (content) included in the Draft Module: Interactive Module for Professional Quality e-AISHI?*

To answer this research question, this section focuses on the key components of face and content validity of the Interactive Module for Professional Quality. This includes examining the characteristics of text, graphics, audio, video, and animation, as well as the core content of the e-AISHI Interactive Module. The process of module development began with the researcher designing an interactive module based on the theme of self-hypnosis to guide the entire content of the module. This approach aimed to help the researcher clearly understand and classify each dimension of the module's construction. The model underpinning this module development is the Multimedia Elements Model by Limbong and Simarmarta (2020). The elements emphasized in the module include text characteristics, graphic features, audio features, video components, and animation elements. The module content focuses on influencing self-perception through positive affirmations and suggestions, as embedded throughout the module.

To assess expert consensus regarding face and content validity, the researcher employed the Fuzzy Delphi Method (FDM) using the Content Validity Expert Form. According to Hansen (2000) and Cheng & Lin (2002) as cited in Mohd Ridhuan Mohd Jamil (2024), expert consensus is achieved if the calculated threshold value (d) is ≤ 0.2, indicating that the variation in expert opinion is within an acceptable range.

As a result of the FDM analysis, it was found that the experts reached a consensus, confirming that the module development aligns with the characteristics of an interactive module as outlined in the Multimedia Elements

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Model by Limbong and Simarmarta (2020) and that the content appropriately fulfills the intended objectives of the module development.

Table 4. 1 Elements of Text Features in the Interactive Module Based on FDM

No.	Element of Text Features in the Interactive Module	Tringulars Fuzzy Numbers Criteria		Defuzzification Process Criteria				Expert Consensus
		Threshold, (d) Value	Percentage of Expert Panel Consensus, %	M1	M2	M3	Skor Fuzzy (A)	
1.	The text used is able to convey information clearly.	0.049	100%	0.860	0.980	1.000	0.947	RECEIVED
2.	The text used consists of various types.	0.027	100%	0.880	0.990	1.000	0.957	RECEIVED
3.	The text used can attract users' attention.	0.027	100%	0.880	0.990	1.000	0.957	RECEIVED
4.	The text used emphasizes the intended meaning.	0.049	100%	0.860	0.980	1.000	0.947	RECEIVED
Nilai *Threshold*, *d* total item 0.153								
Nilai *Threshold*, *d* konstruk 0.038								
Cadangan Elemen Daripada Panel Pakar: Tiada.								

Table 4. 15 Elements of Grafic Features in the Interactive Module Based on FDM

Bil.	Element of Graphic Features in the Interactive Module	Tringulars Fuzzy Numbers Criteria		Defuzzification Process Criteria				Expert Consensus
		Threshold, (d)	Percentage of Expert Panel Consensus, %	M1	M2	M3	Skor Fuzzy (A)	
1.	The selection of graphics aligns with the concept of the module.	0.000	100%	0.900	1.000	1.000	0.967	RECEIVED
2.	The choice of graphics emphasizes the content being conveyed.	0.049	100%	0.860	0.980	1.000	0.947	RECEIVED
3.	The graphics used help deliver	0.049	100%	0.860	0.980	1.000	0.947	RECEIVED

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	information more effectively.							
4.	The graphics make the presentation activities more engaging.	0.000	100%	0.900	1.000	1.000	0.967	RECEIVED
5.	The graphics enhance the appeal of the module's information delivery.	0.000	100%	0.900	1.000	1.000	0.967	RECEIVED
Nilai *Threshold*, *d* total item 0.098								
Nilai *Threshold*, *d* konstruk 0.020								
Cadangan Elemen Daripada Panel Pakar: Tiada.								

Table 4. 2 Elements of Audio Features in the Interactive Module Based on FDM

No.	**Element of Audio Features in the Interactive Module**	**Tringulars Fuzzy Numbers Criteria**		**Defuzzification Process Criteria**				**Expert Consensus**
		***Threshold*, (d)**	**Percentage of Expert Panel Consensus, %**	**M1**	**M2**	**M3**	**Skor Fuzzy (A)**	
1.	The use of voice-over helps convey information more affectively.	0.027	100%	0.880	0.990	1.000	0.957	RECEIVED
2.	The use of background music supports the affective delivery of information.	0.049	100%	0.860	0.980	1.000	0.947	RECEIVED
3.	The use of voice can enhance the appeal of the presented content.	0.000	100%	0.900	1.000	1.000	0.967	RECEIVED
4.	The use of background music can increase the attractiveness of the presented content.	0.000	100%	0.900	1.000	1.000	0.967	RECEIVED
Nilai *Threshold*, *d* total item 0.076								
Nilai *Threshold*, *d* konstruk 0.019								

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Cadangan Elemen Daripada Panel Pakar: Tiada.

Table 4. 3 Elements of Video Features in the Interactive Module Based on FDM

No.	**Element of Video Features in the Interactive Module**	**Tringulars Fuzzy Numbers Criteria**		**Defuzzification Process Criteria**				**Expert Consensus**
		***Threshold*, (d)**	**Percentage of Expert Panel Consensus, %**	**M1**	**M2**	**M3**	**Skor Fuzzy (A)**	
1.	The videos displayed are engaging and more lifelike, reflecting the real world.	0.000	100%	0.900	1.000	1.000	0.967	RECEIVED
2.	The videos displayed are more dynamic in delivering information.	0.000	100%	0.900	1.000	1.000	0.967	RECEIVED
3.	The videos displayed are highly effective in conveying information.	0.000	100%	0.900	1.000	1.000	0.967	RECEIVED
Nilai *Threshold*, *d* total item 0.000								
Nilai *Threshold*, *d* konstruk 0.000								
Cadangan Elemen Daripada Panel Pakar: Tiada.								

Table 4. 4 Elements of Animation Features in the Interactive Module Based on FDM

No.	**Element of Animation Features in the Interactive Module**	**Tringulars Fuzzy Numbers Criteria**		**Defuzzification Process Criteria**				**Expert Consensus**
		***Threshold*, (d)**	**Percentage of Expert Panel Consensus, %**	**M1**	**M2**	**M3**	**Skor Fuzzy (A)**	
1.	Animation helps the module explain concepts in a way that is easy to understand.	0.027	100%	0.880	0.990	1.000	0.957	RECEIVED
2.	The animation used in the module presentation can attract users' interest in carrying out the activities included in	0.000	100%	0.900	1.000	1.000	0.967	RECEIVED

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	the module.							
Nilai *Threshold*, *d* total item 0.027								
Nilai *Threshold*, *d* konstruk 0.014								
Cadangan Elemen Daripada Panel Pakar: Tiada.								

Table 4.24 Content of Video 1 – ATTITUDE Based on FDM

No.	**Video 1 Content – ATTITUDE**	**Tringulars Fuzzy Numbers Criteria**		**Defuzzification Process Criteria**				**Expert Consensus**
		***Threshold*, (d)**	**Percentage of Expert Panel Consensus, %**	**M1**	**M2**	**M3**	**Skor Fuzzy (A)**	
1.	This activity builds a positive attitude through effective self-affirmation.	0.027	100%	0.880	0.990	1.000	0.957	RECEIVED
2.	The audio guidance in this activity successfully evokes deep emotional responses.	0.027	100%	0.880	0.990	1.000	0.957	RECEIVED
Nilai *Threshold*, *d* total item 0.055								
Nilai *Threshold*, *d* konstruk 0.027								
Cadangan Elemen Daripada Panel Pakar: Tiada.								

Table 4.24 Content of Video 2 – IN LOVE Based on FDM

No.	**Video 2 Content – IN LOVE**	**Tringulars Fuzzy Numbers Criteria**		**Defuzzification Process Criteria**				**Expert Consensus**
		***Threshold*, (d)**	**Percentage of Expert Panel Consensus, %**	**M1**	**M2**	**M3**	**Skor Fuzzy (A)**	
1.	This activity will be effective in nurturing a sense of love towards pupils if truly embraced.	0.000	100%	0.900	1.000	1.000	0.967	RECEIVED
2.	The task of writing a letter to a pupil helps teachers internalize the role of educating more deeply.	0.000	100%	0.900	1.000	1.000	0.967	RECEIVED

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Nilai *Threshold, d* total item 0.055
Nilai *Threshold, d* konstruk 0.027
Cadangan Elemen Daripada Panel Pakar: Tiada.

Table 4.24 Content of Video 3 – SECURE Based on FDM

No.	**Video 3 Content – SECURE**	**Tringulars Fuzzy Numbers Criteria**		**Defuzzification Process Criteria**				**Expert Consensus**
		***Threshold*, (d)**	**Percentage of Expert Panel Consensus, %**	**M1**	**M2**	**M3**	**Skor Fuzzy (A)**	
1.	This activity helps reduce stress and release negative emotions.	0.049	100%	0.860	0.980	1.000	0.947	RECEIVED
2.	The spiral visual technique and positive affirmations have a profound impact on participants.	0.064	100%	0.840	0.970	1.000	0.937	RECEIVED
Nilai *Threshold, d* total item 0.113								
Nilai *Threshold, d* konstruk 0.057								
Cadangan Elemen Daripada Panel Pakar: Tiada.								

Table 4.24 Content of Video 4 – HARMONY Based on FDM

No.	**Video 4 Content – *HARMONY***	**Tringulars Fuzzy Numbers Criteria**		**Defuzzification Process Criteria**				**Expert Consensus**
		***Threshold*, (d)**	**Percentage of Expert Panel Consensus, %**	**M1**	**M2**	**M3**	**Skor Fuzzy (A)**	
1.	This activity helps participants overcome fear and trauma symbolically.	0.027	100%	0.880	0.990	1.000	0.957	RECEIVED
2.	The ‘closed-eye drawing’ element is suitable for releasing repressed emotions.	0.000	100%	0.900	1.000	1.000	0.967	RECEIVED
Nilai *Threshold, d* total item 0.027								

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Nilai *Threshold, d* konstruk 0.014
Cadangan Elemen Daripada Panel Pakar: Tiada.

Table 4.24 Content of Video 5 – INTELLIGENT Based on FDM

No.	**Video 5 Content – *INTELLIGENT***	**Tringulars Fuzzy Numbers Criteria**		**Defuzzification Process Criteria**				**Expert Consensus**
		***Threshold*, (d)**	**Percentage of Expert Panel Consensus, %**	**M1**	**M2**	**M3**	**Skor Fuzzy (A)**	
1.	Regular practice can have a positive impact on its practitioners.	0.064	100%	0.840	0.970	1.000	0.937	RECEIVED
2.	The combination of physical movement and music can help improve focus and calmness.	0.027	100%	0.880	0.990	1.000	0.957	RECEIVED
Nilai *Threshold, d* total item 0.092								
Nilai *Threshold, d* konstruk 0.046								
Cadangan Elemen Daripada Panel Pakar: Tiada.								

Usability and Acceptance

Reliability analysis revealed a Cohen's Kappa score of 1.00, indicating perfect agreement among evaluators on the module's structural and pedagogical quality. During usability testing, 16 of 19 items reached 100% consensus among teachers, while the remaining three scored above 95%, suggesting strong approval of the module's practicality and user experience.

Expert Review Panel

table 3.3 Findings from the Content Validity and Reliability Questionnaire

No.	**Item Statement**	**Number of Experts**	**Number in Agreement**
1	The module content matches its target population.	3	3
2	The module content can be implemented effectively.	3	3
3	The module content is appropriate for the allocated time.	3	3
4	The module content can improve preschool teachers' concentration or focus.	3	3
5	The module content can influence changes in teachers' thinking.	3	3

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6	The music and voice presented are clear and easy to internalize.	3	3
7	The visuals displayed are clear, easy to understand, and replicate.	3	3
8	The visuals help me understand the steps of the activities.	3	3
9	I can understand the instructions for the activities from start to finish.	3	3
10	I feel calm when listening to the music included in the draft module.	3	3
11	The music is clear and emotionally engaging.	3	3
12	I can emotionally connect with the voice presented.	3	3
13	I feel that the activities are suitable and beneficial for personal practice.	3	3
14	I believe the activities are also suitable and beneficial for preschool children.	3	3
15	I am interested in learning and practicing every Brain Gym movement presented.	3	3
16	I feel the Brain Gym activities are suitable and beneficial for myself.	3	3
17	I believe the Brain Gym activities are also suitable and beneficial for preschool children.	3	3
18	I need to practice the Brain Gym exercises daily to master and benefit from them.	3	3
19	I enjoy the activities because of the cheerful music and the freedom to perform them spontaneously.	3	3

Table 3.2 presents the data findings from three experts who responded to the Content Validity and Usability Questionnaire. The data were analyzed and interpreted using the Cohen's Kappa Calculation Technique. The results indicate that all experts provided the same level of consensus. The analysis shows that all three experts agreed on all 19 items. This indicates that each item received 100% agreement.

Cohen's Kappa Formula:

$$K = \frac{Po - Pe}{1 - Pe}$$

Where:

- **Po** = Observed agreement between raters
- **Pe** = Expected agreement by chance
- **N** = Number of experts (3)

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- **Total Items** = 19

Calculation of Po (Observed Agreement):

Po = Number of items agreed upon by all raters

Total number of items

Po = 19

19

= 1

This indicates full agreement among the raters for all items evaluated.

Calculation of Pe (Expected Agreement):

There are two response categories:

- Agree (A)
- Disagree (D)

Assumed expert responses:

- Rater 1: 17 Agree, 2 Disagree
- Rater 2: 18 Agree, 1 Disagree
- Rater 3: 18 Agree, 1 Disagree

Proportions:

Category	**Rater 1**	**Rater 2**	**Rater 3**
Agree	17/19 = 0.89	18/19 = 0.95	18/19 = 0.95
Disagree	2/19 = 0.11	1/19 = 0.05	1/19 = 0.05

Expected agreement (Pe) is calculated as:

Agree

Rater 1: 17 = 0.89

19

Rater 2: 18 = 0.95

19

Rater 3: 18 = 0.95

19

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Disagree

Rater 1: 2 = 0.11

19

Rater 2: 1 = 0.05

19

Rater 3: 1 = 0.05

19

Final Calculation of Kappa (K):

$$K = \frac{Po - Pe}{1 - Pe}$$

$$= \frac{1 - 0.8003}{1 - 0.8003}$$

$$= \frac{0.1997}{0.1997}$$

$$= 1$$

Interpretation:

The computed Kappa value is 1, indicating perfect agreement. Based on the Kappa value interpretation scale (Cohen, 1960; Merriam, 2009; Mokhtar, 2011; Othman et al., 2018), this result reflects an excellent level of validity and reliability for the Draft Module: e-AISHI Interactive Professional Quality Module.

This data analysis directly answers Research Question 1.6.4:

Is there content validity and expert reliability for the Draft Module: e-AISHI Interactive Professional Quality Module based on expert evaluation?

Which is the module has been validated and confirmed reliable by all experts involved.

Meanwhile at the stage of usability analysis of the draft module, the researcher employed the Nominal Group Technique (NGT) to analyze the data. A total of 21 preschool teachers were selected and divided into three smaller groups, namely Group A, Group B, and Group C with seven participants in each group.

This method aligns with the argument by Millano and Ullius (1998), who emphasized that usability evaluation refers to the satisfaction and perception of users who are knowledgeable and skilled in using the developed model. This also confirms that the Usability Evaluation Phase is crucial in determining whether a designed and developed module is feasible and appropriate for achieving the intended objectives of the module.

The code representation for each participant in the study is shown in Table 3.3**.**

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Table 3.4 Usability Evaluation Data Based on Nominal Group Technique (NGT) Finding.

No.	Item	Expert Group Score			Total Score	%	Evaluation Status
		Group A (n=7)	**Group**. B (n=7)	**Group** C (n=7)			
1	The module content matches its target population.	7	7	7	21	100%	RECEIVED
2	The module content can be implemented effectively.	7	7	7	21	100%	RECEIVED
3	The module content is appropriate for the allocated time.	7	7	7	21	100%	RECEIVED
4	The module can enhance preschool teachers' concentration or focus.	7	7	7	21	100%	RECEIVED
5	The module can influence changes in preschool teachers' thinking.	7	6	7	20	95.2%	RECEIVED
6	The music and voice presented are clear and easy to internalize.	6	7	7	20	95.2%	RECEIVED
7	The visuals are clear, easy to understand, and replicate.	7	7	7	21	100%	RECEIVED
8	The visuals help me understand the steps of each activity.	7	7	7	21	100%	RECEIVED
9	I can understand the instructions from beginning to end.	7	7	7	21	100%	RECEIVED
10	I feel calm listening to the music in the Draft Module.	7	7	7	21	100%	RECEIVED
11	The music is clear and emotionally engaging.	7	6	7	20	95.2%	RECEIVED
12	I can emotionally connect with the voice presented.	6	7	7	20	95.2%	RECEIVED
13	The activities are suitable and beneficial for me personally.	7	7	7	21	100%	RECEIVED
14	The activities are also suitable and beneficial for preschool children.	7	7	7	21	100%	RECEIVED
15	I am interested in learning and practicing the Brain Gym movements presented.	7	7	7	21	100%	RECEIVED
16	The Brain Gym activities are suitable and beneficial for me personally.	7	7	7	21	100%	RECEIVED

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17	The Brain Gym activities are also suitable and beneficial for preschool children.	7	7	7	21	100%	RECEIVED
18	I need to perform Brain Gym exercises daily to master the movements and experience the benefits.	7	7	7	21	100%	RECEIVED
19	I enjoy the activities because of the cheerful music and the spontaneity involved.	7	7	7	21	100%	RECEIVED

Guide for Calculating Percentage of Agreement Using Nominal Group Technique (NGT)

To determine the level of consensus in the usability evaluation of the draft module, the Percentage of High Agreement is calculated using the following formula:

$$\text{High Agreement Percentage} = \frac{\text{Number of participants who gave a score of 7}}{\text{Total number of participants}} \times 100$$

Example: Item 11

- Number of participants who gave a score of **7** = 20
- Total number of participants = 21

So;

$$\frac{20}{21} \times 100$$

$$= 95.2\%$$

This indicates a high level of agreement among the participants for that item.

CONCLUSION

This research affirms the urgent need for systemic interventions to support preschool teachers in managing emotional burnout, adapting to technological demands and enhancing their professional identity. The e-AISHI Interactive Professional Quality Module addresses these needs by providing an accessible, reflective and pedagogically sound platform for self-paced development. It emphasizes the cultivation of empathy, resilience, communication and character. All crucial for navigating the dynamic landscape of early childhood education.

As a scalable and sustainable solution, the module offers significant implications for policy-makers, training institutions and educators themselves. Ongoing refinement and widespread implementation of such tools are essential to strengthen the ECE workforce and ensure that preschool teachers are not only competent educators but also inspiring role models who leave lasting impacts on future generations.

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ISSN No. 2454-6194 | DOI: 10.51584/IJRIAS |Volume X Issue IX September 2025

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