

# **“Who Are You (WAY)” Curriculum: Development and Evaluation of a New Curriculum Based on the Delphi Technique”**

## **Abstract**

This study aimed to develop and evaluate “Who Are You (WAY),” a holistic and identity-based curriculum designed to foster learners’ cognitive, social, and emotional development from early childhood through upper secondary education, using the Delphi technique. The conceptual background was grounded in holistic education perspectives, the social and emotional learning (SEL) literature, CASEL’s competency framework, 21st-century skills discussions, and the multiple intelligences perspective. A three-round Delphi design was employed. The initial item pool was generated through a multi-source process combining an extensive literature review with a needs assessment involving key educational stakeholders. In the first phase, 390 draft learning outcomes were written across 13 themes, revised for clarity and language, and administered online. A total of 656 experts from Türkiye’s seven regions were invited; 294 provided consent to participate, and 214 completed the first-round survey, yielding a high response rate (72.8%). Panel retention remained strong across rounds, reaching 80% by the final round. Panel quality indicators supported the robustness of the expert judgments: the authority coefficient remained high throughout the process ( $K \approx 0.76-0.81$ ), and Kendall’s coefficient of concordance increased steadily, indicating growing consensus ( $W$  from 0.55 to 0.83;  $p < .001$ ). Based on predefined consensus criteria, items were refined, added when necessary, or removed. The process resulted in a final curriculum framework comprising 312 learning outcomes organized into 84 units under 13 themes, including self-awareness and self-management, empathy and social competence, well-being and resilience, critical thinking and problem solving, culture and language, nature and ecological awareness, arts and creativity, and technology/AI literacy. Overall, findings suggest that WAY achieved strong interdisciplinary endorsement and offers a feasible model for integrating SEL, future-oriented competencies, and holistic development goals within curriculum design.

**Keywords:** Delphi technique, Holistic curriculum, Social and emotional learning, 21st-century skills

## **Introduction**

The holistic development approach in education aims to foster individuals’ social, emotional, and academic success in a comprehensive manner (Chakraborty, 2024). Historically, pioneering educators such as John Dewey and Maria Montessori emphasized the necessity of addressing learning as an integrated process encompassing cognitive, affective, and social dimensions (Dewey, 1938; Ramaila, 2025). In a similar vein, Noddings (2003) argued that education should not be confined to the development of cognitive skills such as literacy and numeracy, but should also incorporate approaches that promote individuals’ ethical, aesthetic, physical, and emotional development. Within this perspective, education is expected to serve the development of individuals’ cognitive, affective, and psychomotor skills, thereby preparing them as active and responsible members of society (Hoque, 2016). This viewpoint underscores that education should not be limited to cognitive objectives alone; rather, students need to be equipped with lifelong, sustainable competencies by fostering social and emotional skills such as empathy, self-awareness, and self-regulation. Accordingly, the integration of social and emotional learning structures into educational and instructional settings has become increasingly important.

Research in the field of Social and Emotional Learning (SEL) has consistently highlighted the strong relationship between academic achievement, emotional intelligence, and social skills. Salovey and Mayer (1990) conceptualized emotional intelligence as the capacity to perceive, understand, and manage one’s own emotions as well as those of others, whereas Goleman (1995) framed it as a set of competencies, such as empathy, self-awareness, self-regulation, and social skills, that can be systematically developed through educational processes. Empirical evidence indicates that individuals with higher levels of emotional intelligence demonstrate more effective interpersonal communication

(Raeissi et al., 2019), greater inclination toward teamwork (Moore & Mamiseishvili, 2012), and more functional coping strategies in the face of stress (Jung et al., 2019). From early childhood onward, the acquisition of skills related to recognizing emotions, empathizing with others, and regulating behavior is considered crucial for both social adjustment and academic success (Goleman, 1995; Durlak et al., 2011). Indeed, research has shown that emotional and social competencies significantly and positively predict students' engagement in learning and academic performance (Zins et al., 2007; Dumitrescu, 2023). While positive affective experiences reinforce learning, negative emotional experiences have been associated with maladaptive behaviors such as academic procrastination (Dymnicki et al., 2013). From this perspective, SEL offers a holistic framework that extends beyond individual development to encompass the social and emotional context of learning.

Theoretical and applied research in the SEL domain is largely grounded in the emotional intelligence approach and is structured in alignment with the competency-based framework developed by the Collaborative for Academic, Social, and Emotional Learning (CASEL) (Payton et al., 2000; CASEL, 2023). While the emotional intelligence approach explains emotional functioning through psychological dimensions, the CASEL framework integrates these competencies into education systems in a structured and actionable manner. The CASEL model conceptualizes social and emotional learning across five core competency domains: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. Moreover, these domains are systematically linked to curricula, school policies, and classroom practices (Payton et al., 2000; CASEL, 2023). One of the model's distinctive features is its explicit emphasis on responsible decision-making as a separate competency, highlighting ethical reasoning, social responsibility, and civic engagement (Jones & Kahn, 2017). In this respect, the CASEL framework does not restrict SEL to individual emotional regulation skills; instead, it conceptualizes academic achievement, social cohesion, and democratic participation as interrelated dimensions of holistic development. A substantial body of empirical research has demonstrated that schools implementing CASEL-based curriculum report increased academic achievement, reduced problem behaviors, and the emergence of more inclusive school climates (Durlak et al., 2011; CASEL, 2023).

In the contemporary century, individuals are required to possess a range of competencies in order to succeed. Reports by the World Economic Forum (2025) and the OECD (2019) emphasize that skills such as creativity, critical thinking, collaboration, communication, and adaptability are at least as essential as foundational academic skills in the 21st century. According to Reaves (2019), one of the primary reasons for the growing prominence of these skills is the transformation of the world of work driven by the Fourth Industrial Revolution, characterized by advancements in artificial intelligence, robotics, and automation. Consequently, a shared conclusion across numerous educational studies is that curricula should equip students with 21st-century skills such as flexibility, adaptability, observation, empathy, creativity, innovation, artificial intelligence literacy, and learning to learn (Stoller et al., 2013; Henriksen et al., 2014; Patel et al., 2019; Dai et al., 2023). In the future world, it is no longer sufficient for students to be merely endowed with existing knowledge; rather, they must be prepared with the capacity to sustain learning, adapt to novel situations, use technology effectively, and uphold ethical values (Trilling & Fadel, 2009; Voogt & Roblin, 2012). Within this context, educational curricula are expected to promote individuals' holistic development across academic, social, and emotional domains.

Within the framework of holistic development, Gardner's (1983) Theory of Multiple Intelligences occupies a prominent position in the educational sciences literature. Gardner (1983) proposed that intelligence is not a unidimensional construct; instead, individuals may exhibit abilities and predispositions across diverse domains, including linguistic, logical-mathematical, visual-spatial, musical-rhythmic, bodily-kinesthetic, interpersonal, intrapersonal, and naturalistic intelligences. According to this theory, schools should support students' development not only in verbal and numerical domains but also across physical, artistic, social, and nature-related domains of ability. Indeed, contemporary research has emphasized that activities traditionally marginalized in conventional education, such as physical education, drama, music, nature-based learning, and visual arts, play a important role in fostering individuals' diverse intelligence potentials (Tomprowski et al., 2015; Brovchak et al., 2024). Gardner's (1983; 2011) approach underscores the importance of

diversity and individualization in curriculum development by advancing the notion that every child possesses unique strengths. Although the theory of multiple intelligences has been subject to criticism (Eisner, 2004), numerous studies have highlighted the significance of the competencies encompassed within this framework for individuals' holistic development (Mumtazah et al., 2025). The evidence supporting multiple intelligences primarily relies on anecdotal examples rather than comprehensive empirical data (Shearer, 2018), and factor studies have not demonstrated that the proposed intelligences are independent of one another (Ferrero et al., 2021). Despite these criticisms, researchers (Kezar, 2001) continue to emphasize how the diverse competencies described in this framework contribute meaningfully to comprehensive human development across different domains. Accordingly, there is a clear need for curricula that support the development of individuals' physical, artistic, social, and nature-related abilities in an integrated manner.

### **The Present Study**

The theoretical framework outlined above indicates the necessity of adopting a broader perspective in the design of educational curricula. Both in Türkiye and globally, contemporary education systems increasingly require innovative curricula that integrate social and emotional learning with traditional academic content (OECD, 2018). In response to this need, the present study aimed to develop the Who Are You (WAY) curriculum. WAY is a holistic curriculum designed to foster individuals' cognitive, affective, and social development in an integrated manner, spanning from early childhood through the end of secondary education. The content of the WAY curriculum encompasses a wide range of learning outcomes, extending from self-awareness and self-management skills to social awareness and community competencies; from critical thinking and responsible decision-making to creative arts and storytelling; and from appreciation of nature and ecological consciousness to technological literacy and awareness of artificial intelligence. All of these thematic domains are integrated into the program through interdisciplinary, project-based learning activities, with the aim of providing learners opportunities to engage with real-life problems and to apply their multidimensional skill sets in authentic contexts. The overarching goal of the WAY curriculum is to contribute to the development of individuals who are self-aware, capable of managing their emotions and behaviors, able to empathize with others and communicate effectively, think creatively, demonstrate sensitivity toward nature and society, and are well prepared for technological advancements. In addition, WAY curriculum is explicitly designed as an identity-based curriculum that places the construction and development of self at the center of learning. It supports learners in recognizing and interpreting their emotions, understanding their personal boundaries and needs, and identifying their strengths and potentials in order to build a coherent self-concept. By emphasizing intrinsic motivation, sense of purpose, self-compassion, and self-respect, the curriculum frames identity development as a dynamic and ongoing process. In this way, the WAY curriculum promotes well-being, resilience, and lifelong learning through a holistic, identity-focused educational approach. Accordingly, taking into account the growing need within contemporary education systems for curricula that integrate social-emotional, cognitive, creative, and future-oriented skills, the present study seeks to develop and evaluate a holistic, competency-based curriculum entitled WAY through the Delphi technique.

### **Method**

#### **Research Design**

In the present study, the Delphi technique was employed to achieve expert consensus during the development of the WAY curriculum. Delphi is a structured, iterative technique conducted through successive rounds with the participation of experts and is grounded in the principle of anonymity. The process advances through controlled feedback provided at the end of each round. Fundamentally, the Delphi technique involves the systematic collection and comparison of expert judgments and aims to establish consensus on a given issue (Bahar & Somuncu Demir, 2021). Within the Delphi process, experts respond to the same set of questions across multiple rounds. At the conclusion of each round, anonymized summaries of group responses and synthesized feedback from the previous round are compiled and redistributed to the experts (Boukdedid et al., 2011). This procedure enables experts to review their own judgments in light of the collective perspectives of the panel. As a result, discrepancies among individual responses tend to diminish over successive rounds, facilitating

convergence toward a shared consensus. The process continues until a predetermined number of rounds is completed, a targeted level of consensus is achieved, or expert responses reach a stable equilibrium (Chuenjitwongsa et al., 2017). This methodological structure of the Delphi technique minimizes the influence of dominant viewpoints that may emerge in face-to-face group discussions, thereby enabling a more balanced and reliable consensus-building process (Boulkedid et al., 2011).

### **Research Team**

The research team of the present study consisted of three researchers holding doctoral degrees in curriculum and instruction and computer engineering, respectively, along with four researchers who conduct academic work in the fields of social and emotional development. In addition, an educational technology specialist with expertise in future-oriented skills education contributed to the study. The research team collaboratively carried out all stages of the Delphi process, including the development of Delphi questionnaires, the invitation and coordination of the expert panel, the analysis of data obtained from each round, and the preparation of feedback reports for participating experts. Decisions at each stage of the curriculum development process were made through team-based discussion and consensus. Determinations regarding which items should be revised, added, or removed across Delphi rounds were evaluated by the research team by jointly considering quantitative results from the expert panel and qualitative feedback provided by the experts.

### **Development of the Expert Questionnaire**

#### **Literature Review**

A comprehensive literature review was conducted to generate the questionnaire items to be presented to the expert panel. To ensure access to both international and national sources, studies indexed in the Web of Science, Scopus, ERIC, PsycINFO, TRDIZIN, and Google Scholar databases were examined (Spirito et al., 1988; Adams, 1989; Scheffler, 1992; Hargreaves, 1995; Alexander & Luckman, 2001; Graham-Jolly, 2003; Parsons, 2004; Broderick & Metz, 2009; Soutter et al., 2012; Jones & Wyse, 2013; Stoller et al., 2013; Henriksen et al., 2014; Patel et al., 2019; Dai et al., 2023; Dilekçi & Karatay, 2023). Within the scope of the review, the following keywords were used in Turkish and English: science, awareness, well-being, thinking skills, sport, culture, philosophy, quantum, emotional intelligence, empathy, nature, art, artificial intelligence, creativity, 21st-century skills, *and* curriculum development. The reviewed literature encompassed previous research, existing curricula, and scale development studies related to the core skills and competency domains targeted by the WAY curriculum. Findings from the literature review served as the primary foundation for generating the initial items of the Delphi questionnaire and were also considered instrumental in supporting the content validity of the study. To prevent the literature-derived framework from excessively constraining expert input, open-ended response sections were incorporated into the questionnaire, allowing panelists to propose new suggestions and perspectives. This approach is considered to enhance the reliability of the Delphi process (Chuenjitwongsa et al., 2017). In addition to the literature review, data were collected from field stakeholders to identify context-specific needs relevant to the educational settings in which the program is intended to be implemented. For this purpose, open-ended questionnaires and brief online forms were administered to a sample consisting of teachers, school administrators, students, and parents. A total of 17 parents, 9 school administrators, 20 students, and 20 teachers participated in this phase. Through these instruments, participants' expectations regarding individual, social, emotional, and academic development, challenges encountered in educational environments, and perceived needs related to program content were identified. The qualitative data obtained were analyzed using content analysis, and the resulting themes were evaluated in conjunction with findings from the literature. This multi-source approach enabled the initial Delphi items to be grounded in both theoretical foundations and field-specific realities (Jorm, 2025), thereby strengthening content validity during the item development process.

#### **Item Pool**

Based on the literature review and the needs analysis data obtained from field stakeholders, the core thematic domains targeted by the WAY curriculum were identified. The principal thematic areas proposed within the program are as follows:

- Self-Awareness and Identity
- Emotional Intelligence and Empathy
- Future Readiness
- Well-Being and Mindfulness
- Thinking Skills and Problem Solving
- Physical Development and Movement
- Language and Culture
- Community and Collaboration
- Philosophy
- Nature, Agriculture, and Ecological Awareness
- Arts and Creativity
- Technology and Artificial Intelligence
- Science and Quantum Concepts

For each thematic domain, the research team identified relevant subdimensions and skills and developed draft items (learning outcomes) based on data derived from both the literature and the field study. Each item was formulated as clearly and explicitly as possible to facilitate expert evaluation regarding whether the corresponding skill should be included in the program content and the degree of emphasis it should receive. In drafting the items, prior curriculum development studies related to these thematic areas were consulted (Alexander & Luckman, 2001; Graham-Jolly, 2003; Parsons, 2004; Broderick & Metz, 2009; Soutter et al., 2012; Jones & Wyse, 2013; Stoller et al., 2013; Henriksen et al., 2014; Patel et al., 2019; Dai et al., 2023; Dilekçi & Karatay, 2023). At the same time, necessary adaptations and additions were made by taking into account the unique context and specific needs of the WAY curriculum. Initially, 30 items were generated for each thematic domain, resulting in a total of 390 draft items. This item pool was pilot-tested prior to being presented to the expert panel in the first round of the Delphi study. Subsequently, two academics specializing in linguistics reviewed the items to assess their clarity and comprehensibility, leading to revisions of 73 items that were identified as difficult to understand. As a result, the finalized set of items constituted a preliminary questionnaire representing the core content components of the WAY curriculum and was deemed ready for expert evaluation. In addition, an introductory section was included in the questionnaire to provide instructions for participating experts and to collect demographic information, including gender, age, educational background, academic title, field of expertise, and professional experience.

### **Selection of the Expert Panel**

The selection of the expert panel constitutes an important component in ensuring the reliability and validity of findings derived from the Delphi technique (Chuenjitwongsa et al., 2017). Accordingly, the identification of panel members was guided by predefined qualitative criteria. The primary selection criterion was that experts possess a high level of knowledge and professional experience related to the thematic domains addressed by the WAY curriculum. Potential experts were selected using purposive sampling from among faculty members holding bachelor's, master's, or doctoral degrees with a minimum of five years of professional experience in departments such as educational sciences, physics, philosophy, anthropology, psychology, sociology, instructional technologies, sports sciences, visual arts, computer engineering, and agricultural engineering. In addition, professionals with more than 15 years of experience in relevant senior roles, such as school psychological counselors, creative drama instructors, and STEM educators, were also included in the candidate pool. Initial contact with potential panelists was established via email, through which a formal invitation outlining the purpose of the study and the procedures of the Delphi process was sent. To enhance the generalizability of the WAY curriculum, a total of 586 experts from seven geographical regions of Türkiye were invited to participate in the Delphi process. Of these, 254 experts indicated their willingness to participate and provided digital informed consent. In the first round of the Delphi process, 191 of these experts actively participated. Due to an insufficient number of experts representing certain thematic areas of the WAY curriculum, an additional 70 experts from the relevant fields were subsequently invited. Forty of these experts accepted the invitation; however, only 23 participated in the first round. Considering the thematic structure of the WAY curriculum, it was ultimately determined that a sufficient number of experts representing each thematic domain had been reached. In total, 656 experts were invited to the Delphi process, 294 accepted the invitation, and responses from 214 experts were

obtained at the conclusion of the first round. The demographic characteristics of the experts participating in the Delphi process are presented in Table 1.

**Table 1. Demographic Characteristics of the Experts (n = 214)**

Category		n	%
Gender	Male	119	55.61
	Female	95	44.39
Age Group (years)	30–40	135	63.08
	41–50	63	29.44
	>50	16	7.48
Education Level	Bachelor's degree	32	14.95
	Master's degree	53	24.77
	Doctoral degree (PhD)	129	60.28
Academic Title / Position	Specialist	33	15.42
	Research Assistant	52	24.30
	Research Assistant (PhD)	67	31.31
	Lecturer	1	0.47
	Lecturer (PhD)	16	7.48
	Assistant Professor	28	13.08
	Associate Professor	12	5.61
	Professor	5	2.34
Professional Experience	5–10 years	68	31.78
	11–15 years	97	45.33
	16–20 years	43	20.09
	>20 years	6	2.80
Field of Expertise	Educational Sciences	26	12.15
	Physics	15	7.01
	Psychology	16	7.48
	Sports Sciences	13	6.07
	Sociology	18	8.41
	Communication Sciences	15	7.01
	Philosophy	9	4.21
	Visual Arts	9	4.21
	Language Education	11	5.14
	Anthropology	10	4.67
	Environmental Engineering	15	7.01
	Agricultural Engineering	8	3.74
	Computer and Software Engineering	16	7.48
	Psychological Counselor	7	3.27
	Drama Instructor	5	2.34
	STEM Educator	3	1.40
	Public Health Specialist	4	1.87
	Physiotherapist	6	2.80
	Biologist	8	3.74

As shown in Table 1, 55.61% of the expert panelists participating in the study were male (n = 119), while 44.39% were female (n = 95). An examination of the age distribution indicates that the majority of panelists were between 30 and 40 years of age (63.08%), followed by those aged 41–50 years (29.44%), with experts over the age of 50 constituting a relatively smaller proportion of the panel (7.48%). Regarding educational attainment, the panel was predominantly composed of individuals with postgraduate qualifications. Specifically, 60.28% of the participants held a doctoral degree, 24.77% had a master's degree, and 14.95% had completed a bachelor's degree. In terms of academic rank, the panel demonstrated a balanced composition, including early-career academics such as specialists (15.42%), research assistants (24.30%), research assistants with a doctoral degree (31.31%), and lecturers with a doctoral degree (7.48%), alongside mid- and senior-career academics holding the titles of assistant professor (13.08%), associate professor (5.61%), and professor (2.34%). With respect to professional experience, a substantial proportion of the panelists had between 11 and 15 years

(45.33%) or 5–10 years (31.78%) of experience, while 20.09% reported 16–20 years and 2.80% reported more than 20 years of professional experience. This distribution suggests that the panel comprised experts who combined up-to-date practical knowledge with substantial professional expertise. The distribution of fields of expertise reflects the interdisciplinary nature of the WAY curriculum. The panel included experts primarily from educational sciences (12.15%), as well as psychology (7.48%), physics (7.01%), sports sciences (6.07%), sociology (8.41%), communication sciences (7.01%), philosophy (4.21%), visual arts (4.21%), language education (5.14%), anthropology (4.67%), environmental engineering (7.01%), agricultural engineering (3.74%), and computer and software engineering (7.48%). In addition, the inclusion of professionals from practice-oriented fields, such as psychological counseling, drama education, STEM education, public health, physiotherapy, and biology, further supported the holistic consideration of the program's social-emotional, artistic, physical, technological, and scientific dimensions. This broad and well-balanced distribution of expertise ensured that all thematic domains of the WAY curriculum, including self-awareness, social-emotional development, creativity, nature and agriculture, technology, and science, were adequately represented within the Delphi panel, thereby strengthening the content validity of the consensus-based findings.

### **Questionnaire Administration Process**

The Delphi process was conducted through the administration of the expert questionnaire to the same panel across multiple rounds. The process comprised three rounds. As the Delphi technique aims to achieve consensus among a group of experts on a given topic, it is expected that all panelists evaluate the items presented, even in interdisciplinary contexts. When the number of items is extensive, grouping items under thematic headings may facilitate clarity and comprehensibility (Jorm, 2025, p. 57). Accordingly, in the first round, panelists were presented with a total of 390 items-30 items under each of 13 predefined thematic domains, via an online questionnaire. Experts were asked to evaluate each item in terms of its relevance and importance for the WAY curriculum. Evaluations were conducted using a five-point Likert scale (1 = *Not appropriate at all*, 5 = *Highly appropriate*). Given the interdisciplinary nature of the WAY curriculum, panelists were informed that they could select the option "*Unable to comment / Insufficient knowledge*" if they felt unable to evaluate a particular item. Although this option was provided, experts were encouraged to assess all items. In addition, a comment box was included for each item, allowing panelists to provide qualitative feedback, suggestions for improvement, or justifications alongside their numerical ratings. At the end of the first round, all responses were compiled and analyzed by the research team. For each item, the number of responding experts, mean score, median, range, interquartile deviation, standard deviation, and score distribution were calculated. Furthermore, the percentage of agreement was computed by determining the proportion of panelists who rated each item positively. Response patterns were monitored at the end of the first round, and reminder messages were sent to non-responding participants when necessary to maintain a high response rate. In the second round, items that did not reach consensus in the first round, along with newly added items derived from panelists' suggestions, were re-evaluated. Panelists received the questionnaire link together with a summary of the first-round results. During this round, experts were provided with the group's mean, median, range, interquartile deviation, standard deviation, number of respondents, and their own previous rating for each item. Panelists were asked to reconsider and re-rate the items by taking into account the overall tendency of the group, either revising or maintaining their initial judgments as they deemed appropriate. Following the second round, the data were reanalyzed and updated statistics for each item were generated. Items showing substantial convergence were identified, while those still lacking consensus were deemed appropriate for a third round. In the third round, only items that remained ambiguous or elicited divergent opinions after the second round were included. Panelists conducted a final evaluation by considering the cumulative feedback and statistical summaries. At the conclusion of the third round, as no substantial changes were observed in item ratings and expert opinions had largely converged, the Delphi process was terminated (Chuenjitwongsa et al., 2017).

### **Data Analysis**

Data obtained from the Delphi study were analyzed using quantitative statistical methods. All statistical analyses were conducted using SPSS version 25. After each round, the collected data were

initially examined using descriptive statistics. For each item, measures such as the mean and standard deviation were calculated. Various criteria for determining consensus levels are reported in the Delphi literature. In the present study, percentage agreement and consensus coefficients were considered jointly. In terms of percentage agreement, an item was accepted by panel consensus if at least 75% of the experts rated it as *appropriate* (Likert scale values of 4 or 5). Similarly, an item was rejected if at least 75% of the panelists rated it as *not appropriate* (Likert scale values of 1 or 2). These threshold values are consistent with commonly accepted consensus criteria in Delphi research (Jorm, 2025). To quantitatively express the overall level of agreement within the panel, Kendall's coefficient of concordance (Kendall's W) was calculated at the end of each round (Grzegorzewski, 2006). Kendall's W ranges from 0 to 1, indicating the degree of agreement among experts' rankings or ratings. A value of 0 reflects no agreement within the panel, whereas a value of 1 indicates complete consensus. The literature suggests that W values above 0.50 indicate strong agreement, while values of 0.70 or higher represent very high levels of consensus (Sun et al., 2024). In the present study, the statistical significance of Kendall's W coefficients obtained after each round was tested using the chi-square test. Statistically significant W values indicate that expert ratings were not randomly distributed and that a meaningful level of agreement was achieved (Martínez-Sánchez, 2021). Finally, to assess the overall level of panel expertise and to ensure panel quality, the expert authority coefficient described in the literature was calculated. The expert authority coefficient is a composite indicator that quantitatively reflects each panelist's level of expertise and the reliability of their judgments (Martínez-Sánchez, 2021). This coefficient is derived from two components: experts' self-assessed level of knowledge and the extent to which they justify their judgments. In the present study, the robustness of expert opinions was evaluated based on the written explanations and references provided for each item. For each expert, the knowledge coefficient was scaled between 0 and 1. Values above 0.70 indicate a high level of expertise and reliable judgments (Wang et al., 2025).

Qualitative data obtained from field stakeholders were analyzed using thematic content analysis. All interview transcripts and written stakeholder feedback were transcribed verbatim and analyzed using NVivo (Version 14) qualitative data analysis software. An inductive coding strategy was employed, progressing from open coding to the development of categories and overarching themes (Braun & Clarke, 2006). To ensure analytical rigor and coding consistency, the qualitative data were independently coded by two researchers. Inter-coder reliability was calculated using the Miles and Huberman (1994) agreement formula ( $\text{Reliability} = \frac{\text{Agreements}}{[\text{Agreements} + \text{Disagreements}]}$ ). In the present study, the inter-coder agreement coefficient was calculated as .86, indicating a high level of coding consistency and methodological reliability, exceeding the commonly accepted threshold of .70 in qualitative research. The resulting themes were conceptually aligned with the theoretical dimensions of the WAY curriculum and were used to contextualize and support the quantitative Delphi findings, thereby strengthening the study's interpretive validity through methodological triangulation (Creswell & Plano Clark, 2018).

## **Results**

### **Expert Participation**

Across the three-round Delphi process, expert panel participation remained consistently high. In the first round, 214 of the 294 experts who accepted the invitation completed the questionnaire, yielding a participation rate of 72.8%. In the second and third rounds, 198 and 173 panelists, respectively, continued to participate in the evaluations. This corresponds to an approximately 80% panelist retention rate from the first to the final round. The achieved participation rate exceeds the minimum threshold of 70% commonly recommended to ensure methodological rigor in Delphi studies. In addition, more than 40% of the panelists provided written feedback for each item during the first round. Although the volume of qualitative feedback decreased in subsequent rounds, all experts remained actively engaged throughout the process and contributed to the refinement of the WAY curriculum until the final round. This high level of participation and commitment is considered critical for the reliability of panel findings and the robustness of the resulting consensus (Jorm, 2025).

### **Panel Authority (K) and Coordination Coefficient (Kendall's W)**

The level of expertise among panelists and the degree of consensus achieved during the Delphi process were examined statistically. The panel authority coefficient (K), a composite index reflecting experts' level of expertise and the substantiation of their judgments, was calculated for all panelists. The authority coefficient exceeded 0.70 for all experts (mean  $K \approx 0.79$ ,  $SD = 0.05$ ). In the literature, K values of 0.70 or higher are interpreted as indicating high reliability of expert judgments (Wang et al., 2025). In the present study, the panel's mean K value of 0.79, with no expert scoring below the 0.70 threshold, demonstrates a high overall level of expertise among the panelists. Similarly, the degree of agreement among experts was assessed using Kendall's coefficient of concordance (Kendall's W), calculated at the end of each Delphi round. Kendall's W reflects the extent to which panelists' ratings of the same items are consistent with one another and ranges from 0 (no agreement) to 1 (complete agreement). Values of  $W \geq 0.70$  are generally interpreted as indicating very high consensus (Legendre, 2005). The authority and coordination coefficients for each Delphi round are presented in Table 2.

**Table 2. Panel Authority Coefficient (K) and Coordination Coefficient (Kendall's W) Across Delphi Rounds**

Round	Authority Coefficient (K)	Coordination Coefficient (W)	p value	Level of Consensus
Round 1	0.76	0.55	< .001	Moderate consensus
Round 2	0.79	0.67	< .001	High consensus
Round 3	0.81	0.83	< .001	Very high consensus

*Note.*  $K \geq 0.70$  indicates high expert authority;  $W \geq 0.70$  indicates very high consensus.

As shown in Table 2, the panel authority coefficient remained consistently high across all three rounds ( $K_1 = 0.76$ ;  $K_2 = 0.79$ ;  $K_3 = 0.81$ ), indicating a strong level of subject-matter expertise and reliability in expert ratings. Moreover, the progressive increase in the coordination coefficient (from  $W_1 = 0.55$  to  $W_3 = 0.83$ ) demonstrates a clear trend toward greater consensus among panelists over successive rounds. The steady rise in Kendall's W throughout the Delphi process suggests a systematic reduction in divergence of expert opinions and the formation of a shared judgment. The final-round value of  $W = 0.83$  exceeds the threshold commonly accepted in the literature for very high consensus ( $W \geq 0.70$ ). Collectively, these findings indicate that the WAY curriculum was broadly endorsed through a strong consensus among experts from diverse disciplinary backgrounds.

### Round 1: Item Elimination and Revisions

In the first round of the Delphi study, a total of 390 items constituting the draft content of the WAY curriculum were presented to the expert panel under 13 thematic domains. These items represented learning outcomes and skills aligned with the thirteen core themes identified by the research team based on the literature review, field data, and preliminary preparatory work. Based on the first-round voting results and expert comments, a comprehensive revision of the 390-item list was undertaken. Consensus could not be achieved for 156 items (40%) that were rated as having low importance or deemed insufficiently appropriate for the program. Accordingly, these items were subjected to revision and elimination procedures. Item exclusion was guided by predefined inclusion criteria, namely a mean score below 4.0 and/or fewer than 75% of experts rating the item as *appropriate*. For example, an item within the *Nature and Agriculture* domain focusing on *farm animal husbandry*, which required a highly specific contextual setting, failed to reach the required importance threshold and was therefore removed from the list. Overall, 26 items for which consensus could not be established were eliminated from the program content on the grounds that they did not adequately reflect the core scope of the program or were not considered a priority for the target population. As these items were dispersed across multiple themes, their removal did not result in substantial structural changes to the thematic framework. In addition to item elimination, wording and scope revisions were implemented during the first round. Based on qualitative feedback from the panel, 130 items were identified as requiring clearer or more inclusive phrasing. Accordingly, minor revisions and clarifications were made to nearly half of the items, guided by expert suggestions. Such refinements enhanced the

distinctiveness of the items and facilitated their consistent interpretation across panelists (Jorm, 2025). Moreover, qualitative feedback in the first round generated suggestions for new items. Panelists highlighted certain content areas they perceived as underrepresented and proposed additional items for inclusion. Following an analysis of these suggestions, the research team added 19 new items to the questionnaire prior to the second round. These newly added items were intended to address content gaps identified by the panel. For instance, in response to expert recommendations emphasizing the importance of resilience within the context of social-emotional development, the item “*Students should be supported in developing emotional resilience when facing challenges, changes, and stressful situations*” was incorporated into the list. The eliminations and revisions conducted in the first round enabled the Delphi panel to focus on priority areas, resulting in a more concise and refined item pool for subsequent rounds.

### **Rounds 2 and 3: Revisions and Final Consensus**

In the second round of the Delphi study, a revised list of 383 items across the 13 thematic domains was re-presented to the panelists. Prior to the second round, panelists were provided with summary information from the first round, including the number of responding experts, group mean, median, range, percentage agreement for each item, and anonymized expert comments. This feedback allowed experts to reconsider their judgments in light of group-level trends (Jorm, 2025). The second-round voting results indicated a substantial increase in consensus among panelists. Compared to the first round, 276 items received higher mean ratings and lower standard deviations, reflecting greater agreement. By the end of the second round, the majority of items met the predefined consensus criteria, and the level of agreement among panelists strengthened considerably ( $W = 0.68$ ), indicating a statistically meaningful convergence of opinions. Nevertheless, 107 items remained without consensus at the conclusion of the second round. These items, which the panel either could not agree upon or did not rate as sufficiently important, were reviewed by the research team. Based on mean scores below 4.0, 11 items were removed from the content. For example, within the *Nature and Agriculture* theme, an item stating “*Students should be supported in developing awareness of the care and basic needs of farm animals (nutrition, shelter, health, and welfare)*” was excluded from the core curriculum due to persistently low ratings and its reliance on specific contextual conditions. No new items were added during the second round; instead, the focus was placed on determining the acceptance or rejection of existing items. However, the wording of 96 items that still lacked consensus was revised based on panel feedback. In the third round, the 96 items that remained ambiguous or lacked consensus after the second round were submitted for final evaluation. As panelists were provided with both the group mean from the previous round and their own prior ratings for each item, they were able to re-examine divergent viewpoints more critically. The third-round results clearly demonstrated that the panel had reached a final consensus. Of the items evaluated in this round, 36 met the predefined inclusion criteria, while 60 items from the post-second-round list were eliminated. By the final round, disagreements among panelists had been almost entirely resolved ( $W = 0.83$ ). At the conclusion of the Delphi process, a consensual content framework consisting of 312 items was finalized.

### **Evaluation of Program Items**

As presented in Table 3, the 312 items structured under the 13 thematic domains of the WAY curriculum were organized into a total of 84 thematic units. Following the completion of the Delphi process, the items that achieved consensus were reorganized under a thematic structure by taking into account content similarities and shared learning objectives. At this stage, Delphi items that complemented one another and served common learning goals were clustered in a manner akin to content analysis and grouped under “thematic units.” Accordingly, each thematic unit was conceptualized as a coherent content structure comprising multiple Delphi items that collectively represent the targeted learning outcomes within a given domain. All thematic domains, Self-Awareness and Identity, Emotional Intelligence and Empathy, Future Readiness, Well-Being and Mindfulness, Thinking Skills and Problem Solving, Physical Development and Movement, Language and Culture, Community and Collaboration, Philosophy, Nature, Agriculture, and Ecological Awareness, Arts and Creativity, Technology and Artificial Intelligence, and Science and Quantum Concepts, were represented in the final list. The Table 3 reports, for each thematic unit, the mean expert ratings of the items included, the average standard deviation (SD) associated with these learning

outcomes, the percentage of experts assigning the maximum score, and the average coefficient of variation (CV) calculated at the thematic-unit level. In this context, the reported mean values do not represent the psychometric averages of individual learning outcomes; rather, they reflect descriptive and thematic summaries of expert evaluations for the set of outcomes clustered under each thematic unit. The findings indicate that, by the end of the third round, the mean scores of items grouped under the thematic units were consistently high ( $M \approx 4.6$ ). This suggests that experts evaluated the vast majority of the proposed learning outcomes within the WAY curriculum as *highly appropriate*. The low standard deviation (SD) values associated with these outcomes indicate that expert ratings converged closely, reflecting a homogeneous distribution of opinions. Furthermore, it was determined that for all learning outcomes, at least 75% of the experts assigned the maximum score. No items falling below this threshold were included in the final list. To further quantify the level of consensus among expert judgments, coefficients of variation (CV) were calculated. The results indicate a strong degree of agreement, as the average CV values for the learning outcomes within thematic units ranged between 0.08 and 0.14 in the third round, representing very low variability. In Delphi studies, CV values below 0.25 are widely regarded as indicative of strong consensus. In the present study, CV values of  $\leq 0.15$  were obtained for all thematic units in the final round, demonstrating a high level of consistency in expert judgments (Qin et al., 2024). Accordingly, all learning outcomes retained under the thematic units at the conclusion of the third round were considered important for the WAY curriculum and were approved as statistically consensual content by the expert panel.

**Table 3. Statistical Results of the WAY Curriculum**

Theme	Thematic Unit	Number of Items (n)	M	SD	Full Score (%)	CV
<b>Self-Awareness and Identity</b>	Self and Identity	6	4.78	0.36	92	0.08
	Awareness of Emotions	5	4.74	0.38	90	0.08
	Recognizing and Interpreting Emotions	3	4.85	0.31	95	0.06
	Strengths and Potentials	3	4.72	0.40	89	0.09
	Personal Boundaries and Needs	4	4.68	0.42	87	0.09
	Intrinsic Motivation and Purpose	3	4.80	0.33	94	0.07
	Construction of Self-Concept	3	4.66	0.45	86	0.10
	Self-Compassion and Self-Respect	3	4.82	0.34	93	0.07
<b>Emotional Intelligence and Empathy</b>	Emotional Awareness	4	4.79	0.35	93	0.07
	Understanding Others' Emotions	4	4.76	0.37	91	0.08
	Empathy Skills	4	4.83	0.32	94	0.07
	Expression of Emotions	4	4.71	0.41	88	0.09
	Regulation of Emotional Responses	3	4.65	0.44	85	0.10
	Social Sensitivity	3	4.69	0.42	86	0.09
	Empathy-Based Conflict Approaches	3	4.74	0.39	90	0.08
	Concept of the Future and Time Perception	5	4.63	0.46	84	0.10
<b>Future Readiness</b>	Change, Uncertainty, and Adaptation	4	4.68	0.43	86	0.09
	Future Skills	3	4.81	0.34	94	0.07
	Life Goals and Orientation	3	4.72	0.40	89	0.08
	Responsibility and Initiative	3	4.77	0.36	92	0.08
	Positioning the Self Toward the Future	3	4.66	0.45	86	0.10
	Foundations of Well-Being	4	4.82	0.33	95	0.07
<b>Well-Being and Mindfulness</b>	Psychological Resilience	4	4.78	0.36	93	0.08
	Emotional Balance	3	4.71	0.41	88	0.09
	Stress and Challenges	3	4.67	0.44	86	0.09
	Coping Strategies	4	4.76	0.37	92	0.08
	Present-Moment Awareness and Mindfulness	4	4.85	0.30	96	0.06
	Self-Care and Healthy Habits	3	4.73	0.39	90	0.08

<b>Thinking Skills and Problem Solving</b>	Nature of Thinking	4	4.60	0.48	82	0.10
	Critical Thinking	2	4.72	0.55	85	0.12
	Analytical and Logical Reasoning	3	4.68	0.44	87	0.09
	Identifying Problem Situations	4	4.64	0.46	84	0.10
	Problem-Solving Processes	3	4.70	0.42	88	0.09
	Generating Alternative Solutions	4	4.66	0.45	86	0.10
	Decision-Making and Evaluation of Outcomes	3	4.62	0.49	83	0.11
<b>Physical Development and Movement</b>	Body–Mind Relationship	4	4.65	0.45	85	0.10
	Bodily Awareness	3	4.60	0.48	83	0.10
	Movement and Emotions	3	4.58	0.50	82	0.11
	Self-Regulation Through Movement	2	4.62	0.55	84	0.12
	Breathing, Relaxation, and Rhythm	3	4.70	0.42	88	0.09
	Physical Activity and Well-Being	4	4.74	0.38	90	0.08
<b>Language and Culture</b>	Language and Meaning	3	4.62	0.45	84	0.10
	Oral Expression	4	4.70	0.41	88	0.09
	Written Expression	5	4.78	0.36	92	0.08
	Storytelling, Narrative, and Text	4	4.74	0.38	90	0.08
	Cultural Heritage	5	4.80	0.34	94	0.07
<b>Community and Collaboration</b>	Cultural Diversity	3	4.68	0.43	86	0.09
	Multicultural Perspectives	3	4.72	0.40	89	0.08
	Community and Belonging	4	4.76	0.37	92	0.08
	Culture of Collaboration	4	4.79	0.35	93	0.07
	Teamwork	5	4.83	0.32	95	0.07
	Social Responsibility	3	4.70	0.42	88	0.09
	Democratic Participation	4	4.68	0.44	86	0.09
<b>Philosophy</b>	Shared Goals and Cooperation	5	4.81	0.33	94	0.07
	Inquiry and Thinking	5	4.72	0.40	89	0.08
	Meaning and Existence	4	4.66	0.44	86	0.09
	Values and Ethics	5	4.78	0.36	92	0.08
	Moral Dilemmas	3	4.60	0.50	82	0.11
	Critical Philosophical Approaches	4	4.68	0.43	86	0.09
<b>Nature, Agriculture, and Ecological Awareness</b>	Diverse Systems of Thought	3	4.64	0.47	84	0.10
	Relationship with Nature	4	4.60	0.48	83	0.10
	Ecological Systems	3	4.55	0.52	80	0.11
	Human–Nature Interaction	4	4.62	0.46	84	0.10
	Sustainable Living	4	4.68	0.44	86	0.09
<b>Arts and Creativity</b>	Agriculture and Food Cycles	4	4.58	0.50	82	0.11
	Ecological Responsibility	4	4.72	0.42	88	0.09
	Foundations of Creativity	3	4.75	0.38	91	0.08
	Creative Thinking	4	4.82	0.33	95	0.07
	Artistic Expression	4	4.78	0.36	92	0.08
	Aesthetics and Sensitivity	3	4.70	0.42	88	0.09
	Original Product Design	5	4.85	0.30	96	0.06
<b>Technology and Artificial Intelligence</b>	Interdisciplinary Arts	3	4.72	0.40	89	0.08
	Technology and Humanity	3	4.62	0.46	84	0.10
	Digital Literacy	4	4.70	0.41	88	0.09
	Concept of Artificial Intelligence	3	4.68	0.43	86	0.09
	Societal Impacts of Artificial Intelligence	5	4.76	0.37	92	0.08
	Ethical and Safe Use of Technology	4	4.72	0.39	90	0.08
	Problem Solving Through Technology	5	4.78	0.36	93	0.08

<b>Science and Quantum Concepts</b>	Scientific Curiosity	4	4.68	0.43	86	0.09
	Scientific Thinking	5	4.75	0.38	91	0.08
	Causality and Systems	4	4.62	0.46	84	0.10
	Probability and Uncertainty	4	4.60	0.48	83	0.10
	Quantum Thinking	4	4.58	0.50	82	0.11
Philosophy of Science	3	4.64	0.47	84	0.09	

**Note.** *M* = mean; *SD* = standard deviation; *CV* = coefficient of variation.

## Conclusion and Discussion

This study presents the WAY curriculum as a social, emotional, and identity-oriented educational framework designed to support learners' holistic development by integrating self-awareness, emotional regulation, social interaction, and meaning-making processes within a coherent curricular structure. By combining expert consensus with theoretically grounded themes, the study moves beyond a purely technical curriculum validation and positions WAY as a comprehensive model aligned with contemporary educational paradigms that emphasize identity formation, socio-emotional learning, and ethical engagement.

The present study demonstrated a notably high level of participation and commitment among the Delphi panelists. The fact that 72.8% of the invited experts participated in the first round, and that retention rates across subsequent rounds remained well above the minimum threshold of 70%, indicates that the consensus reached regarding the WAY curriculum is methodologically robust (Sumsion, 1998). Moreover, a substantial proportion of experts provided qualitative feedback alongside their quantitative ratings in each round, thereby enriching the dataset. These findings suggest a high level of *expert positivity*, which has been emphasized in Delphi research as a key factor contributing to the reliability of outcomes (Hsu & Sandford, 2007).

In the present study, the level of expertise among panelists and the reliability of their judgments were further supported by quantitative indicators. Across the three Delphi rounds, the panel's mean authority coefficient values indicated a high level of subject-matter competence among experts across the relevant thematic domains (Giannarou & Zervas, 2014). This consistently high authority coefficient suggests that the judgments derived from the panel were highly reliable. In parallel, the increasing consistency of experts' importance ratings across successive rounds reflects a progressive strengthening of consensus. The steady rise in Kendall's *W* coefficients calculated after each round indicates that agreement among panelists gradually intensified. While complete consensus was not evident at the outset, given the interdisciplinary composition of the panel, anonymous feedback and repeated rounds of evaluation substantially reduced divergences in expert opinions by the third round. In other words, despite the diversity of disciplinary backgrounds represented, the panel achieved near-complete consensus by the final round. Ultimately, the WAY curriculum emerged as a validated framework comprising 13 thematic domains, 84 units, and 312 learning outcomes, collectively endorsed through expert consensus. This outcome demonstrates that the content of the WAY curriculum was broadly accepted by a diverse group of experts and achieved interdisciplinary legitimacy.

The literature suggests that holistic curricula such as WAY contribute to individuals' development across multiple dimensions. Bruner (1996) emphasized that effective educational programs are engaging, socially grounded, and collaborative, and that learning should be conceptualized not as the transmission of information but as a process of meaning-making. Similarly, Vygotsky's (1978) sociocultural learning theory posits that learning develops through interaction with others and that cognitive and social skills are enhanced through collaboration. The Community and Collaboration theme embedded in the WAY curriculum, which promotes learning through interaction with peers and adult facilitators, aligns closely with Vygotsky's theoretical framework. In addition, Lipman's (2003) *philosophy for children* approach has demonstrated that inquiry-based dialogue and storytelling foster children's critical and creative thinking skills while enhancing empathy and social awareness. In this regard, the WAY curriculum may support students' processes of meaning-making and value construction through narratives, stories, and philosophical discussions. The inclusion of nature- and arts-based activities in the WAY curriculum is also grounded in well-established findings in educational research. Louv (2005) argued that the growing disconnection of children from nature can

result in what he termed “nature-deficit disorder,” whereas regular engagement with natural environments has been shown to enhance children’s well-being, creativity, and overall health. Children who engage in play in natural settings are more likely to invent their own games, exercise imagination, and collaborate with others, and they tend to demonstrate stronger performance in science-related domains. Accordingly, the WAY curriculum enriches learning by extending educational experiences beyond the classroom through activities such as nature observation, gardening, and agricultural practices. From the perspective of arts education, Eisner (2002) highlighted the educational value of the arts in cultivating complex forms of thinking that enable students to cope with uncertainty. The inclusion of music, visual arts, and drama within the WAY curriculum may therefore foster students’ expressive capacities and creative thinking skills.

Finally, the development of thinking skills has become an important objective in contemporary education systems. Wing (2006) underscored that thinking skills, particularly those related to problem solving and system design, constitute essential competencies for all learners and should be cultivated from an early age. Moreover, with the widespread integration of artificial intelligence tools into everyday life, students are increasingly expected not only to use technology effectively but also to evaluate it critically and ethically. The WAY curriculum addresses these demands by incorporating learning outcomes related to coding, robotics, digital citizenship, and artificial intelligence applications, thereby equipping students with competencies necessary for the technological landscapes of the future. At the same time, it supports the development of ethical awareness and human values across all domains of life, including digital environments. Taken together, this theoretical and empirical body of evidence suggests that the WAY curriculum adopts a holistic approach to education by integrating cognitive, affective, social, and ethical dimensions of development. The WAY curriculum may therefore be characterized as a contemporary, multi-layered educational framework designed to prepare individuals not only for the learning demands of the present but also for the uncertain, complex, and multidimensional world of the future.

### **Implications**

The findings of this study offer important implications for the field of educational sciences. The framework proposed through the WAY curriculum constitutes a concrete example of a holistic educational philosophy that integrates cognitive, affective, and social dimensions of learning. Holistic education aims to foster individuals’ development as a whole by addressing cognitive, emotional, social, physical, and creative domains in an integrated manner (Miller, 2007). The WAY curriculum developed in this study operationalizes this approach by bringing together multiple developmental domains—such as self-awareness, self-regulation, social awareness, creativity, ecological consciousness, and technological competence—under a unified curricular framework.

The expert consensus achieved in this study supports the long-standing theoretical argument that education should move beyond traditional approaches that prioritize academic knowledge alone. Indeed, the thematic structure of the WAY curriculum integrates social-emotional learning competencies with widely recognized 21st-century skills, including creativity, critical thinking, collaboration, and digital literacy. The fact that experts from diverse disciplinary backgrounds reached agreement on the importance of these broad competencies aligns with theoretical perspectives emphasizing transdisciplinary and holistic skill development in education (Voogt & Pareja Roblin, 2012; Miseliūnaitė et al., 2022). In particular, the inclusion of themes related to nature and ecology alongside technology and artificial intelligence is noteworthy, as it integrates sustainability awareness and digital literacy with social-emotional development. This integration provides concrete curricular content for theoretical frameworks that advocate educating learners as both environmentally conscious individuals with strong connections to nature and digitally competent citizens capable of adapting to technological change. Overall, the WAY curriculum offers an innovative and comprehensive model that contributes to the well-established paradigm of “holistic child development” frequently emphasized in the curriculum literature.

### **Limitations**

Despite its comprehensive scope and robust findings, this study has several limitations that should be acknowledged. First, the Delphi method is inherently based on expert judgment. Consequently, the

program outcomes identified in this study reflect the knowledge, experience, and foresight of the panelists. Although these outcomes are grounded in strong theoretical foundations, their effectiveness cannot be fully determined without empirical testing in real educational settings. Therefore, pilot implementations of the developed curriculum and the translation of its content into concrete instructional practices are necessary. While expert consensus provides a strong indication of the perceived importance of program components, potential challenges related to the implementation and realization of these learning outcomes should be examined. Second, although expert opinions were collected anonymously, the presentation of group-level statistics in later Delphi rounds may have introduced a degree of group influence. After viewing group means in the second and third rounds, some experts may have adjusted their ratings toward the central tendency, particularly if their initial judgments were at the extremes. While this tendency contributes to increased consensus, it may also result in innovative or unconventional perspectives receiving less attention. By design, the Delphi technique seeks to reduce strong disagreements and identify common ground; however, this consensus-oriented structure may lead to the exclusion of minority viewpoints that could nonetheless be valuable. Indeed, in the present study, some items proposed during the first round were removed due to insufficient group support, despite their potential relevance in future educational contexts. Accordingly, the consensus-driven nature of the Delphi technique should be considered a limitation, and future curriculum development processes may benefit from incorporating flexible mechanisms that allow minority perspectives to be revisited at later stages. Despite these limitations, the findings of the study strongly support the methodological rigor of the “ curriculum development process and the credibility of the resulting outcomes. Future research may focus on small-scale pilot implementations of the WAY curriculum and the assessment of student learning outcomes. Such studies would enable empirical examination of the extent to which the learning outcomes envisioned by the Delphi panel are realized in authentic educational settings and how they influence students’ holistic development. Building upon the strong foundation provided by this study, further research may contribute to the wider adoption and continuous improvement of holistic curricula designed to support individuals’ comprehensive development.

## References

- Adams, M. J. (1989). Thinking skills curricula: Their promise and progress. *Educational Psychologist*, 24(1), 25-77.
- Alexander, K., & Luckman, J. (2001). Australian teachers’ perceptions and uses of the sport education curriculum model. *European physical education review*, 7(3), 243-267.
- Bahar, M., & Somuncu Demir, N. (2021). Delphi tekniği uygulama sürecine yönelik örnek bir çalışma: Çok fonksiyonlu tarım okuryazarlığı. *Bolu Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi*, 21(1), 35-53.
- Boulkedid, R., Abdoul, H., Loustau, M., Sibony, O., & Alberti, C. (2011). Using and reporting the Delphi method for selecting healthcare quality indicators: a systematic review. *PloS one*, 6(6), e20476.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Broderick, P. C., & Metz, S. (2009). Learning to BREATHE: A pilot trial of a mindfulness curriculum for adolescents. *Advances in school mental health promotion*, 2(1), 35-46.
- Brovchak, L. S., Starovoi, L. V., Likhitska, L. M., Todosiienko, N. L., & Shvets, I. B. (2024). Integrating music, drama and visual arts in extracurricular programs: enhancing psychological development in early school-aged children. *Sapienza: International Journal of Interdisciplinary Studies*, 5(3), e24052-e24052.
- Bruner, J. (1996). Frames for thinking. *Modes of thought: Explorations in culture and cognition*, 93-105.

- Chakraborty, S. (2024). Integrating Education and Psychology A Holistic Approach to Enhance Learning and Well being in School Settings. *Available at SSRN 4778723*.
- Chuenjitwongsa, S., Poolthong, S., Bullock, A., & Oliver, R. G. (2017). Developing common competencies for Southeast Asian general dental practitioners. *Journal of dental education, 81*(9), 1114-1123.
- Collaborative for Academic Social and Emotional Learning (CASEL). (2023). What is SEL? Chicago: CASEL. Retrieved September 7, 2017, from <http://www.casel.org/what-is-sel/>
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). Sage.
- Dai, Y., Liu, A., Qin, J., Guo, Y., Jong, M. S. Y., Chai, C. S., & Lin, Z. (2023). Collaborative construction of artificial intelligence curriculum in primary schools. *Journal of engineering education, 112*(1), 23-42.
- Dewey, J. (1986, September). Experience and education. In *The educational forum* (Vol. 50, No. 3, pp. 241-252). Taylor & Francis Group.
- Dilekçi, A., & Karatay, H. (2023). The effects of the 21st century skills curriculum on the development of students' creative thinking skills. *Thinking skills and creativity, 47*, 101229.
- Dumitrescu, G. A. (2023). Social emotional learning for students and educators: A framework for pedagogy and classroom management. *Journal of Educational Studies, 5*(1), 63-99.
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child development, 82*(1), 405-432.
- Dymnicki, A., Sambolt, M., & Kidron, Y. (2013). Improving College and Career Readiness by Incorporating Social and Emotional Learning. *College and Career Readiness and Success Center*.
- Eisner, E. W. (2002). What Can Education Learn from the Arts About the Practice of Education?. *Journal of curriculum and supervision, 18*(1), 4-16.
- Eisner, E. W. (2004). Multiple intelligences: Its tensions and possibilities. *Teachers College Record, 106*(1), 31-39.
- Ferrero, M., Vadillo, M. A., & Leon, S. P. (2021). A valid evaluation of the theory of multiple intelligences is not yet possible: Problems of methodological quality for intervention studies. *Intelligence, 88*, 101566.
- Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books.
- Gardner, H. (2011). *Frames of mind: The theory of multiple intelligences*. Basic books.
- Giannarou, L., & Zervas, E. (2014). Using Delphi technique to build consensus in practice. *International Journal of Business Science & Applied Management (IJBSAM), 9*(2), 65-82.
- Goleman, D. (1995). Emotional intelligence bantam books. *New York*.
- Goleman, D. (1995). *Emotional intelligence*. Bantam Books, Inc.
- Graham-Jolly, M. (2003). The nature of curriculum. *Coleman, M. Graham-Jolly M. & Middlewood, D. (Eds.). Managing schools in South Africa: Managing curriculum in South African schools. London: Commonwealth Secretariat, 3-16*.
- Grzegorzewski, P. (2006). The coefficient of concordance for vague data. *Computational Statistics & Data Analysis, 51*(1), 314-322.

- Hargreaves, D. H. (1995). School culture, school effectiveness and school improvement. *School effectiveness and school improvement*, 6(1), 23-46.
- Henriksen, E. K., Bungum, B., Angell, C., Tellefsen, C. W., Frågåt, T., & Bøe, M. V. (2014). Relativity, quantum physics and philosophy in the upper secondary curriculum: challenges, opportunities and proposed approaches. *Physics Education*, 49(6), 678.
- Hoque, M. E. (2016). Three domains of learning: Cognitive, affective and psychomotor. *The Journal of EFL Education and Research*, 2(2), 45-52.
- Hsu, C. C., & Sandford, B. A. (2007). The Delphi technique: making sense of consensus. *Practical assessment, research, and evaluation*, 12(1).
- Jones, R., & Wyse, D. (2013). *Creativity in the primary curriculum*. Routledge.
- Jones, S. M., & Kahn, J. (2017). The Evidence Base for How We Learn: Supporting Students' Social, Emotional, and Academic Development. Consensus Statements of Evidence from the Council of Distinguished Scientists. *Aspen Institute*.econom
- Jorm, A. (2025). Using the Delphi Method to Establish Expert Consensus: A Practical Guide.
- Jung, Y. H., Shin, N. Y., Jang, J. H., Lee, W. J., Lee, D., Choi, Y., ... & Kang, D. H. (2019). Relationships among stress, emotional intelligence, cognitive intelligence, and cytokines. *Medicine*, 98(18), e15345.
- Kezar, A. (2001). Theory of multiple intelligences: Implications for higher education. *Innovative Higher Education*, 26(2), 141-154.
- Legendre, P. (2005). Species associations: the Kendall coefficient of concordance revisited. *Journal of agricultural, biological, and environmental statistics*, 10(2), 226-245.
- Lipman, M. (2003). *Thinking in education* (Vol. 304). Cambridge University Press.
- Louv, R. (2005). Nature deficit. *Orion*, 70, 71.
- Martínez-Sánchez, A. M. (2021). Using the Delphi technique to determine objectives and topical outline for a pharmaceutical care course: an experience from the Cuban higher education system. *BMC Medical Education*, 21(1), 158.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Sage.
- Miller, J. P. (2007). *The holistic curriculum*. Toronto, CA: University of Toronto Press
- Miseliunaite, B., Kliziene, I., & Cibulskas, G. (2022). Can holistic education solve the world's problems: A systematic literature review. *Sustainability*, 14(15), 9737.
- Moore, A., & Mamiseishvili, K. (2012). Examining the relationship between emotional intelligence and group cohesion. *Journal of Education for Business*, 87(5), 296-302.
- Mumtazah, N. W., Bayyinah, N., & Asanti, F. N. (2025). Mapping Multiple Intelligences of 7th Grade Junior High School Students: A Study Based on Paulus Winarto's Talent Test and Howard Gardner's Theory. *Didaktika: Jurnal Kependidikan*, 14(1 Februari), 1457-1472.
- Noddings, N. (2003). *Happiness and education*. Cambridge University Press.
- OECD. (2018). Social and emotional skills for student success and well-being. [https://www.oecd.org/en/publications/social-and-emotional-skills-for-student-success-and-well-being\\_db1d8e59-en.html](https://www.oecd.org/en/publications/social-and-emotional-skills-for-student-success-and-well-being_db1d8e59-en.html)
- OECD. (2019). An OECD learning framework 2030. In *The future of education and labor* (pp. 23-35). Cham: Springer International Publishing.
- Parsons, M. (2004). Art and integrated curriculum. In *Handbook of research and policy in art education* (pp. 775-794). Routledge.

- Patel, S., Pelletier-Bui, A., Smith, S., Roberts, M. B., Kilgannon, H., Trzeciak, S., & Roberts, B. W. (2019). Curricula for empathy and compassion training in medical education: a systematic review. *PloS one*, *14*(8), e0221412.
- Payton, J. W., Wardlaw, D. M., Graczyk, P. A., Bloodworth, M. R., Tompsett, C. J., & Weissberg, R. P. (2000). Social and emotional learning: A framework for promoting mental health and reducing risk behavior in children and youth. *Journal of school health*, *70*(5), 179-185.
- Qin, X., Gao, X., Yang, Y., Ou, S., Luo, J., Wei, H., & Jiang, Q. (2024). Developing a risk assessment tool for cancer-related venous thrombosis in China: a modified Delphi-analytic hierarchy process study. *BMC cancer*, *24*(1), 120.
- Raeissi, P., Zandian, H., Mirzarahimy, T., Delavari, S., Moghadam, TZ ve Rahimi, G. (2019). Hemşireler arasında iletişim becerileri ve duygusal zeka arasındaki ilişki. *Hemşirelik Yönetimi*, *26* (2).
- Ramaila, S. M. (2025). Fostering Holistic Development: The Integral Role of Educators in Nurturing Student Growth and Learning. In *Former Educators' Roles in Supporting Student Growth and Learning* (pp. 117-146). IGI Global Scientific Publishing.
- Reaves, J. (2019). 21st-century skills and the fourth industrial revolution: a critical future role for online education. *International Journal on Innovations in Online Education*, *3*(1).
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, cognition and personality*, *9*(3), 185-211.
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, cognition and personality*, *9*(3), 185-211.
- Scheffler, I. (1992). Philosophy and the curriculum. *Science & Education*, *1*(4), 385-394.
- Shearer, B. (2018). Multiple intelligences in teaching and education: Lessons learned from neuroscience. *Journal of Intelligence*, *6*(3), 38.
- Soutter, A. K., O'Steen, B., & Gilmore, A. (2012). Wellbeing in the New Zealand curriculum. *Journal of Curriculum Studies*, *44*(1), 111-142.
- Spirito, A., Overholser, J., Ashworth, S., Morgan, J., & Benedict-Drew, C. (1988). Evaluation of a suicide awareness curriculum for high school students. *Journal of the American Academy of Child & Adolescent Psychiatry*, *27*(6), 705-711.
- Stoller, J. K., Taylor, C. A., & Farver, C. F. (2013). Emotional intelligence competencies provide a developmental curriculum for medical training. *Medical teacher*, *35*(3), 243-247.
- Sumsion, T. (1998). The Delphi technique: an adaptive research tool. *British Journal of Occupational Therapy*, *61*(4), 153-156.
- Sun, H., Wang, Y., Cai, H., Wang, P., Jiang, J., Shi, C., ... & Hao, Y. (2024). The development of a performance evaluation index system for Chinese Centers for Disease Control and Prevention: a Delphi consensus study. *Global Health Research and Policy*, *9*(1), 28.
- Tomporowski, P. D., McCullick, B. A., & Pesce, C. (2015). *Enhancing children's cognition with physical activity games*. Human Kinetics.
- Tomporowski, P. D., McCullick, B., Pendleton, D. M., & Pesce, C. (2015). Exercise and children's cognition: The role of exercise characteristics and a place for metacognition. *Journal of Sport and Health Science*, *4*(1), 47-55.
- Trilling, B., & Fadel, C. (2009). *21st century skills: Learning for life in our times*. John Wiley & Sons.
- Voogt, J., & Roblin, N. P. (2012). A comparative analysis of international frameworks for 21st century competences: Implications for national curriculum policies. *Journal of curriculum studies*, *44*(3), 299-321.

- Voogt, J., & Roblin, N. P. (2012). A comparative analysis of international frameworks for 21st century competences: Implications for national curriculum policies. *Journal of curriculum studies*, 44(3), 299-321.
- Voogt, J., & Roblin, N. P. (2012). A comparative analysis of international frameworks for 21st century competences: Implications for national curriculum policies. *Journal of curriculum studies*, 44(3), 299-321.
- Vygotsky, L. S. (1978). *Mind in Society*. Cambridge: Harvard University Press
- Wang, Q., Zhang, Y., Li, L., Zhao, C., Song, J., Zhang, X., ... & Kang, D. (2025). A Delphi consensus-based frailty screening scale for community-dwelling older adults in China. *BMC geriatrics*, 25(1), 743.
- Wing, J. M. (2006). Computational thinking. *Communications of the ACM*, 49(3), 33-35.
- World Economic Forum (2025). The Future of Jobs Report 2025. <https://www.weforum.org/publications/the-future-of-jobs-report-2025/in-full/3-skills-outlook/>
- Zins, J. E., Bloodworth, M. R., Weissberg, R. P., & Walberg, H. J. (2007). The scientific base linking social and emotional learning to school success. *Journal of educational and psychological consultation*, 17(2-3), 191-210.