Designing Cloth Books for Children Aged 0–2 Years: A Practice-Based Capacity-Building Model for Early Childhood Media Producers in Thailand

Raweewan Sap-in, Thammasat University, Thailand

The Paris Conference on Arts & Humanities 2026
Official Conference Proceedings

Abstract

Early childhood (0–2 years) is a critical developmental period requiring media design aligned with cognitive, emotional, and sensory growth. Quality media production for this age group demands developmental knowledge as a foundational core of the creative process. This practice-based study examines how structured creative training can strengthen this capacity among emerging media creators, using cloth book development as both pedagogical framework and site of media production inquiry. This study employed a practice-based research approach to examine how a structured capacity-building process supports emerging media creators in developing developmentally appropriate media for children aged 0–2. Ten creative teams comprising 20 emerging creators, selected through a national open call across Thailand, participated in intensive workshops and expert mentorship, culminating in a structured pitching process. One winning team advanced to full-scale production, undertaking multiple rounds of prototype testing and refinement through consultation with a multidisciplinary panel of early childhood specialists. Findings indicate a substantive shift in creative decision-making—from content-driven production toward developmentally informed design. Narrative complexity was reduced in favor of high-contrast imagery, intentional tactile elements, and simplified interaction sequencing. The production process incorporated audience testing with target families, introducing emerging creators to evaluating audience response as an integral component of responsible media production. The study demonstrates that embedding developmental knowledge within iterative creative training can generate a transferable capacity-building model for responsible early childhood media production in the creative media ecosystems of emerging producers.

Keywords: early childhood media design, cloth book, creative capacity-building, iterative training model, early childhood media producers

Introduction

Early childhood development represents a critical window for investing in human potential (UNICEF, 2019). Producing media for children aged 0–2 years is of paramount importance because the human brain develops rapidly during this period, exhibiting high sensitivity to environmental stimuli and experiences (Center on the Developing Child, 2007). Appropriately designed media can effectively stimulate and support various developmental milestones.

According to Jean Piaget's theory of cognitive development, children in the sensorimotor stage (0–2 years) explore the world primarily through sensory perception and motor actions (Lally & Valentine-French, 2019). Properly designed media—such as toys with sound, vibrant colors, or books with diverse visuals and textures—provides essential learning experiences, promoting rapid brain development through touch and auditory stimulation (Barr et al., 2018).

Furthermore, social interaction with adults and peers is vital for learning during this stage, as highlighted by Lev Vygotsky's social development theory (Lally & Valentine-French, 2019). Consequently, children's media should encourage active interaction between children and caregivers, such as shared reading or adult-mediated play (Fidler et al., 2021).

From the perspective of Sigmund Freud's psychoanalytic theory, infants in the oral stage (0–1 year) naturally use their mouths to explore their surroundings (Lally & Valentine-French, 2019). Media produced for this age group must ensure absolute physical safety for oral exploration; for instance, safe teether toys or cloth books that children can safely bite can facilitate healthy emotional and physical development (American Academy of Pediatrics, 2019). Meanwhile, during the anal stage (1–3 years), children learn self-control and autonomy. Media that fosters independence, such as toys or books that children can open, close, or assemble by themselves, enhances self-confidence and self-regulatory capacities (Lally & Valentine-French, 2019).

While media design must align with these cognitive, emotional, and sensory dimensions, producing high-quality media demands that developmental knowledge serve as a foundational core of the creative process. Therefore, this study aims to examine the processes involved in capacity-building frameworks for emerging creators producing media for children aged 0–2 years. It utilizes the development of a cloth book titled “My Love Is Right Here” as a case study and conceptual model.

The research journey began with a national open call that selected ten emerging creative teams from across Thailand to participate in intensive workshops and expert mentorship. This culminated in a structured pitch, where one winning team was chosen to advance to actual full-scale production. The selected team then developed the final product in close collaboration with a multidisciplinary panel of experts—including pediatricians, early childhood educators, and professional children's book producers. This collaborative framework ensured that the final media was high-quality, safe, creative, and developmentally appropriate, establishing a transferable model for responsible early childhood media production on a broader scale.

Literature Review

Infant Developmental Milestones (0–2 Years)

The cloth book was designed for children from birth to two years of age. Its development draws on four theoretical frameworks in developmental psychology, each addressing a different aspect of early childhood: cognitive growth, emotional bonding, social learning, and environmental context. Together, these frameworks provide a clear rationale for the book's design choices and its role in supporting caregiver-infant interaction.

Piaget's Sensorimotor Stage (0–2 Years)

Jean Piaget described early cognitive development as a progression through four stages. The first—the Sensorimotor Stage—covers birth to approximately two years of age. During this period, infants learn primarily through their senses and physical actions. They explore the world by touching, grasping, mouthing, and manipulating objects, and through these repeated experiences, they gradually build mental schemas that help them make sense of their surroundings (Scott & Cogburn, 2023).

A key milestone in this stage is object permanence—the understanding that objects continue to exist even when out of sight. This typically begins around six months of age and reflects early memory development (Mayes & Fahy, 2019). By 18–24 months, children start using simple symbols and words, marking the transition to the next stage.

Bowlby's Attachment Theory

John Bowlby's Attachment Theory focuses on the emotional bond between infants and their primary caregivers. Bowlby proposed that infants are biologically driven to form close attachments as a means of ensuring their survival and emotional well-being. When caregivers respond consistently and warmly to an infant's needs, a secure attachment develops—giving the child a safe base from which to explore the world (Cassidy et al., 2013). Bowlby identified the first two to two-and-a-half years of life as a sensitive period for attachment formation, during which the quality of early relationships has lasting effects on social and emotional development.

Bowlby outlined four phases in this process. In the first weeks of life, infants respond positively to any caregiver. By two to six months, they begin to show a preference for familiar adults. From six months to around three years, they actively seek closeness with their primary caregiver and show distress when separated. From 24 months onward, children gradually develop a better understanding of the caregiver's feelings and needs, enabling more mutual interaction (Cassidy et al., 2013).

Vygotsky's Zone of Proximal Development (ZPD)

Lev Vygotsky's sociocultural theory highlights the role of social interaction in children's learning. While Piaget focused on how individual children construct knowledge through their own exploration, Vygotsky argued that learning is deeply shaped by interaction with others. His key concept, the Zone of Proximal Development (ZPD), refers to the gap between what a child can do independently and what the child can achieve with guidance from a more

knowledgeable person (Shabani et al., 2010). Learning that takes place within this zone is considered most effective.

The support that helps children learn within the ZPD is known as scaffolding—a concept developed by Wood et al. (1976) based on Vygotsky's ideas. Scaffolding involves providing just enough assistance to help a child move forward, then gradually reducing that support as the child becomes more capable. In the context of the cloth book, caregivers naturally take on this role: they read aloud, point to pictures, name objects, and respond to the infant's reactions. This kind of interactive reading is a practical example of scaffolding in early childhood.

Bronfenbrenner's Ecological Systems Theory

Urie Bronfenbrenner's Ecological Systems Theory offers a broader perspective on child development by considering the range of environments that shape a child's growth. Bronfenbrenner proposed that children do not develop in isolation; rather, they are embedded in a series of interconnected environmental systems, each influencing development in different ways (Tudge et al., 2009).

The system closest to the child is the microsystem, which includes the immediate people and settings of daily life—family members, caregivers, and the home environment. This is the most direct and influential layer of a child's world (Tudge et al., 2009). Beyond this, the mesosystem connects different microsystem settings with one another, while the exosystem and macrosystem refer to wider social structures and cultural values that shape the conditions in which children grow up.

Principles of Media Design for Early Childhood

Developmentally Appropriate Media Design

Developmentally Appropriate Practice (DAP) in media production requires that the complexity of any medium not exceed the cognitive and self-regulatory thresholds of its target audience. Because the infant brain lacks the structural maturity to process rapidly changing or highly abstract stimuli, media featuring abrupt sensory transitions or interactive digital elements frequently triggers cognitive overload—disrupting the learning process and producing emotional dysregulation (Barr et al., 2018). Responsible media design must therefore prioritize cognitive pacing and structural simplicity, stripping away extraneous narrative layers in favor of predictable, repetitive sequencing that conforms to the child's developmental milestones rather than demanding adaptation from the child (American Academy of Pediatrics, 2019).

This principle is further supported by Barr and Linebarger (2010), who argued that effective media for infants and toddlers must be aligned with children's cognitive abilities, attention spans, language development, and learning capacities at each stage of growth. Their work also underscored that young children learn more effectively through responsive social engagement than through passive media exposure. Complementing this, Wojcik et al. (2023) demonstrated that sensory features in children's materials do not independently improve learning outcomes; rather, effectiveness depends on whether the content and design genuinely correspond with children's developmental needs at a given stage. Sensory elements that are excessive or unrelated to the learning goal may distract children from core content, while developmentally congruent, simplified design consistently provides stronger scaffolding for early learning.

High-Contrast Imagery and Tactile Elements

The visual and physical architecture of early childhood media constitutes the primary gateway for neural activation. In the earliest months of life, visual acuity is sharply restricted; the underdeveloped fovea renders soft pastel tones and fine details indistinguishable. Empirical research demonstrates that infants possess a pronounced neurological preference for high-contrast imagery—specifically black-and-white patterns or saturated primary colors—which provide the sharp perceptual boundaries necessary for the visual cortex to practice focal tracking, spatial discrimination, and object recognition (Lally & Valentine-French, 2019). Visual design must simultaneously be augmented by robust tactile feedback. Infants extract critical environmental data through grasping, squeezing, and physically manipulating objects (StatPearls, 2023), and when media incorporates varied physical textures—such as rough canvas, soft velvet, or crinkled surfaces—it stimulates peripheral mechanoreceptors and generates synchronous neural signals alongside visual input. This multimodal reinforcement is essential for motor planning and sensory processing, providing an experiential richness that purely digital interfaces are structurally incapable of delivering.

Cloth Books as Developmental Media

Cloth books represent a purposeful intersection of tangible product design and early childhood pedagogy. Unlike digital alternatives, which frequently induce passive consumption or repetitive, unreflective screen interaction, cloth books require active, minds-on physical problem-solving. Mechanical features embedded within the medium—such as unbuttoning flaps, detaching velcro-secured elements, or threading cords—directly exercise fine motor skills, bilateral coordination, and hand-eye integration (ZERO TO THREE, 2018). Their soft, compliant material also addresses the physiological realities of infancy: constructed from non-toxic, washable textiles, cloth books are physically safe during the oral exploration that characterizes early sensory development (American Academy of Pediatrics, 2019). Structurally, the absence of disruptive digital audio-visual loops naturally invites caregivers to engage in close physical proximity, shared attention, and co-constructed language with the child (Fidler et al., 2021), rendering the cloth book not merely a passive reading material but an interactive developmental apparatus.

The Case for Tactile Media in the 0–2 Age Range

Barr et al. (2018) synthesized substantial scientific evidence demonstrating that physical, tactile media and three-dimensional objects are essential for supporting brain development and cognitive perception in infants and toddlers. Their findings converge on four interconnected arguments. First, tactile media overcomes the transfer deficit that prevents children under two from applying knowledge gained from two-dimensional screen images to the physical world. Second, unlike digital media, tactile media presents natural mechanics and physical surfaces that do not produce extraneous cognitive load, allowing children to maintain sustained focus on primary learning content. Third, the physical mechanisms of tactile media promote minds-on engagement, actively involving the child's brain in physical problem-solving and sensory exploration. Fourth, tactile media serves as a bridge for Joint Media Engagement, enabling high-quality shared play between caregivers and children through which optimal brain development occurs. Taken together, this evidence strongly supports the developmental advantages of tactile media—and cloth books specifically—over digital alternatives for children aged 0–2.

Capacity-Building Frameworks for Creative Producers

Creative Capacity-Building

Capacity-building within the creative sector is theoretically defined as a multi-layered intervention that enhances a creator's or organization's ability to define, execute, and sustain complex artistic and ethical objectives. For media production targeting specialized and developmentally vulnerable audiences such as infants and toddlers, capacity-building must extend beyond technical training to cultivate cognitive and conceptual literacy grounded in interdisciplinary scientific knowledge (UNICEF, 2012). Without such a framework, emerging creators tend to default to content-driven production—prioritizing aesthetic trends or commercial entertainment value over audience developmental readiness. When professional development models embed external domain expertise, such as pediatric science or early childhood theory, directly into the creative workflow, they fundamentally alter the creator's decision-making process, shifting the paradigm from intuitive production toward evidence-based, responsible media design.

The Creative Capacity Building (CCB) framework developed by MIT D-Lab provides a particularly relevant conceptual model. CCB supports the development of individuals' and communities' capacities through participatory learning processes and practical engagement, grounded in the principle that creative and problem-solving competencies are best cultivated through active learning and collaborative practice rather than one-directional knowledge transmission (MIT D-Lab, n.d.). The framework extends beyond technical skill acquisition to encompass the development of confidence, collaboration, and contextual responsiveness. Four interconnected processes define CCB: participation, in which learners actively generate ideas and contribute to decision-making rather than passively receiving information; co-creation, through which collaborative exchange of perspectives and experiences drives shared learning; hands-on learning, in which understanding emerges from practical making, experimenting, and iterating; and iterative design and reflection, through which ideas are continuously refined through cycles of prototyping, feedback, and revision (MIT D-Lab, n.d.). The CCB framework aligns directly with the methodology of the present study, which incorporates active workshop participation, mentorship, prototype development, audience testing, and repeated revision cycles as its core pedagogical structure.

Experiential Workshops in Creative Professional Development

Traditional didactic pedagogical models frequently fail to stimulate meaningful innovation or behavioral transformation within the dynamic landscape of the creative economy. Contemporary creative professional development consequently relies heavily on experiential, work-based learning. Grounded in iterative practice and real-world project simulation, experiential workshops provide a controlled environment in which creators can translate abstract theoretical frameworks into tangible prototypes. Research indicates that intensive, structured workshop models—when paired with cross-disciplinary collaboration and continuous expert mentorship—significantly accelerate both the technical and ethical readiness of emerging talent (Harvard Business School, 2020). The inclusion of formalized milestone events, such as a structured pitching process evaluated by a multidisciplinary expert panel, further serves as a critical pedagogical catalyst: it requires emerging producers to explicitly articulate and defend their design rationale under professional scrutiny, reinforcing the internalization of audience-centered standards and safety considerations.

Kolb's Experiential Learning Theory

David A. Kolb's Experiential Learning Theory (ELT) provides the theoretical backbone for understanding how structured creative training drives professional transformation. Kolb (2015) defines learning as a process in which knowledge is created through the transformation of experience—not passively acquired, but continuously co-constructed as learners actively engage with and interpret direct encounters. This process unfolds across a four-stage cycle operating along two dimensions of grasping and transforming experience. In the first stage, Concrete Experience (CE), learners engage directly with a new activity, relying on sensory perception and feeling. In the second stage, Reflective Observation (RO), they pause to review and evaluate the experience, synthesizing multiple perspectives to identify underlying causality. The third stage, Abstract Conceptualization (AC), involves integrating these reflections into coherent logical frameworks and generalizable principles. The fourth stage, Active Experimentation (AE), applies these newly formed concepts pragmatically in unfamiliar contexts, inherently initiating a subsequent, higher-order learning cycle (Kolb, 2015).

A foundational principle of the theory is that comprehensive learning is obstructed when a learner becomes tethered to a single stage—accumulating experience without reflection, or acquiring theory without practical application (Kolb, 2015). Accordingly, capacity-building curriculum must operationalize the full cycle: guiding emerging creators from prototype fabrication (CE) through expert critique (RO), enabling the internalization of domain-specific design knowledge (AC), before applying validated insights in full-scale production (AE). This cyclical architecture is what drives sustained, transferable professional development—a dynamic that the present study seeks to enact and examine within the context of early childhood media production.

Methodology

Research Design

This study employed a practice-based research approach to examine how a structured capacity-building process supports emerging media creators in developing developmentally appropriate media for children aged 0–2 years. The research integrated capacity-building workshops, creative practice, expert mentorship, prototype development, and field testing throughout the media production process.

Capacity-Building Process

The study followed a sequential capacity-building model consisting of five stages: (1) nationwide recruitment and selection, (2) intensive training workshops, (3) structured pitching, (4) incubation and production, and (5) prototype development and field testing.

Stage 1: Nationwide Recruitment and Selection

An open call invited emerging media creators from across Thailand to participate in the project. Ten creative teams (20 participants) were selected to join the capacity-building program.

Stage 2: Intensive Capacity-Building Workshops

Participants attended workshops covering four areas: (1) early childhood development and age-appropriate media, (2) children's book production, (3) storytelling, illustration, and visual communication, and (4) legal and ethical considerations for child-centered media production.

Stage 3: Structured Pitching Process

Each team developed and presented a children's book concept for children aged 0–2 years to a multidisciplinary panel of experts. One team was selected for the production phase.

Stage 4: Incubation and Production

The selected team developed the cloth book *My Love Is Right Here* under the guidance of a multidisciplinary expert panel. The development process included concept refinement, prototype development, expert consultation, and production supervision.

Prototype Development and Field Testing

Prototype development was conducted between March and June 2025 through four iterative phases: (1) conceptual design and drafting, (2) content and component development, (3) prototype production and refinement, and (4) audience testing and reflection.

The final prototype was evaluated through home-based observations with four families and a group testing session. Participants were recruited according to predefined inclusion criteria, including families with children aged 0–2 years showing age-appropriate development. Primary caregivers participated voluntarily and provided informed consent before behavioral observations and post-testing interviews.

Figure 1

Summary of the Development Process and Key Milestones of My Love Is Right Here (March–June 2025)

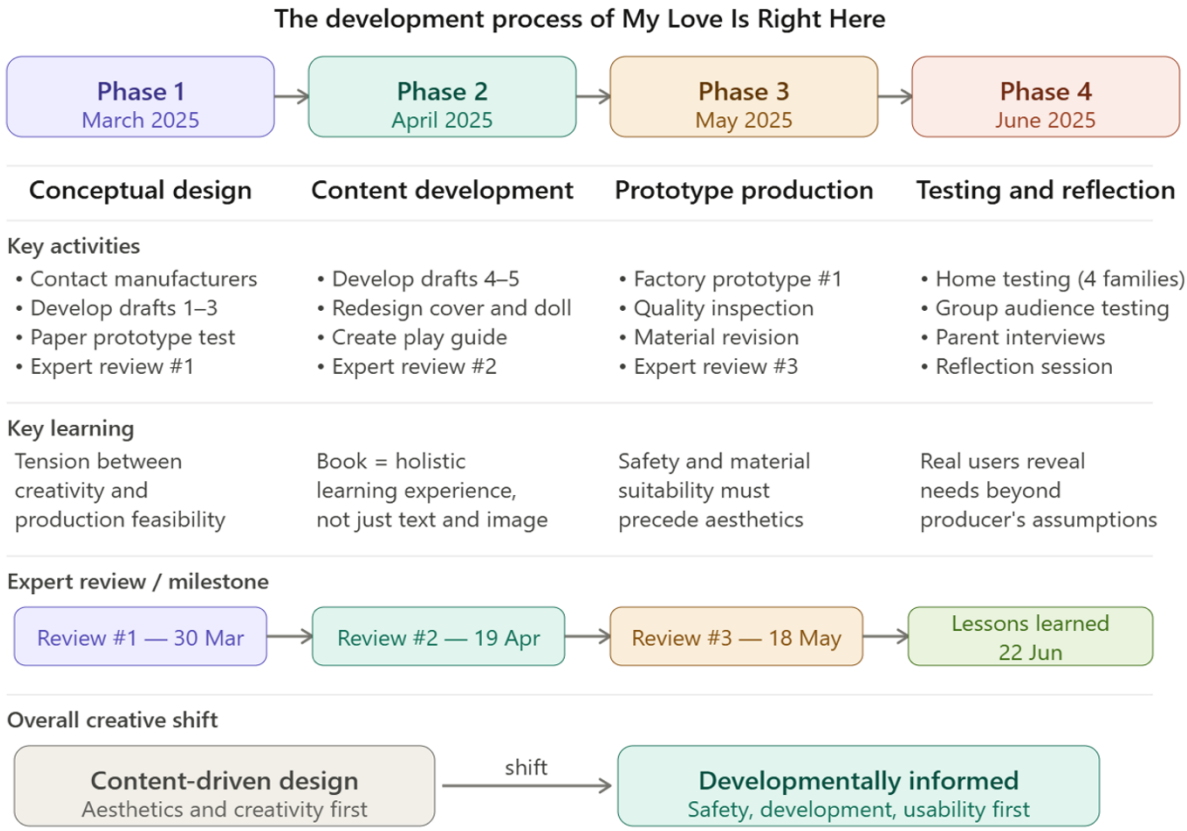

Figure 1. Summary of development process and milestones (March–June 2025)

Lesson Learned and Reflection. A collaborative evaluation session brought together the emerging media creators, expert mentors, and research team to reflect on the outcomes and insights gained.

- A collaborative evaluation session bringing together the emerging media creators, expert mentors, and research team to reflect on the outcomes and insights gained.

Data were collected through multiple sources throughout the project process. During the training phase, participant feedback and learning experiences were gathered through training satisfaction evaluation forms administered after workshop activities. Throughout the development and production stages, process documentation was collected from Creative Process and Learning Reports submitted upon project completion. In addition, collaborative reflection and lessons learned sessions were conducted with the youth media production team responsible for developing the cloth book in order to capture reflections, learning experiences, and changes in creative decision-making throughout the production process.

Data were analyzed using qualitative thematic analysis, focusing on recurring patterns related to creative learning processes, design decision-making, and the integration of child development principles into media production practices. Quantitative data from satisfaction forms were analyzed using descriptive statistics to summarize participant responses.

Results and Discussion

Results

Quantitative Evaluation of the Training Program

The training evaluation results showed that participants generally reported high levels of satisfaction with the program, indicating that the workshop design effectively supported learning and creative development.

The evaluation results for the training program under the "Capacity Building for New Gen Creators of Safe and Creative Media for Early Childhood (New Gen Creators for Kids): Production of Tactile and Cloth Books for Early Childhood (0–2 Years)" are presented below. A total of 20 participants attended the training workshop, with 16 participants successfully completing the comprehensive post-training evaluation questionnaire. Based on a 5-point Likert scale (where 5 represents the highest and 1 represents the lowest level of satisfaction), the evaluation framework is categorized into three main sections: general demographic status and levels of satisfaction toward the project. The quantitative analysis and distribution of the feedback are detailed as follows.

Demographic Data of Respondents (n = 16). The following table presents the fundamental demographic profile of the respondents to contextualize the background of the training participants:

Table 1
Demographic Profile of Training Participants

Variables	Details	Frequency (n)	Percentage (%)
1. Gender	Female	12	75.00
	Male	4	25.00
	Total	**16**	**100.00**
2. Age	Under 18 years	0	0.00
	18–19 years	4	25.00
	20–21 years	8	50.00
	22–23 years	2	12.50
	24–25 years	2	12.50
	Total	**16**	**100.00**
3. Occupation	Students	14	87.50
	Child Development Center Teachers	1	6.25
	Childcare Caregivers	0	0.00
	Kindergarten Teachers	0	0.00
	Others	1	6.25
	Total	**16**	**100.00**
4. Prior Experience (Children's Book Production)	Experienced	2	12.50
	No Experience	14	87.50
	Total	**16**	**100.00**

Note. N = 16 of 20 participants (response rate = 80%). Four participants did not complete the evaluation form as they were required to depart early due to traveling from out of province.

Demographic Analysis: According to the table, the majority of the respondents are female, accounting for 75.00%. In terms of age distribution, the largest group falls within the 20–21 years old bracket at 50.00%. Regarding occupation, a significant majority are students, representing 87.50%. Notably, the vast majority of participants (87.50%) had no prior experience in producing children's books.

Satisfaction Levels Towards Project Participation. The satisfaction level was analyzed using the mean score and interpreted based on the 5-point interval scale (0.80 score range per level):

Table 2
Mean Satisfaction Scores by Evaluation Dimension

Evaluation Items	Mean	Satisfaction Level
Dimension 1: Content, Format, and Training Methodology		
1.1 The content was appropriate and well-aligned with the training topics.	4.88	Highest
1.2 The content comprehensively reflected key principles of books for early childhood (0–2 years).	4.81	Highest
1.3 The training content provided clear, practical examples that can be applied in reality.	4.81	Highest
1.4 The training format, combining lectures with hands-on workshops, facilitated a clear understanding of the content.	4.69	Highest
Total Dimension 1 Mean Score	**4.80**	**Highest**
Dimension 2: Knowledge and Benefits Acquired		
2.1 Participants gained knowledge and fundamental principles in producing books for early childhood (0–2 years).	4.88	Highest
2.2 Participants can apply the knowledge gained from the training to future children's book production.	4.75	Highest
2.3 The practical exercises during the training enabled participants to create preliminary outputs.	4.88	Highest
Total Dimension 2 Mean Score	**4.84**	**Highest**
Overall Combined Mean Score (Both Dimensions)	**4.82**	**Highest**

Satisfaction Data Analysis. When evaluating each dimension individually, participants expressed their satisfaction at the "Highest" level across both areas, resulting in an overall combined mean score of 4.82. The detailed findings are as follows:

- **Knowledge and Benefits Acquired** yielded the highest mean score of 4.84. The items receiving the highest approval were the acquisition of core knowledge/principles and the effectiveness of practical exercises in enabling participants to successfully develop their initial book models.
- **Content, Format, and Training Methodology** achieved a mean score of 4.80. The highest-rated aspect was the relevance and alignment of the content with the specified training topics. Meanwhile, the integration of lectures and hands-on workshops received a mean score of 4.69, which still remains securely within the "Highest" satisfaction tier.

Qualitative Outcomes of the Creative Process

Qualitative findings revealed a clear shift in participants' creative decision-making, moving from content-driven ideas toward developmentally informed design choices that better suited children aged 0–2 years.

Thematic Shift in Creative Decision-Making. The core learning outcomes and cognitive shifts experienced by the creators are synthesized in the framework below:

Through these shifts, creators adjusted the book's design parameters. Narrative complexity was reduced in favor of high-contrast imagery, intentional tactile elements, and simplified interaction sequencing.

Figure 2

Framework of Thematic Shifts in Creators' Design Decision-Making

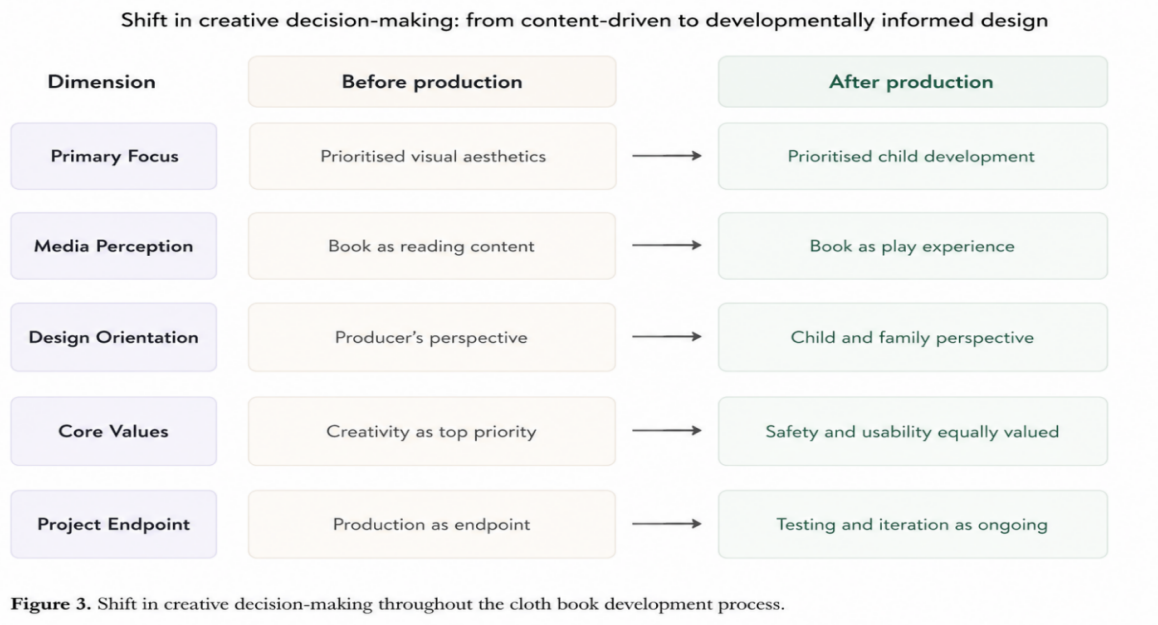

Figure 3. Shift in creative decision-making throughout the cloth book development process.

Discussion

From Content-Driven to Developmentally Informed Design

The findings suggest that integrating early childhood development knowledge into the creative process can significantly reshape how emerging creators conceptualize and produce media for infants and toddlers.

The statistical breakdown highlights a highly successful alignment within the project's operational framework. Despite the fact that the vast majority of the target group (87.50%) consisted of youth and students with absolutely no prior experience in children's media production, the specially tailored training curriculum effectively bridged this gap.

This success is clearly evident from the exceptionally high satisfaction scores regarding both knowledge acquisition and hands-on workshop execution. These findings provide empirical evidence that the program successfully achieved its core objective: empowering and cultivating

a new generation of creators by equipping them with the practical capabilities to design safe, creative, and tangible media for early childhood development.

Implications for Capacity-Building in Early Childhood Media

These results highlight the value of capacity-building as a transferable model for strengthening responsible early childhood media production within Thailand's creative media ecosystem.

This study, tracking the trajectory from training and pitching to industrial production, provided emerging media creators with a profound understanding of early childhood media design. Creators gained deep insights into material safety, developmental appropriateness, and the meticulous nature of industrial quality control. Giving young creators the hands-on opportunity to brainstorm, design, and produce the fabric book My Love Is Right Here did more than just build a product. From the lens of Ecological Systems Theory, this project introduced a powerful "Microsystem Tool" embedded in the child's immediate environment. Consequently, these new media producers recognized that they were not merely making a conventional book; they were intentionally crafting an environmental tool that strengthens the caregiver-infant bond, the ultimate foundation for early human development. Furthermore, they recognized the immense value of media for the underserved 0–2 age bracket, noting that such media acts as a vital catalyst for family bonding and gentle sensory play. Managing industrial manufacturing, cooperating with factories, and engaging in user testing cultivated a well-rounded professional capacity among these youth producers. Ultimately, they recognized that children's media must transcend commercial appeal to become "meaningful media" that aligns with real family contexts, thereby positioning this model as a cornerstone for cultivating responsible producers within the safe and creative early childhood media ecosystem.

Conclusion

This study concludes that an iterative, practice-based creative training model can support a shift in media producers' perspectives from content-driven approaches toward developmentally informed design. By integrating early childhood development principles into a structured, real-world production process, emerging creators develop a stronger sense of media responsibility alongside the practical competencies required to produce developmentally appropriate early childhood media.

Recommendations

Comprehensive Training on Book Production Workflows: Industrial cloth book manufacturing involves strict timelines and external factory variables that creators cannot directly control. Future iterations should include dedicated training modules covering factory communication, pre-production manuscript preparation, and industrial manufacturing protocols to enhance project planning efficiency.

Specialized Training on Media Certifications and Standards: Because emerging creators often lack industrial compliance experience, explicit training regarding legal and publication standards is highly recommended. Workshops should comprehensively cover ISBN registration processes, national industrial product standards (such as Thailand's TIS), and the paperwork required to verify child safety compliance.

Acknowledgements

The author gratefully acknowledges the Thai Media Fund (TMF) for funding this research project. Sincere appreciation is also extended to the College of Innovation, Thammasat University, for supporting the presentation of this research at an international academic conference.

The author would also like to thank the multidisciplinary panel of experts, mentors, and workshop facilitators for their invaluable guidance and support throughout the capacity-building, prototype development, and production process. Their expertise and constructive feedback were instrumental in the successful implementation of this project.

Finally, sincere appreciation is extended to all participating creative teams and youth media creators for their commitment and active participation throughout the project. Their creativity and collaboration were essential to the development of this practice-based learning initiative for early childhood media.

Declaration of Generative AI and AI-Assisted Technologies in the Writing Process

The author declares that ChatGPT (OpenAI) and Claude (Anthropic), generative AI-assisted writing tools, were used to support language refinement, text organization, and improve the clarity and readability of the manuscript. Their use was limited to editing, proofreading, and enhancing the presentation of the manuscript. The author carefully reviewed, revised, and verified all AI-assisted outputs before incorporating them into the manuscript.

The author further declares that, apart from the assistance described above, no AI or AI-assisted technologies were used to generate the research ideas, study design, methodology, data collection, analysis, findings, interpretation, or conclusions. These components are the author's original work and are derived from the careful and systematic conduct of the research. The author accepts full responsibility for the content of this manuscript.

References

American Academy of Pediatrics. (2019). *Selecting appropriate toys for young children in the digital era* [Clinical report]. AAP Publications. https://publications.aap.org/pediatrics/article/143/1/e20183348/37330/Selecting-Appropriate-Toys-for-Young-Children-in

Barr, R., & Linebarger, D. N. (2010). Screen media and language development in infants and toddlers: An ecological perspective. *Developmental Review, 30*(2), 176–202. https://doi.org/10.1016/j.dr.2010.03.006

Barr, R., McClure, E., & Parlakian, R. (2018). *Screen sense: What the research says about the impact of media on children aged 0-3 years old*. ZERO TO THREE. https://www.zerotothree.org/resources/2533-screen-sense-what-the-research-says-about-the-impact-of-media-on-children-aged-0-3-years-old

Cassidy, J., Jones, J. D., & Shaver, P. R. (2013). Contributions of attachment theory and research: A framework for future research, translation, and policy. *Development and Psychopathology, 25*(4 Pt 2), 1415–1434. https://doi.org/10.1017/S0954579413000692

Center on the Developing Child. (2007). *The science of early childhood development* [In brief]. Harvard University. https://developingchild.harvard.edu/resources/inbrief-science-of-ecd/

Fidler, R., Kirkorian, H. L., & Pempek, T. A. (2021). Joint media engagement in infancy and toddlerhood: How parent-child interaction shapes learning from screen and physical media. *Journal of Children and Media, 15*(2), 245–262. https://doi.org/10.1080/17482798.2020.1794932

Harvard Business School. (2020). *The power of experiential learning in driving creative innovation* [White paper]. Harvard Business Publishing. https://publications.hbs.edu/experiential-learning-innovation

Kolb, D. A. (2015). *Experiential learning: Experience as the source of learning and development* (2nd ed.). Pearson Education. Open Research Library. https://archive.org/details/experientiallear0000kolb

Lally, M., & Valentine-French, S. (2019). *Lifespan development: A psychological perspective* (2nd ed.). College of Lake County. Open Textbook Library. https://open.umn.edu/opentextbooks/textbooks/lifespan-development-a-psychological-perspective

Mayes, L., & Fahy, T. (2019). Cognitive development. In *StatPearls*. StatPearls Publishing. https://www.ncbi.nlm.nih.gov/books/NBK537095/

MIT D-Lab. (n.d.). *Creative capacity building* (CCB). Massachusetts Institute of Technology. https://d-lab.mit.edu/approach/creative-capacity-building

Plan For Kids. (2021). *Techniques for choosing age-appropriate books*. https://www.planforkids.com/kids_corner/how-to-choose-picturebook-for-kids

Scott, H. K., & Cogburn, M. (2023). Piaget. In *StatPearls*. StatPearls Publishing. https://www.ncbi.nlm.nih.gov/books/NBK448206/

Shabani, K., Khatib, M., & Ebadi, S. (2010). Vygotsky's Zone of Proximal Development: Instructional implications and teachers' professional development. *English Language Teaching, 3*(4), 237–248. https://doi.org/10.5539/elt.v3n4p237

StatPearls. (2023). *Child development*. NCBI Bookshelf, National Center for Biotechnology Information. https://www.ncbi.nlm.nih.gov/books/NBK564386/

Tudge, J. R. H., Mokrova, I., Hatfield, B. E., & Karnik, R. B. (2009). Uses and misuses of Bronfenbrenner's bioecological theory of human development. *Journal of Family Theory & Review, 1*(4), 198–210. https://doi.org/10.1111/j.1756-2589.2009.00026.x

UNICEF. (2012). *The importance of caregiver-child interactions for the survival and healthy development of young children* [Organizational capacity-building framework]. UNICEF Expanded Model of Care. https://www.unicef.org/early-childhood-development

UNICEF. (2019). *Early childhood development: A statistical profile of early childhood development in Thailand*. UNICEF Thailand. https://www.unicef.org/thailand/reports/early-childhood-development-thailand

Wojcik, E. H., & Houston-Price, C. (2023). Touch-and-feel features in “first words” picture books hinder infants' word learning. *Journal of Experimental Child Psychology, 232*, Article 105860. https://doi.org/10.1016/j.jecp.2023.105860

Wood, D., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychology and Psychiatry, 17*(2), 89–100. https://doi.org/10.1111/j.1469-7610.1976.tb00381.x

ZERO TO THREE. (2018). *The power of play: Learning through play in infant and toddler classrooms*. National Center for Infants, Toddlers, and Families. https://www.zerotothree.org/resources/2534-the-power-of-play-learning-through-play-in-infant-and-toddler-classrooms

Contact email: raweewan@tu.ac.th