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INTEGRATING SOCIAL AND EMOTIONAL LEARNING THROUGH STEAM ACTIVITIES IN INCLUSIVE EARLY CHILDHOOD CURRICULUM

Hoang Thi Nho[1] and Tran Thi Thiep[*2]
VNU University of Education, Vietnam National University, Hanoi city, Vietnam
Faculty of Special Education, Hanoi National University of Education, Hanoi city, Vietnam

[*]Corresponding author: Tran Thi Thiep, e-mail: ttthiep@yahoo.com.vn

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Abstract. This paper explores the integration of Social and Emotional Learning (SEL) within the context of STEAM (Science, Technology, Engineering, Arts, and Mathematics) activities in early childhood education. The primary objective is to examine how SEL can be effectively incorporated into STEAM curricula to support holistic development in young learners. Theoretical frameworks underpinning SEL and STEAM are discussed, highlighting their complementary nature and potential for enhancing children's social and emotional competencies alongside their academic skills. The paper provides a comprehensive review of existing literature and practical guidelines for educators on embedding SEL principles within STEAM activities. It emphasizes the importance of creating a learning environment where children can develop essential social and emotional skills such as empathy, self-regulation, and collaboration while engaging in STEAM-based explorations. This approach aims to foster a more inclusive and balanced educational experience that prepares children for both academic and social success.

Keywords: Social and Emotional Learning (SEL); STEAM; Early Childhood Education; Integration; Soft Skills.

1. Introduction

In recent years, the landscape of early childhood education has shifted towards more holistic approaches, emphasizing not only cognitive and academic development but also the social and emotional growth of young children. As the world becomes increasingly complex and interconnected, children need a broader set of skills to thrive. These skills go beyond traditional academic competencies, encompassing emotional intelligence, creativity, problem-solving, and collaboration. This has led to the growing importance of integrating Social and Emotional Learning (SEL) with interdisciplinary learning frameworks like STEAM (Science, Technology, Engineering, Arts, and Mathematics) in early childhood education.

Social and Emotional Learning (SEL) is a pedagogical framework designed to foster emotional intelligence and social competence in students. It is rooted in five core competencies identified by the Collaborative for Academic, Social, and Emotional Learning (CASEL, 2020): self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. These competencies are crucial for navigating interpersonal relationships, managing emotions, and making ethical decisions. SEL has been shown to improve not only students'

emotional well-being but also their academic performance, behavior, and long-term success (Durlak et al., 2011). Implementing SEL in early childhood education helps lay the foundation for developing empathy, resilience, and cooperative problem-solving from a young age (Bierman et al., 2008).

Children with disabilities participate in the learning environment alongside typically developing peers. Implementing STEAM activities in the inclusive early childhood classroom requires the use of universal learning design (UDL) principles in order to engage all children in meaningful learning experiences with three principles representation, engagement, and expression.

After making sure the classroom environment has materials and space for all children to engage in learning, the use of UDL principles can support most children's needs, to access materials and engage in the learning environment.

STEAM, on the other hand, is an educational approach that integrates the traditional STEM disciplines (Science, Technology, Engineering, and Mathematics) with the Arts to encourage creativity, innovation, and critical thinking (Yakman, 2008). STEAM promotes hands-on, inquiry-based learning, where students actively engage in solving real-world problems through experimentation and collaboration. In early childhood settings, STEAM activities are designed to leverage children's natural curiosity and playfulness, making complex concepts more accessible and engaging (Kim & Park, 2012). By incorporating arts into STEM, the STEAM framework encourages children to think creatively, explore multiple solutions to a problem, and express their ideas through various mediums.

Both SEL and STEAM offer powerful frameworks for supporting children's holistic development, but they are often implemented separately in classroom settings. Integrating SEL into STEAM offers an innovative solution to this challenge, blending the cognitive and emotional dimensions of learning into a single, cohesive approach. Through this integration, children not only develop technical and academic skills but also learn how to regulate their emotions, collaborate with peers, and persevere through challenges.

Research has shown that the early years are critical for the development of both social-emotional and cognitive skills (Shonkoff & Phillips, 2000). This period, often referred to as the "critical period" for brain development, is marked by rapid growth in areas of the brain responsible for executive functioning, emotional regulation, and problem-solving (Center on the Developing Child, 2016). Educational experiences during this time have lasting effects on a child's ability to succeed in school and beyond. Therefore, integrating SEL into STEAM during the early childhood years provides a unique opportunity to support a child's overall development in a way that aligns with their natural learning processes.

In practice, integrating SEL and STEAM means designing activities that target both academic and emotional growth. For example, a simple engineering challenge, such as building a structure using blocks, can be enhanced by encouraging children to work in teams, communicate their ideas, and manage any frustrations that arise during the process. Similarly, an art project that asks children to express their understanding of a scientific concept, such as the water cycle, can also incorporate discussions about environmental responsibility and empathy towards nature. These kinds of activities not only deepen children's understanding of the world around them but also help them develop essential life skills like empathy, collaboration, and resilience.

The integration of SEL into STEAM is also supported by several theoretical frameworks in early childhood education. Vygotsky's (1978) social development theory, for example, emphasizes the importance of social interaction in learning, suggesting that children develop cognitive and emotional skills through collaboration and communication with others. This aligns well with the hands-on, collaborative nature of STEAM activities, where children are often encouraged to work together to solve problems. Moreover, Piaget's (1952) constructivist theory

of learning posits that children learn best through active exploration and experimentation, which is a key feature of both SEL and STEAM. By engaging children in activities that require them to think critically, solve problems, and work with others, educators can create learning environments that support both academic and emotional development.

Despite the potential benefits of integrating SEL into STEAM, there remains a gap in research and practice regarding how best to implement this approach in early childhood classrooms. Many educators are familiar with the principles of either SEL or STEAM but may lack guidance on how to effectively combine these frameworks in meaningful ways. This paper seeks to address this gap by exploring theoretical foundations for integrating SEL into STEAM and providing practical guidelines for educators.

Emotional education for preschool children is crucial for shaping their personality and fostering their comprehensive development in areas such as intellect, emotional understanding, self-management of emotions, and the ability to recognize and adjust emotions. It helps children build and maintain positive social relationships with peers, family, and others around them. Children who receive good emotional education typically have better behavior control and are less likely to face behavioral and psychological issues. Therefore, emotional education is a component of effective education and social skills, one of the five areas within the Early Childhood Education Program. Teachers and parents play a vital role in guiding, modeling, and supporting children's emotional development.

Emotional education is the ability to apply knowledge, experience, and self-understanding to identify, process, and adjust one’s emotions in accordance with the context and communication situation. Thus, emotional control is a process, and acquiring emotional control skills requires time for practice and specific techniques to achieve the desired goals.

In life and work, we constantly face various emotions, ranging from love and discomfort to fear. Good emotional balance helps us maintain and develop social relationships, especially in the workplace. Effective emotional control can “resolve” conflicts in relationships with students and colleagues and help “transform” students who are still making mistakes.

When teachers learn emotional control skills, they can turn negative emotions into more positive ones, respond flexibly to situations, maintain a humane perspective on children’s mistakes, and act appropriately in caregiving and educational activities. Positive words and actions of preschool teachers also serve as role models for students, teaching them kindness and compassion towards friends and family, contributing to the development of their good character in the future.

In the following sections, we will delve into the theories that support the integration of SEL and STEAM, review relevant literature on these educational frameworks, and offer concrete examples of how educators can design activities that nurture both cognitive and emotional growth in young learners. By aligning the goals of SEL and STEAM, educators can foster a classroom environment that not only prepares children for academic success but also equips them with the social and emotional tools they need to thrive in a rapidly changing world.

2. Content

2.1. Social and Emotional Learning (SEL)

2.1.1. Concept of SEL

Social and Emotional Learning (SEL) is a framework designed to facilitate the development of crucial life skills through education. SEL encompasses the ability to understand and manage one's emotions, set and achieve positive goals, exhibit empathy, build and maintain healthy relationships, and make responsible decisions (CASEL, 2020). The evolution of SEL reflects a shift toward a more holistic view of education that values emotional and social growth alongside

cognitive development. This comprehensive approach is essential in early childhood education, where foundational interpersonal skills are developed (Zins, Weissberg, Wang, & Walberg, 2004).

2.1.2. Key Characteristics of SEL

The five core competencies of SEL, as outlined by CASEL (2020), are:

Self-awareness: Involves recognizing and understanding one's emotions, thoughts, and values, and their influence on behavior. This competency helps children develop emotional intelligence and is critical for emotional regulation and social interaction (Denham, Bassett, & Wyatt, 2007).

Self-management: Includes the regulation of emotions, thoughts, and behaviors in various situations. This skill aids in managing stress, controlling impulses, setting goals, and maintaining motivation. It is vital for handling challenges and achieving personal and academic goals (Bierman et al., 2008).

Social awareness: Refers to the ability to empathize with others from diverse backgrounds, understand social norms, and recognize community resources. This competency fosters empathy and respect for others, crucial for positive social interactions (Durlak et al., 2011).

Relationship skills: Encompasses the ability to form and sustain healthy relationships through effective communication, active listening, cooperation, and conflict resolution. Developing these skills supports positive relationships with peers and adults (Denham et al., 2003).

Responsible decision-making: Involves making constructive choices based on ethical standards, safety concerns, and social norms. It helps children develop moral and ethical understanding and take responsibility for their actions (Durlak et al., 2011).

Structure of SEL Programs: SEL programs utilize both explicit and implicit methods:

Explicit instruction: Involves dedicated lessons focused on teaching SEL skills, such as group discussions, role-playing, and cooperative games. These activities directly address SEL competencies and integrate them into daily classroom routines (Weissberg et al., 2015).

Implicit instruction: Embeds SEL opportunities into everyday interactions and classroom routines. Teachers model SEL behaviors and create a supportive environment that fosters emotional security and positive social interactions (Zins et al., 2004). Research shows that SEL programs incorporated into daily practices result in improved emotional regulation, social behavior, and academic performance (Durlak et al., 2011).

2.2. STEAM (Science, Technology, Engineering, Arts, Mathematics)

2.2.1. Concept of STEAM

STEAM education integrates Science, Technology, Engineering, Arts, and Mathematics to create an interdisciplinary approach that promotes creativity, critical thinking, and problem-solving. By including the Arts, STEAM emphasizes the role of creative expression in addressing complex problems and encourages experiential, inquiry-based learning (Yakman, 2008). This approach is particularly effective in early childhood education, where play and experimentation drive cognitive and social development (Bequette & Bequette, 2012).

2.2.2. Key Characteristics of STEAM

Interdisciplinary Learning: Encourages the connection of concepts across different subjects, enhancing understanding through a holistic approach. For example, a building project might integrate concepts from mathematics, science, and art, reflecting the interconnected nature of knowledge (Kim & Park, 2012).

Inquiry-Based and Hands-On Learning: Emphasizes active participation and exploration, where students ask questions, conduct investigations, and engage in experiments. This hands-on

approach aligns with early childhood development and fosters critical thinking and problem-solving (Herro & Quigley, 2016).

Creativity and Innovation: The Arts component promotes creative thinking and innovative problem-solving. Artistic activities enable children to express their ideas and approach problems from multiple perspectives, which is valuable for developing flexible thinking and resilience (Bequette & Bequette, 2012).

2.2.3. Structure of STEAM Activities

STEAM activities are project-based and collaborative, involving real-world problem-solving:

Identify a problem or question: Students define a problem or question, such as "How can we build a bridge that holds the most weight?"

Plan and investigate: Children brainstorm ideas, plan their approach, and gather materials for experimentation.

Test and iterate: Students test their designs, make adjustments based on results, and revise their approach as needed.

Present findings: The final step involves sharing results and reflecting on the learning process (Kim et al., 2019).

2.3. Integration of SEL and STEAM

2.3.1. Concept of SEL-STEAM Integration

Integrating SEL into STEAM education combines cognitive and emotional development, providing a holistic learning experience. SEL supports the emotional and social skills necessary for collaboration and perseverance, while STEAM fosters creativity and problem-solving. This integration enhances the overall educational experience, preparing children for complex future challenges (Henriksen, Mishra, & Mehta, 2015).

2.3.2. Characteristics of SEL-STEAM Integration

Collaborative Problem-Solving: SEL-STEAM integration promotes teamwork and effective communication, essential for solving real-world problems. Children practice SEL competencies such as empathy and cooperation while engaging in STEAM projects (Kim et al., 2019).

Emotional Resilience and Persistence: STEAM projects often require multiple iterations and problem-solving. SEL supports resilience by helping children manage frustration and maintain motivation through setbacks, fostering a growth mindset (Durlak et al., 2011).

Empathy and Perspective-Taking: SEL enhances STEAM by promoting empathy and diverse viewpoints. Understanding and valuing different perspectives can lead to more innovative solutions and improve teamwork dynamics (Denham et al., 2003).

Reflective Learning: Combining SEL and STEAM emphasizes reflective practices, where children assess their experiences and growth. This reflection reinforces the connection between emotional development and academic achievement (Zins et al., 2004).

2.4. Application of Theories: Practical Guidelines

2.4.1. Guidelines

Step 1: Designing STEAM Activities with SEL Objectives to meet the need of all children

To effectively integrate SEL into STEAM, educators need to design activities that simultaneously target both STEAM and SEL goals. For example, a STEAM project about building a bridge can incorporate SEL objectives such as collaboration, communication, and perseverance in problem-solving.

SEL Competencies: While engaging in STEAM projects, students can practice self-management (controlling frustration during difficult tasks), social awareness (understanding the emotions and perspectives of peers), and relationship-building (working cooperatively in groups).

STEAM Elements: Each project should encourage exploration and inquiry through scientific and artistic processes, ensuring that children are using creative thinking and critical analysis to solve problems.

Step 2: Utilizing Thematic Storylines

One effective method to integrate SEL into STEAM activities is through thematic storylines that resonate with children's real-world experiences. For example, a family-themed storyline can provide a rich context for SEL by focusing on relationships, empathy, and emotional understanding. Activities can include:

Art Projects: Children could create family portraits that include discussions on family roles and emotional dynamics, helping them recognize and express emotions.

Engineering Challenges: Building a model of a family home could involve collaboration and communication, reinforcing social skills while practicing engineering principles.

Step 3: Facilitating Group Work and Reflection

Group work is a critical component of SEL integration into STEAM. Teachers should encourage all children to work in small teams, allowing them to practice relationship-building and collaborative problem-solving. After each activity, a reflection session can help students process their emotions and evaluate how they worked together as a group.

Guided and supporting Reflection: Teachers can ask questions like, "How did you feel when working on this project with your friends?" and "What was challenging, and how did you overcome it together?" These reflections are key to embedding SEL deeply into the learning experience.

Step 4: Balancing Structure with Flexibility to Adapt the goals of education for children with special education needs

Teachers should maintain a balance between structured guidance and open-ended exploration. By providing clear SEL goals and STEAM instructions, while allowing students to take creative ownership of their projects, teachers can also foster independence and emotional resilience for children with special education needs.

Teachers should intentionally identify teaching opportunities when interacting with children to scaffold or extend their knowledge and skills. Intentional educators have a purpose for student learning (e.g., academic, or social goals), continuously monitor children's progress, and are able to explain what they are doing and why they are doing.

Within routines and learning activities, educators can use multiple means of engagement to provide multiple opportunities and ways in which children engage in STEAM knowledge. Educators can engage children in child-led activities, adult-led activities, transitions, and mealtimes.

2.4.2. Examples

Table 1. Objectives of Utilizing STEAM and SEL Activities Through Storytelling

Developmental areas	General objectives	Thematic Objectives: Family
Physical Development	**1. Toddler (Nursery Age):** - Healthy, with weight and height developing normally for their age. - Adapts to the daily routine at the nursery. - Performs basic movements appropriate for their age.	- The child can coordinate hand and foot movements smoothly in motor development exercises.

	- Exhibits some initial motor qualities (agility, dexterity, body balance). - Demonstrates coordinated hand and finger movements. - Capable of performing some self-care tasks related to eating, sleeping, and personal hygiene. **2. Preschool Age:** - Healthy, with weight and height developing according to age standards. - Exhibits motor qualities such as agility, strength, dexterity, and endurance. - Executes basic movements accurately, with proper posture. - Enhances coordination of senses and movements, moves rhythmically, and understands spatial orientation. - Demonstrates skills in activities requiring dexterity and flexibility. - Has some knowledge about food and its benefits for health. - Develop good habits and skills in eating, maintaining health, and ensuring personal safety.	- Arrange and assemble different shapes to create various house designs or structures. - Understands some household safety risks and how to prevent them.
Cognitive Development	**1. Toddler (Nursery Age)** - Shows interest in exploring and discovering the surrounding world. - Exhibits sensory sensitivity. - Capable of observing, commenting, remembering, and expressing understanding with simple sentences. - Has some initial knowledge about themselves and familiar objects and phenomena. a. Sensory Development and Practice - Auditory, Taste, Tactile, Visual, Olfactory Sensory Development b. Recognition - Some body parts. - Common toys and vehicles. - Their own name. - Some familiar animals, flowers, and fruits. - Basic concepts related to math, size, shape, quantity, and spatial positions relative to themselves. - Knowledge about themselves and those around them. **2. Preschool Age** a. Development of Cognitive Abilities - Eager to learn, enjoys exploring and understanding surrounding objects and phenomena. - Able to observe, compare, classify, make judgments, pay attention, and intentionally remember. - Capable of identifying and solving simple problems in various ways. - Able to interpret understanding through different means (actions, images, words, etc.), with spoken language being predominant. - Has some initial knowledge about people, objects, surrounding phenomena, and basic math concepts. b. Cognitive Development Education	- Children learn about family members and how to address them respectfully. - Children learn about some family anniversaries and discuss meaningful ways to celebrate these occasions. - Explore materials used for building houses. - Understand the concept of a family tree. - Children develop cognitive skills through activities related to learning letters and basic math concepts.

	* Scientific Exploration - Human body parts. - Objects. - Animals and plants. - Some natural phenomena. * Introduction to Basic Math Concepts - Sets, quantity, ordinal numbers, and counting. - Comparison, sorting according to rules. - Measurement. - Shapes. - Spatial and temporal orientation. * Social Exploration - Self, family, and community. - Preschool. - Some simple professions. - Landmarks, countries, etc.	
Language Development	1. Preschool a. Language Development - Gradually increasing vocabulary/sentence complexity - Expanding communication content - Ability to listen and understand spoken language in daily interactions - Ability to express oneself through various means (spoken words, facial expressions, gestures, body language) - Clear expression and purposeful communication in daily life - Ability to listen to and retell events and stories - Ability to perceive rhythm and rhyme in poems, nursery rhymes, etc., appropriate to age - Basic skills in reading and writing b. Goals of Language Development Education * Listening - Listening to words referring to people, objects, phenomena, characteristics, qualities, activities, details, and emotional descriptions - Listening to spoken language in daily interactions - Listening to stories, poems, nursery rhymes, folk songs appropriate to age * Speaking - Pronouncing all sounds in Vietnamese correctly - Expressing needs and feelings, and using various sentence types - Using vocabulary and sentences in daily communication, answering and asking questions - Reciting poems, nursery rhymes, folk songs, and storytelling - Being polite and confident in communication * Introduction to Reading and Writing - Developing a habit of reading books - Familiarizing with common symbols in daily life	- Children are confident and proactive in communication with others, avoid interrupting or talking over others, and use complete sentences. - Using polite words and expressions, knowing how to say thank you and sorry. - Reciting lines of characters from stories and expressing characters' emotions through voice modulation. - Recognizing letters - Children can describe events with detailed information about actions, personalities, and states in a clear and coherent manner.

	- Getting acquainted with written letters	
Social-Emotional Development	Social-Emotional Development - Self-Awareness: Developing an awareness of oneself. - Recognition and Expression: Recognizing and expressing emotions related to people, objects, and phenomena around them. - Personal Qualities: Exhibiting qualities such as confidence, agility, and dynamism. - Life Skills: Demonstrating skills such as respect, cooperation, friendliness, care, and sharing. - Adherence to Rules: Following rules and regulations in family and preschool settings. Social-Emotional Skills Education a) Developing Emotions - Self-awareness. - Recognizing and expressing emotions towards people, objects, and phenomena around them. b) Developing Social Skills - Understanding social behavior and rules in family, preschool, and community settings. - Caring for and protecting the environment. - Showing concern and cooperation with friends, family, and society.	- Children: Children are joyful and enthusiastic about learning activities; they know how to wait their turn and raise their hands to express their opinions. - Affection and Gratitude: Children show love and appreciation towards their family members. - Group Skills: Children have skills for working in groups and interacting with teachers and peers. - Household Skills: Children can tidy up and assist with tasks at home with their mothers. - Family Care: Children engage in activities and actions that help care for and protect their family.
Nutrition and Health Education	- Develop Good Habits: Practice routines and good habits in daily life. - Self-Care Activities: Become familiar with self-care activities and health maintenance. - Safety Awareness: Recognize and avoid potential safety risks.	- Self and Others' Health: Take care of personal health and that of others, and motivate them to engage in activities like yoga, exercise, or drinking fruit juices. - Support Family: Assist in caring for grandparents and helping parents with household chores when needed. - Maintain Cleanliness: Keep the living environment clean and healthy. - Healthy Eating: Prepare and consume nutritious food. - Positive Attitude: Smile, be cheerful, and share with others. - Show Love and Respect: Love everyone and avoid causing harm. - Encourage Healthy Habits: Encourage family members to adopt good habits, maintain

		cleanliness, and visit grandparents. - Protect Family Members: Engage in activities and actions that safeguard family members.
Aesthetic Development	*Developing Aesthetic Sensibility* - Music and Movement: Listen to music, sing, and move according to the rhythm. - Artistic Activities: Engage in drawing, sculpting, tearing and sticking paper, and creating collages; appreciate and view artwork. - Appreciation of Beauty: Recognize and appreciate beauty in nature, daily life, and art. - Creative Expression: Demonstrate creativity in music and visual arts activities. - Artistic Engagement: Enjoy and eagerly participate in artistic activities, with an awareness of preserving and protecting beauty. *Aesthetic Education* - Appreciation and Expression: Recognize and express emotions in response to the beauty of nature, surroundings, and art. - Music and Visual Arts Skills: Develop skills in musical activities (listening, singing, moving to music) and visual arts activities (drawing, tearing and sticking paper, cutting, creating shapes). - Creativity in Art: Show creativity in participating in artistic activities (music, visual arts).	- Creativity: Show creativity in various artistic activities. - Self and Peer Evaluation: Recognize and evaluate your own and others' artistic products. - Rhythmic Movement: Move in rhythm to songs related to different themes. - Artistic Decoration: Cut, paste, and decorate items such as models of houses.

Table 2. STEAM and SEL Activities based on Story - General Guideline

Week	**SECTION/WEEK**					
Week 1	**Steps**	**STEAM LESSON 1: Literature (Story Telling)**	**STEAM LESSON 2: Problem Raising (Exploration –Technology)**	**STEAM LESSON 3: Exploration (Scientific Discovery)**	**STEAM LESSON 4: Math – Logical Thinking Exercise**	**STEAM LESSON 5: Activity Planning (Art Creation)**
	1	The teacher introduces the cover and main characters from the story, predicting the content. E.g., the story "I Love My Body"	The teacher retells the story and discusses it with the children	Provides scientific knowledge to children through gathering or creating data related to the questions raised in the previous lesson	Logical thinking activities based on the story	Children present and share what they have discovered/observed/collected in the previous lesson
	2	Listen to the story	Sparks curiosity, creating a	Participate in Scientific	Logical thinking exercises	Children use drawings or created objects

			need to explore activities related to the story. Establishes a connection between the story and the STEAM activity	Discovery/Experiments	related to the story content	to describe what they have explored/observed and express their thoughts about their creations
	3	Learn about the characters and the content of the story. Describe the characters' traits, personalities, actions	Guide children to story-related content by showing them relevant activities on YouTube			
	4	Discuss the story details. Children practice critical thinking through a series of questions. Integrate emotional education questions into the conversation: How did the child feel about the story? What lessons did the story provide? What would the child do if they were the character? What did the characters do in the situation? Did the child feel empathy with the characters?	Guide children to discussion topics: What causes the phenomenon? What should people do to change it? How should they do it?			

Week 2	Steps	STEAM LESSON 6: Design (Art - Creation)	STEAM LESSON 7: Logical Thinking	STEAM LESSON 8: Creation (Technology - Crafting)	STEAM LESSON 9: Product Completion	STEAM LESSON 10: Presentation (Presentation - Project Summary)
	1	Teacher guides and supports children in generating ideas. Group work activities	Incorporate mathematical knowledge into the process (lessons related to balance, comparison, buoyancy, magnetism, shapes: cylinders, spheres, cubes, etc.)	Realize children's design ideas and create products according to the designs	Complete the STEAM product	Children present their product/group's product
	2	Introduce suitable materials	Logical Thinking Exercise	Use methods such as attaching, assembling, stacking different materials, following steps like in a technical design process	Enhance the product (experiment with other materials if the initial method is not effective)	Retell the story in order
	3	Use methods like drawing, sculpting, tearing, cutting, and pasting to create a complete design				Children self-assess the product (to help them understand and remember the steps and knowledge after each project)
	4	Design the process of creating the product				Teacher evaluates the children's products

3. Conclusions

Integrating Social and Emotional Learning (SEL) with STEAM activities presents a powerful approach to nurturing well-rounded learners in early childhood education. By applying the theories of Vygotsky, Bandursa, and others, and through thoughtful curriculum design, educators can create an environment where children develop emotional intelligence alongside academic

knowledge. Using thematic storylines, collaborative projects, and reflective practices ensures that SEL competencies are seamlessly woven into hands-on STEAM activities, promoting holistic child development.

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