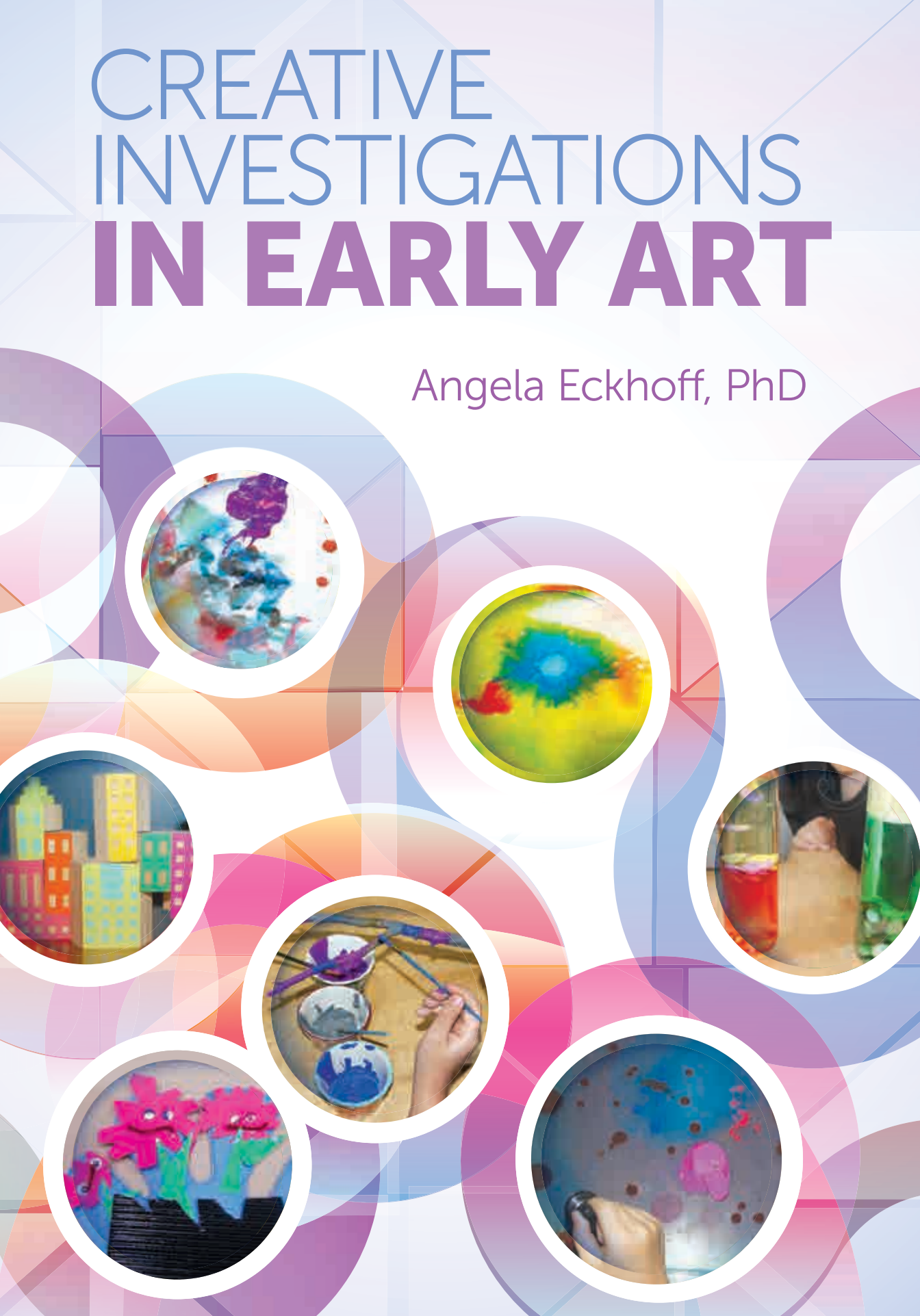
CREATIVE INVESTIGATIONS IN EARLY ART

Angela Eckhoff, PhD



CREATIVE INVESTIGATIONS IN EARLY ART

Angela Eckhoff, PhD

Gryphon House
www.gryphonhouse.com

Published by Gryphon House, Inc.
P. O. Box 10, Lewisville, NC 27023
800.638.0928; fax 877.638.7576

Visit us on the web at www.gryphonhouse.com.

Cover images used under license from Shutterstock.com and courtesy of the author.

Library of Congress Cataloging-in-Publication Data

The Cataloging-in-Publication Data is registered with the Library of Congress for ISBN 978-0-87659-806-1.

Bulk Purchase

Gryphon House books are available for special premiums and sales promotions as well as for fund-raising use. Special editions or book excerpts also can be created to specifications. For details, call 800.638.0928.

Disclaimer

Gryphon House, Inc., cannot be held responsible for damage, mishap, or injury incurred during the use of or because of activities in this book. Appropriate and reasonable caution and adult supervision of children involved in activities and corresponding to the age and capability of each child involved are recommended at all times. Do not leave children unattended at any time. Observe safety and caution at all times.

Contents

Introduction

Ms. Lara is introducing her class to an integrated science and visual-arts project that she describes as a moving painting, in which her students will experiment with color dyes and substances that will resist absorbing the color dyes. For this project, Ms. Lara has placed a variety of colored water in small containers. She has gathered pipettes, large tubs, and small containers of cooking oil and liquid soap to be used as a resist. As a resist, the cooking oil and liquid soap won't take on or absorb any of the color dyes the children add to the painting. Ms. Lara invites two children at a time to work alongside her as they explore and create with the materials. As Ms. Lara carefully describes the materials available for the experience, she emphasizes that the children take their time so that they can closely observe what happens each time they add a new color or substance.

One child, Matt, begins by slowly adding drops of color to his tray. While he works, Ms. Lara asks questions such as "What happened when you added the red to the yellow?" and "Ooh, what color will that make when you add it?" Following his use of the droppers full of color, Matt adds a few drops of oil, and Ms. Lara says, "The oil is resisting that color; it's not taking it on." Matt points out the areas that resist and states that they look like clear circles. Matt adds more colored liquid, faster than before, by pouring out the colored water in the small cups that Ms. Lara has made available. As he pours, he moves the cup around the tray, noting how quickly the colors are mixing together. Ms. Lara continues to support Matt's observations by asking questions and pointing out reactions as they work alongside each other.

Reflection

Ms. Lara and Matt worked alongside each other, which afforded many opportunities to talk about the transformations they were seeing after each new addition to the trays. This type of open-ended experience allows for much discussion and provides many opportunities for informal

observations of children's interests and understanding. Each child's experience is going to be different based on the materials he chooses to use and the order in which he uses them. An open exploration captures students' interests and gets them excited about what they will experience next. The inquiry-process skills used in this experience provide opportunities for students to make observations, explore, question, make predictions, and conduct simple science investigations.

The visual and performing arts are powerful curricular companions to early science, technology, engineering, and mathematics experiences. It is important for all early childhood educators to create an environment where the arts are a consistent and valued component of the daily life of the classroom, a classroom where the arts are embedded in the experiences of all children and teachers. Embedded arts experiences move beyond the additive approach of an arts-integration model to a more holistic view that values arts experiences that are rooted across the curriculum in meaningful ways. This holistic approach allows teachers and children to experience the visual and performing arts in a deep, meaningful way. The arts serve as a way for children to experience and express wonder, imagination, communication, and thinking. When the arts are integrated into STEM experiences, we can promote children's abilities to communicate their knowledge and understanding through dance, song, drawing, painting, or sculpture. Guidance in this section comes from the National Art Education Association (NAEA), the Early Childhood Issues Group of the National Art Education Association (called Early Childhood Art Educators, or ECAE), and the National Core Arts Standards from the National Coalition for the Core Arts Standards (NCCAS).

This book is designed to provide early childhood educators with pedagogical practices, arts content knowledge, and lesson ideas that scaffold young children's experiences with integrated visual and performing arts–rich STEM learning. You will find information on contemporary creativity and inquiry-based pedagogical practices that you can use to implement arts-rich learning experiences for young children. This book will broaden your understanding of the relationship among STEM content, learning environments, and supportive pedagogical

practices in early childhood classrooms. When visual and performing arts experiences build on student interests and understanding and connect to STEM content learning, young children are able to experience meaningful, relevant connections between content areas. This book stresses the importance of encouraging minds-on learning experiences in the early childhood classroom through guided and independent investigations where every child is actively involved. Early childhood educators have important roles in early arts-rich STEM experiences and will act as both guides and facilitators throughout the planning, implementation, and assessment of the creative, inquiry-based experiences presented throughout this book. For young children, arts-rich STEM experiences involve using tools and a variety of arts media and materials, being creative and inventive, developing questions based on observations and firsthand experiences, exploring meaningful content, and sharing their understanding with others.

Creative Investigations in Early Art will support your development of creative experiences in the classroom by helping you to do the following:

- Understand the links among the science, technology, engineering, arts, and mathematics disciplines
- Plan cooperative arts-based STEM lessons that will engage all children in your classroom as individuals or when working in small or whole groups
- Implement classroom experiences that support children's engagement in integrated, arts-rich learning experiences on an everyday basis
- Recognize the power of the visual and performing arts to support children's abilities to discover, invent, explore, question, and communicate their understanding of the world
- Document children's knowledge development with authentic work samples and classroom artifacts

Playful Learning

Play is an essential part of explorations of learning in early childhood. Through play, young children learn about themselves, their environment, people, and the world around them. Playful learning encourages children to explore and experiment in situations where they feel comfortable taking risks and delving into the unknown. Children's play in the early childhood classroom can take on many different forms and functions. When children explore, experiment, and cooperate through play, they learn about how the world works. Children need teachers who are supportive of their play and who work to carefully identify play situations where teacher guidance or involvement is welcome and needed.

Young children bring their knowledge and understanding into their play to further experiment and clarify their knowledge. This process is child driven; the role of the adult is one of supporter, guide, and facilitator. The adult meets each child at his own stage of understanding with intentional pedagogical practices that promote questioning and exploration. Teachers can create early childhood classrooms that honor the ways in which children learn and explore by ensuring that young children have ample opportunities for playful learning and exploration. In the role of supporter, guide, and facilitator, the teacher carefully observes children's play and helps to scaffold their thinking through questioning and providing additional supportive materials and opportunities for guided learning. The visual and performing arts encourage positive dispositions for play in the classroom because of the emphasis on discovery and invention as children explore and manipulate a wide variety of arts media.

Guided Explorations in Early Arts-Rich STEM Experiences

To develop a comprehensive approach, it is important to understand and apply the pedagogical practices that best support young children as they work in the visual arts. Supporting young children as they observe art, explore media and techniques, and create their own works of art requires

careful attention to the many facets of art making and art viewing. In a guided-exploration approach, a teacher works alongside students during visual-arts experiences to support observation and listening skills, to encourage artistic expression, and to consider the aesthetic qualities in art (Bresler, 1993). A guided-exploration approach encourages young learners to engage deeply during arts-rich experiences, which helps to encourage creative, artistic, and aesthetic thinking.

Guided Exploration Orientation to Classroom Arts Practices

In the guided-exploration orientation, the teacher's responsibilities include helping children learn to observe, listen, and communicate their sensitivities through artistic expression and to consider the aesthetic qualities in art.

The guided-exploration orientation involves intensive teaching on the part of the teacher, including providing students with personally meaningful feedback on their work and encouragement to continue to build their understanding.

Student engagement in arts experiences includes effort, concentration, awareness, and thought.

Bresler, Liora. 1993. "Three Orientations to Arts in the Primary Grades: Implications for Curriculum Reform." *Arts Education Policy Review* 94(6): 29–34.

As you plan lessons that integrate the arts, engineering, and technology, consider this guidance from the Early Childhood Arts Educator's Issues Group from the National Art Education Association about the types and qualities of supportive arts experiences in early childhood.

National Art Education Association. n.d. *Art: Essential for Early Learning*. Position paper. Alexandria, VA: National Art Education Association. https://www.arteducators.org/community/articles/67-early-childhood-art-educators-ecae

Quality Arts Education Guidelines

A quality early arts education requires that children have the following:

- Access to an organized, materials-rich environment that invites discovery, interaction, sensory and kinesthetic exploration, wonder, inquiry, and imagination
- Access to a wide variety of art media that support two- and three-dimensional (2-D and 3-D) expression
- Plenty of unhurried time, both structured and unstructured, to explore the sensory/kinesthetic properties of materials and to develop skills and concepts in re-presenting their experiences
- A responsive educator who values young children's diverse abilities, interests, questions, ideas, and cultural experiences, including popular culture
- A responsive educator who can support appropriate development of skills and use and care of materials
- A responsive educator who understands and supports the unique ways that young children represent their thoughts, feelings, and perceptions through actual, virtual, and experimental media and processes
- A responsive educator who supports the multiple ways that young children create meaning through conversation, storytelling, sensory-kinesthetic exploration, play, dramatics, song, and art making
- A responsive educator who carefully observes, listens to, and reflects on children's learning, using multiple forms of documentation and assessment

Building Creative Arts–Rich STEM Experiences in the Classroom

Early childhood educators have essential roles in the development of children's creative-thinking skills because these educators can either

create supportive classroom environments or create classrooms in which children's creative skills are stifled. To incorporate creative learning experiences in the classroom, teachers must design lessons that include opportunities for critical thinking and reflection, while also maintaining a focus on student interest. In addition, teachers must recognize that creativity is a learning process that encourages social interaction and promotes individual ownership of ideas. In the classroom, creativity is a part of the learning process based on children's interests, involves reflection and interaction with other children and adults, and requires children to document and report on their thinking and experiences. When young children are provided opportunities to personally engage with challenging, reflective learning experiences, they are building critical- and creative-thinking skills.

The lesson ideas and classroom vignettes shared throughout this book incorporate opportunities to build children's understanding of the visual and performing arts, science, technology, engineering, and mathematics while also promoting children's creative-thinking skills. Each lesson includes critical elements of inquiry and creative thinking—open-ended tasks, opportunities for social interaction, and opportunities for reflection and elaboration.

Open-ended tasks provide young learners with opportunities to experiment with new ideas and engage in inquiry. Because open-ended tasks promote idea experimentation, they encourage children to focus on the processes of learning rather than on the need to arrive at a single correct answer. Gaining experience with idea experimentation will help support children's acceptance of ambiguity and willingness to make mistakes, allowing them to gain confidence in their problem-solving abilities.

Likewise, providing opportunities for small-group work and social interaction is a crucial component of creative thinking. Working in pairs or small groups will help to promote brainstorming and allow children to learn from and with each other. Such tasks will also support children's experiences with reflection and idea elaboration. These skills

are important cognitive tools that allow children to learn from their own experiences and examine their own learning processes. Employing these components of creativity in the classroom will help to create a rich, engaging learning environment for all students.

Recommended Practices and Content Coverage in Early Arts-Rich STEM Experiences

The content of the lessons presented in each chapter of this book is based on the guiding recommendations presented in a position statement from the ECAE and in the National Core Arts Standards from the NCCAS. Both sets of standards are designed for use with young children, and we can use these guidelines to help determine the types of experiences that promote meaningful engagement in the arts for our students. Every lesson presented throughout each chapter of this book is designed to encourage you to explore and implement the types of arts-rich STEM learning that will build children's thinking, exploring, questioning, and documenting skills, in addition to curricular content knowledge. Together, we will explore the types of lessons and approaches to pedagogy that will help your students learn much more than the conceptual facts; we will look for the opportunities that arise during your interactions with students and enable you to support, extend, and encourage their thinking with conversation and questioning in a natural manner.

Every lesson you encounter in this book will ask you to carefully consider your interactions with young children, as well as the classroom environment. The interplay among children, teachers, and the classroom environment is central to the process of learning. The concept of possibility thinking encourages teachers to consider how asking questions, play, supportive classrooms, imagination, innovation, and risk-taking affect the processes of thinking and learning.

The elements of possibility thinking are as follows:

- **Possibility thinking**—a dynamic interplay between children and teachers
- **Posing questions**—questions from children are acknowledged and celebrated by teachers; teachers' questions encourage inquiry
- **Play**—opportunities for extended play periods
- **Immersion**—immersion in a benign environment free from criticism and mockery
- **Innovation**—teachers closely observe innovations in student thinking in order to prompt and encourage
- **Being imaginative**—ample opportunities to meld imagination and curriculum content
- **Self-determination and risk-taking**—deep involvement and risk-taking are encouraged by both children and teachers

Craft, Anna, Linda McConnon, and Alice Matthews. 2012. "Child-Initiated Play and Professional Creativity: Enabling Four-Year-Olds' Possibility Thinking." *Thinking Skills and Creativity* 7(1): 48–61.

Promoting Creative, Arts-Rich Learning in the STEM Disciplines

Classroom components	***Supportive approaches in the early childhood classroom***
Physical environment	• Flexible spaces with movable furnishings that provide space for exploration, display, and storage, and spaces that can accommodate and adapt for small and large groups

Classroom components	*Supportive approaches in the early childhood classroom*
Role of the teacher	• Provide opportunities for children to document their thinking through drawing, writing, and verbal means • Encourage students to share their thoughts with a large/small group • Ask questions to promote deep thinking and problem solving • Provide materials that can support student inquiry • Closely monitor student thinking and exploration in order to scaffold experiences
Peer-to-peer relationships	• Provide opportunities for children to share their problem-solving experiences • Encourage and support children's use of inquiry-based and creative thinking • Provide opportunities for children to ask questions, design/plan experiments, work in pairs/small groups, test ideas, and document their experiences
Structure of arts-rich STEM experiences	• Provide opportunities for children to connect the arts to STEM content areas, work on problems and projects for extended periods of time, and revisit previous experiences and lessons multiple times to encourage mastery and promote confidence
Parent and community engagement	• Provide opportunities to connect arts-rich STEM experiences to the community and the children's daily lives • Engage families throughout the learning process through regular documentation of children's experiences

Organization of This Book

This book is based on broad categories of early arts-rich explorations: music and movement, dramatic arts, visual arts, and artists and artworks—all integrated into STEM activities.

Each chapter begins with background information on the visual- or performing-arts content presented throughout the chapter. Each chapter also features classroom vignettes to help bring the information on content and pedagogical information to life. Woven throughout the book are arts-rich STEM lessons for young children that are built on pedagogical practices for creative, inquiry-based thinking. You will also find information on recommended children's books related to each chapter's content.

EDU023000

PLAY, draw, DESIGN, CRAFT, & imagine... INSPIRE CREATIVITY!

Explore how art is a natural fit with science, technology, engineering, and math (STEM) investigations! Did you know the visual and performing arts are powerful curricular companions to early STEM experiences? The arts help young learners nurture and expand their creative- and critical-thinking, communication, and problem-solving skills.

Open-ended art exploration captures students' interests and gets them excited about what they will experience next. These experiences include opportunities for students to observe, explore, question, predict, and even conduct simple science investigations.

With guidance from the National Art Education Association (NAEA) Early Childhood Issues Group (ECAE) and the National Core Arts Standards from the National Coalition for the Core Arts Standards (NCCAS), *Creative Investigations in Early Art* provides early childhood educators with pedagogical practices, arts-content knowledge, and lesson ideas to build young children's experiences with integrated visual and performing arts.

Teachers will learn practical ideas for intentionally fostering young children's hands-on, minds-on explorations connecting the following areas of the creative arts to STEM:

- Music and Movement
- Dramatic Arts
- Visual Arts
- Artists and Artworks

Guide your young learners as they explore both on their own and collaboratively to develop their ability to innovate and imagine.

Angela Eckhoff, PhD, is an associate professor of teaching and learning in the Early Childhood Education program and codirector of the Virginia Early Childhood Policy Center at Old Dominion University. She holds a dual PhD from the University of Colorado–Boulder in educational psychology and cognitive science. She is a coeditor of the Growing in STEM column for *Young Children*, published by the National Association for the Education of Young Children. She is the author of **Creative Investigations in Early Science, Creative Investigations in Early Technology and Engineering**, and **Creative Investigations in Early Math**, available from Gryphon House.

GH 15949

U.S. $18.95

ISBN 9780876598061

51895

9 780876 598061

Gryphon House

www.gryphonhouse.com