

Standards Correlations

Developmentally Appropriate Practice (DAP)

NAEYC[®] Principles of Child Development and Learning



www.kidescience.com

About Us



Our activities are story-based inquiries—creating playful scenarios in your classroom.

In every single lesson, children advance crucial science-process skills (also known as inquiry skills):

- Observation
- Classification
- Communication
- Measurement
- OPredication
- 🧭 Interpretation
- 🔮 Conclusion



Egg-straordinary Nest Building How do birds look after their babies?

Engineering Science Arts Mathematics

() 45 min lesson Easy preparation

In addition to these scientific inquiry skills, each lesson supports many other skills, including technological, socialemotional, linguistic, mathematical and movement skills.

We really are cross-curricular.

See <u>our other standards documents</u> for more details.



How Kide Science Supports the Principles of Child Development and Learning

Our goals and learning philosophy match with the following principles:

Development and learning are dynamic processes that reflect the complex interplay between a child's biological characteristics and the environment, each shaping the other as well as future patterns of growth.

Yes, we agree! Kide activities focus upon *the active process* of finding out new things (constructing knowledge), rather than rote-learning facts. When children have an active role in finding out new things, the learning is more likely to stay with them for years to come.

2. All domains of child development—physical development, cognitive development, social and emotional development, and linguistic development (including bilingual or multilingual development), as well as approaches to learning—are important; each domain both supports and is supported by the others.

It's so easy to associate science *only* with cognitive development. Actually, it is so much more than that! Early science learning is all about curiosity, enthusiasm, sharing and celebrating the new findings together.

Also, a socially and emotionally safe environment is crucial for children to share their ideas, rather than feeling the pressure to give only "correct" answers. During Kide inquiries, ideas don't have to be scientifically accurate to be valued. The accuracy will develop little by little in time, along with conceptual understanding.

3. Play promotes joyful learning that fosters self-regulation, language, cognitive and social competencies as well as content knowledge across disciplines. Play is essential for all children, birth through age 8.

This principle resonates with our thinking the most! Play is key; it's essential for development and learning.

We use pretend play to boost the feeling of competence: when a child puts on a lab coat, they feel like a real scientist—a problem solver who can do anything. We embrace the power of a child's imagination, and use it to challenge thinking beyond what they already know. It develops their identity as a competent STEAM learner.



4. Although general progressions of development and learning can be identified, variations due to cultural contexts, experiences, and individual differences must also be considered.

For every learning situation, a child brings their own individual experiences and personal background. They then use these experiences to make sense of new concepts. Of course, the challenge for a teacher is to acknowledge and value these different backgrounds. Luckily, as our lessons are play-based, all children can access the learning from their own point of view.

We also support this individuality through activity-specific adaptation tips: there to help the teacher differentiate the lesson.

5. Children are active learners from birth, constantly taking in and organizing information to create meaning through their relationships, their interactions with their environment, and their overall experiences.

Yes they are! Fundamental inquiry skills already develop as babies observe the world around them. During Kide inquiries, children continue to practice these inquiry skills throughout early childhood. They are active agents; problem solving with phenomena hands-on.

6. Children's motivation to learn is increased when their learning environment fosters their sense of belonging, purpose, and agency. Curricula and teaching methods build on each child's assets by connecting their experiences in the school or learning environment to their home and community settings.

Exactly! This is one reason for using stories and imaginary play in inquiries; they make the science child-sized and meaningful. The pretend play element also boosts the active role of the children, let's them take ownership, and helps them to communicate their findings and ideas.



7. Children learn in an integrated fashion that cuts across academic disciplines or subject areas. Because the foundations of subject area knowledge are established in early childhood, educators need subject-area knowledge, an understanding of the learning progressions within each subject area, and pedagogical knowledge about teaching each subject area's content effectively.

> Our world is not divided into subject areas: that's why our lessons use a more holistic approach. Our inquiries are seldom about one subject area; we might combine movement with SEL; math with arts; or bringing all of the STEAM-subjects together.

8. Development and learning advance when children are challenged to achieve at a level just beyond their current mastery and when they have many opportunities to reflect on and practice newly acquired skills.

Levels of mastery are not strictly bound to age; children develop at different paces with different strengths. That's why our activities can be taught with different age groups. The open-ended play means that children often exceed their expected level of performance as their imagination takes them beyond what they already know.

As an added bonus, our lessons can be made more challenging by using our handy adaptation tips.

9. Used responsibly and intentionally, technology and interactive media can be valuable tools for supporting children's development and learning.

In our approach, the concept of technology is not bound to electronic devices. Our activities include active hands-on experimenting, during which the children will learn skills like computational thinking, creative engineering, problem solving and critical thinking.

