



Making and Play

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BHAG

Playful learning can give *context* to making.

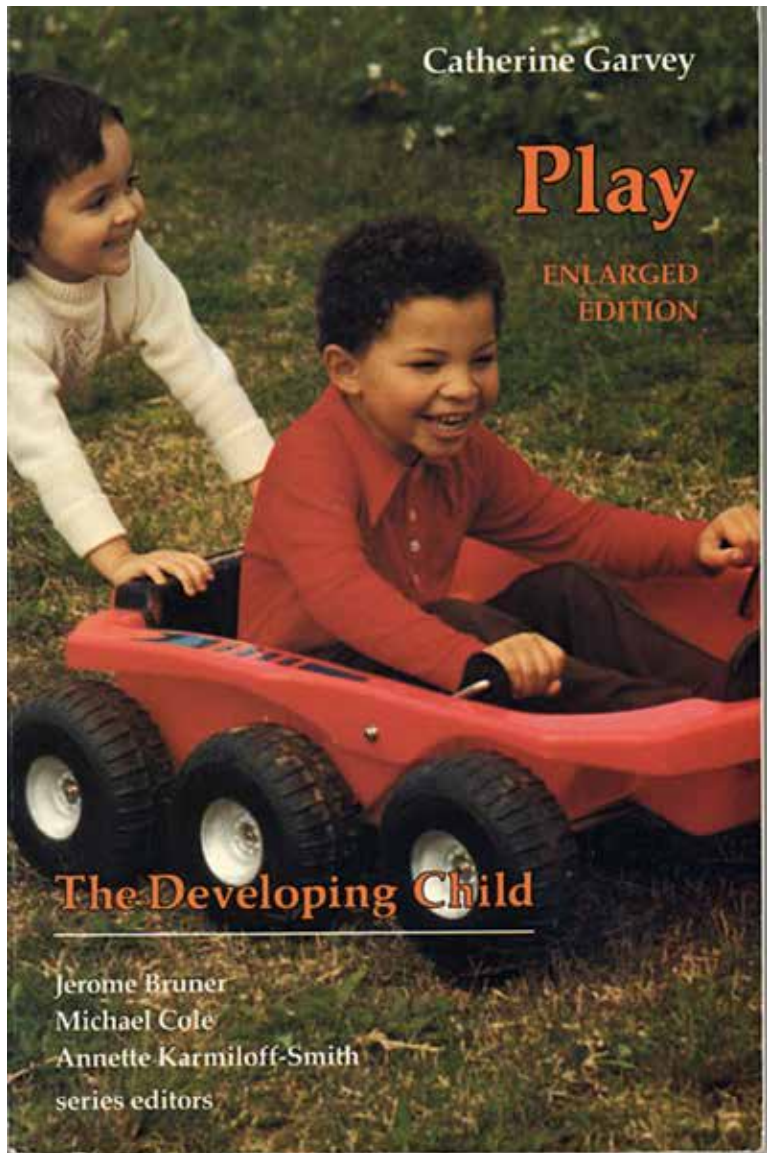
Context builds engagement.

Engagement fuels stamina.

Stamina is needed to develop skill.

Skill supports opportunity.

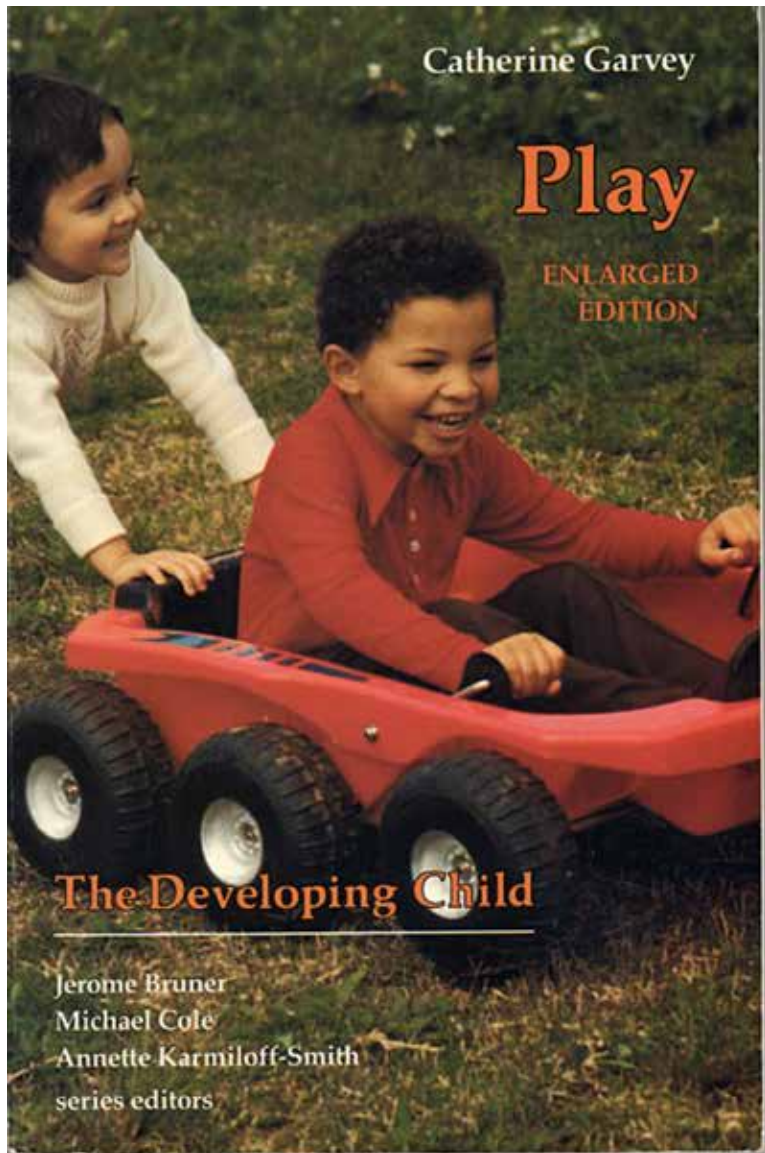




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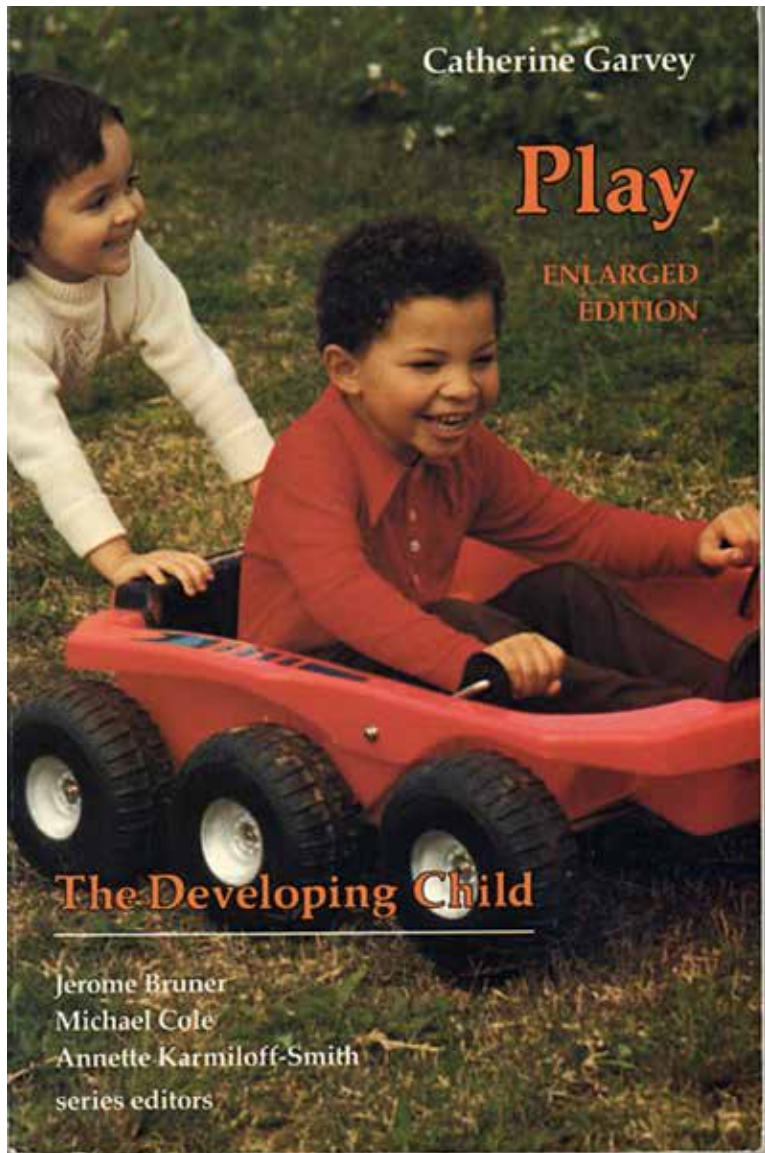
I. Play is pleasurable,
enjoyable. Even when not
accompanied by signs of
mirth, it is still **positively
valued by the player.**

Garvey, Catherine. 1990. *Play*. Enlarged edition. Cambridge,
MA: Harvard University Press. ISBN 9780674673656.



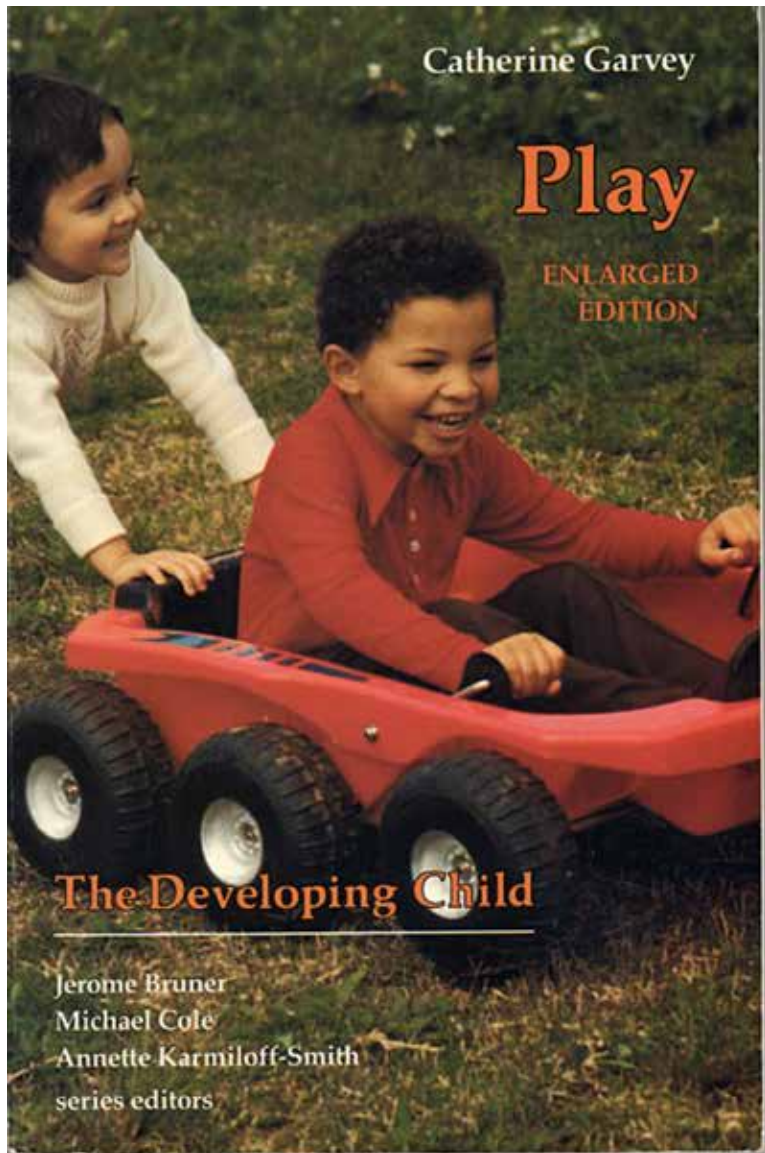
“

2. Play has no extrinsic goals. Its motivations are **intrinsic** and serve no other objectives. In fact, it is more an enjoyment of means than an effort devoted to some particular end. In utilitarian terms, it is **inherently unproductive**.



“

3. Play is spontaneous and voluntary. It is **not obligatory** but is **freely chosen** by the player.



“

4. Play involves some **active engagement** on the part of the player.

Garvey, Catherine. 1990. *Play*. Enlarged edition. Cambridge, MA: Harvard University Press. ISBN 9780674673656.

Kit-ification



A decorative graphic featuring a large, light blue dashed circle. Inside and around this circle are various colorful geometric shapes: a large green circle at the top left, a small green circle with a white dot, a small blue circle, a large orange circle, a small pink circle, a yellow arc, a large cyan arc at the top right, a blue circle containing a white quote mark, a large yellow circle, a small pink circle, a large orange arc, a small green circle with a white dot, and a small cyan circle. The text "Hour of Code is boring. All you do is make the game they want you to make." is centered within the dashed circle.

“

*Hour of Code is boring. All you
do is make the game they want
you to make.*

Heathcote, Dorothy, and Gavin M. Bolton. 2010. Drama for learning Dorothy Heathcote's mantle of the expert approach to education. Portsmouth, NH: Heinemann. ISBN 9780435086435

Drama for Learning

Dorothy Heathcote's Mantle of the Expert Approach to Education



Dorothy Heathcote and Gavin Bolton

“Mantle of the Expert works by ...planning a **fictional context** where the students take on the responsibilities of an expert team.

As the team, they are **commissioned by a client** to work on a assignment, which has been planned to generate tasks and activities that will involve them in studying and developing wide areas of the curriculum.”

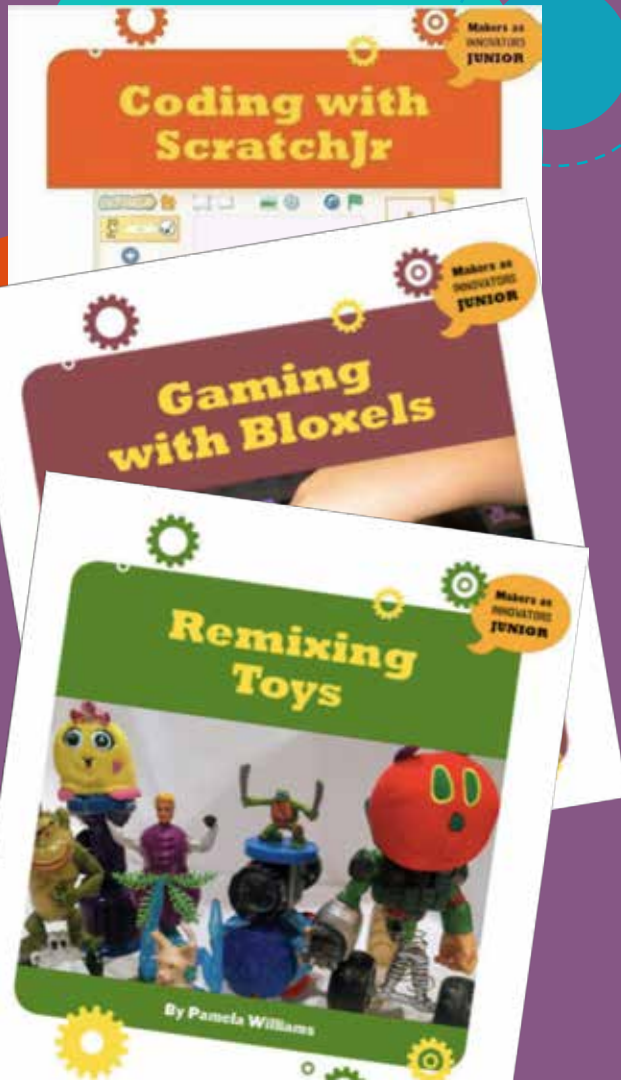
<https://www.mantleoftheexpert.com/what-is-moe/introduction-to-moe/>

Solving Problems in Role

See selves as professionals

Adds a theatrical tension

Turns STEM toys into
problem-solving tools



Makey Makey

Designing Board Games

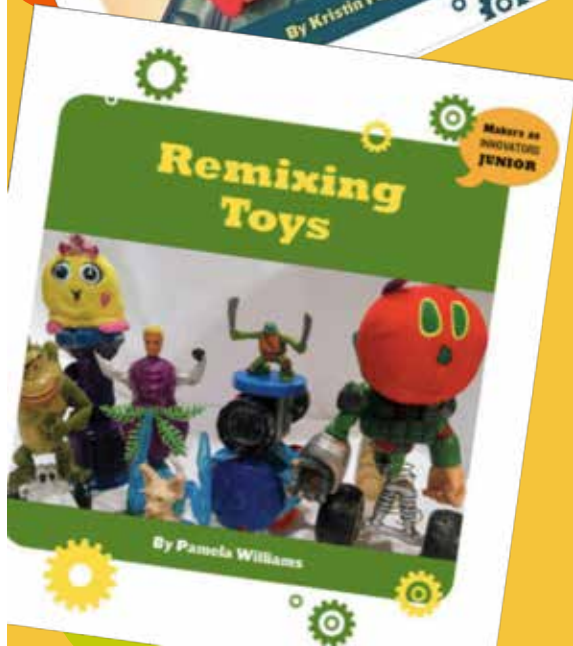
Controlling an Ozobot

Pizza, Prototype, and Pitch

Game Design

LittleBits

Inventing with LittleBits

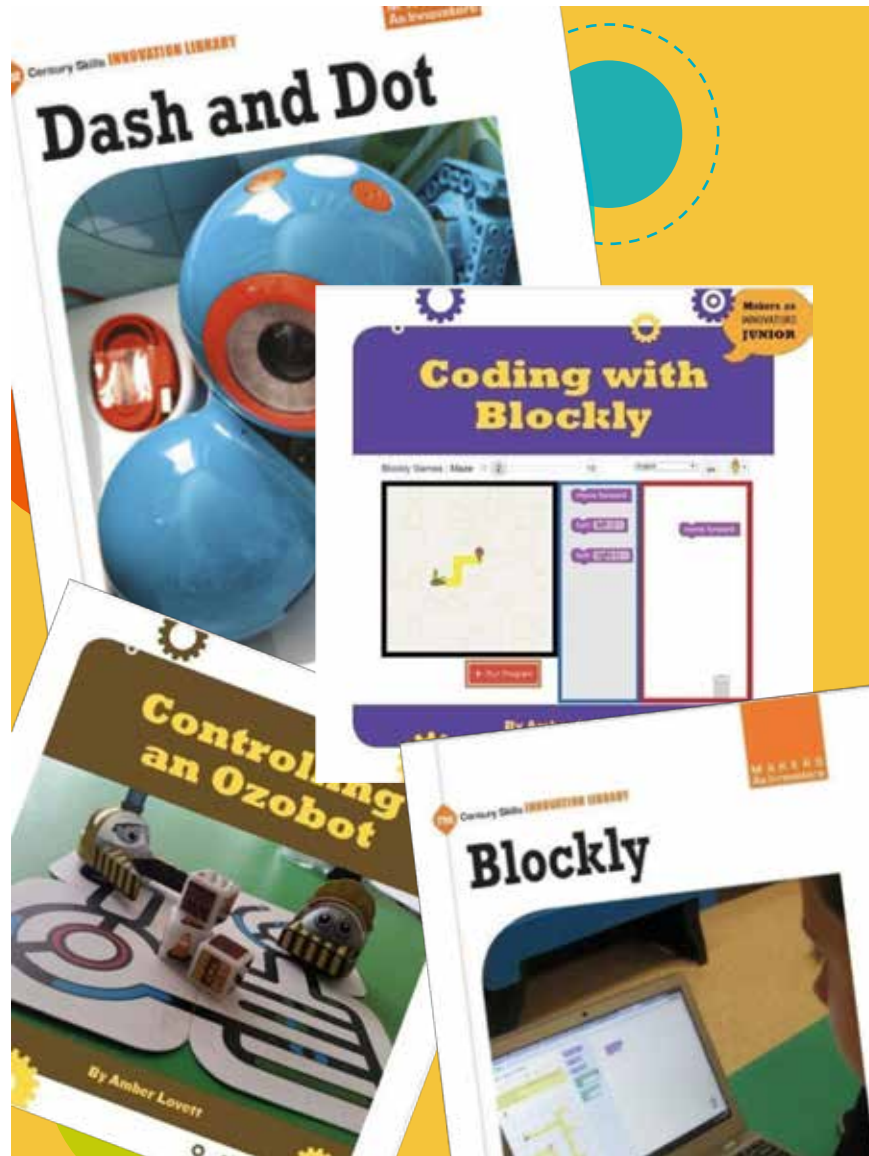


Holiday Toy of the Year*

***But the factory can't afford new materials**



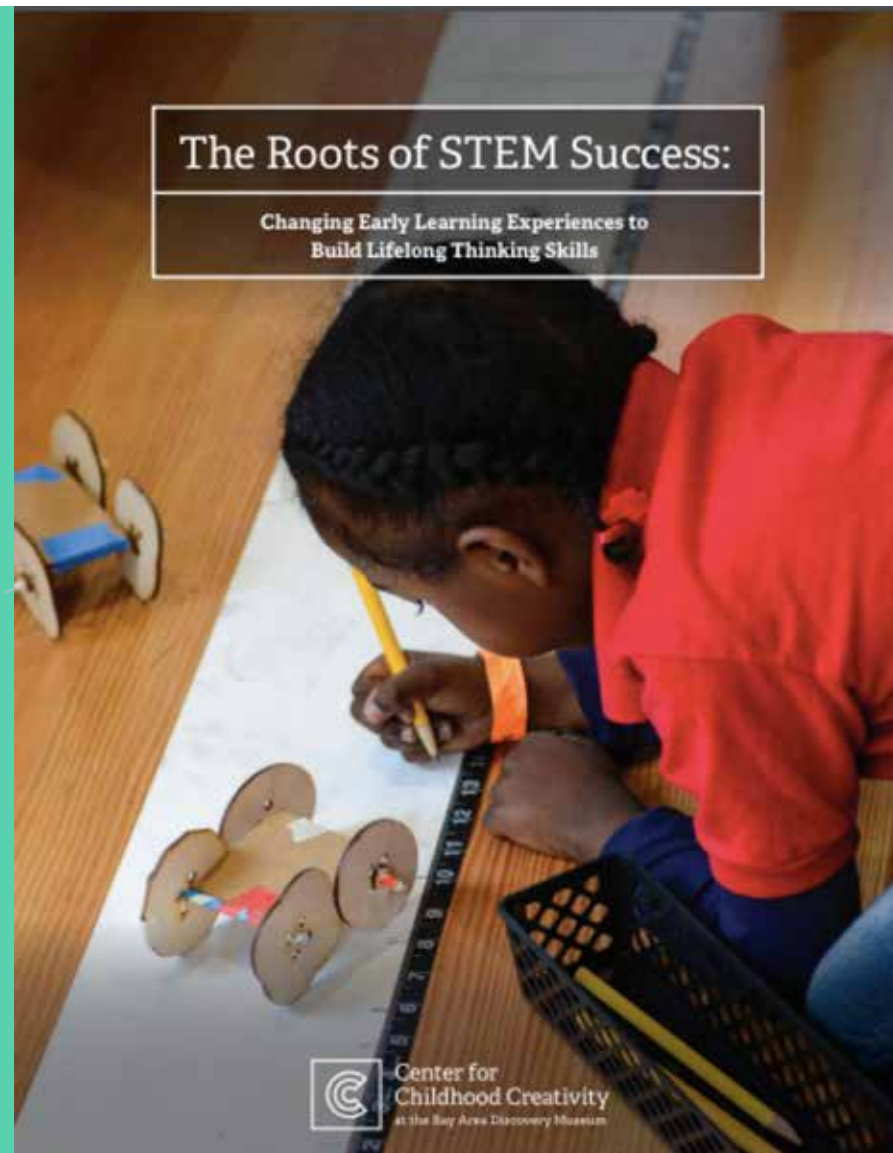
Video Game Company



Robot Theatre Company

1. STEM thinking begins in infancy.
2. To become strong STEM thinkers, children need more play.
3. STEM amplifies language development; language enables STEM thinking.
4. Active, self-directed learning builds STEM skills and interest.
5. Mindset matters to STEM success.
6. Children's abstract thinking potential can be unlocked through both adult support and executive function skill development.

<http://bit.ly/roots-stem>





Your Turn ... Questions?

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