

# *Enriching the Lives of Children*

*Creating Meaningful and Novel Stimulus  
Experiences to Promote Cognitive, Moral and  
Emotional Development*

*Rosalyn M. King, Presenter*

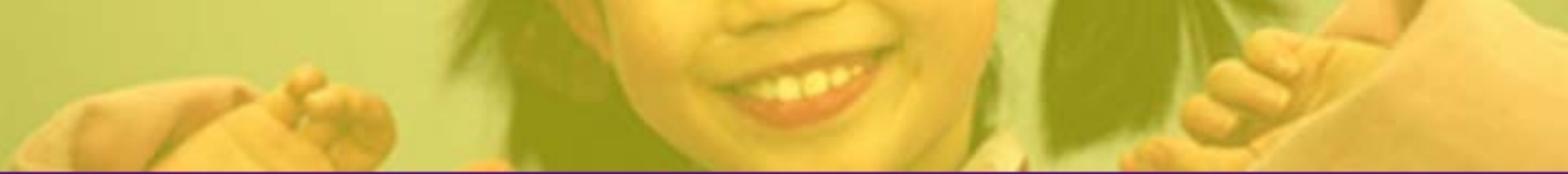
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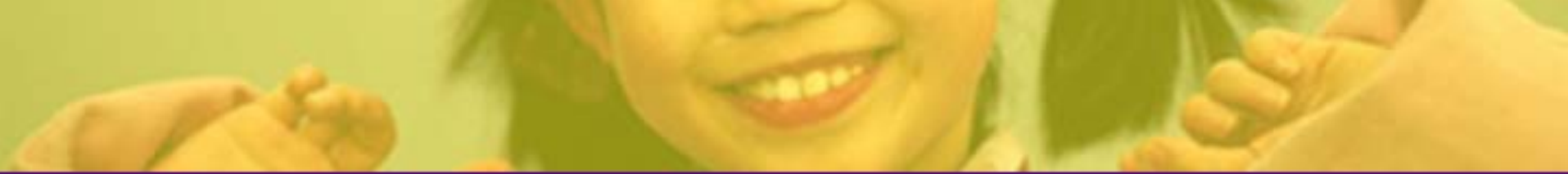
*Oxford Roundtable on the Psychology of the Child  
St. Anne's College-Oxford University  
July 16-21, 2006*





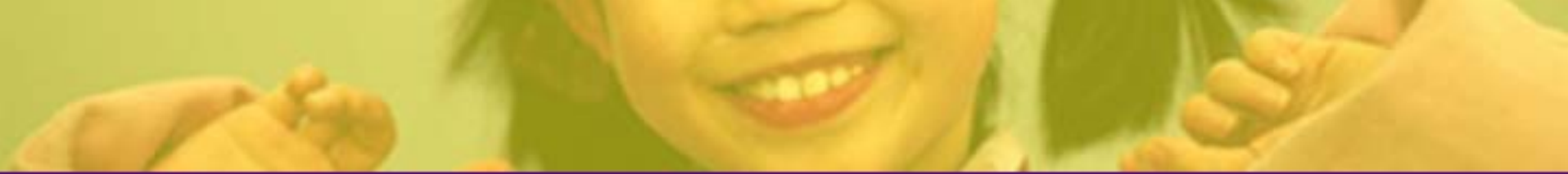
# OVERVIEW

- I am particularly interested in exploring innovative and novel ways to enrich children's lives within and outside of the classroom.
- My paper is a theoretical discussion of theories, research, instructional strategies and models on enriching the lives of children.
- I also examine the connections and impacts on the developmental domains; i.e., effects of learning and stimulation on cognitive, moral, and emotional development.



# OVERVIEW

- Substantial review conducted over 4 decades on constructivists, cognitive developmental and authentic learning theorists, explanations and models.
- A major observation: 2 major streams of thought reflected: traditionalist perspectives vs. reformers or innovators.
- Traditionalist focus on basic skills development.
- Innovators focus on basics plus enhancing growth and development through a variety of innovative approaches that empower students in an integrated way.



**TABLE 1.1** Education's Ideological Divide

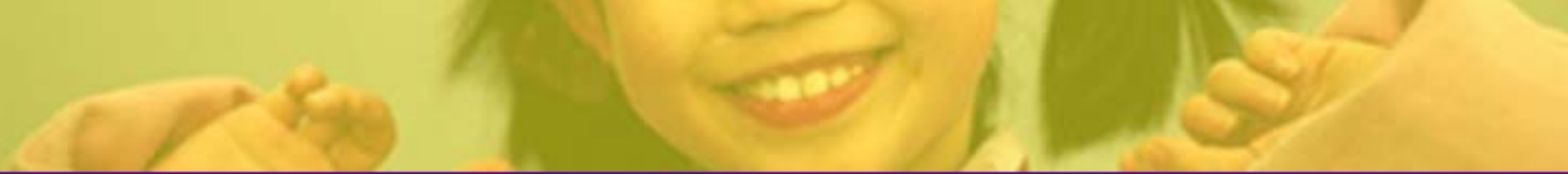
TRADITIONAL	INNOVATIVE
<p>Standardized Tests Basic Skills Ability Grouping Essays/Research Papers Subject-Matter Disciplines Chronology/History Breadth Academic Mastery Euro centrism Canonical Curriculum Top-down Curriculum Required Content</p>	<p>Authentic Assessment Higher-Order Thinking Heterogeneous Grouping Hands-on Projects Interdisciplinary Integration Thematic Integration Depth Cultivation of Individual Talents Multiculturalism Inclusive Curriculum Teacher Autonomy/Creativity Student Interest</p>

Source: Ferrero 2006.



# OLD PARADIGM VS. NEW PARADIGM

- How will the mainstream paradigm change; or how might it change, to reflect the transitions and challenges in education we are confronting in the 21<sup>st</sup> century?
- Faces, perspectives, needs of students are changing.



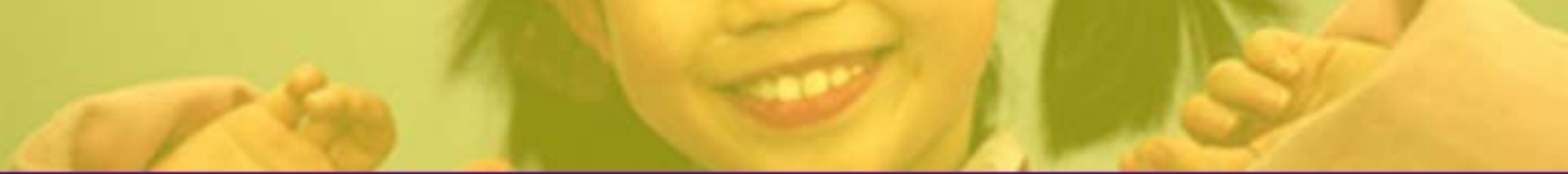
# Research Questions

- Since the call for reforms in education in the 1970s, what reforms have been made and what further reforms are needed?
- Are we or how can we create classrooms that are exciting and stimulating places for students to be?
- How do we transition from the more traditional modes of teaching to dynamic models of teaching and learning that truly stimulate and motivate student learning?



# Research Questions

- Is there a possibility that the traditional modes and alternative innovative modes can meet?
- Over the past 2 decades, who has developed or implemented innovative theories, explanations, or model programs addressing the importance of enriching the lives of children, targeting developmental domains and developing interesting, novel but practical and workable, stimulating instructional programs?
- What are the important key elements and how do they relate to the developmental domains?



# Research Questions

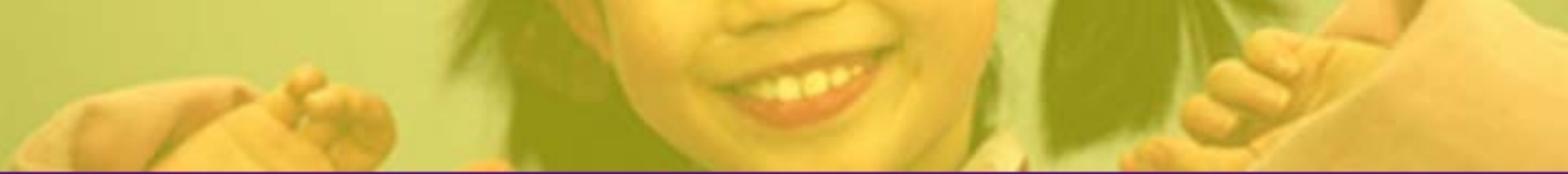
- What interesting and novel instructional or program models are being implemented and tested; and, do these models address or impact developmental domains? What specific developmental domains are addressed?
- Are model programs having successful results? Is there conclusive evidence as to their effectiveness; and precisely how are these programs enriching the lives of children in meaningful and positive ways?
- What are the gaps in understanding, research and the types of programs needed; and, what questions remain?





# Historical Reflections

- 1970s: Classrooms are boring places to be (Goodlad, 1977).
- Report, *A Nation At Risk* (1983) says American education is mediocre and calls for reforms (National Commission on Excellence in Education).
- In 2003, Koret Task Force on K-12 Education (Hoover Institution) says no effective educational reforms were made. Still need flexibility and innovation.



# Historical Reflections

- Critical Question:

*Are schools “good enough” to prepare students for the challenges of the 21<sup>st</sup> century?*



# Meaning of Enrichment

- **No substantive definition found.**
- **Descriptors from dictionary:**

*“to add greater value or significance to.”*

*“to improve in quality or productivity (as by adding desirable ingredients).”*

*“to supply with riches or wealth.”*

*-Random House Webster's College Dictionary-*

*“to make rich or richer”*

*The New Merriam-Webster Dictionary*

*“to improve the quality or value of;” to make wealthy or wealthier.”*

*-Compact Oxford English Dictionary-*



# Enrichment—My Definition

*“Improving the quality and value of one’s life through nurturance and development of one’s human potential by provision of stimulating experiences that energize the individual to act in positive and productive ways; and, with the end result being enhanced growth and development that leads to a higher quality of life, greater productivity, balance and wholeness.”*

*The beneficial outcome of such enrichment should result in riches and wealth, both personally and materially.*



# Why Worry About Enrichment?

## **Parker Palmer:**

*“The purpose of education is to guide students on an inner journey toward more truthful ways of seeing and being in the world.”*

## **David Perkins:**

*“The purpose of education is not just about acquiring knowledge, but about learning how to do significant things with what you know.”*

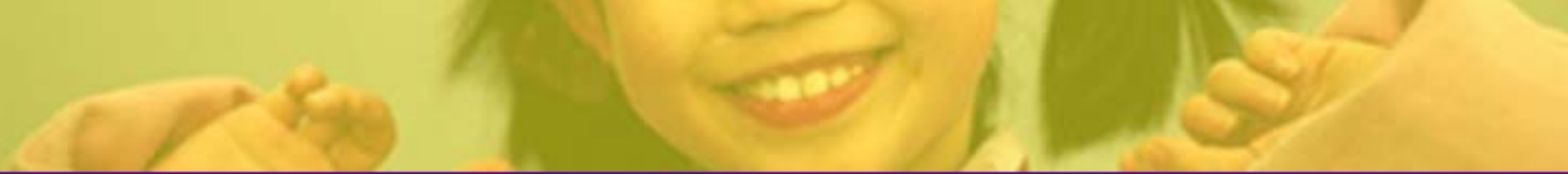
## **Howard Gardner:**

*“A good measure of intelligence is a student’s ability to fashion products.”*

## **Constructivist Theorists:**

*“Students must be permitted the freedom to think, to question, to reflect, and to interact with ideas, objects, and others—to construct meaning.”*

(Brooks & Brooks).



# Why Worry About Enrichment?

***“The call to enrich the lives of children is the call to give the children of the world every opportunity to evolve into psychologically healthy, whole, viable, and productive human beings--who will contribute to the good of self, society and world; and which will, hopefully, lead to a richer and better world in which to thrive and grow.”***

## Theoretical Propositions Supporting Enrichment

- Constructivism
- Authentic Pedagogy
- Authentic Assessment
- Teaching for Meaning and Understanding

## Learning and the Developmental Domains

- Learning & Cognitive Development
- Developmental Appropriate Practices & Brain Research
  - Development of Moral Character
  - Stimulating Emotional Development
  - Creativity & Development

## Innovative Models

- Large-Scale Programs
- Innovative Teaching Strategies
- Multiple Intelligences-Models and Programs
- Inquiry & Problem-Based Models
  - Science Models
- Service and Field-Based Models
- Innovative Instructional Technology Models
  - Global Projects

## Pedagogical Structures and Strategies

- Holistic Education
- Teaching for Multiple Intelligences
- Guided Discovery
- Structured, Pretend and Mature Play
  - Concept of Flow
- Differentiated Instruction
- Role of Technology (Computer-Based and Innovative)

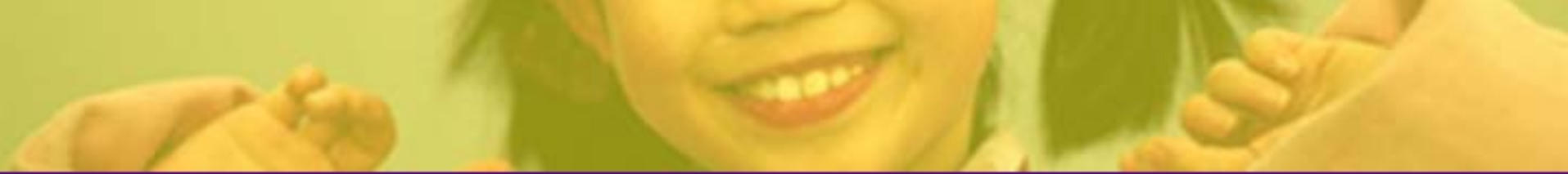
Research Findings Include Four Parts

# **KEY FINDINGS:**

**Constructivism,  
Authentic Pedagogy,  
Learning and  
Assessment**







# Constructivism, Authentic Pedagogy, Learning and Assessment

- A call for authentic teaching and learning.
- Allow children to personally construct knowledge and meaning with conceptual tools.
- From old notion of learners as “disconnected knowledge processing agents” to “learners as active knowledge-makers or constructors” (Bloomer, 2001).



# Constructivism, Authentic Pedagogy, Learning and Assessment

- Constructivism not a new concept. Early scholars such as Aristotle, Husserl, Vygotsky, Piaget and Bruner pointed to the necessity of students being able to socially construct meaning and understanding through learning.
- Current scholars—Gardner, Newmann, Csikszentmihalyi, Sternberg, Feldman, and others, support the notion that finding ways to stimulate children's educational lives is important.



# Constructivism, Authentic Pedagogy, Learning and Assessment

- Authentic construction of knowledge involves application, manipulation, interpretation, or analysis of prior knowledge to solve a problem that cannot be solved simply by routine retrieval or reproduction." (Newmann 1996,286)
- A summary of the research over the last 30 years on learning and cognition reveals that authentic learning for meaning leads to greater retention and use of information and ideas (Bransford, Brown & Cocking 2000).



# Constructivism, Authentic Pedagogy, Learning and Assessment

- A teacher states:

*“I want my students to look at a tree and think of the leaf patterns and the golden ratio, how chlorophyll changes with the seasons, how trees fit in the ecosystem. Our job is to get students to love learning and wonder why and how things work.”* (Brooks 2004,13)



# Constructivism, Authentic Pedagogy, Learning and Assessment

According to research, teaching for meaning and understanding occurs when five key principles are implemented:

- Understanding big ideas in content;
- When students are asked to inquire, think at high levels and solve problems;
- When students are expected to apply knowledge and skills in meaningful tasks within authentic contexts;
- When teachers regularly use thought-provoking, engaging, and interactive instructional strategies.
- When students have the opportunity to revise their assignments using clear examples of successful work, known criteria, and timely feedback.

(McTighe, Seif, & Wiggins 2004, 27)

A young child with light-colored hair is shown in profile, blowing bubbles. The child's mouth is open, and several bubbles are visible near their face. The background is a soft, out-of-focus green with many more bubbles floating around. The overall mood is joyful and carefree.

# KEY FINDINGS: Learning and the Developmental Domains

Cognitive, Moral, Social,  
and Emotional Development



## KEY FINDINGS: Learning and the Developmental Domains

- There is an interconnection between learning, cognition, social and emotional development.
- When we speak about stimulating children's lives, strategies developed must also address the developmental domains.
- Learning should have effects outside the classroom.



## KEY FINDINGS: Learning, Cognition and Development

- A wide variety of factors guide learning—**anatomical, physiological, environmental and cognitive.**
- There are **physiological linkages to learning and corresponding brain changes** as one engages in learning.
- Development also **impacts brain growth and functioning.** The brain behaves but the **brain also responds to its environment.**
- Brain, body and developmental domains work together.
- This research report documents in detail, the findings on learning, development and brain connections, along with suggestions for appropriate classroom teaching and learning strategies.
- See pages 21-26 for a detailed listing of research findings, along with a Table on developmentally appropriate practices correlated with brain research and recommended instructional strategies.





## KEY FINDINGS: Development of Moral Character

*“To educate a person in mind and not in morals is to educate a menace to society.”* Theodore Roosevelt

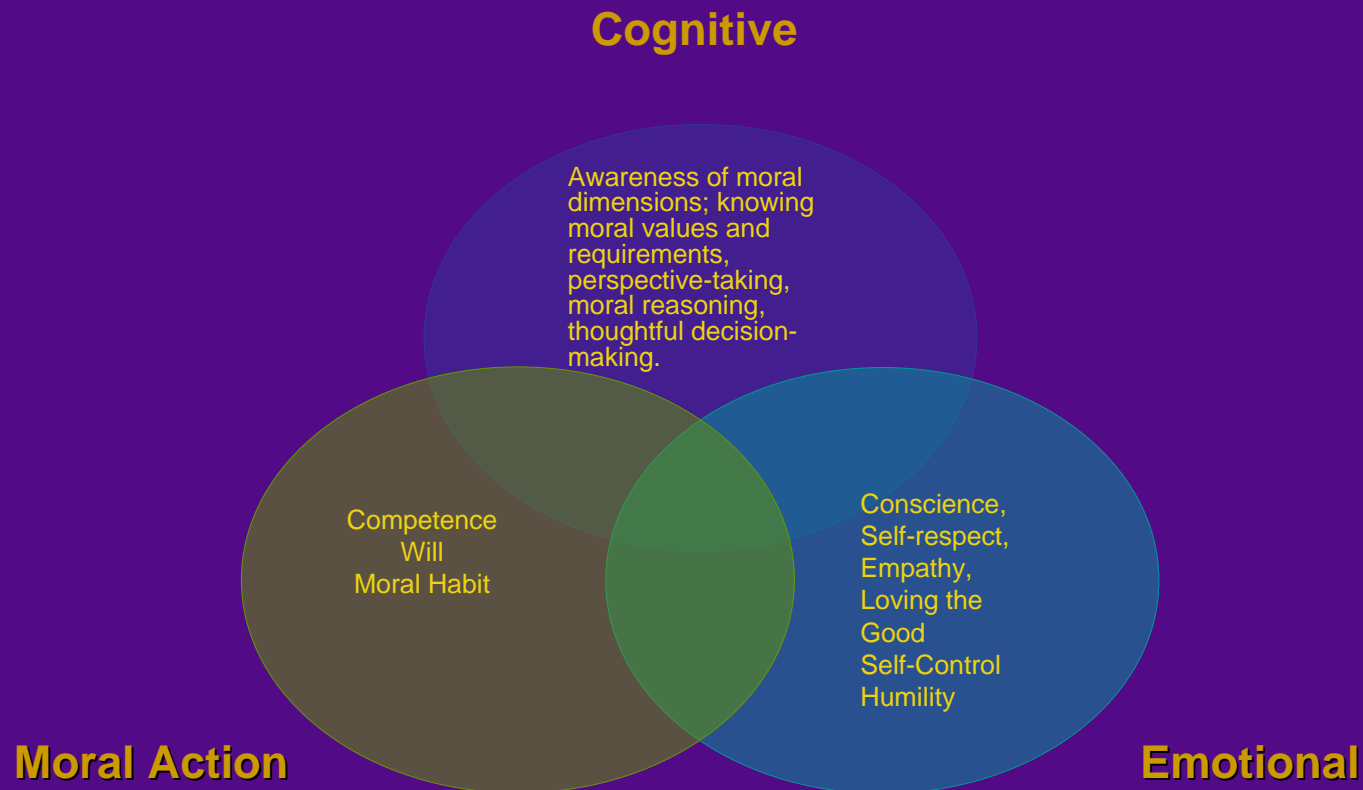
- The development of moral character was advocated in the earliest of times.
- McGuffey Readers in 1836.
- John Dewey, Emile Durkheim and Jean Piaget also were proponents of moral development. Dewey wrote *Moral Principles in Education* (1911) and Durkheim’s book had a similar title, *Moral Education* (1925). This was followed by Hartshorne and May, *Studies in the Nature of Character* (1928-30) and Jean Piaget’s work, *The Moral Judgment of the Child* (1932).
- C.S. Lewis: concept of the “good person.” Outlined a list of important virtues- Kindness, honesty, loyalty, obligation, etc.



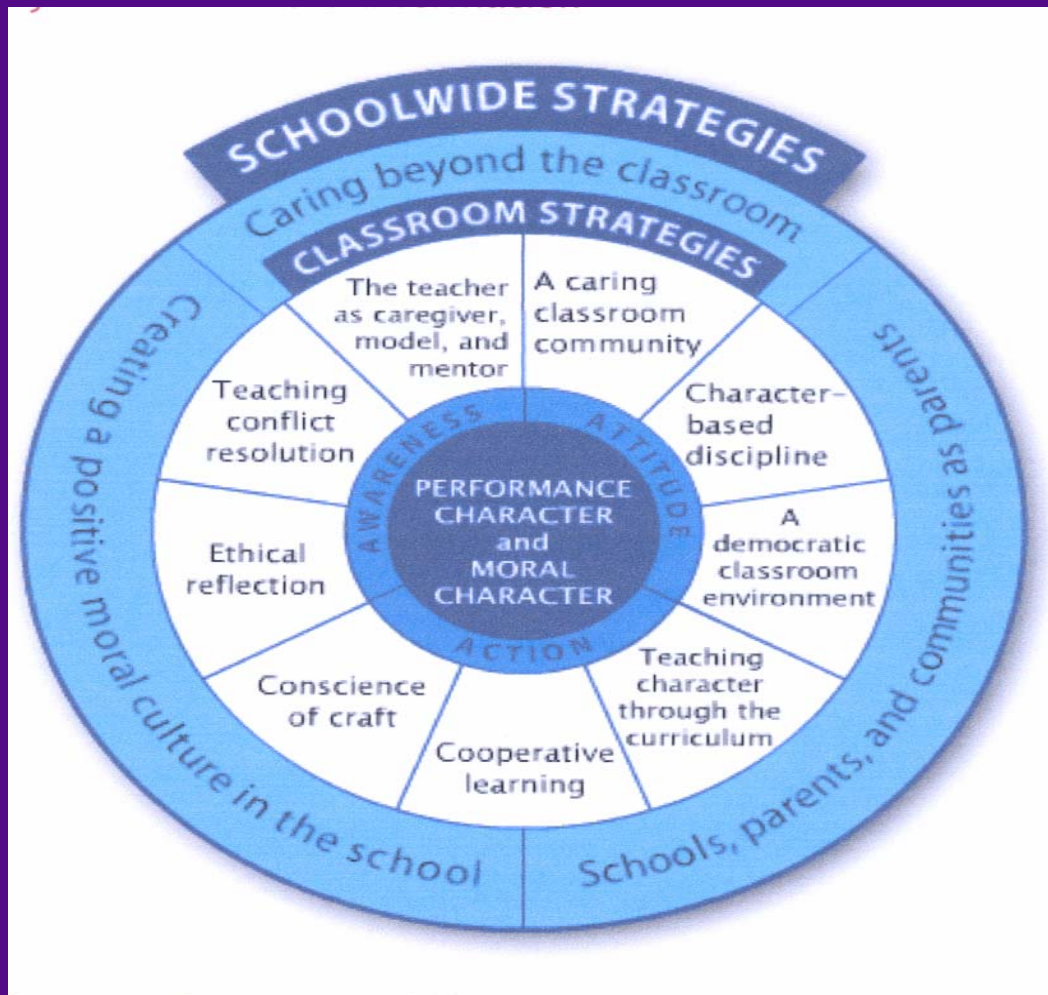
## KEY FINDINGS: Development of Moral Character

- Lawrence Kohlberg: developmental stages of moral reasoning and moral dilemmas discussion. Sees *moral education as stimulation for development*.
- Thomas Lickona: Character Education and the Character Education Partnership.
  - *“Good character consists of knowing the good, desiring the good and doing the good.”*
  - *Schools have important role to play.*
  - *Character includes cognitive, emotional and behavioral dimensions.*
  - *Schools must provide character building experiences.*

# KEY FINDINGS: Character Education--Dimensions



# 12-Point Comprehensive Approach to Character Education





## KEY FINDINGS: Development of Moral Character

- The literature cites the importance of developing moral imagination in children—the capacity to empathize with others. The ability to feel with and for others—through empathy training.
- Ryan (1993) suggests that the formal curriculum could include stories, historical figures and events to illuminate the human condition. He provides many examples in his research.

# Key Findings:

**Stimulating Emotional Development**





# Stimulating Emotional Development

## Antonio Damasio

- Moral behaviors are emotional—expression of compassion, shame, indignation, dominant pride, submission.
- Emotions are brain representations of body states.
- Emotions are nerve activation patterns that correspond to the state of the internal world.
- Emotions are vital to the higher reaches of human intelligence.
- Emotions are essential to rationality.

**FACT: Developmental domains are interdependent.**



# Stimulating Emotional Development

**FACT:** Stimulating educational experiences can trigger the sensory and emotional states of individuals in positive or negative ways.

## Kurt Fischer—"Skill Theory"

- Emotions generate actions and action tendencies. As children develop there is a constant interplay between their cognitive and emotional functions, which give rise to increases in their ability to reflect on and understand their emotions, consider other's perspectives or plan their actions.
- A child's performance level on a given cognitive task will vary according to the level of social support he or she is accorded. Without support children rarely perform at their optimal level. There must be high support conditions.

*This is similar to Vygotsky's concept- "Zone of Proximal Development."*





# Stimulating Emotional Development

FACT: Students can also bring negative emotions to the classroom that impede their ability to learn.

## Daniel Goleman-Emotional Intelligence

- The state of a person's emotional base can impact in positive or negative ways the outcomes of performance and achievement.
- Schools must help children learn how to manage their emotions.
- Children who can manage emotions pay more attention, take in and remember information better.
- Emotional development should be a part of the implicit curriculum.
- Teach cooperative learning as a strategy for managing emotional development.



# Stimulating Emotional Development

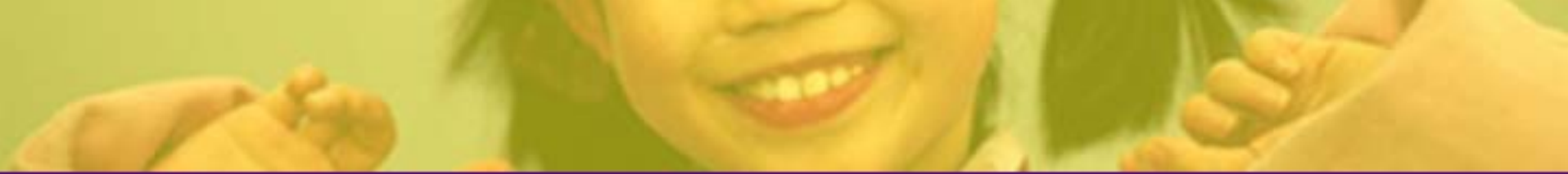
**Fact:** Instructional Programs which include teaching children how to manage their emotions have more positive results with improved performance.

- Other studies support these findings on the relationship to the other developmental domains and importance of emotional development.
- A substantial body of research supports the notion that social and emotional variables are integral rather than incidental to learning.
- See CASEL (The Collaborative for Academic, Social, and Emotional Learning), an organization working to establish SEL as an essential part of P-12 education. ([www.CASEL.org](http://www.CASEL.org)).

# Key Findings:

Creativity & Development





# Creativity & Development

- There has been much discussion and shifts in the definition and descriptions of creativity over the decades.
- Lev Vygotsky; Piaget, Freud, Terman
- There have been shifts in focus and definitions from personality to process to measurement.
- Contemporary theorists include: Sawyer, Csikszentmihalyi, David Henry Feldman, Robert Sternberg, Howard Gardener & Others.



# Creativity & Development

- Many definitions offered:

--"a socially recognized achievement in which there are novel products."

(Barron & Harrington, 1981)

--"a function of the individual and environment"

(Csikszentmihalyi, 1988)

--" a developmental process that is transformational"

(Feldman, 2003)

--"a social and individual process."

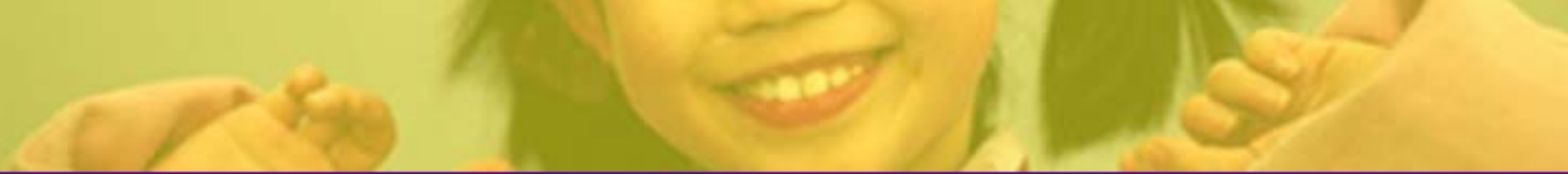
(Vygotsky)

--" a process that transforms the creator and others through the personal experience of the process and through the impact of new knowledge and the innovative artifacts disseminated through culture."

(Moran and John-Steiner, 2003).

--"people who buy low and sell high in the realm of ideas."

(Robert Sternberg)



# Creativity & Development

- Creativity or the need to create is an essential part of development.
- There is a precise relationship between play and the development of creativity. Structured, pretend and mature play contributes to the development of creativity.
- Developing opportunities for the cultivation of creativity and structuring and creating opportunities for play seem to be essential and probably brain-based.



# Creativity & Development

## Research Paper Includes:

- Early notions of Lev Vygotsky on elements and nature of creativity, creative imagination, play, and their relationship to development.
- Importance of pretend and structured play and contributions to the development of creative talent.
- Strategies for teachers and parents to encourage development of creativity. (Sternberg's 21 ways to encourage creativity in children.)
- Discussion of triarchical teaching strategies: analytical, creative and practical learning; that not only does it improve students creative domains, but also improves overall performance.

A young child with light-colored hair is shown in profile, blowing bubbles. The child is smiling and looking upwards. The background is a soft, greenish-yellow color with many bubbles of various sizes floating around. The overall mood is joyful and playful.

# Structures and Strategies

For Creating Novel Stimulus  
Experiences





# Structures and Strategies

- Teaching the Whole Child.
- Teaching for Multiple Intelligences-Use MI Menus
- Guided Discovery
- The Importance of Play
- Create Flow
- Differentiated Instruction
- Use Innovative Computer-Based Technology

(See Table 4.4 on the impact of technology on children's developmental domains of social, emotional, language, physical, motor and cognitive development. Also, Table 4.5 on impact of technology on four characteristics of learning.)

A young child with light-colored hair is shown in profile, blowing bubbles. The child's mouth is open, and several bubbles are visible near their face. The background is a soft, greenish-yellow color with many more bubbles floating around. The overall mood is joyful and imaginative.

**Selected Innovations:**

**Programs,**

**Models,**

**Strategies,**

**Worldwide**





**Key Learning Community**



# Key Learning Community

Professional Institute

Indianapolis, Indiana, October 10-13, 2005

<http://www.616.ips.k12.in.us>



## Character Education Partnership

is dedicated to developing young people of good character who become responsible and caring citizens.

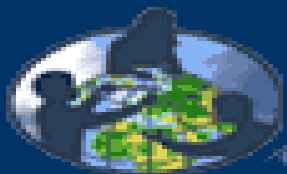


*CEP's goal is to engage more people from local communities in our core national programs.*



**LEARN HOW you can make a difference in your community.**





# The GLOBE Program





## The River City Project

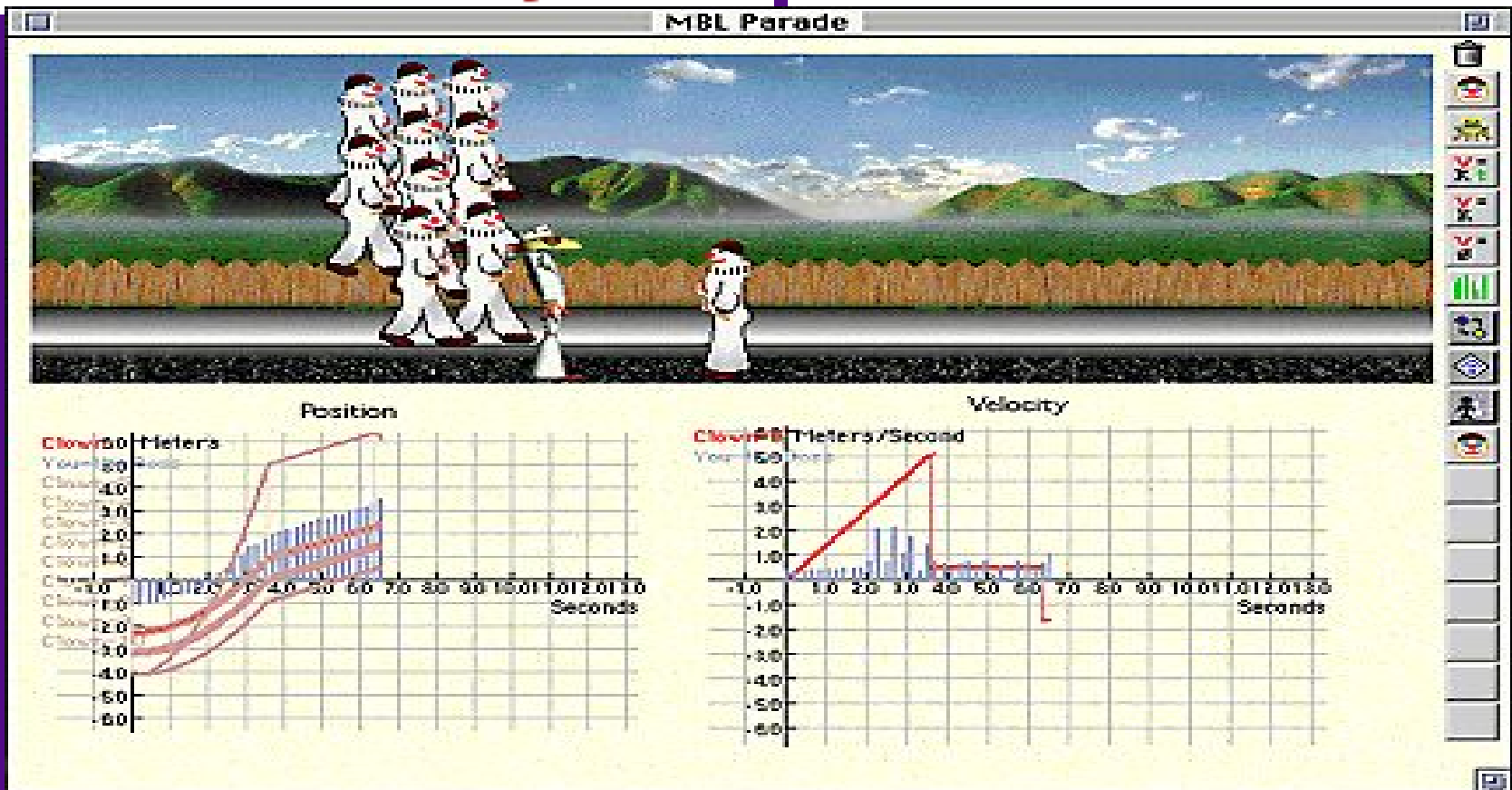
Multi-User Virtual Environment Experiential Simulator



<http://muve.gse.harvard.edu/rivercityproject>

# SimCalc Projects

Mathematics Education Research Group  
University of Massachusetts Dartmouth







**GENERATION**

**Yes**

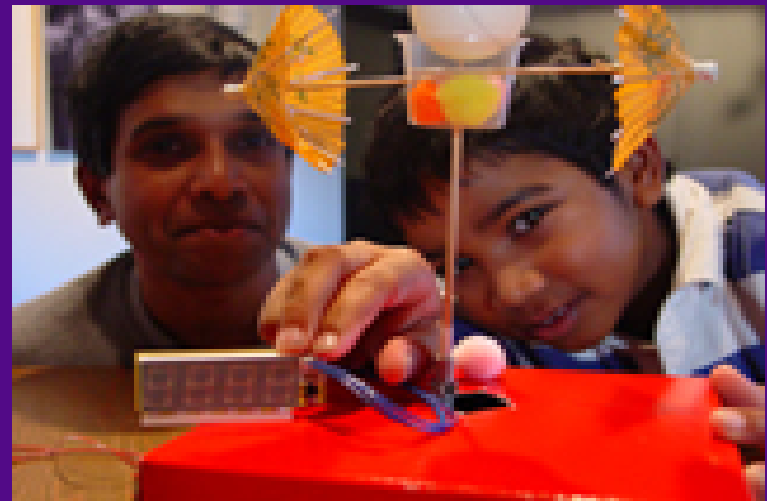
**Youth & Educators Succeeding**



[www.genyes.com](http://www.genyes.com)



## MIT Media Lab-Programmable Bricks etc.



<http://web.media.mit.edu/~mres>



## Movers and Shakers

Build talking birds, gelbaying guests, and other crazy characters

**Making motion**

Use a 200CP motor and other parts to make a mechanism that lifts up and down.

**Creating a character**

Use a pair of Technic ball or Technic ball. Add graph axes and other decorations. Attach the head to a 200CP axle.

**Controlling the speed**

Use a 200CP motor, a 200CP axle, and other parts to control the speed.

**The more the merrier**

Use our motor ball characters or make a second one, giving the second character, so that when you give your up, the other goes down.

To allow motion to change the motor's speed.

Use a 200CP motor, a 200CP axle, and other parts to make a mechanism that lifts up and down.

To give 200CP extra torque for harder building situations.

**Make a character!**

By exploring how to give motion with a 200CP motor, you can make a character that can move and talk. Use the 200CP motor and other parts to make a character that can move and talk. Use the 200CP motor and other parts to make a character that can move and talk.

## Dream House

Make a house that comes to life

**Light up the oven**

Use a 200CP motor and other parts to make a mechanism that lights up the oven.

**Knock, knock**

Use a 200CP motor and other parts to make a mechanism that knocks on the door.

**Shower everything again**

Use a 200CP motor and other parts to make a mechanism that showers everything again.

**Light up the oven**

Use a 200CP motor and other parts to make a mechanism that lights up the oven.

**Knock, knock**

Use a 200CP motor and other parts to make a mechanism that knocks on the door.

**Shower everything again**

Use a 200CP motor and other parts to make a mechanism that showers everything again.

**Make a Dream House**

Use a 200CP motor and other parts to make a mechanism that lights up the oven, knocks on the door, and showers everything again.





# WorldQuest

- A problem-solving simulation game to promote global understanding and communication between diverse student populations in the classroom and beyond with the goal of building a world community.

[www.psyking.net/id225.htm](http://www.psyking.net/id225.htm)



# Conclusions & Gaps

- **Paradigm changing slowly but many educators are enthusiastic and developing new models-worldwide.**
- **Beginning of a manual of best practices.**
- **Gap: programs for gifted & talented; service learning programs & models; study abroad programs; and, other current programs being implemented or developed.**
- **More careful documentation of effectiveness.**
- **Site visits to selected programs for further study.**
- **Continuation of the research to include adolescents and the early years of college.**
- **Question to Ponder:**  
What other programs are out there that meet the criteria set forth in this research that enrich the lives of children?