

RESEARCH AND THE DESIGN OF NEW LEARNING ENVIRONMENTS

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COMPETING CONCEPTS OF LEARNING AND SCHOOLING

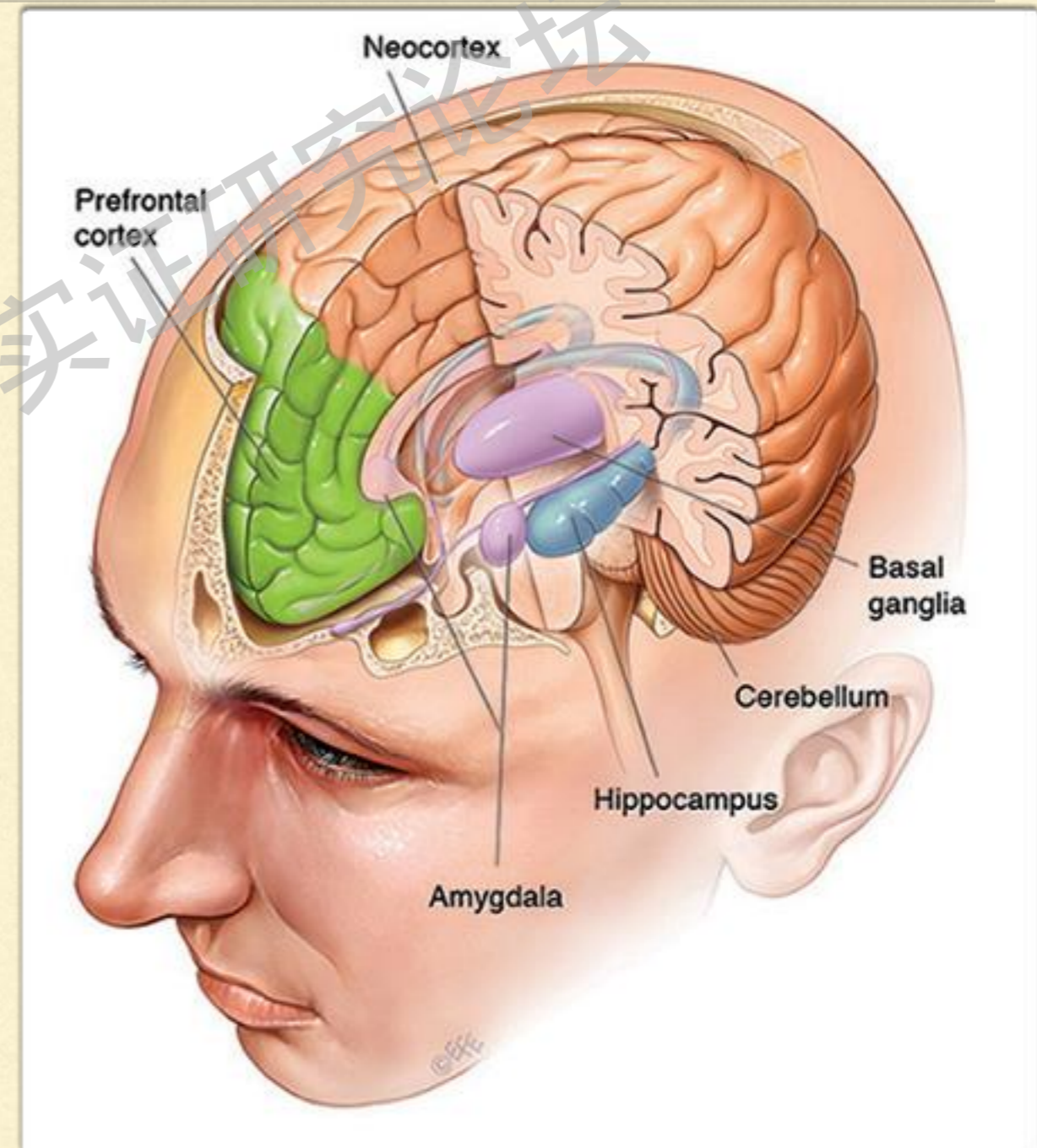
Learning as Accumulation of Information and Algorithms
Schooling as Social Control and Allocation of Status
Assessment as Determination of “Merit”

Versus

**Learning as the Ability to Consciously Modify Beliefs,
Understandings, and Actions in the Presence of Evidence,
Experience, and Reflection**
Schooling as Organized Learning
**Assessment as Monitoring the Development of
Learning**

HOW LEARNING HAPPENS

- Experience is processed in context
- Learners form “autobiographical memories” of themselves
- Learners develop agency and control through actions, consequences, self-characterization
- Memory is transitory, malleable, active



HOW LEARNING HAPPENS: FOUR EXAMPLES

- **SELF-KNOWLEDGE**

- THE ABILITY TO ASSESS ONE'S OWN KNOWLEDGE, SKILL

- **THEORY OF MIND**

- THE ABILITY TO TAKE THE PERSPECTIVE OF ANOTHER

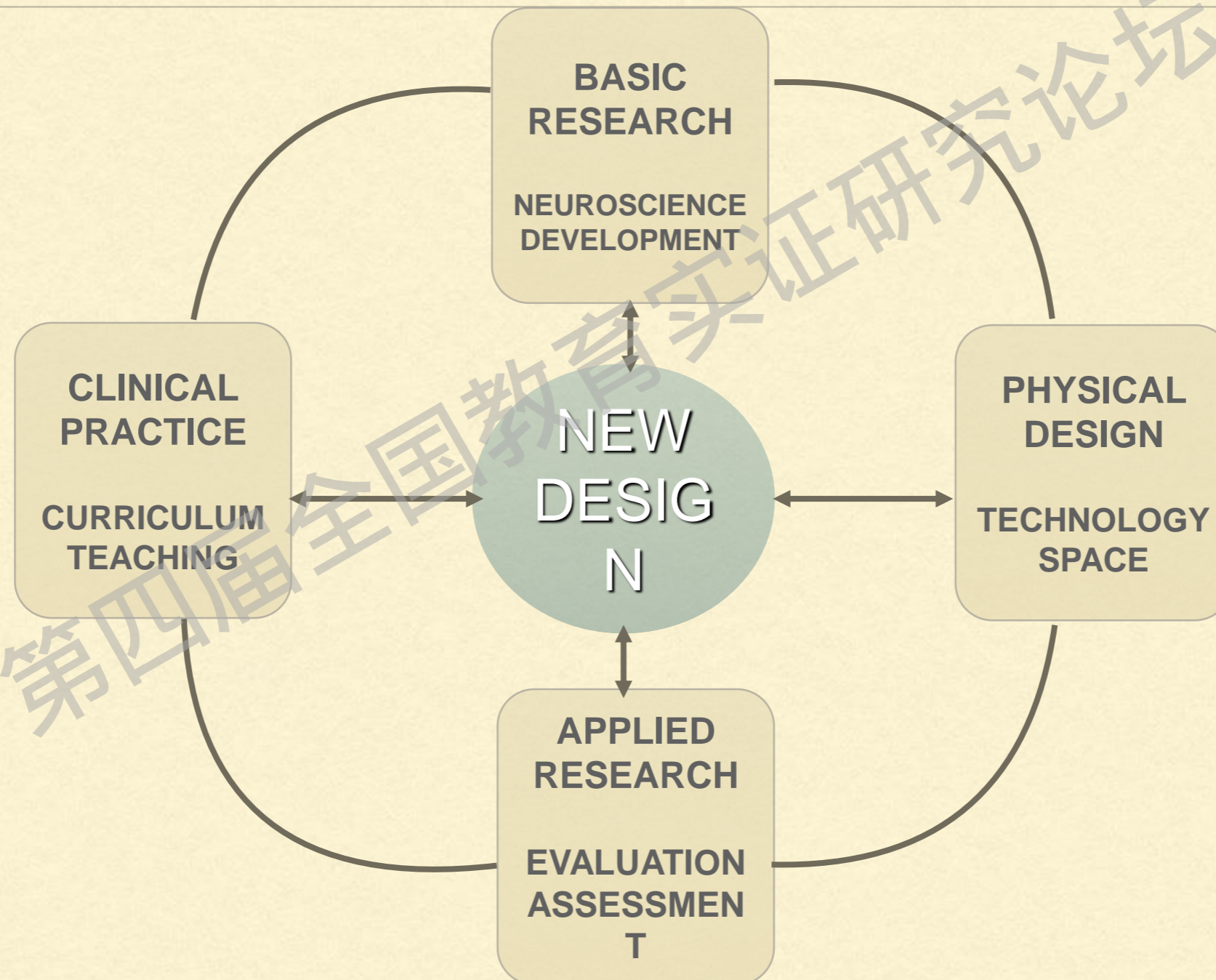
- **SELF-MANAGEMENT; EXECUTIVE FUNCTION**

- THE ABILITY TO PLAN, EXECUTE COMPLEX ACTIONS

- **NEUROPLASTICITY**

- THE ABILITY TO MONITOR AND CONTROL ONE'S LEARNING OVER TIME
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ELEMENTS OF DESIGN



WHAT THE NEW SCIENCE OF CHILD
DEVELOPMENT TELLS US ABOUT THE RELATIONSHIP
BETWEEN PARENTS AND CHILDREN

THE
GARDENER
AND THE
CARPENTER

PICADOR

ALISON GOPNIK

*"This lovely book, and the life's work that animates it,
will only deepen that bond [between caregiver and child], helping our
children to flourish." — Erika Christakis, *The Washington Post**

第四届全国教育实证研究论坛

INVENTING OURSELVES

*The Secret Life of the
Teenage Brain*



SARAH-JAYNE
BLAKEMORE

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FOUR PRECURSORS

- NUVU STUDIO, CAMBRIDGE, MASSACHUSETTS
 - TUTORIA, MEXICO
 - BEIJING ACADEMY, BEIJING
 - SELF-MANAGED LEARNING, VICTORIA, AUSTRALIA
-

NUVU STUDIO, CAMBRIDGE, MASSACHUSETTS



TUTORIA, MEXICO



BEIJING ACADEMY



SELF-MANAGED LEARNING VICTORIA, AUSTRALIA



WHAT PRECURSORS HAVE IN COMMON

- LESS IS MORE: SIMPLE, TRANSPARENT THEORIES OF LEARNING
 - BELIEF THAT LEARNING IS INNATE, TEACHING IS OPTIONAL
 - CURIOSITY OVER CERTAINTY
 - GIVEN AN OPPORTUNITY TO PRACTICE, PEOPLE WILL LEARN WHAT THEY NEED TO KNOW
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ELEMENTS OF DESIGN

