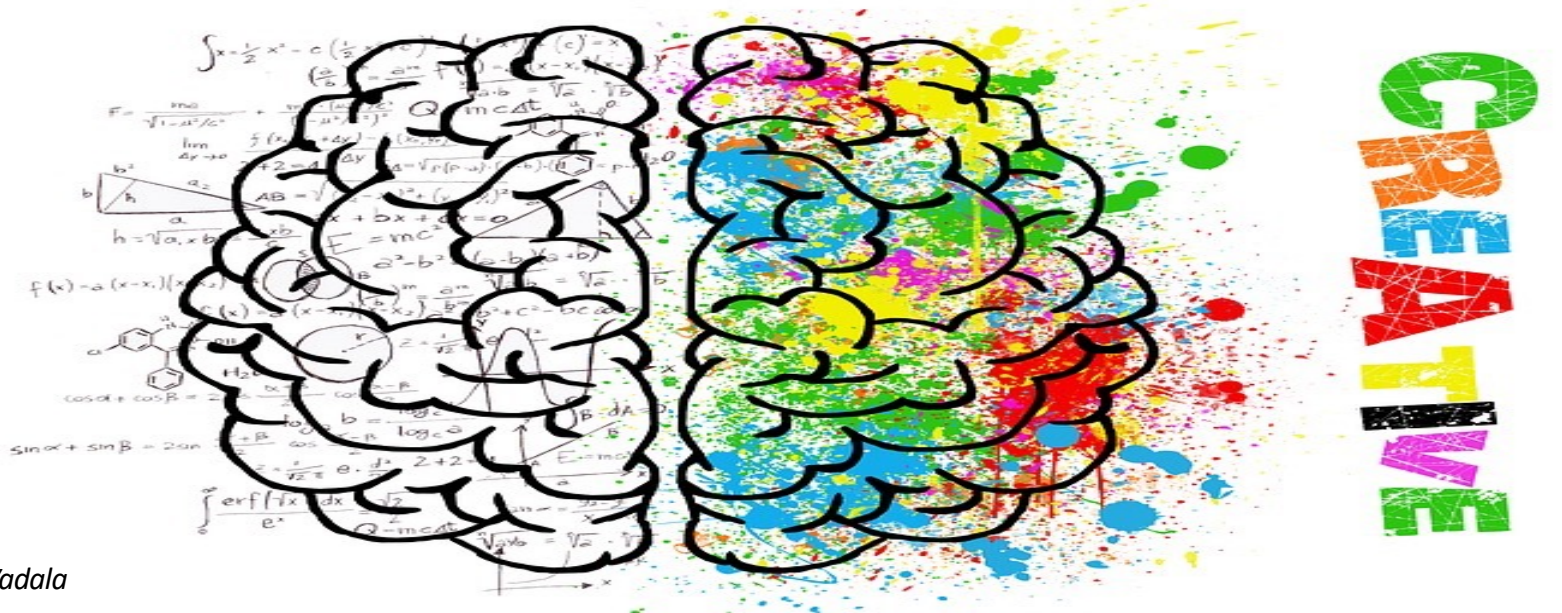




Instructional Models & Learning:

Right Brain and Left-Brain Strategies

LOGIC



Dr. Theresa Vadala

Create dynamic and engaging learning strategies with the 4MAT Learning Model by providing adult learners with the process of experiencing, assimilating, acting upon and integrating knowledge to incorporate into daily teaching practices. The 4MAT model is a process for improving the quality of learning and incorporates learning styles for all individuals to understand.



**Applying New Knowledge:
Learning & Transfer**

Child Care Training Consultants, LLC

Accredited by International Association for Continuing Education and Training (IACET)

CKA 7: Leadership and Professional Development

Title: NV CKA 7.J Instructional Models and Learning: Right and Left-Brain Strategies

3 Hours

0.3 CEUs

Instructional Models and Learning: Right and Left-Brain Strategies

Theresa Vadala, Ed. D

Child Care Training Consultants, LLC

Las Vegas, Nevada 89139



All rights reserved. No part of this manual may be photocopied or reproduced in any form without written permission from the publisher. Moreover, no part of this publication can be stored in a retrieval system, transmitted by any means, recorded or otherwise, without written permission from the publisher.

Limits of Liability and Disclaimer of Warranty

The contents of this training “**Instructional Models and Learning: Right and Left-Brain Strategies**” is for Educational Purposes Only. While every precaution has been taken in preparing this manual, including research, development, and testing, the Author assumes no responsibility for errors or omissions. No liability is assumed by the Author for damages resulting in the use of this information.



Welcome!

**Thank you for choosing
Child Care Training Consultants, LLC.,
for your Training Needs!
Learning Assessment**

Read the material provided, take the 5-10 quiz questions and
complete the training evaluation at the end of the course.

Participants must receive 100% on individual courses to obtain a certificate of completion.

Questions?

We are happy to help.

Support Services:

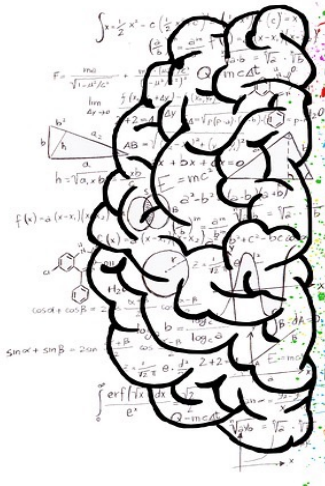
Please contact us 24/7

at

childcaretrainingconsultants1@gmail.com

Business # 702.837.2434

LOGIC





Mission & Vision

Mission Statement

“Child Care Training Consultants, LLC’s is committed to provide research-based professional growth and development training courses primarily focused on the Child Development Associate. The CDA is the nation’s premier credential that is transferable, valid, competency-based and nationally recognized in all 50 states, territories, the District of Columbia, community colleges and the United States Military.

Vision

Child Care Training Consultants, LLC’s vision is to provide the early childhood community with courses based on CDA competency standards to obtain their CDA Credential and assist in reaching their goal as an exceptional early childhood educator to ultimately achieve higher child outcomes.



About the Trainer



Theresa has over 30 years experience in the field of Early Childhood Education. During that time, she served as a Preschool Teacher, Disabilities Coordinator, Program Facilitator, and Director of an Early Childcare Program. She has a Doctoral Degree in Educational Leadership with Specialization in Curriculum and Degree in Educational Leadership with Specialization in Curriculum and Instructional Design. Theresa is a Professional Growth & Development Trainer and Curriculum Designer and offers web-based courses internationally. She is the Executive Director/Owner of the training organization Child Care Training Consultants, LLC., (CCTC).

Business Description

Child Care Training Consultants, LLC. (CCTC) is an accredited provider (AP) with the International Association for Continuing Education and Training (IACET) that provides Continuing Education Units (CEU) for adult education nationally. The business is also a recognized training organization with the Council for Professional Recognition, Child Development Associate Council (CDA), National Credentialing Program.



Goal & Learning Objectives

Goal: The goal of this training is to identify how the 4MAT learning model is used to engage both adults and children, in learning strategies using all learning styles.

Objective/s: Participants will be able to:

Part 1: Identify four instructional models and tools used to reach and engage all learners.

Part 2: Identify our own right or left-brain dominance given a quiz and identify right and left-brain activities for adults.

Part 3: Identify activities to strengthen students right and left brain.



Learning Outcomes

Learning Outcomes: After the training, participants will be able to:

Part 1: Name four instructional models used to reach and engage all learners and describe how the 4MAT Learning Model relates to both adults and children.

Part 2: Complete a quiz to identify right and left-brain dominance and identify right and left-brain 3-5 activities for adults.

Part 3: Chart right and left-brain activities for children to strengthen their right and left-brain dominance.



Try This!

First, draw a picture of a house using your **non-dominant hand**.
Second, draw a picture of a house using your **dominant hand**.



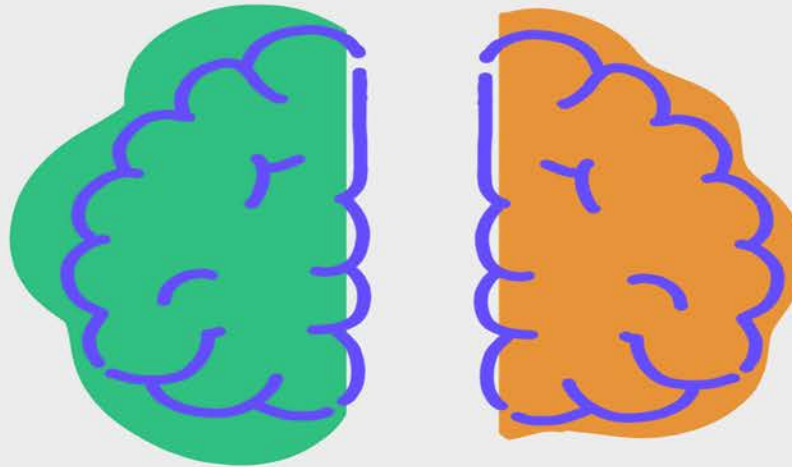
Which house was easier to draw?

Where you able to draw a house using both your non-dominant and dominant hand?



Left Brain **VS** Right Brain

Logical
Analytical
Linear
Verbal
Factual
Sequential



Creative
Intuitive
Artistic
Non-verbal
Emotional
Imaginative

This is the same with our brain.

We use both the left and right side of our brains, however,
one side is more dominant than the other.



Agenda

Introduction

Part 1: Identify Four Instructional Models

- ADDIE Model: Instructional Systems Design Framework
- Blooms Taxonomy Framework
- Kirkpatrick's Model: Four Levels of Learning Evaluation
- **4MAT Learning Model**

Part 2: Using Both Sides of the Brain

- Right and left-brain quiz
- Right and left-brain activities for adults

Part 3: Right and Left-brain Activities for Preschoolers

Review

Assessment

Evaluation



Part 1: Four Instructional Models

1. ADDIE Model: Instructional Systems Design Framework
2. Blooms Taxonomy Framework
3. Kirkpatrick's Model: Four Levels of Learning Evaluation
- 4. 4MAT Learning Model**



1. ADDIE Model: Instructional Systems Design Framework

The ADDIE Model was first created for the U.S. Military during the 1970s by Florida State University. ADDIE is an acronym for a five-phase course development process. The ADDIE Model generally consists of five interrelated phases—Analysis, Design, Development, Implementation, and Evaluation.





2. Blooms Taxonomy Framework

Bloom's taxonomy helps instructors create valid and reliable assessments by aligning course learning objectives to any given level of student understanding or proficiency. Crooks (1998) suggests that much of college assessment involves recalling memorized facts, which only addresses the first level of learning.

BLOOM'S TAXONOMY

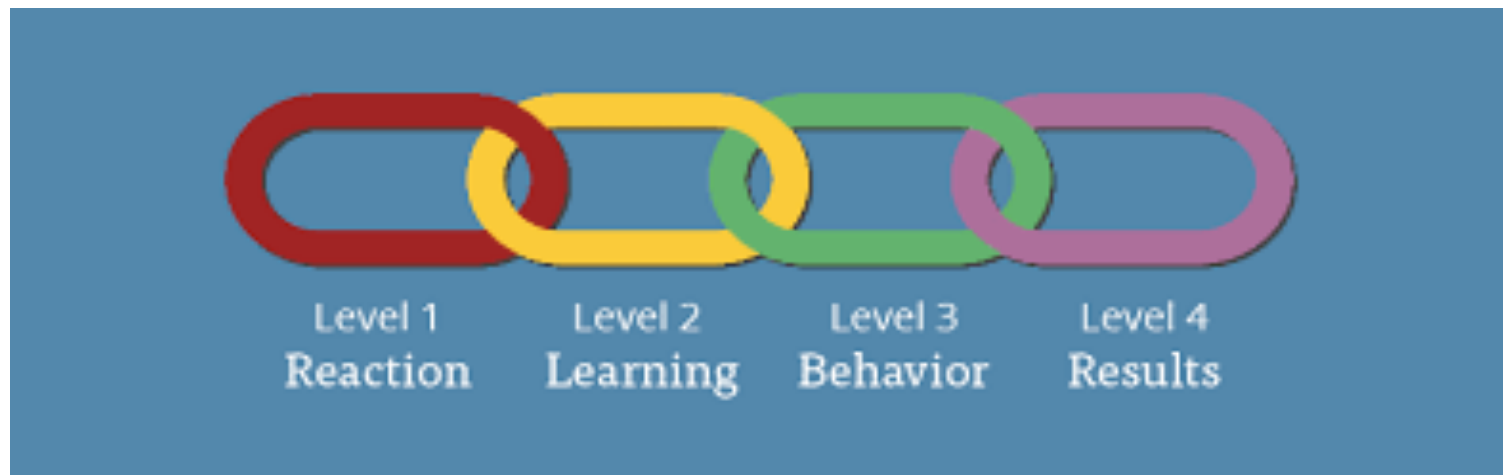


Remembering		Understanding		Applying		Analyzing		Evaluating		Creating	
To find or recall information		To construct meaning from written material or graphics.		To use information in new situations.		To draw connections among ideas.		To value information or ideas		To produce new or original work.	
Define	Name	Associate	Estimate	Calculate	Modify	Break Down	Experiment	Appraise	Measure	Compose	Formulate
Draw	Outline	Classify	Explain	Change	Organize	Categorize	Illustrate	Argue	Rank	Construct	Generate
Duplicate	Recall	Compare	Identify	Classify	Plot	Combine	Inspect	Assess	Rate	Create	Produce
Identify	Recognize	Comprehend	Indicate	Compile	Practice	Connect	Outline	Conclude	Recommend	Criticize	Propose
Label	Select	Demonstrate	Interpret	Compute	Present	Contrast	Predict	Convince	Score	Design	Revise
List	Show	Describe	Relate	Employ	Produce	Debate	Research	Evaluate	Select	Develop	Rewrite
Match	State	Differentiate	Restate	Execute	Show	Differentiate	Separate	Grade	Support	Direct	
		Discuss	Select	Illustrate	Solve	Distinguish	Simplify	Investigate	Test		
		Distinguish	Summarize	Implement	Use	Examine	Subdivide	Justify			
		Translate		Map	Write						
				Model							



3. Kirkpatrick's Model: Four Levels of Learning Evaluation

The Kirkpatrick Model is a globally recognized method of evaluating the results of training and learning programs. It assesses both formal and informal training methods and rates them against four levels of criteria: reaction, learning, behavior, and results.



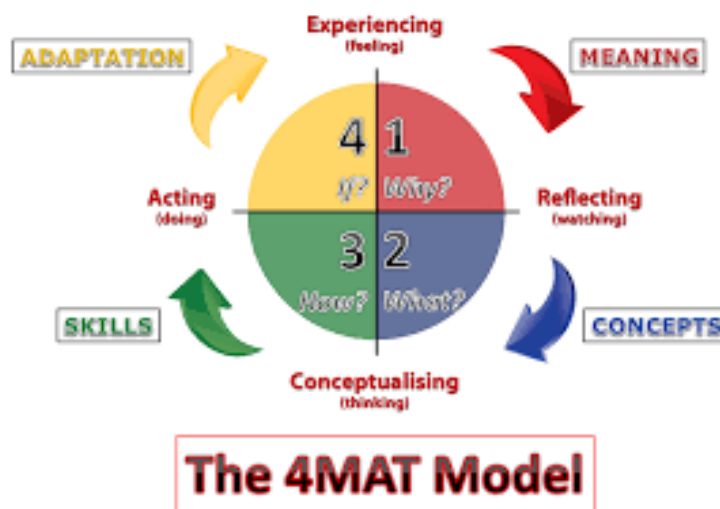


4. 4MAT Learning Model

The 4MAT System is a structured approach to teaching that ensures all learners can be engaged and benefit from the learning experience. It caters to different learning styles and consists of four distinct phases: experiencing, conceptualizing, applying, and refining.

It entails the use of right and left-mode strategies within four distinct phases of the learning cycle:

1. Experiencing
2. Conceptualizing
3. Applying
4. Refining





4. 4MAT Learning Model

The 4MAT model was originally developed by Bernice McCarthy in 1980. It is based on research from many fields, but mainly is a synthesis of findings from the fields of learning styles, and right and left-brain dominance.



The Left and Right Mode

The *Left Mode* is analytical and knows those things we can describe with precision. It examines cause and effect, breaks things down into parts and categorizes them, seeks and uses language and symbols, abstracts experience for comprehension, generates theory, and creates models. It is sequential and works in time.

The *Right Mode* knows more than it can tell, filling in gaps and imagining. It is intuitive. It senses feelings; forms images and mental combinations; and seeks and uses patterns, relationships, and connections.

Excellence and higher-order thinking demand that we honor both sides of the brain, teaching interactively with hands-on, real-life, messy problem solving. Learners speak in words, signs, symbols, movement, and through music. The more voices students master, the more, new learning they will do.

Unfortunately, some teachers only lecture using logical, sequential problem solving and are unaware of teaching using the 4MAT Model.



Left and Right Mode

Learning involves interaction between the right and left hemispheres of the brain.

Left – Operates best through structure, sequence.

Prefers language, is sequential, examines the elements, has number sense.

Works to analyze or break down information.

Right – Operates out of being, comprehends images, seeks patterns, creates metaphors, is simultaneous.

Strives to synthesize, consolidate information.

The interplay between right and left is crucial to higher learning and thinking.

Creative expression and problem solving.



Using Both Sides of the Brain

The teacher's roles will change as they move through the 4MAT Learning Cycle. They are more active in the first two areas of learning as the goal is to engage students in must apply learning in real life situations or contexts.

Using Both Sides of the Brain

In addressing the various learning styles, the 4MAT System also incorporates elements of brain research—in particular, the different ways that the right and left hemispheres of the cerebral cortex process information (Benson 1985, McCarthy 1981 and 1987, Sylwester 1995, Wittrock 1985). Called the Left and Right Modes.



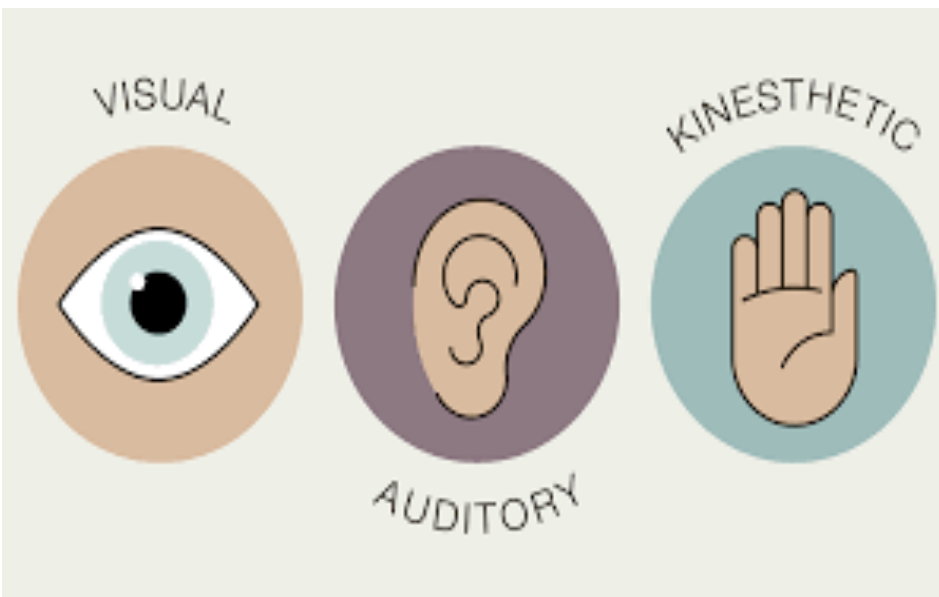
Why learn about the 4MAT Model?

- As an instructional design tool, 4MAT gives teachers and trainers a systematic way to train all learners to think and learn well.
- As a professional development tool, it provides a framework for assessing the quality of any learning experience.
- As an organizational model, it offers a method for creating an environment for continuous learning and development.

How does it relate to teaching preschool students?



Learning Styles & Multiple Intelligences





Learning Styles & Multiple Intelligences

4MAT is a cycle of learning that moves from learner engagement to knowledge acquisition to skills and fluency development, then to creative adaptation of material learned.

By moving through this cycle, teachers naturally address all the needs of diverse learners.

To learn successfully, a student also needs expertise in other learning styles; together these styles form a *natural cycle of learning*.

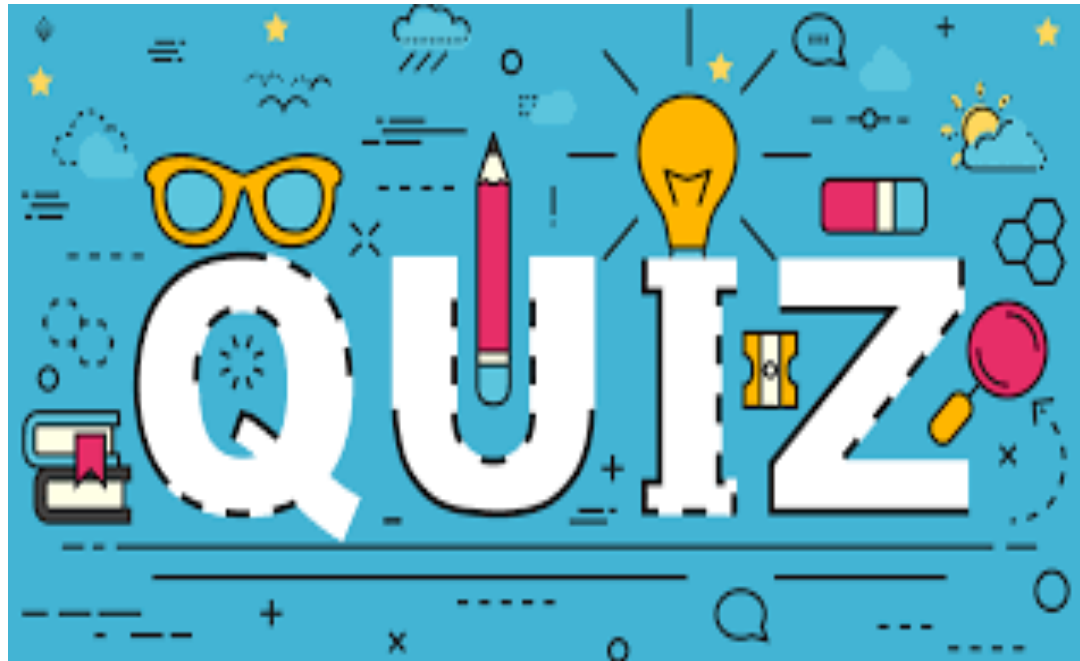
For example, it begins with a **Connect** activity to engage students in learning and to help them see the value of learning.

Students must draw on their own experiences to create the personal connection that is essential to student motivation and engagement.



Part 2: Using Both Sides of the Brain

Which side of YOUR brain is more dominant?



The quiz is available in your account with your lesson.



Understanding the Right Brain vs. Left Brain Theory

Understanding the Right brain vs. Left brain theory and knowing how you use your brain hemispheres helps you understand yourself better. It improves your ability to study, learn and process information. It also informs you about the reasons why you prefer certain activities or have certain interests. It is important to incorporate both right and left-brain activities to students during daily teaching practices.

As educators, we must assess the students' ability to picture the concept, to experiment with the idea, to combine skills in order to solve complex problems, to edit and refine their work, and to adapt and integrate learning.



How Students Connect Information

We need to know how students are connecting information to their own experiences, how they are blending expert knowledge with their own, and how creative they are. We also need some way of measuring how students reflect on material, conceptualize, and represent what they have learned through various kinds of performances. Students initiate learning by looking for unique aspects of the information to learn and they sustain learning through trial and error. Some students prefer to learn by self-discovery, talking, convincing others, looking for creative solutions to problems, and engaging in free flights of ideas. While other students like to work independently.



Right and Left-Brain Activities for Adults

Look at the chart and say the color not the word.

YELLOW	BLUE	ORANGE
BLACK	RED	GREEN
PURPLE	YELLOW	RED
ORANGE	GREEN	BLACK
BLUE	RED	PURPLE
GREEN	BLUE	ORANGE

Left – Right Conflict

Your right brain tries to say the color, but the left brain insists on reading the word.



Right and Left-Brain Activities for Adults

Which animal do you see first?





Right and Left-Brain Activities for Adults

What do you see?





Right and Left-Brain Activities for Adults

Would you Rather?

(Right brain or left brain?)

1. Would you rather draw a picture or work on math problems?
2. **Would you rather dance on stage or or give a speech?**
3. Would you rather work on a puzzle or exercise?
4. **Would you rather sew a costume or write an essay?**
5. Would you rather work alone or in a group?

Think about what you would rather do and identify if you are more right or left -brain dominant.



How to Train the Left and Right Brain

Left Brain

- Math
- Science
- Language
- Reading
- Speech
- Writing
- Puzzles



Right Brain

- Art
- Drama
- Dance
- Design
- Story telling
- Sport
- Music
- Sewing

If a person's personality shows a preference for one side's thinking over another they may demonstrate:

- Frustration
- High emotions if they cannot complete things
- Rejection of ideas
- Dislike of activities



Part 3: Right and Left-brain Activities for Preschoolers

We can support children's frustration and a sense of failure by:

- Giving a chance to find solutions
- Giving time to be innovative
- Give visual pointers
- Encourage group thinking
- Use metaphors to explain concepts
- Encourage movement and role play
- Keep boundaries and expectations consistent

If children are frustrated, it does not mean that you should give up on introducing new tasks, but rather that there needs to be adaptations made to allow them to engage and encourage their brain to use other types of thinking.



Right and Left-brain Activities for Preschoolers

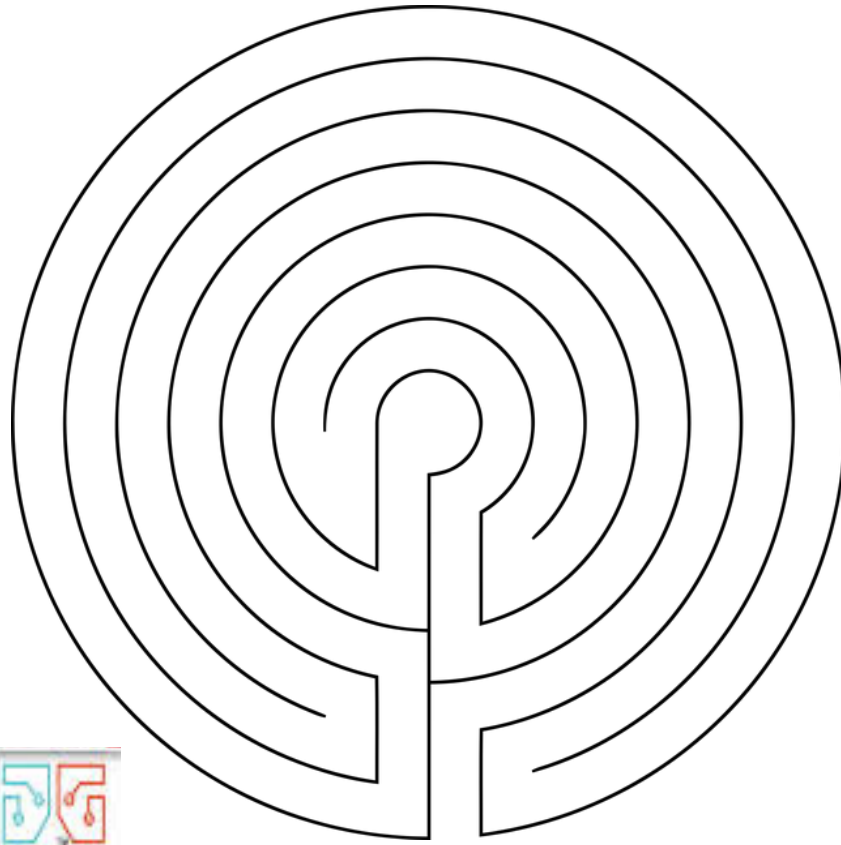
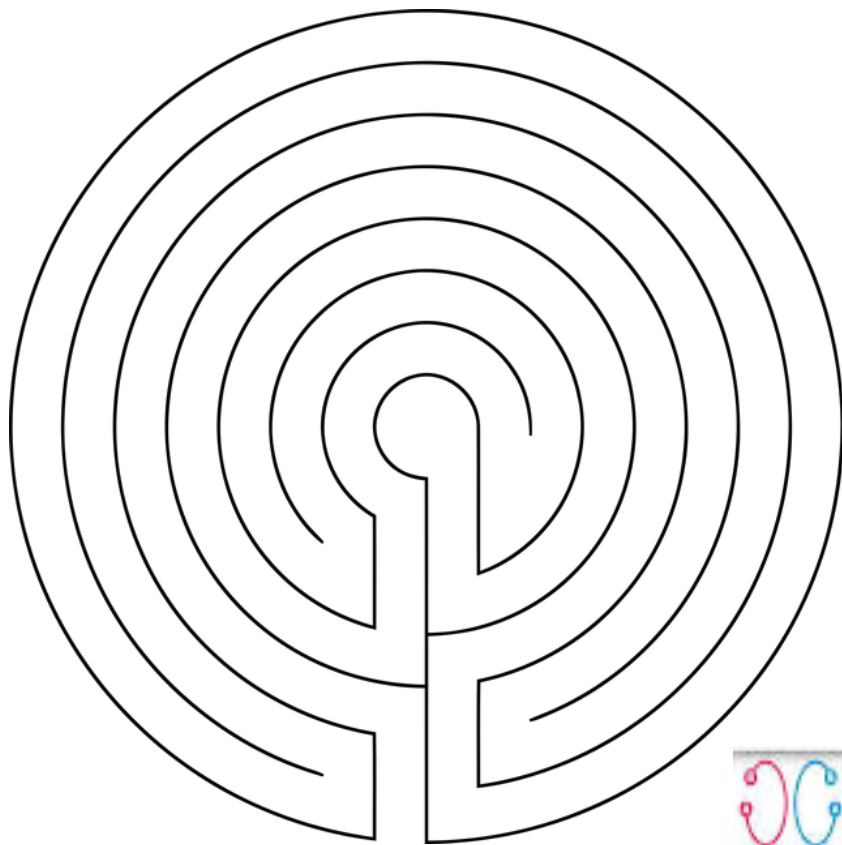
Educators can have fun and make students brains stronger – this also means that we they will feel happier and will be able to find more solutions to problems and solve questions quicker!

- Break sequential tasks down into smaller tasks so there is a sense of achievement to encourage building concentration
- Create activities where children take their own innovative idea and then plan the processes and sequences to develop it
- Break sequences into visual prompts and then extend with logical stages



Right and left-brain Activities for Preschoolers

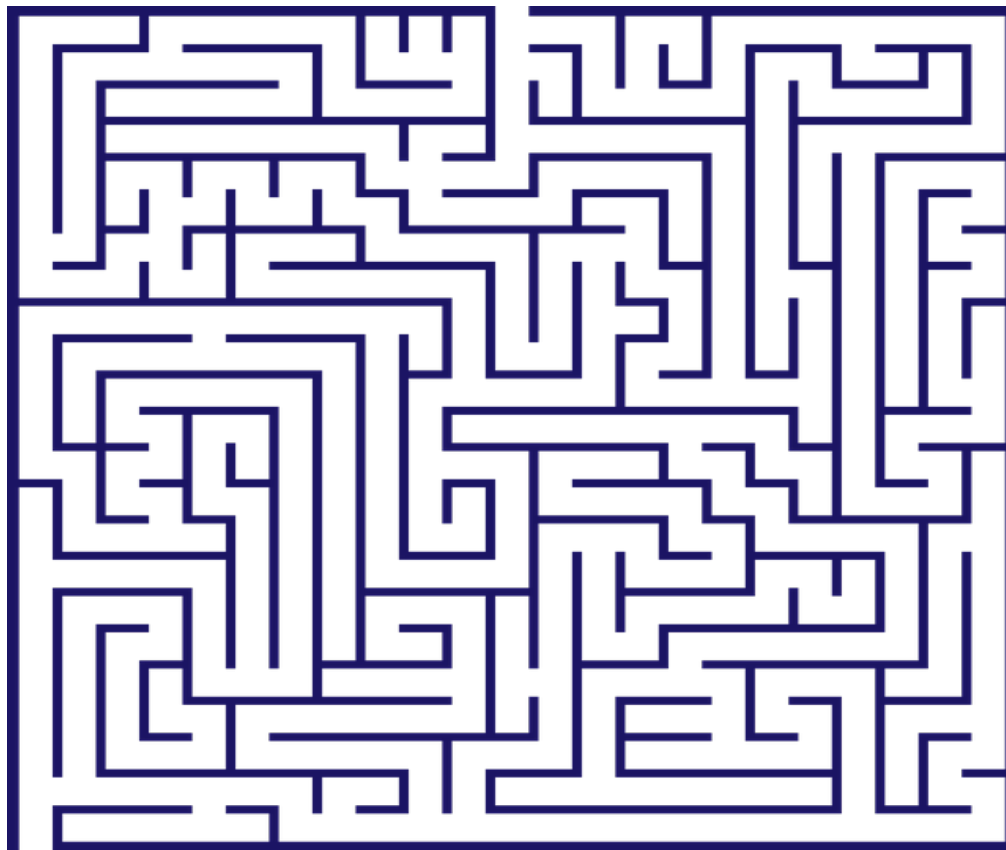
Encourage students to use both right and left finger at the same time to follow the maze.





Right and Left-brain Activities for Preschoolers

Have students follow the maze with their dominant hand/finger, then use non-dominant hand/finger to follow the maze.





Right and Left-brain Activities for Preschoolers





Right and Left-brain Activities for Preschoolers





Right and Left-brain Activities for Preschoolers

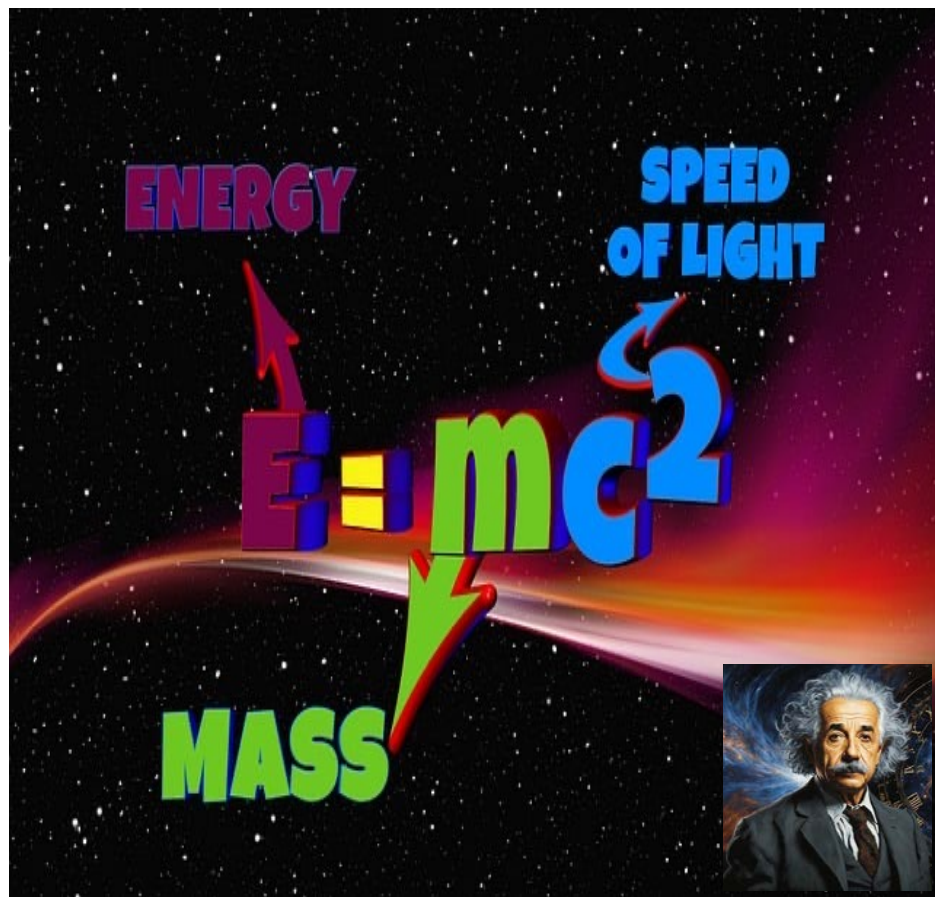
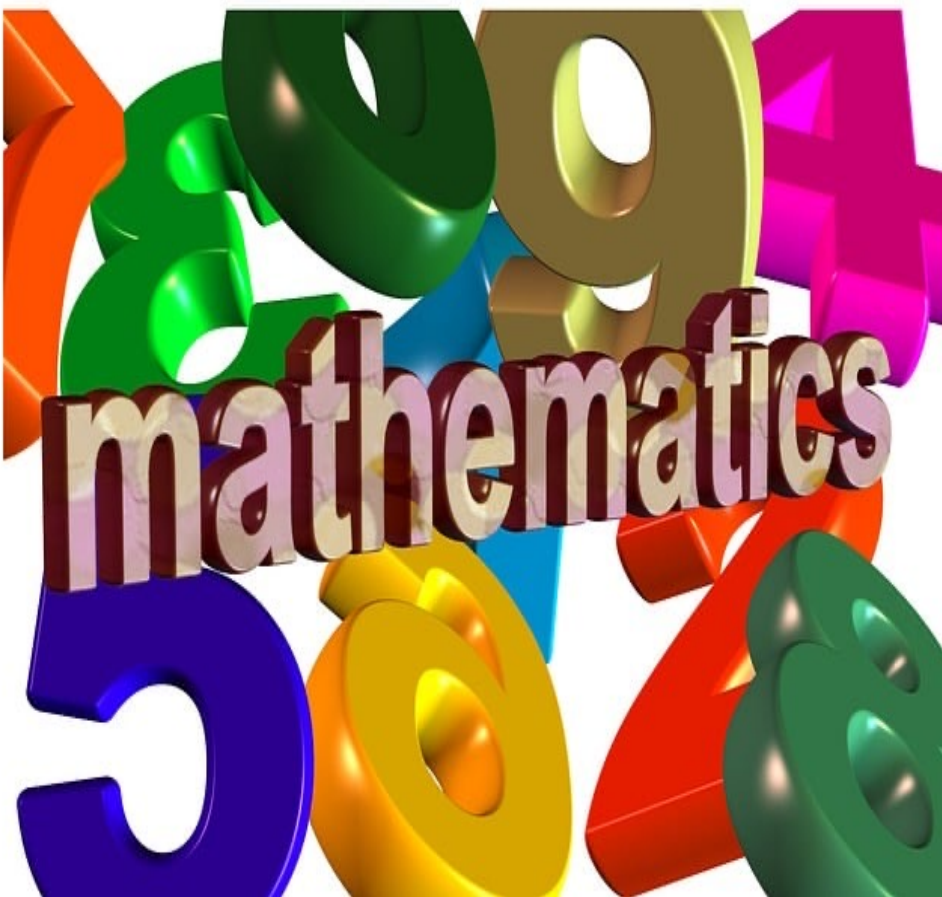
Encourage students to work on puzzles to strengthen the right side of their brain.





Right and Left-brain Activities for Preschoolers

Engage students in math and science activities to strengthen the right side of their brain.





Right and Left-brain Activities for Preschoolers

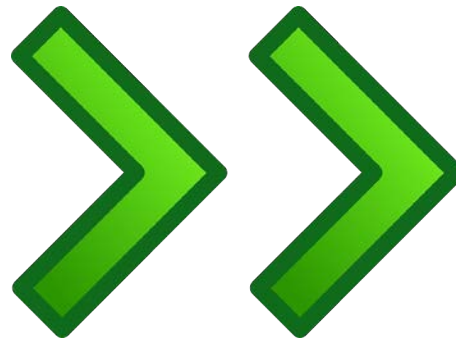
Engage students in art activities to strengthen the left side of their brain.





Right and Left-brain Activities for Preschoolers

Have students step forward with their dominant foot, then use non-dominant foot to strengthen both sides of the brain.





Review

Part 1: Identify four instructional models

- ADDIE Model: Instructional Systems Design Framework
- Blooms Taxonomy Framework
- Kirkpatrick's Model: Four Levels of Learning Evaluation
- **4MAT Learning Model**

Part 2: Using both sides of the brain

- Right and left-Brain Quiz
- Right and left-brain activities for adults

Part 3: Right and left-brain activities for preschoolers



Learning Outcomes

Learning Outcomes: After the training, participants will be able to:

Part 1: Name four instructional models used to reach and engage all learners and describe how the 4MAT Learning Model relates to both adults and children.

Part 2: Complete a quiz to identify right and left-brain dominance and identify right and left-brain 3-5 activities for adults.

Part 3: Chart right and left-brain activities for children to strengthen their right and left-brain dominance.



References

- Branch, R. M. (2009). *Instructional design: The ADDIE approach* (Vol. 722). Springer Science & Business Media.
- Dick, W., & Carey, L. (1996). *The Systematic Design of Instruction* (4th Ed.). New York: Harper Collins College Publishers.
- Kress, G. (2010). *Multimodality: a social semiotic approach to contemporary communication*. Abingdon/New York: Routledge.
- Leshin, C. B., Pollock, J., & Reigeluth, C. M. (1992). *Instructional Design Strategies and Tactics*. Englewood Cliffs, NJ: Education Technology Publications.
- McCarthy, B. (1981, 1987). *The 4MAT System: Teaching to Learning Styles with Right/Left Mode Techniques*. Barrington, Ill.: Excel, Inc.
- Benson, D.F. (1985). "Language in the Left Hemisphere." In *The Dual Brain: Hemispheric Specialization in Humans*, edited by D.F. Benson and E. Zaidel. New York: Guilford Press.
- Kegan, R. (1982). *The Evolving Self: Problems and Process in Human Development*. Cambridge, Mass.: Harvard University Press.
- Kolb, D.A. (1984). *Experiential Learning: Experience as the Source of Learning and Development*. Englewood Cliffs, N.J.: Prentice-Hall.
- McCarthy, B. (1981, 1987). *The 4MAT System: Teaching to Learning Styles with Right/Left Mode Techniques*. Barrington, Ill.: Excel, Inc.
- McCarthy, B. (1996). *About Learning*. Barrington, Ill.: Excel, Inc.
- Sylwester, R. (1995). *A Celebration of Neurons: An Educator's Guide to the Human Brain*. Alexandria, Va.: ASCD.
- Wittrock, M.C. (1985). "Education and Recent Neuropsychological and Cognitive Research." In *The Dual Brain: Hemispheric Specialization in Humans*, edited by D.F. Benson and E. Zaidel. New York: Guilford Press.



Welcome!

Thank you for choosing
Child Care Training Consultants, LLC.,
for your Training Needs!
Learning Assessment



Child Care Training Consultants, LLC.

Read the material provided, take the 5-10 quiz questions and
complete the training evaluation at the end of the course.

Participants must receive 100% on individual courses to obtain a certificate of completion.

Questions?

We are happy to help.

Support Services:

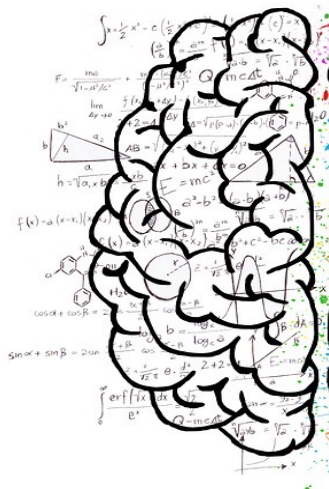
Please contact us 24/7

at

childcaretrainingconsultants1@gmail.com

Business # 702.837.2434

LOGIC





Thank you!!!

Post-Quiz Survey

Evaluation



Dr. Theresa Vadala
Child Care Training Consultants, LLC
www.childcaretrainingclasses.org
702.837.2434