

Contents

Preface	vii
Acknowledgments	ix
About the Author	xi
Introduction: Differentiating Instruction With Style	1
<i>Brain research and educational research tell us that people learn in many different ways and styles. This chapter provides a brief overview of the scope of available theories of intelligences and thinking styles. You don't need to know every detail of every theory, but you can use an understanding of learning styles theory to explore the diversity that each learner brings to the classroom.</i>	
1. Learning, Growth, and the Brain	5
<i>The natural process of learning involves emotional, social, physical, cognitive, and reflective learning systems. Teachers can use an understanding of these learning systems, of common brain principles, and of how the left and right brain hemispheres interact to create safe, friendly, and challenging classrooms; to plan brain-compatible lessons; and to select teaching strategies that engage both hemispheres of the brain.</i>	
2. Learning Styles	23
<i>Understanding how people prefer to learn involves surveying them, listening to them, observing them, and understanding how their preferences for visual, auditory, or kinesthetic modes affect their learning. Important theories about learning preferences and learning styles have been offered to us by researchers in psychology and education, including Carl Jung, Anthony Gregorc, David Kolb, Bernice McCarthy, Don Lowry, Richard Strong, Harvey Silver, and J. R. Hanson. To synthesize their many theories into four primary learning styles, we will meet beach ball learners, puppy learners, microscope learners, and clipboard learners, introducing principles for differentiated lesson planning and instruction that work for all.</i>	

3. Intelligences: IQ or Many?

59

What is intelligence and what role does intelligence play in growth? This chapter explores several important theories about intelligence: Art Costa's 12 intelligent behaviors, Howard Gardner's 8 multiple intelligences, Robert Sternberg's triarchic model of intelligence, and Daniel Goleman's 5 domains of emotional intelligence. We will also look at how those theories of intelligence correlate with natural learning systems, learning styles, and research-based instructional practices. You will find a large variety of tools here: surveys and checklists to assess learners' multiple intelligences; brainstorming tools for instructional planning across content areas, learning styles, and intelligences; and choice boards for differentiated instruction.

4. Thinking Skills and Styles

91

Thinking skills can be taught, and this chapter offers a generous collection of models, tools, templates, systems, and samples to show you how. Topics include frequently asked questions about teaching thinking, metacognition, and the essential thinking skills needed for success in the 21st-century workplace. Also covered are the essential taxonomies: Bloom's taxonomy of critical thinking, Quellmalz's thinking taxonomy, Krathwohl's affective taxonomy, Williams's creative taxonomy, and Eberle's SCAMPER method. Along with the taxonomies are instructional tools, including cubing, choice boards, quality questioning, graphic organizers, brainstorming tools, reflection tools, and feedback tools.

5. Making the Right Choices for Your Classroom

145

How can teachers cope with the complexity of research and available models concerning learning preferences, learning styles, multiple intelligences, best practice, and thinking skills? The reality is that we cannot use every strategy for every student, but we can use differentiated strategies to provide variety for our students, and we can use teacher reflection to examine our plans to see if we are attending to the diversity in our classrooms while also focusing on the standards. This chapter offers a step-by-step planning template for differentiated lessons and a sample lesson for critiquing. Also offered are reflection tools to guide teachers in planning instruction that is brain compatible, taps a variety of multiple intelligences, offers satisfying learning activities for all learning styles, and builds in thinking skills at all levels of the taxonomies.





Bibliography

153

Index

161

Figure 2.19 Synthesis of Learning Styles Theories

<p>SF Sensing/Feeling Abstract Random Diverger Blue Imaginative Interpersonal Social/Emotional Theater</p> 	<p>Tendencies</p> <p><i>Sensing</i> Focuses on what works Enjoys application Realistic Careful about facts Accepts current reality Works steadily Can oversimplify</p>	<p>Tendencies</p> <p><i>Feeling</i> Likes harmony and works at it Likes praise Is sympathetic Dislikes unpleasant things Enjoys pleasing others Takes an interest in people Considers people as well as task</p>
<p>NT Intuitive/Thinking Abstract Sequential Assimilator Green Analytical Understanding Cognitive/Reflective Theater</p> 	<p>Tendencies</p> <p><i>Intuitive</i> Likes challenges Looks at possibilities Likes variety Enjoys new options Moves quickly Has bursts of energy</p>	<p>Tendencies</p> <p><i>Thinking</i> Appreciates logic and reason Responds to people's ideas Needs fair treatment Firm and tough-minded Not attuned to feelings Has a talent for analyzing</p>
<p>ST Sensing/Thinking Concrete Sequential Converger Gold Common Sense Mastery Cognitive/Physical Theater</p> 	<p>Tendencies</p> <p><i>Sensing</i> Focuses on what works Enjoys application Realistic Careful about facts Accepts current reality Works steadily Can oversimplify</p>	<p>Tendencies</p> <p><i>Thinking</i> Likes a plan Likes things settled and complete Finishing is important Satisfied with a judgment Essentials are important Schedule is necessary Uses lists and agendas</p>
<p>NF Intuitive/Feeling Concrete Random Accommodator Orange Dynamic Self-Expressive/ Physical Theater</p> 	<p>Tendencies</p> <p><i>Intuitive</i> Likes challenges Looks at possibilities Likes variety Enjoys new options Moves quickly Has bursts of energy</p>	<p>Tendencies</p> <p><i>Feeling</i> Likes open-ended questions Adapts to change Has trouble with decisions May start too many projects Postpones the unpleasant Responds to pressure</p>

Beach Ball Learners

Jennifer was my beach ball learner. From Day 1, she was animated, active, and expressive. She was always curious and excited about learning. She always had a new game or a “better way to build a mouse trap.” She loved school at first. The excitement of new territory to explore and all the adventures she hopes for encouraged her each day. Early elementary school was great. She had innovative and stimulating kindergarten, first-grade and second-grade teachers who capitalized on her strengths and

Figure 2.20 Self-Reflection Inventory

Read each statement and circle the numbers that are most like you.

1. I like new challenges.
2. I like to work with my friends.
3. I like to follow directions.
4. I like to examine things that interest me.
5. I like creating and discovering.
6. I like group work in class.
7. I like routines each day.
8. I like to understand how things work.
9. I like new things and ideas.
10. I like everyone to feel good.
11. I like to finish a job or assignment.
12. I like to think and solve problems.
13. I like to use my imagination and create things.
14. I like helping other people.
15. I like to see models and make things.
16. I like to read to get the information I need.
17. I like moving about.
18. I like everyone to do well and be happy.
19. I like to do things I feel comfortable with and are familiar.
20. I like to organize things so they make sense to me.
21. I like music and art.
22. I try to understand how others feel.
23. I like to follow patterns.
24. I like to see the details and parts.
25. I like to think about where new information can lead me.
26. I like to share ideas and problems.
27. I like to solve problems step by step.
28. I like to work with ideas, new models, and projects.

Circle the numbers below that you circled above.

- | | |
|-----------------------------|---------------------|
| A. 1, 5, 9, 13, 17, 21, 25 | _____ total circled |
| B. 2, 6, 10, 14, 18, 22, 26 | _____ total circled |
| C. 3, 7, 11, 15, 19, 23, 27 | _____ total circled |
| D. 4, 8, 12, 16, 20, 24, 28 | _____ total circled |

If you had a higher total in A: You are more beach ball like.

If you had a higher total in B: You are more puppy like.


If you had a higher total in C: You are more clipboard like.

If you had a higher total in D: You are more microscope like.

Copyright © 2005 by Corwin Press. All rights reserved. Reprinted from *Differentiating Instruction With Style*, by Gayle H. Gregory. Thousand Oaks, CA: Corwin Press, www.corwinpress.com. Reproduction authorized only for the local school site that has purchased this book.

encouraged her to go farther. She read well and wrote with imagination and flair. As she moved up in the grades, the freedom to be her self was curtailed. She could no longer use her creativity and fresh ideas to enhance her learning. She was forced to follow directions and observe limits (which were good skills for life), but with only that “modus operandi” and somewhat boring routine she became a “reticent consumer” as she moved

Figure 2.21 Beach Balls Learning Style

Concrete Random, Accommodator, Orange, Dynamic, Self-Expressive Learners, NF	
<p>Innate abilities</p> <p>Experimentation and discovery Risk taking and possibility thinking Adventurous and discovery oriented Intuitive and insightful Creative and independent Spontaneous and curious</p> 	<p>Work best when they</p> <p>Get to make choices Are self-directed Are in competition Can experiment through trial and error Can use brainstorming and have open-ended options Have activities that are hands-on They can create and use their imagination</p>
<p>Challenges</p> <p>Having lockstep directions and limitations Making choices even if they like them Having no options or variety Working in a constant environment Always doing the same written task</p>	<p>To work on</p> <p>Managing time and process Completing and follow through Delegating responsibility Being realistic about outcomes Accepting others' ideas Setting limits, being realistic</p>
<p>Instructional strategies: Brainstorming, problem solving, games, experiments, simulations Activities they prefer: Considering, organizing, reorganizing, exploring, forecasting, processing, predicting, creating, recommending Products: Editorials, problem solutions, games, simulations, inventions, experiments Multiple intelligence strengths: Visual/spatial, musical/rhythmic, bodily/kinesthetic</p>	


Copyright © 2005 by Corwin Press. All rights reserved. Reprinted from *Differentiating Instruction With Style*, by Gayle H. Gregory. Thousand Oaks, CA: Corwin Press, www.corwinpress.com. Reproduction authorized only for the local school site that has purchased this book.

through middle and high schools. She did not have opportunities to experiment, be spontaneous, and make choices as Figure 2.21 shows that a beach ball learning style prefers.

Puppy Learners

Jodie, my first daughter, was much more a puppy learner (truer to a firstborn). She was very much interested in people and her interactions with them. She was sensitive and highly emotional in her interactions with others. She was upset when others were upset and showed joy in other's happiness. She aimed to please. She liked recognition and needed feedback and positive affirmation that she was doing "whatever" well and according to expectations. She was intuitive and sensitive and had great empathy for her family and friends. She loved working with others and was often the mediator and consensus builder during conflicts (her own and others'). Figure 2.22 shows us the attributes of the puppy learning style.

Figure 2.22 Puppies Learning Style

Abstract Random, Diverger, Blue, Imaginative, Interpersonal Learner, SF	
<p>Innate abilities</p> <p>Empathic and intuitive Subjective, abstract, affective Read between the lines See the gestalt (forest) Personalize information Sensitive, flexible, and amenable Use imagination in their work</p> 	<p>Work best when they</p> <p>Have opportunities to work with others Have time for self-reflection Can connect with teacher and other learners Are given a rationale for learning Receive personal attention and support Work in a noncompetitive environment Engage in open communication</p>
<p>Challenges</p> <p>Being detail oriented and exacting Working alone or following detailed directions Working with time limits and parameters Being corrected or receiving negative feedback Memorizing Working with difficult people Using lists and agendas Doing one task at a time</p>	<p>To work on</p> <p>Picking a plan and sticking to it Focusing on time limits Giving attention to detail and precision Controlling impulsivity Controlling emotions Seeing details Including details in decision making</p>
<p>Instructional strategies: Cooperative group learning, webbing, mapping, media, personalized learning, role playing, music</p> <p>Activities they prefer: Connecting, relating, expressing, sharing, presenting, interpreting, performing, counseling, imagining, peer interaction, dialogue, and discussion</p> <p>Products: Creative arts, interview, journal</p> <p>Multiple intelligences strengths: Interpersonal, verbal/linguistic</p>	

Copyright © 2005 by Corwin Press. All rights reserved. Reprinted from *Differentiating Instruction With Style*, by Gayle H. Gregory. Thousand Oaks, CA: Corwin Press, www.corwinpress.com. Reproduction authorized only for the local school site that has purchased this book.

Microscope Learners

Pat, my microscope learner, was a diligent student. He was eager to learn and would research extensively on a topic to make sure the information was accurate and up to date. He liked to work alone at his own pace and delve as deeply as he wanted into the content. He wanted to know why we were doing what we were doing and what use it might be to him. He liked to get expert opinions and make his own conclusions about the information. He was highly competitive and wanted to be sure he was thorough and correct. He was often hard on himself and wanted accuracy and precision (not bad traits) to an extreme at times. He was easily frustrated if he didn't succeed to his level of satisfaction, and he was often intolerant of other students if they didn't measure up to his standards. See Figure 2.23 for the attributes of the microscope learning style.