

Promising Potential and Advanced Ability in Visual-Spatial Learning

“A visual-spatial learner is a student who learns holistically rather than in a step-by-step fashion. Visual imagery plays an important role in the student’s learning process. Because the individual is processing primarily in pictures rather than, ideas are interconnected (imagine a web). Linear sequential thinking — the norm in American education — is particularly difficult for this person and requires a translation of his or her usual thought processes, which often takes more time” (The Visual Spatial Learner, 2019).

“Spatial learners are systems thinkers—they need to see the whole picture before they can understand the parts. They are likely to see the forest and miss the trees. They are excellent at mathematical analysis but may make endless computational errors because it is difficult for them to attend to details. Their reading comprehension is usually much better than their ability to decode words” (The Visual Spatial Learner, 2019).

General Characteristics of a Visual-Spatial learners may include:

- High interest and ability in abstract thinking and puzzle solving
- Twice exceptional (2E) learning needs
- Creative, artistic, imaginative and/or humorous
- Demonstrate talent in mathematics and computer technology
- Fascinated by images
- Empathetic with people and/or animals
- Highly intuitive. They know without being able to explain how they know what they know
- Learn holistically. May need to see the “big picture” or the “whole” to understand their parts
- Simple tasks are difficult, but more complex tasks are easier
- Able to understand relationships between concepts
- Tactile learners
- Able to find patterns
- Relationship oriented – perform best when they feel “liked.” Collaborative work groups may be effective for teaching and learning

Characteristics and challenges may include:

- Difficulty spelling

- Loses track of time
- Disorganized
- Completing sequential tasks
- Extremely imaginative see the “BIG picture”
- May struggle with appropriate emotional response
- May struggle with auditory learning

Strengths include:

- Solving puzzles
- Three-dimensional design
- Visual transformation
- Perceive the interrelationship between parts
- Holistic learning
- Building and hands on activities
- Artist and creative
- Affinity for numbers

Ways of knowing for the Visual-Spatial learner:

- Need to see the whole in order to understand the parts not step by step
- Very observant, may not grasp what they hear
- See the big picture but miss details
- Learn all at one rather than trial and error
- Learning is stored in images and feeling rather than words and ideas
- Create unusual solutions to a problem instead of just one idea
- Often lose track of time
- Intuitive rather than analytical

Ideas, tools, and strategies to support and develop potential in Visual-Spatial learners:

- Humor

- Visual instruction
- Creativity and imagination
- Encourage inquiry and discovery
- Tactical and hands-on learning experiences
- Music and rhythm
- Example student profile of gifted Visual-Spatial student:
 - Can solve advanced math problems, but may have difficulty explaining the steps for how they solved it
 - Creates detailed illustrations to show understanding of a story, but may have difficulty writing a timed summary

VIGNETTE

"... a 13-year-old boy, who, after failing two grades in his elementary school, has finally made it to the sixth grade. Though he doesn't turn in much work, his sixth-grade teacher has noticed that he seems to have a mathematical mind and catches on to new concepts easily. He aced a nationally normed analogies test and built a working roller coaster in his backyard out of scrap lumber and electronic equipment..." (The Gifted Child - Characteristics of a Gifted Child).

Commonly used Assessments and Identifying Evidence:

- Stanford Binet Intelligence Scales
- Wechsler Intelligence Scale for Children (WISC-5)
- Interviews with students, caregivers, mentors, etc.
- Student work and passion projects

Sources:

[Who Are Visual- Spatial Learners?](#)

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[Upside-Down Brilliance - Part1 - Linda Silverman](#)

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