VISUAL LANGUAGE I
To better understand some of the skills we aim to target with this program you can review this walkthrough on Visual Perceptual Processing from www.visionandlearning.org

**Visual Perceptual Processing.**

Visual perceptual processing, or visual information processing, is a set of skills we use to gather visual information from the environment and integrate them with our other senses. This is done while incorporating all the integrated information with other things, such as past experiences, motivation and development, so that we can derive understanding and meaning from what we are experiencing. This process allows the development of schemes to derive meaning from what we see.

Visual perceptual processing is very important, but especially so when learning. Without visual perceptual processing, you would not be able to accurately learn to read, give or get directions, copy from the board or from a book, visualize objects or past experiences, remember things visually, have good eye-and coordination, integrate visual information with our other senses to do things like ride a bike, play ball, or hear a sound and be able to visually recognize where it is coming from (like an ambulance), just to name a few.

Visual perceptual processing can be broken into three components - visual spatial skills, visual analysis skills and visual integration skills. Just like anything else that is broken into components, these skills work together or build upon each other to help you function.

**I. VISUAL SPATIAL SKILLS**

These are the skills we use to understand directional concepts to organize our visual space. This is how we visually project our body coordinates out into the world.

For example: When you say, “It is over to the left,” the “to the left” has no meaning unless it has a point of reference. So actually, you are really saying to the left of where YOU are. If you don’t know where your body is, it is hard to know where things are in relation to you. Visual spatial skills require observing an object, then accurately reporting its relationship in space relative to your own self.

**A. Laterality**

Laterality is an internal self-awareness of two body sides and knowing they are different. It requires good balance, vestibular function and an awareness of a body midline (an invisible line that divides your body in half).

FACT: During a study at the Southern California College of Optometry, 73.8% of children already determined to have a learning disability failed tests used to assess laterality and directionality. Laterality eventually evolves into directionality.

A person must understand laterality on their person before it can be applied in space. This means if you do not know the two sides of your body (left and right), how can you know what to call the two sides of the room? We always learn how to judge where things are by first learning how to relate it to ourselves.

When you start applying left and right concepts to your external visual space, you are beginning to learn directionality.

**B. Directionality**

Directionality incorporates up, down, ahead, behind, and any combination thereof into the equation. It also means projecting these directions including left and right out into space. Again, a person must understand these concepts as they relate to themselves before they can apply them to other things.
Directionality is very important in decoding letters. If you don't have this concept down, learning to read can be very confusing. For example, the letters “b,” “d,” “p,” and “q,” all look like the same symbol if you do not have any concept of orientation.

**FACT:** Research has shown that children who still have reversal problems after age 8 will likely have problems developing good reading skills.

### C. Bilateral Integration

Bilateral integration is another visual spatial skill that is important. This is the ability to effectively use both sides of the body separately (like typing) and/or simultaneously (like riding a bicycle).

Very young children will use only one side at a time until they learn this skill. This is a normal part of development. However, if a child is still exhibiting this behavior after third grade, this may signify a problem with visual spatial skills. Watch a young child draw or color. Crayons on the left stay on the left and are manipulated by the left hand and vice versa. If they want something on their right to use on the left side, they will pick up the crayon in the right hand, then pass it to their other hand rather than cross over the midline of their body.

With proper development the left and right side should begin to enhance each other’s function, for example the right hand may stabilize a piece of paper while the left hand draws. Another integration skill you can observe is moving one foot ahead of the other when walking, while at the same time swinging contralateral arms as the foot comes forward, for example the right foot and the left arm, then the left foot and right arm.

This skill cannot be developed fully unless laterality is learned well, too. If you do not have the concept of the difference between both sides of your body, it is very difficult to learn how to coordinate them.

### II. VISUAL ANALYSIS SKILLS

Visual analysis, or visual discrimination, is used to identify, sort, organize, store and recall visually presented information. It is the ability to take in visual information remember it and apply it later. Children with poor visual analysis skills often have trouble learning the A, B, C’s and recognizing words or simple forms even when presented repeatedly; for example, they may correctly read the word “house” in one sentence and incorrectly read “horse” two lines later. These kids tend to mistake words with similar endings or beginnings, generalize when grouping objects. They also have a hard time understanding size and magnitude, (a cup of water in a tall glass and a cup of water in a shallow bowl are not seen as equal amounts).

#### A. Figure Ground:
An ability to attend to or search for a specific form or feature while simultaneously ignoring irrelevant information. Example: Looking for a specific piece of information when reading or searching for a specific tool in a toolbox full of tools.

**Example Activities:** Hidden Pictures

#### B. Visual Form Recognition/Discrimination & Constancy:
The ability to discriminate differences in forms. This includes differences of size, shape, color and orientation. Recognition that visual information in a form is consistent in spite of the object, size in the back of the eye, or location.

**Example:** DOG = dog = Dog, or that a cup of water is a cup of water whether in a tall glass or shallow bowl.

**Example Activities:** Parquetry Blocks, Tetris, Cut and Assemble

#### C. Visual Closure:
The ability to recognize clues presented visually that allow him or her to determine the appearance of the final product without all the details being present.

**Example:** Being able to complete a word when only part of the word is seen; recognizing what will appear in a picture before it is completed.

**Example Activities:** Connect the Dot, Missing Pieces

#### D. Visual Spatial Memory:
Ability to recall the spatial location of an object or stimuli. The ability to be able to recall, identify, or reproduce a design or dominant feature of an object.

**Example:** Being able to picture a lost object; seeing a printed word and developing a mental picture to the corresponding object.

**Example Activities:** Memory Card Games

#### E. Visual Sequential Memory:
Ability to view and then recall a sequence of numbers, letters or objects in the order they were originally presented.
Example: Recall a phone number 205-9786 vs. 205-9687, or in spelling “their” vs. “thier”
Example Activities: Electronic ‘Simon Says’ or other Sequence Replication Activity

F. Visualization: Ability to recall a previously viewed image or object and mentally manipulate the image from various aspects.
Example: Seeing a flattened box and being able to mentally reconstruct it and picture the dimensions to decide if the object you want to put in the box will fit.
Example Activities: Pegboard, Tangoes, Shape Replication

G. Visual Speed & Span of Perception: The rate and amount at which information is being handled in visual processing.
Example: Quickly and efficiently copying an assignment off the chalkboard with only a few glances vs. needing to glance at the chalkboard after every one to two words or bits of information is copied.
Example Activities: Speed Stackers

Automaticity:
Once all of these skills are developed, it is important for them to become automatic so they take up less brain power to use. Just like learning to drive a car with a manual transmission. At first, it takes a lot of brain power to get your feet to move the right way and for you to time it with what your hand does with the stick shift. Not only are you learning a new skill, but you also have to make sure you pay attention to the road and steer accordingly. Once you get the hang of it, the ability to shift gears became automatic and you can devote that brain power to eating a Big Mac and talking on the cell phone along with everything else (not recommended, by the way). In order to have efficient visual information processing skills, you have to learn the skills well to the point where they become easy.
Automaticity is key in efficient learning.

III. VISUAL INTEGRATION SKILLS
This processing ability allows you to integrate information with your other senses or with other visual information.

A. Visual-Visual Integration
Visual-visual integration is what happens when several visual skills integrate together. If you looked at a new word and then matched it with an image in your mind to help better recall what the word means, this would be an example of visual-visual integration. So, for example, if you looked at the word “Siamese,” and you saw a picture of that type of cat in your mind, you would be integrating visual input with visualization.

B. Visual-Motor Integration
Visual motor integration (VMI) consists of coordinating visual perceptual skills together with gross-motor movement and fine-motor movement. It is the ability to integrate visual input with motor output. This is how individuals plan, execute and monitor motor tasks, such as threading a needle, tying shoe laces, catching or hitting a ball. It is also essential in academic performance. This is commonly referred to as Eye-Hand Coordination.

In the example below, we can look at how you are coordinating your vision with how you move your pencil. Basically, are you visually guiding your pencil to accurately represent what you see.
Look at the picture below:
Example Activities: Grid drawings

Children with known learning disabilities have a high prevalence of VMI deficiencies. In one study, out of 51 LD elementary students, 85% of them were correctly identified as being learning disabled by finding problems in this area. VMI problems affect IQ scores, suggesting that perceptual and cognitive skills necessary for good VMI are generalized. **VMI also correlates well with math skills, especially in the lower grades from kindergarten to second grade!**

Children with poor VMI skills have a difficult time on written assignments and tests, erase excessively, show poor penmanship, and do not do well when copying down information. These same children often seem to perform better when answering aloud and can verbalize that they know the material they are being tested on, but seem to test poorly on that same material when writing is required. Not a good thing when you are taking standardized tests.

Exercises in the Visual Language program aims to efficiently and effectively develop a number of these Visual Perceptual Processing skills. Simple, early exercises like ‘Connect-the-dots’ not only introduces the student to the most fundamental marks of a visual vocabulary and aspects of motor control, but also begins to develop skills of Bilateral Integration, Visual Closure, Visual Sequential Memory.

Our later exercises--like grid-drawings for example--not only continue to expand on fundamental marks and increasingly fine motor control, but also continue the development of visual perceptual skills in more complex combinations such as (but not limited to) Visual Closure, Visual Spatial Memory, Visualization, Visual Form Recognition/Discrimination & Constancy, and Visual-Motor Integration (Eye-Hand Coordination).
VISUAL LANGUAGE
KINDERGARTEN
“Learning to design is learning to see, an adventure that gets more and more captivating the further you go.” - Oliver Reichenstein

Visual Language I is a strategic sequencing of educational visual arts exercises designed to develop visual literacy and communication skills in the most effective and efficient manner possible. Echoing the same rational sequence of skill building exercises from the celebrated Waichulis curriculum (designed for the International Ani Art Academies) Visual Language I seeks to develop visual literacy and communication skills that will allow students to successfully interact and contribute to a global environment that is increasingly dependent on visual stimuli.

“Visual arts education is now understood as critical and necessary for success in a world that is making a paradigm shift to a global model requiring higher order thinking, creativity, problem-solving, and flexibility. Even Benjamin Bloom’s Taxonomy of Learning Domains – a standard model for the classification of intellectual behaviors related to learning – has been revised and restructured to make “Creating” the top of the hierarchy. The taxonomy now reflects not only the arts, in particular, but also a relevance to 21st century work. Visual arts learning includes all three of Bloom’s domains of educational activities leading to higher order thinking.”

-Darien Public Schools Art Department, Connecticut.
VISUAL LANGUAGE I (K-3)

OBJECTIVES

- Acquisition of media skills and processes necessary for life-long artistic learning and application.
- Development of adaptable/transferable fine motor control and hand-eye coordination.
- Development of the ability to depict, analyze and interpret the world in visual form.
- Development of creative and communication skills so as to successfully express ideas through artistically proficient products.
- Identification and exploration of the scientific and psychological aspects of the art experience.
- Development of problem-solving and critical-thinking skills.
- Strengthening of creative thinking and inventiveness.
- Development of a deeper understanding of human behavior, motivation, diversity, culture, and history.

intended to augment that creative experience with focused practice so as to achieve the aforementioned objectives. (Please feel free to send any suggestions or feedback to aaawaichulis@gmail.com. Through constructive feedback and input we hope to continue to improve on this early framework.)

STANDARDS


1st Grade Literacy: CCSS.ELA-LITERACY.RI.1.1, CCSS.ELA-LITERACY.RI.1.3, CCSS.ELA-LITERACY.RI.1.4, CCSS.ELA-LITERACY.RI.1.6, CCSS.ELA-LITERACY.SL.1.1, CCSS.ELA-LITERACY.SL.1.2, CCSS.ELA-LITERACY.SL.1.3, CCSS.ELA-LITERACY.SL.2.1, CCSS.ELA-LITERACY.SL.2.3
1st Grade Math: CCSS.MATH.CONTENT.1.G.A.1, CCSS.MATH.CONTENT.1.G.A.2,

2nd Grade Literacy: CCSS.ELA-LITERACY.RI.2.4, CCSS.ELA-LITERACY.RI.2.7, CCSS.ELA-LITERACY.SL.2.1, CCSS.ELA-LITERACY.SL.2.3
2nd Grade Math: CCSS.MATH.CONTENT.2.G.A.1,

SPECIAL NOTE

This sequential framework that is Visual Language I (II, and III) should be viewed as an organic system that can be altered and/or augmented to fit the specific needs of the classroom. With this in mind, it is highly recommended that the Visual Language I exercises be assigned in the order that they are presented so as to maximize development.

Additionally, these exercises are not meant to displace any popular pre-existing art projects that provide a fun creative experience for many, many students. The sequential framework provided here is

www.davinciinitiative.org
VISUAL LANGUAGE I (K-3)

3rd Grade Literacy: CCSS.ELA-LITERACY.RI.3.4, CCSS.ELA-LITERACY.SL.3.1, CCSS.ELA-LITERACY.SL.3.3, CCSS.MATH.CONTENT.3.G.A.1

National Visual Arts Standards K-4: 1.a, 1.d, 2.c, 3.b,

MATERIALS

The materials for the Visual Language I exercises can be determined by classroom availability and the individual wishes of the teacher. Exercises may be carried out with plain paper, graphite pencil, crayon, marker, colored pencil, watercolor, acrylic, and construction paper of various colors. Additionally, some exercises may require glue, scissors and additional objects like paper plates. Please see individual exercise sheets for any specific materials required.

BASIC STRATEGY

The Visual Language I exercises echoes the same visual element chronology as Anthony Waichulis’ Language of Drawing and Language of Painting programs. The general sequence is as follows: DOT, LINE, SHAPE, VALUE, and COLOR. You may see COLOR and VALUE trade order from Kindergarten to third grade as some concepts essential to VALUE and COLOR are more complex and thus are not addressed until the latter.

Visual Language I combines current day art projects found in most K-3 classrooms and infuses them with the LoD/LoP general sequence of development. This strategy aims to successfully balance familiarity and tradition with focused practice and efficiency.

See attached documentation.
“Learning to design is learning to see, an adventure that gets more and more captivating the further you go.”

Oliver Reichenstein

The Visual Language program is a strategic sequencing of visual arts exercises designed to develop visual literacy and communication skills in the most effective and efficient manner possible. Echoing the same rational sequence of skill building from the celebrated Waichulis curricula, The Visual Language system seeks to develop visual literacy and communication skills that will allow students to successfully interact and contribute to a global environment that is increasingly dependent on visual stimuli.

Each grade repeats the same journey connecting dots with line, configuring lines into both shapes and values, marries value to shape to yield form, and then ignites each element with the magnificent contributions of color. Repetition is a key component for this learning model however great care was taken to embed it into a myriad of various arenas. For example, the earliest exercises in these K-12 adaptations place the same focus on dot-line repetition that is found in the successful Waichulis curricula--however--this repetitions is hidden in a number of matching challenges, connect-the-dot projects, guiding tracings and puzzles. Additionally, this variety presents significant opportunities for collateral contributions to other areas of study.

Visual Language I, II and III follows a theoretically sound process and rational sequence that is inherent to most successful educational systems. It is highly recommended that while teachers may customize the content of the individual sections, the overall hierarchy of development should remain intact. (Dot-Line-Shape-Value-Color-Form.)

Cover sheet will divide key sections for easy navigation and planning. Additional cover sheets for particular exercises may be added to help teachers understand why a certain project may be beneficial.

In addition, exercise sheets will contain a program version or “depth-route” indicator that will rate a particular exercise’s impact for better planning based on available classroom hours. While each grade follows the same sequential pattern of the Dot, Line, Shape, Value*, Color, Form* – worksheets will now contain a depth code of A,B, or C: “A” representing a course with minimal hours to invest, “B” representing intermediate, and “C” representing a robust course. This way teachers can effectively and efficiently strategize with a clear and quick reference based on their time.

*Value and Form are not introduced until 2nd grade.

‘Strengthening indicators’ can also be found on certain assignment pages. These indicators will suggest potential exercises within the overall curriculum (if applicable) that will allow a student to try their hand at an early activity that may better prepare the student for the marked challenge. (For example – on a particularly challenging grade 4 Line assignment sheet you may see a strengthening exercise recommendation for a Grade 3 exercise, Line section, Page 7.)
VISUAL LANGUAGE I, II, III

DOT/LINE

SHAPE

VALUE

COLOR

FORM
DOT

LINE

First Marks Kindergarten
CURVED
WAVY
BROKEN

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SPIRAL
Connect the Dots Kindergarten
1
2
3
4
5
The Connect-the-Dots portion of this Lesson Plan framework can use any Connect-the-Dots exercises of increasing difficulty that the teacher deems appropriate. The following examples were acquired online.

General Example
DOT/LINE
SHAPE
VALUE
COLOR
FORM
Connect the dots along the lines to reveal a shape.

**TRIANGLE**

**SQUARE**
Connect the dots along the lines to reveal a shape.
Connect the dots along the lines to reveal a shape.

CIRCLE

OVAL/ELLIPSE
Practice these basic shapes.
Practice these basic shapes.
Practice these basic shapes.
VISUAL LANGUAGE I, II, III

DOT/LINE
SHAPE
VALUE
COLOR
FORM
COLOR
Red
Orange
Yellow
Green
Blue
Purple
FUN WITH SHAPES EXERCISE INSTRUCTIONS

You will need:
Sheets of White or Colored Construction Paper
Scissors
Paper plates
Glue or Glue Stick
Crayons, Markers, or Pencils

The following projects are meant to be completed in a sequence of increasing difficulty. Completed project illustrations on the exercise sheet are printed small to conserve space.

Instructions:
Cut along the dashed lines. Arrange cut out shapes on any color paper you wish using the illustration as a guide. Glue shapes onto the paper. Follow any additional instructions found on the exercise sheet. For example, some projects may require coloring, tracing, and drawing.

Optional supplies:
Straws
Glitter
Leaves
Branches
Googly eyes

Note:
All of the exercises can be substituted with construction paper instead of printer paper. Teachers can draw outlines of the shapes.
Cut out the shapes out of any color construction paper you choose. Add any elements you choose.
Additional Instructions:
Cut the paper plate in half. Color and decorate the paper plate. Cut out the rectangle for the bottom part of the mushroom out of any color construction paper you choose. Glue two parts together.