DOCUMENT RESUME

ED 200 892 CS 005 896

AUTHOR Kossack, Sharon W.; Bader, Barbara
TITLE Visual Literacy: Foundation for Comprehension.
PUB DATE Nov 80
NOTE 19p.; Paper presented at the Annual Meeting of the Southeastern Regional Conference of the International Reading Association (6th, Norfolk, VA, November 12-15, 1980).

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Classification; *Cognitive Processes; Elementary Secondary Education; *Reading Comprehension; *Remedial Instruction; *Teaching Methods; *Visual Learning; *Visual Literacy

ABSTRACT

It is necessary to provide a comprehensive program of visual literacy skill development to provide a firm foundation for reading comprehension. A taxonomy of visual literacy can suggest an outline for such a program. Once the student has been made aware of the desired thought processes in familiar contexts, it is then appropriate to guide the student to translate the same visual understandings to less familiar, more varied contexts. Visual interpretation begins with the student identifying appropriate visual elements on the basis of direct definition or description, since part of the problem regarding visual illiteracy is the inability to associate the correct element with the appropriate descriptor. Though visual literacy enhances comprehension, it also has potential as a generic, nongraded, nonthreatening, remedial strategy for the older student. It can provide a foundation for comprehension processing prior to the student's encounter with written discourse. Once the logic of comprehension is built by having students interact with classroom situations, share movies or television shows, discuss pictures and oral stories, the oral and visual processes developed by these means can ease the transition into similar processes in written language. This transition phase helps guide students into the notion that written language has meaning and that this meaning has logic that is familiar to their experiences. (HOD)

# VISUAL LITERACY: FOUNDATION FOR COMPREHENSION

by Sharon W. Kossack, Florida International University--Bay Vista Campus
Barbara Bader, Florida International University--Tamiami Campus

VISUAL LITERACY: FOUNDATION FOR COMPREHENSION

> Today our children are accustomed to receiving much of their information from visual forms; television, movies, comic strips, filmstrips, slides, and picture stories in magazines. The use of visuals in the preschool years for most children makes the use of verbal communication relatively less important. However, when the child enters school, he enters a new world full of verbal demands which often completely ignore his visual learning and proficiencies. We usually insist on the verbal response when it is the visual which he has learned first.[3]

Visual Literacy: What Is It?

Visual literacy is the set of thoughts, actions, and judgments which are initiated by primary forms of experience. It is the ability to gain understanding through the language art of reading and interpreting the relationships within what one sees. The fundamental power of image making by the imagination in response to orally- or visually-presented contexts furnishes the raw material for concepts and ideas. Thus, visual literacy is the source of meaning, ideas, theories, organization, and relationships.

The fundamentals of receptive and expressive visual languaging are formed long before expressive verbal vocabulary is formed.[2] The very young child develops an understanding of the process of cause/effect while observing Mother replacing toys dropped from a playpen. The widened eyes and exclamation of "Uh-oh!" when a child sees the wicked fairy's image appear within the visual context of Snow White demonstrates an accurate ability to predict outcomes. The understanding of visual action and image is quickly translated to verbal language. The understanding within the visual context serves the purpose of strengthening and developing verbal vocabulary.

Without visual language skills, meaning can be lost. Congenitally blind subjects, suddenly able to see, could not identify intimately familiar objects which were formerly well know to them by touch (examples: clock, cube). Though the formerly blind person was able to identify, by touch, which was rounded and which was squared, this was impossible for them to do visually.[12] This person was as illiterate with regard to visual interpretation as the verbally illiterate is to the word form cat; both illiterates are unable to translate into meaning, though the visual illiterate tactually knew the object and the verbal illiterate orally knew the word cat.

Just as objects apparently have a language of interpretation, pictures have a still more abstract language, specific and unique to them as representational suggestions of reality. Australian aborigines, unschooled in picture interpretation, were identified as visually illiterate. Though they were sighted, they were unable to derive meaning from photographs of animals which were exceedingly well known to them.[12] The interpretation of pictures requires an understanding of language that goes beyond their role as representations of reality.[13] The transfer of visual interpretation from concrete to representational (object/action to pictures) must be guided to assure that understanding is derived.

Visual illiteracy due to lack of guided transfer is prevalent in the case of deprived youth. Recent studies of children who have been institutionalized or raised in deprived circumstances demonstrate a striking lack of visual development similar to that described in the visual illiterate. This deficiency, if left unremedied beyond the primary years, appears to result in irreversable deficit.[9, 10] Programs of early detection and intervention, however, have been shown to improve learning, but still cannot totally erase the visual deficit.[4, 5, 14] By what means can we identify the visually deficient youngster? By what avenue can the visual deficit be alleviated?

A Taxonomy of Visual Literacy

Bloom's taxonomy[1] was adapted for the purpose of (1) rendering more precise the communication about visual literacy, (2) providing an overview of the skill interrelationships related to visual literacy, (3) suggest a continuum for devising both diagnostic instruments and curricular support for visual literacy. It provides for the generation of comprehension questioning on four levels (see Table 1): (a) recall level, where students identify relationships within pictures based on remembering information from a prior discussion, (b) thought level, where students use picture attributes to predict consequences/relationships which have not been prediscussed, (c) application level, where students demonstrate a visual process independently, and (d) evaluative level, where the student detects fact/fiction, artist mood devices, and similar tasks requiring the application of judgment.

INSERT TABLE 1 ABOUT HERE.

If learning processes are vague and poorly defined, precise discussion between

professionals is unlikely. Without professional communication, fragmented understanding on the part of the practitioner (in this case the teacher) will result in the unfocused use of unrelated visual literacy tasks. Present understanding of visual literacy, as it is practiced, is limited to random questioning about pictures. It is unstructured, unfocused, and the intent is not clear. As the essential skills involved in visual literacy become more precisely defined, as when they are placed in a taxonomy, communication is possible because a language has been provided. The merit of these skills can be investigated and debated. The relative importance of the contribution of the skills can be accurately discussed and measured. Hence, the taxonomy of visual literacy is offered as a means of fostering more precise communication.

Just as taxonomies in science or mathematics help to integrate the relationships of concepts within those disciplines, the taxonomy of visual literacy is intended to suggest skill interrelationships within a visual context. Since the taxonomy deals with thought, however, the rigid, measurable interactions found within science and mathematics taxonomies falters when applied to the taxonomy of visual literacy. The relationship of thought processes tend to overlap, if only because the higher level skills require a foundation of lower level skills. The reader is cautioned not to view the skill categories as discrete. It is more profitable to consider them as an outline of interrelationship, rather than to debate the discreteness of process.

Similarly, the skills appear to be arrayed in a hierarchy of difficulty; but, depending on the skill and context, a higher level skill may be rendered infinitely easier than a question derived from a lower-level category. For example, the identification of a favorite character (critical level) will probably be a lot easier than identification of a causal factor (inferential) within the same visual context. Even though the skills involved are on varying taxonomy levels which appear to suggest a reversed level of difficulty, in actual fact the nature of the skill or the difficulty of the visual context disallow the stringently hierarchical perception of the levels. The reader is cautioned not to view the levels as absolute levels of difficulty.

Since the taxonomy, when applied to a visual context, suggests multi-leveled development of questions, diagnostic instruments could be developed with the guidance of the taxonomy. Such instruments could be used to preassess the visual skills of youngsters as a means of planning instruction. It could again suggest skills to be included in a test of mastery once instruction has been conducted.

And, finally, the taxonomy has implication for instruction. Should a school system wish to compare the visual skills listed on the taxonomy with present curricular skills outlines, the taxonomy skills may suggest areas needing supplement, if not revision. Current materials can be examined through comparison with the taxonomy to assess the degree to which they foster the development of critical visual literacy skills; those materials currently in use which appear unfavorable in this comparison can be improved with the use of the taxonomy. For example, if few inferential level questions are provided, the taxonomy can be used to develop more questions of this type. In a similar fashion, materials under consideration for potential purchase can be critiques using such a taxonomy. High-cost materials which provide few opportunities for visual literacy skill development would be a poor purchase choice if the diagnosis determined many students in the school needed such instruction. Should a school require materials unique to their student population, or if a curricular search reveals few worthwhile materials, the taxonomy can also be used to convert readily available, non-academic materials into useful tools for teaching visual literacy. For example, objects from a desk, from a kitchen, from a bathroom could be used to provide nontraditional contexts in which to encourage categorizing, thus teaching main idea in a concrete, visual context. For the older child, the use of the newspaper advertisements which are largely pictorial could be converted into skill lessons on comparison, fact/opinion, main idea, and similar skills. Thus, the taxonomy impacts instruction in four ways: (1) guides the evaluation and improvement of materials currently being used, (2) suggests needs for curricular development or revision, (3) outlines the critique of potential materials, and (4) directs the development of nontraditional materials as instructional tasks.

The Nature of Visual Learning

As instruction in visual languaging is provided, five basic factors must be taken into consideration when choosing or developing visual literacy materials: (1) the transfer of meaning from concrete to representational (pictures), (2) relevance, (3) active interpretation, (4) logical identification of the illogical, and (5) provision for comprehensive instruction in visual literacy skills.

It is suggested that all basic processes of thought can and should be developed via visual media. Cause/effect, sequencing, predicting outcomes, main idea,

identification of artist mood, identifying fact/fantasy, and a myriad of other processes should first have their foundation in visual interpretation prior to their application to words, sentences, and paragraphs. It is necessary to provide a comprehensive program of visual literacy skill development to provide a firm foundation for comprehension. The taxonomy of visual literacy is suggested as an outline of such a program.

Initial instruction should be done in visual contexts familiar to the student. Since the meanings within the visual context are not inherent in the situation, but lie in what we, as viewer, bring to the pictures,[13] the visual situations involving the greatest relevance for the viewer allow for the greatest understanding if it is process we desire more than the gathering of visual information about a specific visual context. For example, initial instruction using a beach scene when teaching a rural Kansas student would assure a lack of understanding. The child could describe familiar things (trees, bench), but be at a loss to identify, describe, or interpret less familar items (beach, ocean).*

> The mark of an effective teacher is the selection of visuals to which the student can already respond, not those to which he cannot. He then uses visuals to bring out the specific, desired response he wishes the student to practice.[6]

Once the student has been made aware of the desired thought processes in familiar contexts, it is then appropriate to guide the student to translate the same visual understandings to less familiar, more varied contexts. Once the ideas of beach, waves, water cycle are understood in relation to a local lake, an ocean picture would provide good horizontal development for the rural Kansas student.

Most students will not come to school as visually illiterate as the congentially blind person who is suddenly able to see. They have been surrounded by visual stimuli since birth, but have not been guided in their visual viewing. Thus, the teacher can anticipate gaps in students' visual understanding and relative strengths in their understanding of concrete visual interpretation. The wise teacher will select instructional media that will foster the easy transfer of visual interpretation from the concrete situation understood by the child to the representational context (picture context) most like the original concrete context. In this way, the teacher capitalizes on the life experiences of the child to enhance the visual understanding. The teacher not only provides relevance in initial visual languaging, but also strives to provide the transfer from the known concrete visual situation to the more abstract pictorial

*Teachers are cautioned to be receptive to extraordinary student answers. A teacher who is open to alternative, but logical, viewing will know to probe the "Why?" of unusual student responses.

interpretation.

Visual interpretation begins with the student identifying appropriate visual elements on the basis of direct definition or description, since part of the problem regarding visual illiteracy is the inability to associate the correct element with the appropriate descriptor. But interpretation must then move to place emphasis on meaning, not solely on description of an image. The interpretation of visual contexts is not a static description of a frozen image that has no antecedent or subsequent consequences.

> (P)ictures in books . . . are likely to be of value only insofar as they are interpreted as representing changing, moving phenomena. The viewer has to see the picture as a moving scene, for to view it as a still exposure means that the point of the illustration has been lost. Most illustrations require that a complex and dynamic interpretation be introduced by the viewer.[11]

Students who are guided to understand the dynamic interpretation of visual contexts will be more flexible in applying a dynamic, interpretative understanding to written discourse. A firmer foundation will have been laid to facilitate the transfer of comprehension processes to the written word.

The student must be made aware of logic. Questions regarding what is relevant to the visual context should certainly be asked, but the student must also be made aware of what is not relevant as well. A view of a zoo scene might elicit the question, "What other kinds of animals could also be included in this scene?"--an inferential question relating to the logic of the situation. But a question of illogic, such as, "Would a dinosaur be seen in this picture?" or "Would a whale be seen in a cage like that?" encourage the student to examine the outside parameters of the context so that the concept of zoo is understood both for what it is and what it is not.

Is visual literacy an added curriculum? By what means can such a foundation for comprehension be included in reading instruction?

Instructional Application

Though visual literacy obviously enhances comprehension, it also has potential as a generic, nongraded, nonthreatening remedial strategy for the older student. It can assist the curriculum planner, teacher, aide, or parent in building a foundation for comprehension processing prior to the student's encounter with written discourse. It is one of the few truly ungraded strategies, especially

when it is applied to current and familiar contexts, pictures, and the newspaper. When nontraditional materials like that are used, visual literacy can be considered as a supplement to ordinary instruction, but this need not be the case. Visual literacy can be a conscious focus throughout a student's daily experiences.

EVERYDAY SITUATIONS are rich sources of comprehension development. If teachers plan to use recurring, familiar classroom situations as a means of reinforcing the multi-level processes of comprehension, the skills will become so ingrained in the student that the transfer to written contexts will be greatly facilitated.

Common school experiences can be a realistic means of conveying the idea of literal cause and effect. Should a student drop a glass of juice, the teacher can use this as an opportunity to discuss the cause of the spill. If the class observes ominous clouds while at play, students can logically predict rain (effect). Familiar situations can be acted out, in a process similar to Charades. As one team acts out a familiar experience, the opposing team's task is to guess the outcome (predict the outcome). For example, a student can pretend to kick a ball toward classroom windows as the other team observes. The teacher would guide students to a prediction of a broken window. As students become more familiar with the procedure, smaller teams can be formed and the activity can proceed, on a point basis, with minimal teacher direction.

Teams of students can also be used to demonstrate, using actual classroom objects, the processes involved in various comprehension skills. They can be asked to show their understanding of main idea by grouping items and labelling them. Other teams can be shown the groups of objects and be asked to practice the skill by matching titles with appropriate sets of objects. Sequence can be acted out in teams, with the opposing team guessing the action and naming three major actions. For example, a team could illustrate a science project involving the planting of seeds which requires the preparatic of soil in a pot, insertion of seed, and watering. The action is an example of applied comprehension, the interpretation is an example of inferential comprehension. This illustrates how judicious grouping can allow students on different levels to contribute to their mutual mastery and understanding.

Critical comprehension can be developed after students have viewed Hulk or Star Wars or some other familiar, high-interest fantasy show. They could be asked to identify things in the show that could/could not have happened in real life. Students could become involved in Wish Day, where they verbalize and illustrate wishes for things they would like to have come true (like the invention of an automatic homework doer or

an instant bed-maker). As the teacher reads stories during the day, students could be asked to interpret the visual illustrations to detect reality/fantasy aspects. Fact/opinion awareness can be derived with the use of the illustrations on menus. Actual food items can be contrasted with menu illustrations to determine misleading visual factors. Menu illustrations can be discussed to detect visual aspects which cause the viewer to be attracted to a particular food item--color, nostalgia, texture, food combinations, and the like. Students can be asked to share television jingles, "The bottomless cup of coffee," "We do it your way," "You deserve a break today," "The Real Thing," to detect exaggeration devices in commonly encountered advertisements. Student disappointment in response to cereal box or comic advertisements can also create teachable moments about misleading visual illustrations. As students become comfortable with comprehension processes within everyday experiences, they can be guided into more abstract, less familiar interpretations through the use of pictures.

PICTURES are used in the classroom for a variety of purposes, i.e. as a resource for subject area units or as a spark for creative writing activities. The taxonomy can guide the teacher to use these files in a focused way to teach the processes involved in comprehension from a visual (prereading) perspective.

Picture selection is critical, since motivation and attention are essential. Choices should be based on relevance and interest.* Photographs of one's own pupils capitalizes on the egocentricity of young children. They will want to look, listen, and discuss personalized pictures which depict them in their classroom, lunchroom, playground, school bus, on a field trip, around the school building, and within their immediate community.

The newspaper is a source of current, high-interest pictures. Advertisements, pictures, and comics provide an abundance of inexpensive, familiar, highly motivating materials that can be used to develop specific comprehension skills visually.

---

*Since motivation and attention are critical, pupils' interests, pets, hobbies, sports, and items of local interest should be considered. Geographical areas (urban, suburban, rural) should be included. Fads, advertisements, comics, scenes from popular movies or television shows often prove to the motivating visuals. Photographs of children at play, work, eating, and having fun serve to involve students, especially when they can easily identify with the visual characters.

Literal comprehension can be developed using pictures or orange juice, cereal, toast, and milk. Students would categorize such pictures by meal (breakfast, lunch, dinner), by food groups (fruits, vegetables, dairy products, meats) or by growing location (under/on/above ground) as a means of developing main idea.

The daily comics, cut apart by frame, can be rearranged into logical sequence to develop students' inferential skills.* Comic strips may also be used to predict outcomes if all frames are kept intact and the child is provided a variety of ending frames from the same strip. The child's task would be to select the frame which best completes the action of the intact portion of the strip. An example of the use of comics to predict the outcome is included in Figure 1. The same strip can be used to make other inferences. Comparisons between the human characters can be made as the child is asked to identify the father, to compare the boys ("Who is oldest?" "What is their relationship?"), and theorize about the girl ("Who is she?" "Does she know the boy character well?" "Is she his sister?"). Inferences about the time of year or time of day can be made, based on clothing.

Problem solving is often considered an area reserved for older children, exclusive to mathematics. Although the very young child is capable of solving problems, practical opportunity is rarely provided. Local events, such as the relocation of the community zoo, can initiate problem-solving questions like, "How will the 3-ton elephant, 20-foot giraffe, or the 10 seals be moved to their new home?" Such questions help students to develop their applied comprehension skills. Scanning a newspaper, children can be encouraged to devise such problems for their peers to solve. This could initiate excellent homework assignments, which would not involve direct reading. Children can decide which authority would be an appropriate resource to verify their solutions.

The magazine section of the Sunday newspaper is a source of colorful pictures useful when teaching visual imagery. Pictures of flowers in bloom may suggest questions like, "What do you think the petals will feel like? What in the picture makes you think so?"

---

*Care should be taken when selecting comics. Some frames are often included which, when separated, are irrelevant to the sequence. A tryout on an adult is helpful in identifying which frames can be discarded as the strip is being converted into an instructional tool. It is important to note that a child's logical sequence may not necessarily be the original order of the strip. Teacher judgment, based on probing questions ("Why did you put them in that order; tell me the story?"), are essential in evaluating a child's performance on this task.

Literal comprehension can be developed using pictures of orange juice, cereal, toast, and milk. Students would categorize such pictures by meal (breakfast, lunch, dinner), by food groups (fruits, vegetables, dairy products, meats) or by growing location (under/on/above ground) as a means of developing main idea.

The daily comics, cut apart by frame, can be rearranged into logical sequence to develop students' inferential skills.* Comic strips may also be used to predict outcomes if all frames are kept intact and the child is provided the last frame from the actual strip and additional frames cut from the same strip from other weeks. The child's task would be to select the frame which best completes the action of the intact portion of the strip. An example of the use of comics to predict the outcome is included in Figure 1. The same strip can be used to make other inferences. Comparisons between the human characters can be made as the child is asked to identify the father, to compare the boys ("Who is the oldest?" "What is their relationship?"), and theorize about the girl ("Who is she?" "Does she know the boy character well? Is she is sister?' Inferences about the time of year or time of day can be made, based on the clothing.

Problem solving is often considered an area reserved for older children exclusive to mathematics. Although the very young child is capable of solving problems, practical opportunity is rarely provided. Local events, such as the relocation of the community zoo, can initiate problem-solving questions like, "How will the 3-ton elephant, twenty-foot giraffe, or the 10 seals be moved to their new home?" Such questions help students develop their applied comprehension skills. Scanning a newspaper, children can be encouraged to devise such problems for their peers to solve. This could initiate excellent homework assignements, which would not involve direct reading. Children can decide which authority would be an appropriate resource to verify their solutions.

The magazine section of the Sunday newspaper is a source of colorful pictures useful for teaching visual imagery. Pictures of flowers in bloom may suggest questions like, "What do you think the petals will feel like? What in the picture makes you think so?"

---

*Care should be taken when slecting comics. Some frames are often included which, when separated, are irrelevant to the sequence. A tryout on an adult is helpful in identifying which frames can be discarded as the strip is being converted into an instructional tool. It is important to note that a child's logical sequence may not necessarily be the original order of the strip. Teacher judgment, based on probing questions ("Why did you put them in that order; tell me the story?"), is essential in evaluating a child's performance on this task.

A picture of pizza may initiate a question like, "How might this taste? What picture clues tell you that?" or a crowded city street might encourage the question, "What, from the picture, do you think you would hear?"

Upper primary or intermediate pupils could be asked to look through the newspaper page by page, to find people they consider famous. In the ensuing discussion in support of their choices, they will develop the skills necessary to judge appropriateness worth, desirability.

Throughout such visual literacy instruction, it is important that the teacher probe more deeply than the immediate answer. "Why do you think so," should be an immediate follow-up, especially to an unusual answer, or one that is at variance with the adult expectation. Many times, children reveal appropriate thinking, based on their own unique view of the situation. This discussion helps students gain a firmer grasp on the meaning of language, and deeper understanding of the processes of thought required in higher levels of understanding.

Into Reading

Once the logic of comprehension is built by having students interact with classroom situations, share movies or television shows, discuss pictures and oral stories, the oral and visual processes developed by these means can ease the transition into similar processes in written language. When students are asked to recall what they said about the sequence/main idea/outcome of a picture, the teacher can write down clue words that helped the students identify the inference. Students begin to see how written words mirror the basic logic they identified in their oral languaging. This transition phase helps guide students into the notion that written language has meaning, and that this meaning has logic that is familiar to their experiences.

Summary

Based on the premise that readiness for comprehension has to be built, much as readiness for effective creative writing involves training in word connotations, imagery, and other skills related to written discourse, teachers are urged to spend time in the prereading phase of instruction teaching children the logic of comprehension--prior to actual formal reading instruction. If students are given visual literacy training prior to experiencing written language, it is thought that comprehension difficulties will be avoided when actual written interpretation is required. Should older students experience difficulty comprehending written discourse, visual literacy procedures can serve as remedial tools to help them move from the comprehension process

they know and understand at the visual level to the same processes within print.

Such instruction must be planned, but can be conducted as a natural part of regular instruction. Actual classroom incidents, pictures taken from magazines and newspapers, television shows, movies, objects found in the classroom, or photographs can be used provided the teacher takes five basic instructional factors into consideration:

(1) relevance of context to student experience

(2) comprehensiveness of the visual literacy skill development

(3) active interpretation of visual contexts which involves both the interpretation of the logical and the illogical aspects of the visual situation,

(4) transfer of process from concrete contexts to a representational level and finally to print.

The taxonomy of visual literacy is advanced as a means of providing a comprehensive visual literacy program. In addition to providing this overview of visual literacy skills and suggesting points of interrelationship, the taxonomy is intended to serve three additional functions. It can enhance the accuracy of communication about the nature of visual literacy. It can be used as a tool for creating diagnostic, prescriptive, and mastery instruments. Prospective materials can be evaluated with the use of the taxonomy to assure comprehensiveness of instruction as well as assessing the presence of high-level questioning.

Dealing with everyday situations and familiar pictorial materials, as opposed to written words, the chances of pupils meeting with success will be enhanced. Knowing that success builds self-confidence and self-concept, youngsters will enter the world of basal readers and other written contexts with positive feelings. Thus, an implemented program of visual literacy will positively influence both the cognitive and affective domains.

C. Applied Comprehension. Student can demonstrate prior skills encountered on other levels; i.e. student can illustrate sequence, main idea, character traits. Emphasis on this level is on doing and applying what was learned in prior visual contexts to a related (but different), independently suggested context.

a. Illustrates. Student can demonstrate understanding of the processes of sequence, fact/fantasy, main idea, etc. by self-selecting other visual examples to illustrate the task.
b. Acts Out. Student can demonstrate understanding of the processes of character trait, sequence, etc. by body gestures, dialogue, and other role-playing devices, in response to cue words/visual contexts.
c. Improvisation. Student can devise own visual illustration to demonstrate knowledge and understanding of processes of sequence, main idea, fact/fantasy etc.
d. Problem-solving. Student can solve and devise similar visual problems like riddles, analogies, and the like.

D. Critical Comprehension. Evaluative judgment is made by comparing ideas presented in visual selection with external criteria provided by the teacher, other authorities, other sources, or with internal criteria provided by the viewer's experiences, knowledge, values. Deals with judgment, focuses on qualities of accuracy, acceptability, desirability, worth, probability, psychological and aesthetic impact of visual selection. READING BEYOND THE VISUAL IMAGES is the task of the respondent.

a. Judging Reality/Fantasy. Judges which visual elements are fact, which are fantasy; judges if visual context could actually happen, based on experience.
b. Judging Fact/Opinion. Are there visual elements intended to sway your thinking (color, contrast, images); is there enough visual support for the conclusion, theme, etc.?
c. Judging Adequacy/Validity. Is visual information presented in keeping with student's experience on the subject? Viewer must compare sources of information, with an eye to agreement/disagreement, completeness/incompleteness.
d. Judging Appropriateness/Worth/Desirability. Was the visual image presented right/wrong, good/bad, acceptable? Were all of the images/actions in concert with the major theme; were any inconsistent?
e. Emotional Response to Content. Viewer expresses feelings about the visual selection in terms of interest, excitement, fear, hatred, boredom, amusement
f. Identifying with Characters/Incidents. Viewer must be sensitive to, have sympathy for characters/incidents to express feelings of identity.
g. Visual Imagery. Viewer is able to verbalize feelings with regard to artist's ability to portray visual images which cause the respondent to visualize, smell, taste, hear, feel the ideas/images depicted.

Table 1: Taxonomy of Visual Literacy

A. Literal Comprehension. Focuses on images and information directly shown in the viewed context; involves ideas previously pointed out to the respondent; requires no interpretatin or judgment. READING THE IMAGE or RECALLING DIRECTLY STATED INFORMATION ABOUT THE IMAGE is the task of the respondent.

   a. Recognizing Details. Locates/identifies visualized images (objects/pictures clearly depicted or prediscussed)
   b. Recognizing Main Ideas. Locates/identifies stated main ideas of a visual context. Places visualized objects, people, things, places into prediscussed categories.
   c. Recognizing a Sequence. Locates/identifies elements whose relationships involve an order/sequence which has been previously discussed.
      1. Identifies an Outcome. Identifies visual evidence of the consequence in a cause-effect sequence.
      2. Identifies Order. Identifies logical order of a sequence of more than two visual events which have been discussed.
      3. Identifies Cause. Identifies prediscussed antecedent visual element in a cause/effect sequence of events.
   d. Recognizes a Comparison. Locates/identfies likenesses and differences in visual images or reccalls from directly stated information from prior discussion.
   e. Recognizes Character Traits. Locates/identifies visual clues which illustrate the discussion of character traits.
   f. Outlines. Organizes visual images into outline form, suggesting main ideas and supporting visual details; can be done verbally or visually
   g. Summarizes. Condenses visual context using direct/paraphrased statements which outline prior discussion.

B. Inferential Comprehension. Student uses visualized ideas/information, applies intuition and person experiences as a basis for conjecture/hypothesis/prediction. Student is required to use thinking which goes beyond the visual images. READING BETWEEN THE VISUAL IMAGES is the task of the respondent.

   a. Interpreting Supporting Details. Suggests additional images which might have been included in the visual context which would have made it more informative, interesting, appealing.
   b. Interpreting Main Idea. Suggests the title, main idea, theme, central idea without benefit of prior verbal discussion about the visual context.
   c. Interpreting Sequence. Identifies the order of elements whose relationship involves a sequence.
      1. Predicts an Outcome. Conjectures the next step, based on visually presented context; suggests the result/consequence of an action.
      2. Orders Visual Elements. Indicates the order of a set of visual elements; suggests actions/incidents which might have taken place between visualized elements.
      3. Interprets the Cause. Hypothesizes about nonstated motivation of characters, as visually depicted, and their interactions with respect to the cause of an action/incident; what caused certain elements to be included?
   d. Interpreting Comparison. Infers likenesses and differences in visual elements (characters, times, places), can suggest points related to multiple visual contexts, or can relate visual context to viewer circumstances.
   e. Interpreting Character Traits. Hypothesizes on the nature of characters based on visual interaction clues.

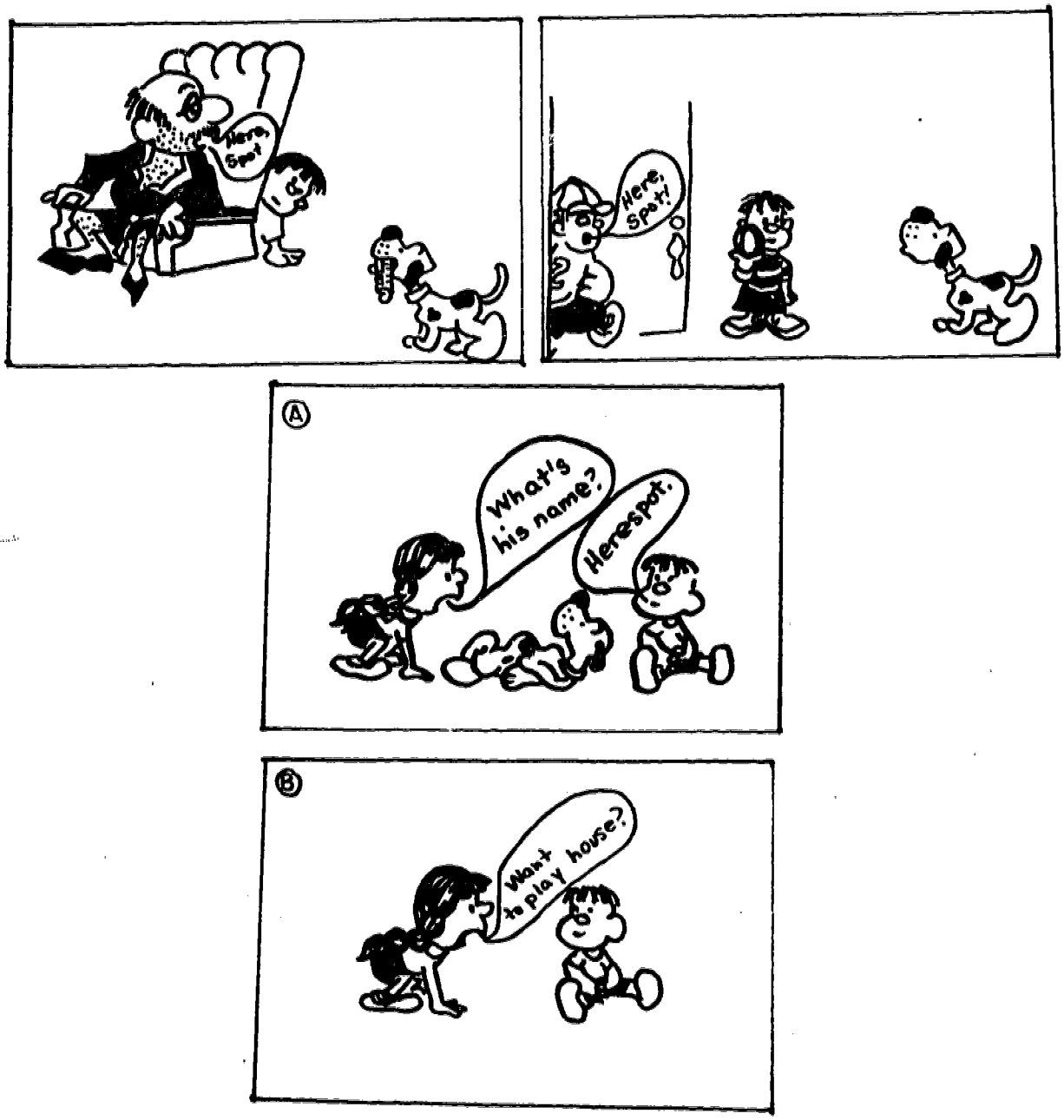
C. Applied Comprehension. Student can demonstrate prior skills encountered on other levels; i.e. student can illustrate sequence, main idea, character traits. Emphasis on this level is on doing and applying what was learned in prior visual contexts to a related (but different), independently suggested context.

a. Illustrates. Student can demonstrate understanding of the processes of sequence, fact/fantasy, main idea, etc. by self-selecting other visual examples to illustrate the task.
b. Acts Out. Student can demonstrate understanding of the processes of character trait, sequence, etc. by body gestures, dialogue, and other role-playing devices, in response to cue words/visual contexts.
c. Improvisation. Student can devise own visual illustration to demonstrate knowledge and understanding of processes of sequence, main idea, fact/fantasy, etc.
d. Problem-solving. Student can solve and devise similar visual problems like riddles, analogies, and the like.

D. Critical Comprehension. Evaluative judgment is made by comparing ideas presented in visual selection with external criteria provided by the teacher, other authorities, other sources, or with internal criteria provided by the viewer's experiences, knowledge, values. Deals with judgment, focuses on qualities of accuracy, acceptability, desirability, worth, probability, psychological and aesthetic impact of visual selection. READING BEYOND THE VISUAL IMAGES is the task of the respondent.

a. Judging Reality/Fantasy. Judges which visual elements are fact, which are fantasy; judges if visual context could actually happen, based on experience.
b. Judging Fact/Opinion. Are there visual elements intended to sway your thinking (color, contrast, images); is there enough visual support for the conclusion, theme, etc.?
c. Judging Adequacy/Validity. Is visual information presented in keeping with student's experience on the subject? Viewer must compare sources of information, with an eye to agreement/disagreement, completeness/incompleteness.
d. Judging Appropriateness/Worth/Desirability. Was the visual image presented right/wrong, good/bad, acceptable? Were all of the images/actions in concert with the major theme; were any inconsistent?
e. Emotional Response to Content. Viewer expresses feelings about the visual selection in terms of interest, excitement, fear, hatred, boredom, amusement
f. Identifying with Characters/Incidents. Viewer must be sensitive to, have sympathy for characters/incidents to express feelings of identity.
g. Visual Imagery. Viewer is able to verbalize feelings with regard to artist's ability to portray visual images which cause the respondent to visualize, smell, taste, hear, feel the ideas/images depicted.

Figure 1.


Here, Spot!
Here, Spot!
Ⓐ
What's his name?
Herespot.
Ⓑ
Want to play house?

Bibliography


1. Bloom, Benjamin, et. al., Taxonomy of Educational Objectives, Handbook I: Cognitive Domain, New York: David McKay, 1956.

2. Debes, John, "The Loom of Visual Literacy--An Overview," Proceedings of the First National Conference on Visual Literacy, (Williams, Clarence and John Debes, editors), New York: Pitman Publishing Corporation, 1969, p. 4.

3. Debes, John, "Some Foundations for Visual Literacy," paper presented to the Society for the Study of Technology in Education at the University of Rochester, June 13, 1968.

4. Dodd, John M. and Barabasz, Arreed F., "A Cross-Cultural Comparison of Inversion Perception at Three Age Levels," Journal of Educational Research, LXII, 1, September, 1968, pp. 34-6.

5. Gerber, Marcelle, "The Psychomotor Development of African Children in the First Year and the Influence of Maternal Behavior," Journal of Social Psychology, XXXXVII, 1958, pp. 185-195.

6. Gropper, George L., "Who is Visually Illiterate: The Student or the Teacher?" Proceedings of the First National Conference on Visual Literacy, (Williams, Clarence and John Debes, editors), New York: Pitman Publishing Corporation, 1969, p. 223.

7. Kachuck, Beatrice L. and Albert Marcus, "Thinking Strategies and Reading," Reading Teacher, Vol. 30 , No. 2 , November 1976, pp. 157-161.

8. Nevius, John R., "Teaching for Logical Thinking is a Prereading Activity," Reading Teacher, Vol. 30, No. 6 , March 1977, pp. 641-3.

9. Provence, Sally and Rose Lipton, Infants in Institutions, New York: International Universities Press, 1963, p. 28f.

10. Soares, Anthony and Louise Soares, "Self-Perceptions of Culturally Deprived Children," American Educational Research Journal, Vol. 1, No. 1, January 1968, p. 28f.

11. Travers, Robert M., "The Deveopment of Dynamic and Static Interpretation of Pictures," Proceedings of the First National Conference on Visual Literacy, (Williams, Clarence and John Debes, editors), New York: Pitman Publishing Corporation, 1969, pp. 118-120.

12. Turbayne, Colin Murray, The Myth of the Metaphor, Columbia, South Carolina: University of South Carolina Press, revised edition, 1970.

13. Wendt, Paul R., "The Language of Pictures," in S.I. Hayakawa (editor) The Use and Misuse of Language, Fawcett Pub., Inc., 1962, pp. 175-83.

14. Williams, Clarence, "Nine Visual Literacy Propositions and Some Related Research," Proceedings of the First National Conference on Visual Literacy, (Williams, Clarence and John Debes, editors), New York: Pitman Publishing Corporation, 1969, pp. 60-63.