Teacher's Guide/Exploring Childhood

Child's Play

Seeing Development

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Seeing Development

EDC School and Society Programs
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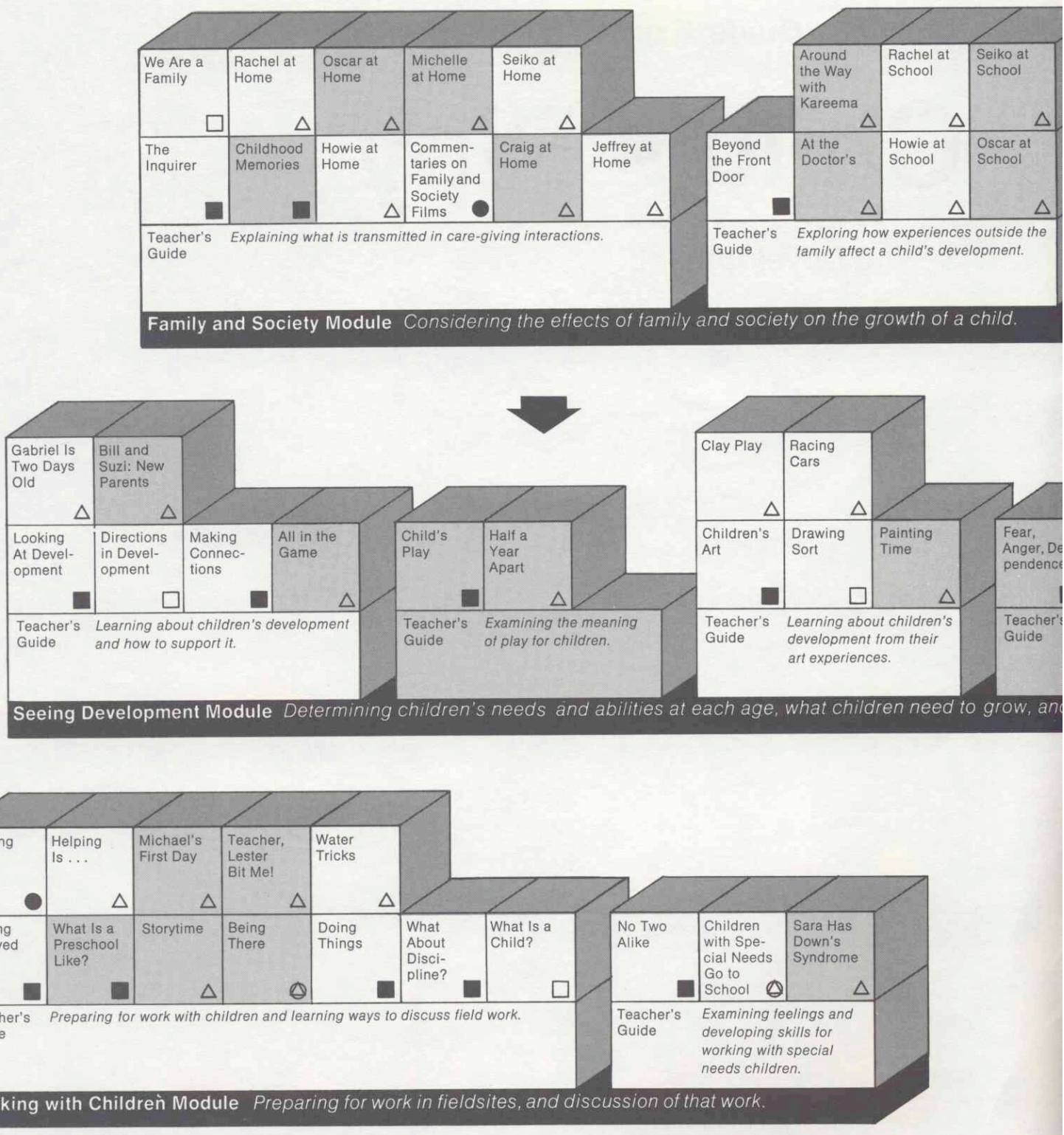
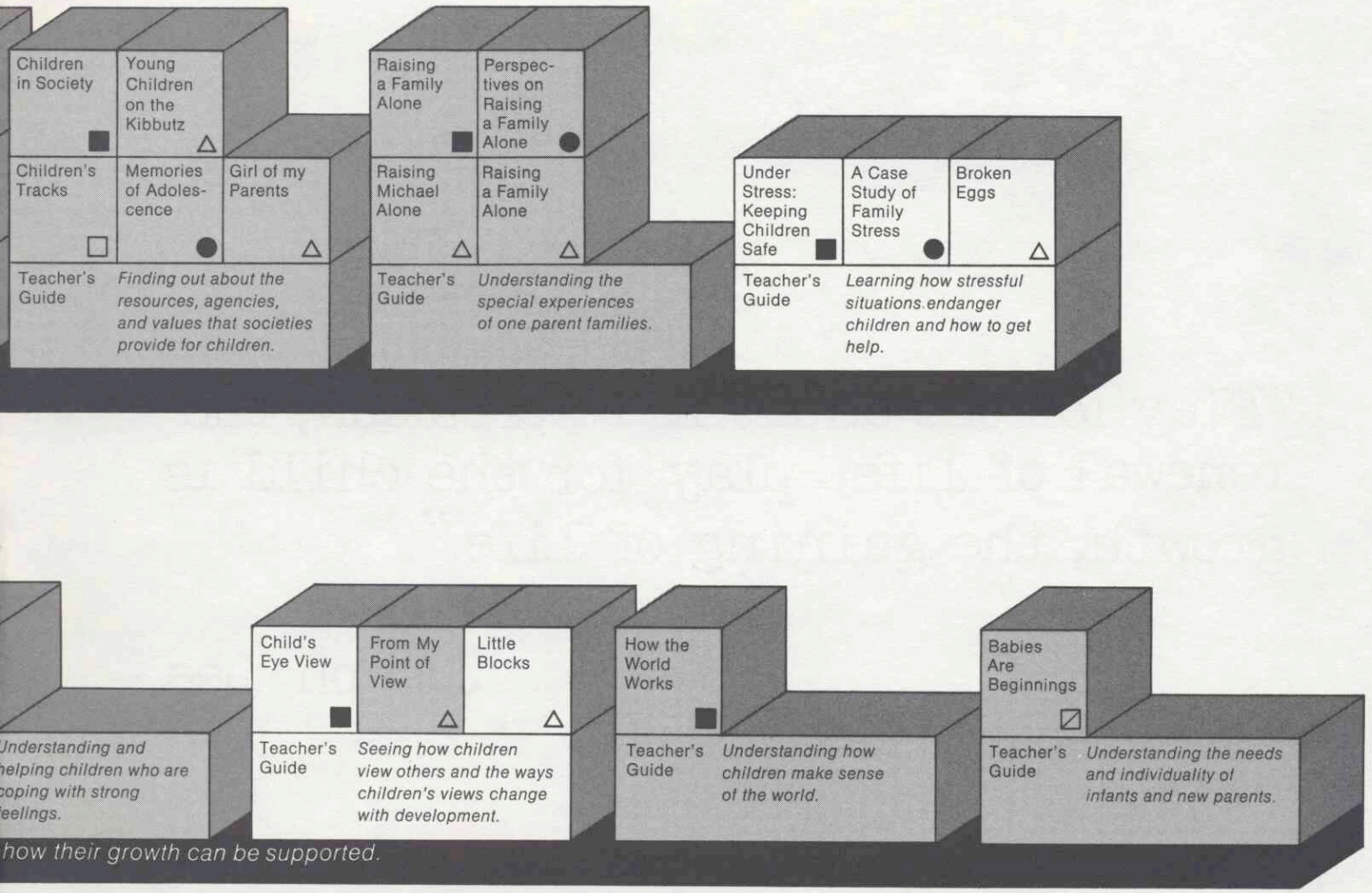
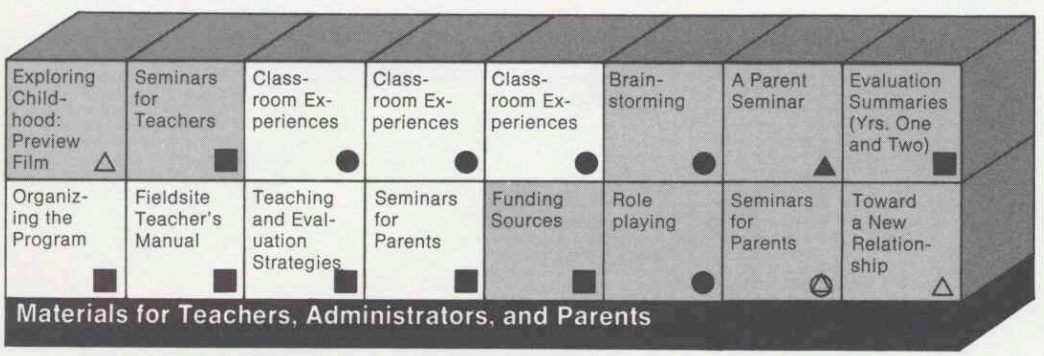


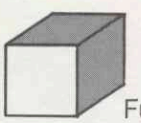
Exploring Childhood

Key

- ■ Booklet
- △ Film
- ⏀ Filmstrip and Record
- □ Poster
- ● Record
- ▲ Cassette
- ⧄ Cards



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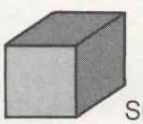

Supplementary Materials

"Play for the adult is re-creation, the renewal of life; play for the child is growth, the gaining of life."

Joseph Lee

The full-year package of EXPLORING CHILDHOOD materials includes items selected from each module of the course. Important material from this unit which is not included in the full-year selection is the film, "Half a Year Apart." This film may be obtained separately and used with this guide.

Contents

ONE TEACHER'S PLAN FOR *CHILD'S PLAY*

ORGANIZING QUESTIONS

What does play offer the player?

How is play important to you?

How does play change with age?

How can I support a child's play?

A SAMPLE SEQUENCE OF ACTIVITIES FOR 15 ONE-HOUR CLASSES

Activities*	Class
Photo essay, mixing, matching, and adding captions. Assignment: Bring in more pictures.	Class 1
Read and discuss "Some Ideas about Child's Play" (p. 5). Introduce and begin "A Hunt for Play" (p. 4).	Class 2
Reports on "Hunt"; review "Some Ideas about Play," and add ideas from "Notes on Functions of Play" (p. 7).	Class 3
Discussion using essay, "Hunt" reports, "Readings" (p. 6), "Considering Changes" (p. 11), and "Playing at Different Ages" (p. 22 in student book).	Class 4
View "Half a Year Apart" (see pp. 9-11)..	Class 5
Small-group activity, "Playing at Different Ages." Use "Directions in Development" poster to check out each group's ideas.	Class 6
Begin "A Play File" (p. 14), using journal notes and "Hunt" reports as the first entries. Assignment: Collect information for file.	Class 7
Work on Play File.	Class 8
Go over pages 27-28 of the student book together. View "Water Tricks" and fill in the chart.	Class 9
Read together "Experimenting with Color." In small groups, fill in the charts.	Class 10
View "Rachel at School." Half the class makes cards for Play File based on their viewing. The other half fills out the chart and plans an activity for Rachel and her friends.	Class 11
Some students plan a play activity for children at fieldsites, using *Doing Things* and other resources. Other students read copies of readings from the teacher's guide, or other books provided by the teacher. The remainder of the students plan interview or toy store visits (p. 15).	Class 12
Students give reports on their projects.	Classes 13-15

*Page numbers refer to teacher's guide unless otherwise noted.

Overview

Goals

The purposes of *Child's Play* are threefold: to help students understand the significance of play for human beings of all ages; to help students understand the concept of development as seen in the familiar context of the play of young children; and to help students use their understanding of play in their work with children. The reading and activities of *Child's Play* should take up approximately two and a half weeks of class time.

Relation to Other Materials

As part of the Seeing Development module, *Child's Play* and its accompanying film, "Half a Year Apart," help students see that a child's behavior at any one moment is both the result of the child's past development *and* a part of the child's future growth. Through observing children at play and thinking about how play contributes to growth, students' understanding of development increases.

Both *Looking at Development* and *Making Connections* help students to collect information about children and play and to use what they learn in understanding theories of development. The "Directions in Development" poster provides helpful touchstones for considering how play relates to other aspects of children's growth. And *A Child's Eye View* helps explain some of the puzzling aspects of children's play during their first six years, by explaining how egocentrism affects children's interactions with others. *Beyond the Front Door*, part of the Family and Society module, explores further the role of experience on children's growing abilities to interact with others.

Three other films that will especially enrich work in this unit are "All in the Game," a British documentary that examines children's play as a means of understanding child development; "Water Tricks," in which a teenager plans and carries out a play activity with a small group of four-year-olds; and "Rachel at School," in which the relationship between social and emotional development is vividly presented in the natural play (and feuding) of three preschoolers.

Play Is a Chance

Purpose:	To help students understand the significance of play for human beings of all ages.
Material:	*Child's Play*, pp. 1-20.

The Photo Essay

Look at the photo essay, "Play Is a Chance...," on pages 1-16. Discuss students' feelings and opinions about play, considering the word "chance" to mean opportunity and infinite possibilities, rather than risk or gamble.

During a short journal-writing time, students might respond to one or more of the following questions:

> What chances does play offer everyone?
>
> Why do people play?
>
> What is involved in play?

Or before you distribute the booklets, ask students to write whatever comes into their heads, using the phrase "Play is a chance to..." as a stimulus.

Students could then go through the pictures in the photo essay at home or in class; on their own, with partners, or in small groups. They could write down or talk about their reactions to the captions as illustrated by the photos, and also discuss the appropriateness of the photos. They should notice that the photographs illustrate people of different ages involved in play, and discuss what this says about the chances play offers everyone.

Students could think of other incidents and/or phrases that might describe play. They could think of other examples of play from the fieldsite or from their own experience that fit the captions. Or they could collect pictures that illustrate play and make their own collection like this one, selecting phrases to accompany the photos.

The goal is to realize that any function of play (e.g., gaining skills) can be fulfilled by many different forms of play (e.g., games, sports, hobbies, daydreams).

Play Is Many Chances

The next task is to see that one form of play can "offer many chances all at once." Students should draw on their own experiences of play as well as on the play they have observed at the fieldsite or in films such as "Half a Year Apart," "Helping Is...," and "Water Tricks." The soccer playing in "All in

the Game" is another example of how one form of play fosters development in many areas at once. When students consider that a game such as hide-and-go-seek might "develop strength and agility, let the child gain confidence," etc. (in addition to teaching rules), you should discuss *how* the game fulfills these functions. For example:

> How does the game "develop strength and agility"? (Running, crouching--if these are newly acquired skills.)
>
> How does it "let the child gain confidence"? (Gains confidence in the power of thought--selecting a good hiding place; guessing where others will decide to hide or look; counting to one hundred.)

Students should realize that these achievements come to children through play without their having planned or intended the achievements.

Students can experiment with matching different captions and pictures from the photo essay. On paper or in small-group discussion, they can decide which pictures and captions could be matched, giving specific reasons for their decisions. As in the example in the student booklet, they can also choose one picture and decide how many captions could be applied to it. They can think of their own captions for some of the photos and write them individually in their journals or as a class exercise on the blackboard.

A Hunt for Play

The object of the "Hunt for Play" is to look for the universal aspects of play, rather than for differences in play.

Students should copy the sample observation form for the hunt (*Child's Play*, p. 18) into their journals and briefly discuss them. Before they go looking for examples of play, they should consider *where* they will look. Encourage them to think of unusual places: Does play happen only at the playground? What about at home? in the street? on TV? on the way home from school? They should be reminded to look for play in people of all ages--children, parents, adolescents, neighbors, old folks--and they might have individually assigned responsibility for observing play in a specific age group. One way for students to deal with the issue of what is or is not play would be to note *everyone* they saw in a 30-minute time period and consider whether or not these persons were playing.

They should also consider how they will know what the player was *feeling* and what the player was *getting out of* playing. Discuss: What clues will you have (expression, gesture, words, actions)? Can someone else tell if you are playing? The issue here is that play is defined by someone's attitude toward it, rather than by what he or she is doing; and attitudes are often harder to observe than actions.

Who played: _____

_____

_____

What did the player do: _____

_____

_____

_____

What did the player seem to be feeling: _____

_____

_____

_____

What was the player getting out of playing: _____

_____

_____

_____

What do you think play is?

If the hunt is a homework assignment, suggest that students be on the lookout for play throughout the normal course of their day--at school, on the way home, in the neighborhood, in the house, on TV.

If your school is situated in a neighborhood where there is a lot of activity during the day, the hunt might become a kind of scavenger hunt, in which the class sets off in pairs or small groups during a regular class period. The teacher might set up the mission thus:

> Collect all the examples of play you can in 20 to 25 minutes, and report back here exactly 15 minutes before the end of class to report your findings.

SHARING OBSERVATIONS

In sharing, students should look carefully over their hunt notes, and consider, "What was the same in all the play observed?" They might brainstorm generalizations to describe their observations. Once the list is on the blackboard, they can more easily note which characteristics were most often observed.

In discussing how they decided what was play, students can also record their collective information on the blackboard, and use it to arrive at a definition of play.

> Did they decide by what the people were doing? by how they were doing it? by what they said? by what they thought people's feelings or attitudes were?

Students can consider what they think play is individually, in small groups, or as a class. If they have trouble with this question, or if their answers are too limited, you can help by asking questions such as:

> Is shooting baskets with your friends play?
>
> Is shooting for a basket in a tied-score championship game play?
>
> Is shooting for a basket as a member of a professional basketball team play?
>
> What is different in these examples about how the "players" feel?

After students have read "Some Ideas about Child's Play" and the quotations on the next few pages in *Child's Play*, they can consider again whether they would still say that everything they wrote down in their hunt was play. Did their conception of play change? If so, how?

Some Ideas About Child's Play

Purpose:	To present a variety of viewpoints about play.
Time:	This section should be discussed in connection with the photo essay and the hunt.
Material:	*Child's Play*, pp. 18-20.

The opening paragraph in the student booklet introduces four brief readings and summarizes two important ideas about play:

- that play is "serious," and important in the sense that it serves a necessary function in everyone's development.
- that play is that which we ourselves choose to do and set the boundaries for.

The following notes supplement the student readings and, along with the readings in this guide (pp. 23-37), are provided as a resource in leading discussions with students and in helping them define the importance of play for children.

A Definition of Play

The purpose of these materials is to help students value children's play and to learn about children by observing them at play.

The student material describes play as a time when children are free to create their own rules and patterns. Play is not happening when someone else imposes the goals or rules on us. Play is not happening when we are asked to do something which is too difficult or too easy for us to do, or which we have no interest in doing. Play *is* happening when we determine what we will do and what the goal will be; when the goal set by others is the same as our own; when we have the power to switch the goal, or to adapt it to our own needs and interests. Play is most exciting when it is neither boring and repetitious nor too difficult for us, but challenges us to extend our emerging abilities or allows us to work out fantasies or fears that preoccupy us.

For this reason, play can be defined only by an individual's attitude toward what is being done--*not* by categorizing activities. Stringing beads might be play for a boy who is just learning to coordinate his fingers, but an impossible and frustrating task for a child who cannot yet manipulate fingers separately. It could be a repetitious and boring chore for an adult who saw no challenge in fine finger coordination. Play is not only *what* is done, but *how* it is done, and with what feelings.

This understanding of play is crucial to students' knowing how they can best support children's play. If they understand that play is not productive when it is beyond children's level or when it is imposed from outside, they will begin to learn to be sensitive to what children are doing, and to adapt their goals to respond to the child's.

Readings

The four brief readings on pages 19-20 of the student booklet present some of the functions of child's play. Students should realize that these readings do not represent a complete description of the functions play serves for children, but are intended to provoke thought and discussion about play and to help them consider what importance the play they have observed at the fieldsite might have for the children who were involved.

[N.B.: In the reading by Susan Isaacs, "gumshoe" means a rubber overshoe or sneaker; and "biplane" refers to an airplane with two sets of wings, one above the other.]

You might refer students to the questions from the hunt and ask them to apply each question to the first two readings, which describe play of Michael and of James. Consider in each instance: Who is playing? What does each player seem to be feeling? What do you think they get out of playing?

The function served by the play described in each reading is stated in the titles of the readings. Students can consider these titles in discussing how the children in the incidents are using play: for instance, for "putting new ideas together" --how they make a situation concrete and act out roles they normally could not take (the butcher shop, biplane, bonfire, and telephone incidents); or for learning how to do something by "imagining" having the ability (the tricycle incident).

They can compare the incidents and functions of play described in all four readings with incidents in their own experience, at the fieldsite, in the hunt, or in course films. Ask:

> Can you give an example of play in which you saw a child putting new ideas together (e.g., in "Just Joining In: Water Restaurant" from *Getting Involved*)?
>
> What play incident can you recall that might have contributed to a child's self-confidence?
>
> From your observations, what kind of play lets a child be "in power"?

Observations and journal notes can serve as reminders in this exercise. Discuss: How does play serve these functions for you? Ask:

> How is play important to you? Can you think of any "play" that is really "serious" for you? (The teacher might offer examples of play incidents he or she has observed among students, and ask students why this play was important to them.)
>
> Is swimming always play? drawing? checkers? Given the definition of play at the end of "Some Ideas about Child's Play" (play is a time when you are free to create your own rules and patterns), when would swimming not be "play" for a player?
>
> How do you decide whether an activity is play?

NOTES ON FUNCTIONS OF PLAY

Play Assists Children in Mastery of Materials. Play situations provide young children with the chance to come into contact with a wide range of "materials" --clay, blocks, paint, gym equipment, sand, water, language--each of which can provide an additional medium through which they can express their feelings and ideas. The freedom of the play situation makes it possible for children to encounter a material, experiment with it, learn how to control it to the extent that it "speaks" for them. Each material encourages different sorts of expression: blocks might provoke children to expressing what they know about structures and spaces, while paint could move children to share what they know and feel about color and shape.

Play Assists Children in Mastering Their Own Bodies. The activity and exuberance of play allows young children to discover the capabilities and limitations of their bodies. The freedom available in play to repeat and repeat until there is assurance and smoothness means that children go over and over how to skip rope, how to throw a ball, how to pump on a swing until they feel confident and masterful. Play also provides the opportunity to learn by "comfortable steps." Once children have learned a simple song or dance, they are free to change and vary the original pattern.

Play Assists Children in Mastering Themselves in Relation to Others. When children join the small group playing "fire" or the larger group playing "Farmer in the Dell," they are suddenly in the situation of coordinating their own desires and interests with those of all the other players. Being told to be the person in the burning house and not a fireman, not being chosen for a part in the game--experiences such as these demand that children reconcile their desires with the wishes of others.

Play Assists Children in Gaining a Fuller Understanding of the World Around Them. Imagine children playing with the half-dozen containers at a water table. They notice that those that are filled with water sink, while those that are empty float. As they experiment with filling and emptying, it is possible to see that they learn not only what to expect when a toy boat fills up with water, but also something about the principles that govern the physical world. Through experimenting with materials they gain understanding of how their world works.

Some "play opportunities" might be thought of as broader and less immediate than the four just mentioned, yet they are just as important for children.

Play Allows Children to Come to Terms with Events. The lives of three-year-olds are full of surprises. They exist chiefly in "the here and now," so that the departure of family members, visits to the doctor, the death of a family pet --even though discussed sensitively with them--can take on terrifying dimensions. As they play, children have the chance to reenact such events, but with a difference. They are "the planners"; when they set the stage, there is nothing sudden, unpredictable, or frightening about an event; they can control it.

Similarly, following a trip to the dentist, a five-year-old may make a younger sibling, a parent, or even a doll the patient, pretending to inflict on that person what the child experienced. Through reenactment, children can gain a kind of mastery over events that earlier overwhelmed them. In so doing, they give their world a new and reassuring kind of coherence and predictability.

Play Deepens Children's Understanding of the Social World. In many ways play offers children an introduction to life in their culture. "What is expected" and "what is valued" in their world are explored through play. In role play, four-year-olds will hear loud complaints from their peers if their portrayal of a "father," "doctor," or "truckdriver" varies too widely from what other children have come to expect--through direct experience, television, books, or through being told--as appropriate to these roles. Later, as children enter more and more into organized games, they come into contact with an entire heritage of behaviors. If, for example, the games they inherit from their older siblings bear the message "win at any cost," young children come to see strongly competitive behaviors as appropriate. If play behaviors are labeled "male" and "female," they will soon recognize this and behave accordingly. Should they be heir to games that stress physical strength or intellectual skills, they will realize that these are important to those around them.

Play May Encourage the Habit of Inquiry. When children are encouraged to seek answers through playing, they may acquire the habit of inquiry. In an environment that makes materials available, supports children in their efforts to use and master these materials, and suggests that there are many things to be found out about these materials, children become accustomed to asking and trying to answer questions. In such an environment, children play "what if" constantly. "What if I were a grownup?" "What if I were on top of a high building?" In this manner they raise questions, form concepts, and test reality.

Play Changes with Age

Purposes:	To help students understand the concept of development as seen in the familiar context of the play of young children. To identify some of the ways play changes with development.
Materials:	*Child's Play*, pp. 21-26; film, "Half a Year Apart" (14 min.); games intended for various ages; a collection of toys and play objects.

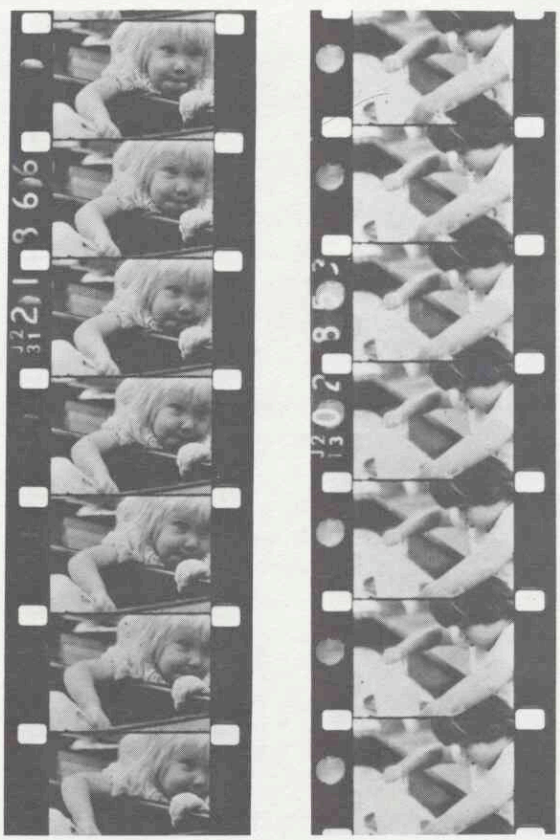
"Half a Year Apart"

The film "Half a Year Apart" offers students an excellent opportunity to observe two young children playing with water in order to see what "needs, interests, and abilities" are expressed by the children's play, and to see how those "needs, interests, and abilities" differ in children half a year apart.

The following notes can help to describe the significance of the children's actions in the film, and can be used in place of a transcript to supplement your observations of the film.

Film Notes

Two-year-old Rachel is delighted with sensory experience. She blows bubbles, hums to herself, and splashes in the water for the sensory feedback of hearing, seeing, and feeling. At 2 1/2, Josh seems less interested in sensory experience, and more interested in the nature of things and in the events he can make happen.



Rachel makes things happen by simple, usually one-step acts. She seems to respond to the stimulus-situation outside her. Bubbles and sounds attract or compel her attention.

Josh explores the properties of objects (ping-pong balls, water) by more complex plans, which often involve several steps. There is a beginning, a middle, and an end to his systematic exploration. He seems to operate mainly according to a plan inside his head, and less according to the attraction of outside events. He can also alter his plans and elaborate on them.

Toys and objects help him to explore pouring, filling up, and floating. Objects are means to his ends, rather than only objects to be explored in their own right.

RUNNING NOTES

Rachel blows bubbles in the water using a straw.
Uses her hand to pounce on them and cause them to burst.
Hums and sings to herself.
Tastes the bubbles and makes a grimace.

Josh uses a shell to pour water into another shell.
Fills red bowl with water using ladle.
Puts shell in bowl and then pours in water.
Fills plastic pitcher with water.
Blows bubbles with plastic tubing.

Rachel sings, "Happy Birthday, Robert."
Sings and talks to Josh, mentioning him by name in her song.
Puts hands in water to feel the bubbles.
Hums, talks to herself some more.
Stirs water with a straw.
Puts ping-pong ball in bowl, then forgets it.
Blows bubbles some more, then bursts them again.
Accompanies all motor actions with a little chant/song.

Josh uses transparent pitcher to fill green pitcher with water.
Sinks transparent pitcher to bottom of larger pitcher.
Attempts to place red bowl in green pitcher, but it won't fit because of previously sunken pitcher. He then takes everything out of large green pitcher and empties out water.
Puts red bowl into green pitcher.
Attempts to put transparent pitcher in green pitcher. It won't fit because red bowl is inside green pitcher.
Seems to figure out the problem. Methodically takes red bowl out so that transparent pitcher will now fit inside.

Throughout these actions, Josh is using a new variety of containers in "pourer" and "recipient" roles.

Josh fills milk bottle with water and ping-pong balls.
Empties water out of milk bottle.
A few ping-pong balls come out of milk bottle.
Places one ping-pong ball on top of overturned milk bottle and slowly flicks it off edge so that it tumbles into water table.
Fills milk bottle again with both water and ping-pong balls.
Watches ping-pong balls rise to top of the water level in the milk bottle.
Shakes up bottle, listening to sound of ping-pong balls inside.
Pokes ping-pong ball down into bottle, trying to sink it.
Ping-pong ball again rises to the top of the water's surface in the bottle.

Throughout these actions, Josh is examining how space is taken up inside a container by an object, and the floating property of the ping-pong balls.

Josh uses "Flipper," a rubber dolphin puppet, as though it is another container.
Fills Flipper up with water as he has filled up everything else.
Turns Flipper around in the water so that it rolls on its side.
(Fantasy play?)
Uses cup to fill pitcher.

Rachel's mother comes to take her home. She says, "My mommy!" with obvious delight.

VIEWING THE FILM

Acquaint the students with the setting and ages of the children. Rachel and Josh are playing side by side at a water table in the day care center they attend each day while their parents work. Naturally, they have different temperaments. And, of course, one is a girl and the other a boy. An important reason for the difference in their play, however, is that they are "half a year apart" in age. She is 2; he is 2 1/2.

If students have not seen the film before, you might view it once for a general sense of the setting and mood of the film. To observe the children carefully, you may wish to divide the class into two groups, so that one group focuses on Josh and the other on Rachel. Students might record their observations as a list of verbs in their journals. Both groups can make a list of the materials used by the children. For example:

Rachel	Joshua	Materials
blowing	pouring	shell
singing	filling	ladle
tasting	splashing	bowl
stirring	dipping	tubing
splashing		drinking straw
		plastic bottle
		sieve
		dolphin puppet
		ping-pong balls
		pitcher

DISCUSSING THE FILM

Using the list form just described, one student can record the observations of the two groups on the chalk board. When the observations are all listed, students can record the notes in their journals in sentence form. A further focus would be to circle the main interests of each child in the film, and discuss the questions that follow to note the developmental patterns in each child. These questions are intended to help focus the students' discussion of the film, and should be seen as a whole rather than as isolated issues to be discussed individually or in a particular sequence:

> How did Rachel play? How did Josh play? What materials did each child use and how? What interests did these choices demonstrate? What did each child discover by using the materials?

> What general similarities and differences were there in how each child played? What does this tell you about the pattern of development?

> Remind students that they tried playing with water themselves in "Trying Out Kids' Stuff," and that they watched children playing with water in either "Half a Year Apart" or "Water Tricks," to see the similarities and differences between their own and the children's water play. What do these differences and similarities tell them about development?

Considering Changes

Child's Play (p. 22) describes children of different ages and their varying ability to use such play equipment as Legos, Tinker Toys, wooden blocks, scissors, a puzzle, a sand table, and games with rules (such as Follow the Leader or others described in *Doing Things*--Concentration, Battle, Shape Lotto, Target Toss, What Am I?).

> What other examples of the effect of age on playing can students offer?

You might remind them of "Building a Toy Village" and "You Be the Baby" in *Getting Involved*.

> What further insights can they add to their earlier discussion of these storyboards?

What changes in their own taste or abilities in games have they noticed?

Students themselves might try some of the activities described on page 22. They could look first at their own reactions to the activity, then put themselves in the place of children of different ages and imagine how age would affect a child's reaction to the activity.

If a game is too simple to be "play" for the students, discuss how it might be changed to make it more interesting and challenging. Change the game and play it again. What ability or interest does it now require that it did not before?

Later, ask students to compare this role play of children's play with the later observations of actual children's play:

What differences do students see between their play and the play of children of different ages?

Why do they think these differences occur?

Remind students that when they think about activities for children, they must consider the appropriateness of the activity to the children's age. Help on the appropriateness of individual activities for young children can come from the fieldsite teacher and from the next activities, in which students make observations and collect information for the play file and the data poster.

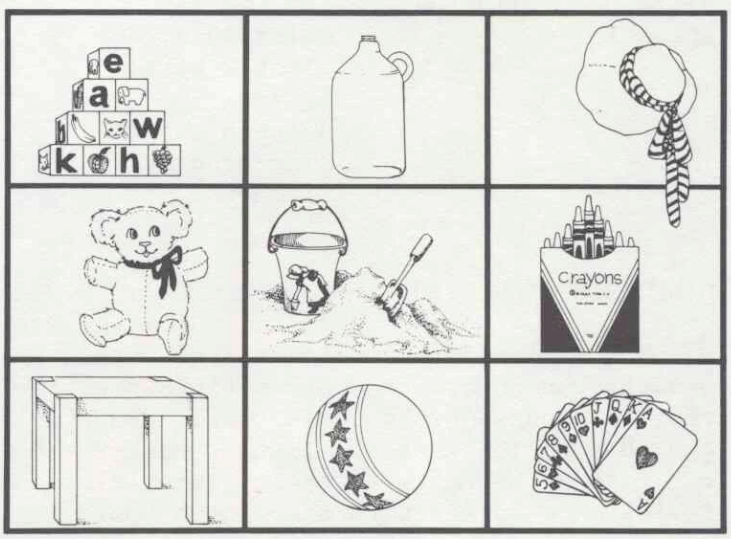
Playing at Different Ages

In this activity, small groups of students look at illustrations of objects in *Child's Play* and say how they think children of different ages would play with them. It might help to have a collection of play objects (not only things intended to be toys) in the room--e.g., a hat, spools, sponges. This activity will help students define their present assumptions about children's play and find out what they do not know so that they can better observe children's play.

When students refer to their "Hunt for Play" and compare adult and adolescent play to the play of young children and infants, they should focus on differences and similarities in:

- social growth
- imaginative and pretend play
- intellectual ability
- physical ability
- complexity of task
- recall of the past

Play is important at all ages. The reading by Sara Arnaud et al. on page of this guide, and the following notes based upon it, might serve as a resource to you in helping students to understand developmental changes in children's play, to focus their observations, and to organize their observation data.



Notes on Developmental Patterns

Several broad changes can be seen in children's play as they grow toward maturity.

1. Early children's play concentrates on exercising the senses, particularly new abilities, manipulating the environment, and on exploring and controlling as a process. Later the play moves toward an increasing use of fantasy and symbolism, the creating of products, and eventually, a concentration on imaginary verbal and mental play.

   Infants:

   - mouth activities, vocalizing, listening, breath and saliva control
   - exploration of own body, that of the mother, and objects contacted accidently
   - intentional repetition of contact with objects

   Toddlers:

   - experiments with body movements, practice of motor skills
   - exploration of the quality and uses of objects through containing and releasing, filling and emptying activities
   - use of objects in play as symbols of, for example, animals

   3-year-olds:

   - fantasy play with no preconceived theme (process rather than product)
   - collecting and gathering activities; and ritualized, repeated activities directed toward making time and space controlled and predictable

   5-year-olds:

   - intense dramatization of widening world using abstract symbols such as paper money

   6- to 10-year-olds:

   - fantasy play including preconceived, repeated plot themes
   - staged drama, as well as improvisation

2. Play is at first an expression of children's dependence and an effort to define their own individuality and sexuality. With a growing sense of self, play becomes an expression of independence and of the ability to relate to others.

   Infants:

   - opening, closing eyelids, peek-a-boo

   Toddlers:

   - mirror play, hide-and-seek--both of which provide reassurance of their closeness to their mothers and of their own existence

   3-year-olds:

   - trying out many different roles in rapid succession, with no differentiation between people or between themselves and others
   - confusion of who they are with who they pretend to be--therefore will not pretend to be "baby" because they do not want to *be* baby
   - dramatization of nurturant behavior in fantasy play to show closeness to families
   - games of hiding, appearance and disappearance, pretending to be mother, effort to control anxiety about the beginning of separation from mother

   4-year-olds:

   - still hiding themselves and objects
   - recognition of difference between themselves and others and between different roles: do not switch roles so abruptly, are not afraid of being the baby, use toys to *be*

something rather than *being* the things themselves
- extension of play from representation of family relationships to imitation of actions of people in the community (storekeepers, firemen)
- awareness of male-female roles as shown in elaborate male and female costumes and props--bride and groom play, fairy tale enactments, boy-girl chases--curiosity about the opposite sex seen in doctor play
- growing ability to relate to others as shown in games with rules

6- to 10-year olds:

- lack of parental figures in play: see groups of peers threatened by some dangerous adult figure
- distrust and attraction to opposite sex as seen in all-girl or all-boy casts in which males are concerned with prowess and females with attractiveness, but opposite sex is treated with hostility

3. They use play with increasing complexity to express, control, and sublimate fear and aggression.

3-year-olds:

- dramatization of distant nonfamilial or TV characters

4-year-olds:

- portrayal of figures and monsters who attack and chase but also rescue
- use of silliness, bathroom words, nonsense rhymes
- dramatization of nightmares
- designation of play space in which occupants are "good" and outsiders "bad"

5-year-olds:

- dramatization of biting animals and monsters that kill in structured puppet shows or dictated stories
- dramatization of unusual or frightening experiences immediately after they happen

6- to 10-year-olds:

- use of bathroom talk, sadistic behavior, violent and bloody dramatic themes
- dramatization of stories in which things that appear to be good are really dangerous
- self-reassurance about frightening fantasies by blaming "crazy script writer," using silliness and nonsense speech

A Play File

Purposes:	To give students an opportunity to share their individual observations of play. To enable students to note the differences in play at each level and to provide them with criteria for planning future activities for the fieldsite.
Materials:	*Child's Play*, pp. 24-26; 4" x 6" index cards (at least eight for each student); a file box (or shoe box); index tabs; the "Directions in Development" poster.

PREPARATION

In preparation for making their observations of play, students should copy the headings "Child," "Age," etc. from *Child's Play* onto their note cards at home or in class. Remind them to leave space between headings for their notes. Completely filling in these cards at

the fieldsite will take at least a week, but the activity should also be ongoing whenever students plan and carry out an activity with children.

Directions for filing, organizing, and drawing conclusions from the observation cards are included in *Child's Play*, pages 24-25.

Using Your Information

Information collected and generalized from the cards may now be pooled on a chart (see sample in *Child's Play*, p. 25) describing the materials children use, what they do in play, and what they get out of it at different ages. Later this information can be transferred to note cards and pinned to the data poster. This might be a good point to introduce some of the information from "Notes on Developmental Patterns in Play" (this guide, p. 13).

RELATED ACTIVITIES

Below are some other possible activities that would reveal information about play at different ages:

1. To interview parents, grandparents, other relatives, neighbors, or other older people about the kind of play that was popular in another era, and about their favorite games, including those remembered from their childhood and adolescence, as well as those that they enjoy now.

2. To visit a toy store and look at a wide variety of toys, from those made for babies through those made for teenagers. Discuss: What is a toy? What is different about toys made for people of different ages? A toy has a maker and a user. Can you tell from a toy what uses were intended by its maker? What can you learn about the maker's values for

A Play File

Look at the data poster category "Relating to Other Children" and you will find the play of young children described. The poster has examples of the earliest infant and toddler play as well as the play of older children.

In the previous activity, you discussed how preschoolers might play. During your next week of visits to the fieldsite, try out your ideas. Collect examples of the play of young children and put down your information on 4×6 index cards, using the list at right. Collect six to eight such examples.

When all class members have their observation cards ready, put them all together. One person should then order the cards according to age. Divide into small groups, with each group looking at all the cards for a particular age — all the three-year-old cards, for example. Then, as a group, write a description of the kind of play that seems to go on at this age. This may be hard because not all children of the same age have the same skills or interests. But look for the ways in which most of the children seem to play. Your description should suggest what interests children of this age and what is possible in their play.

Child
Age
Sex
Materials Used
What he/she did
What he/she seemed to be feeling
What he/she seemed to be getting from this play
What adults did

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Using Your Information

Your play file and the data poster offer a wealth of information about how children play at different ages. Using this information, complete the following chart and develop some general ideas about what happens to a child's playing as he or she develops. Later you can use the chart to help you in filling out your data poster. If you don't know any children of a certain age, leave that age blank.

	Materials children like to use	What they do as they play	What they seem to get out of it
The children you work with:			
at 2			
at 3			
at 4			
at 5			
at 6			
at 7			

Sample

Share conclusions with the class, and use the information to fill out your data poster.

25

children? What can toys tell you about a culture's values for children? For example, Eskimo toys include miniature tools, harpoons, and ice knives, and their play is often an imitation of adult work. One value expressed here would be the need for work in order to survive. (See *The Inquirer* for student research ideas and assistance.)

3. To examine how play changes during adolescence and becomes a way of being accepted by others on a social and intellectual level. For example, the ability to play chess, checkers, and cards is a measure of intellect; playing football, basketball, or dancing well can lead to social acceptance. Students might compile a list of teenage pastimes and analyze them according to what functions they serve.

SUMMARY

As a way of pulling together all of the specific information collected and observed about children's play, students are asked to look for patterns about play on the "Directions in Development" poster. You might do this exercise in connection with *Making Connections* and the film "All in the Game."

Below is an example of how students might fill out the summary chart on page 26.

With development a child's play becomes more: preconceived and structured

and less: improvisational

But some things remain the same no matter how old the child is: that children always engage in fantasy and dramatic play.

Supporting Children's Play

Purpose:	To help students use their understanding of play in their work with children.
Materials:	*Child's Play*, pp. 27-34; "Just Joining In," in *Getting Involved*; films, "Half a Year Apart" and "Water Tricks"; "Doing Things Activity Form," in teacher's guide for *Doing Things*.

What Role for You?

After students have read the beginning of this section, page 27, discuss the roles students are now assuming at the fieldsite. Whereas they were mostly observers at first, now they are trying to combine the role of the observer with the role of the participant--or even with the role of leader.

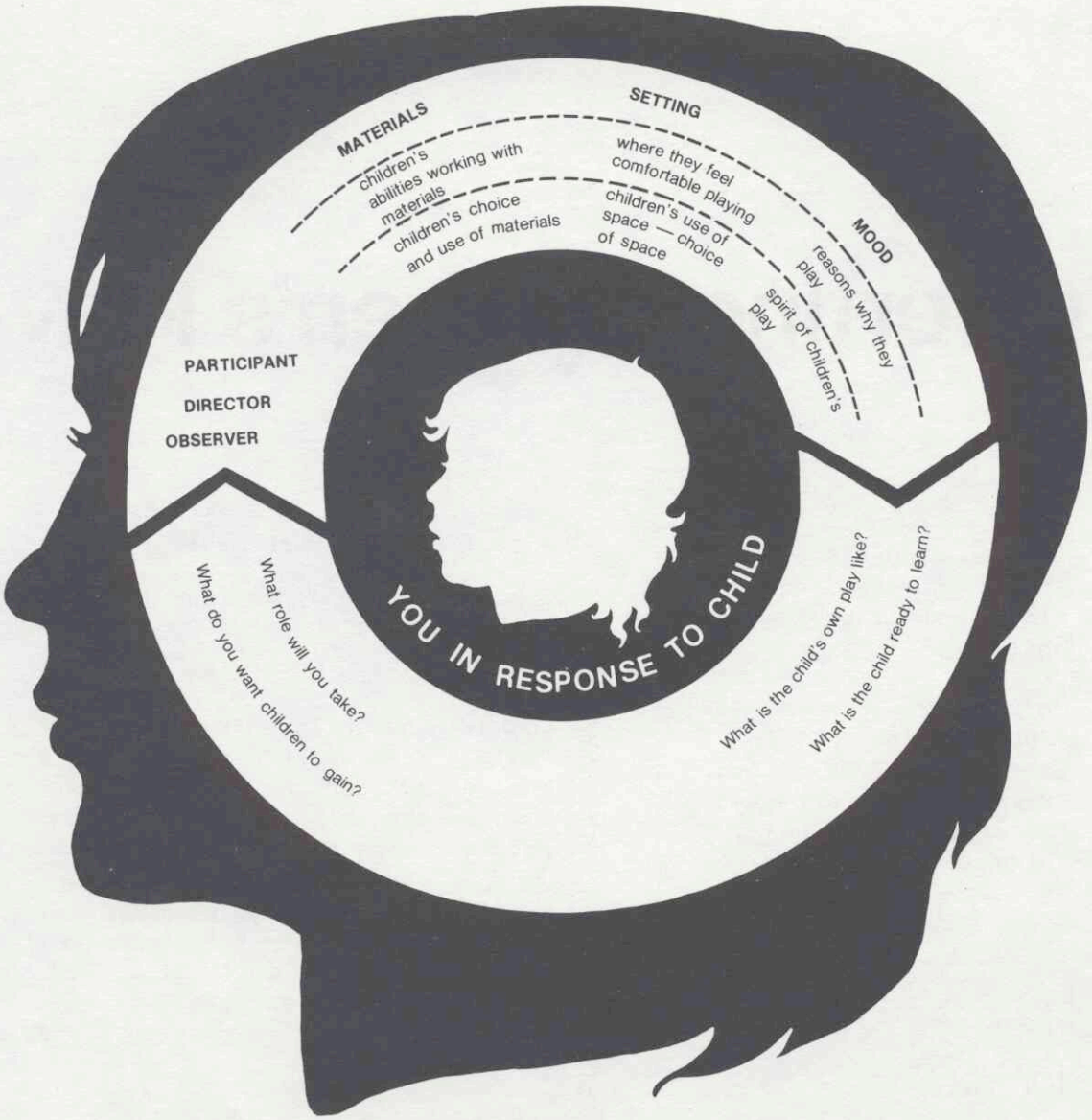
Ask the students if they can recall instances in which they observed children at play and wanted to step in to make the play richer. You might show or recall "Water Tricks" and "Little Blocks" at this point for examples of ways in which students sought to enrich children's play. The major questions to discuss about these and about examples from fieldsite work are:

When do you enter in?

How do you enter in?

Compare the children's water play in "Half a Year Apart" and "Water Tricks." What effect does an adult's presence have on the children's play in "Water Tricks"? Ask students to refer to the journal entries written in "Trying Out Kids' Stuff" (in *Getting Involved*) about how they previously suggested they might help the children in "Half a Year Apart." Would they still say the same thing? What role did adults play in the filmed situation?

Students will realize that they observe many play situations in which there are not enough clues in what they see to tell them what the child is up to. They might want to enter in, but lack of knowledge about the child's thoughts and feelings in the situation would make it difficult for them to act in such a way as to support the child. As students learn more about development from the course and from their experience at the fieldsite, they will sense that some situations clearly call for adult participation. Often just a comment like, "Look at all the blocks you've been able to use," or the addition of a new piece of material is enough to support children and help them build on their activity.


MATERIALS
children's abilities working with materials
children's choice and use of materials
SETTING
where they feel comfortable playing
children's use of space — choice of space
MOOD
reasons why they play
spirit of children's play
PARTICIPANT
DIRECTOR
OBSERVER
YOU IN RESPONSE TO CHILD
What role will you take?
What do you want children to gain?
What is the child's own play like?
What is the child ready to learn?

The chart on page 28 of *Child's Play* can help students to decide whether entering a particular play situation will support the child's play. Copy the chart on the board. Point out to students that they should begin by asking themselves the four questions at the beginning of "Supporting Children's Play" (What is the child's own play like? What materials does the child enjoy playing with? What does he or she do well? What gives him or her a hard time?). All cues about what a child is ready to learn come from the ongoing play of the child (refer to two "Helping Skills" exercises in *Getting Involved*: "Considering Children's Needs," and "Looking for Children's Reasons").

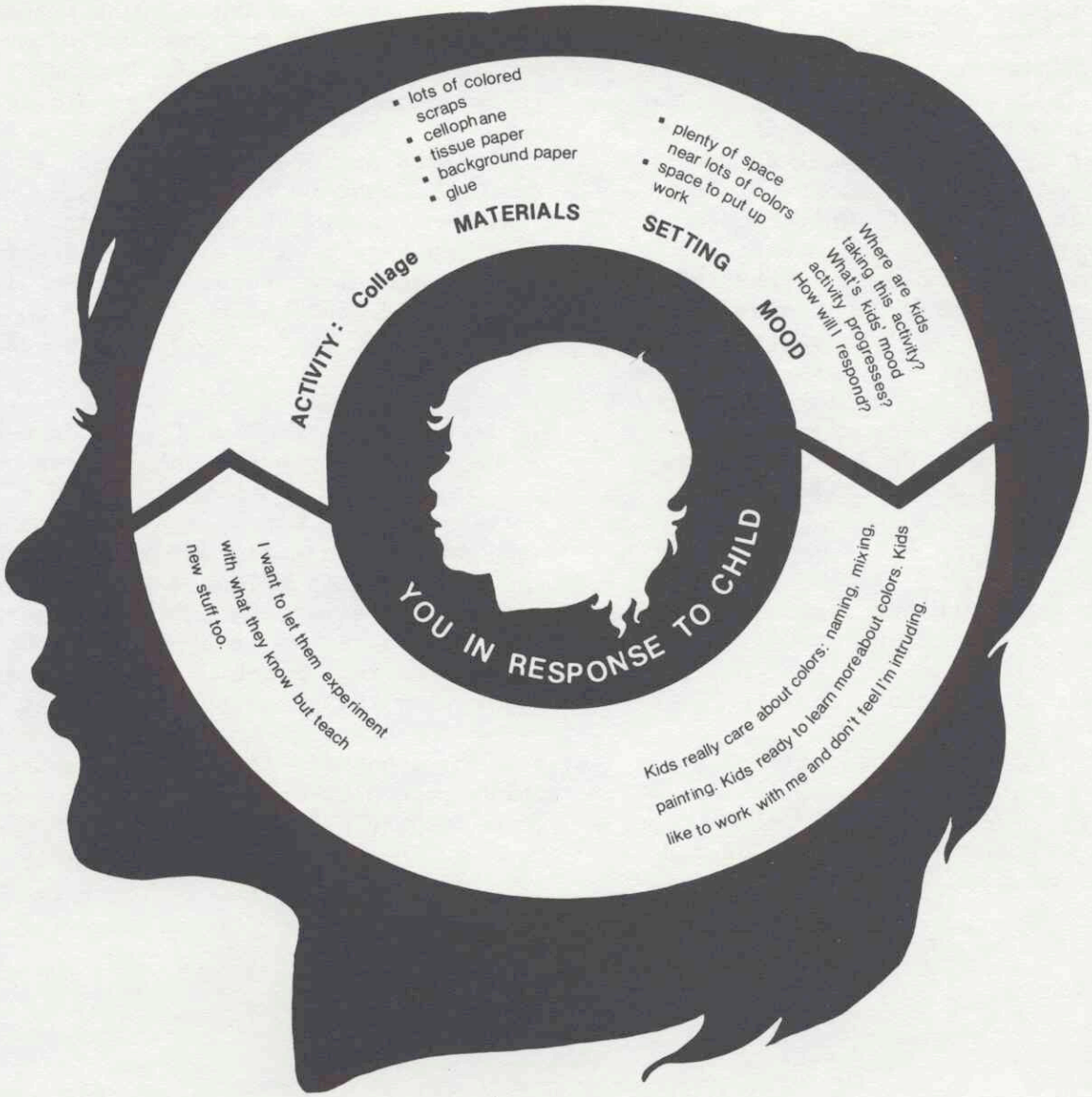
Given an understanding of the child's activity, how the student responds depends upon:

- what role the student can take
- what the student wants children to gain

(Consider the roles and goals suggested under these questions on page 27 of *Child's Play*.) Students might practice by imagining they are involved with Bonnie, the little girl in "Water Tricks," or Rodney in "Little Blocks."

Once it is decided whether they can help the child most by acting as observers of his or her activity, participants in it, or organizers of it, then they are ready to make decisions regarding materials and setting, and can be prepared to respond to the child's mood as the activity progresses.

Students should realize that they need to be sensitive to the child's response to the activity initiated, in order to see whether the new activity has in fact supported the child's original play or whether it has supplanted the child's agenda with something else--something that may be valid, or something that may be distracting or inhibiting. Students might view "Helping Is..." again at this point, to consider the appropriateness of each student's involvement in the children's play and the extent to which students are supporting or taking over the children's play (see especially "Trains" and "Clay").


ACTIVITY: Collage
MATERIALS
lots of colored scraps
cellophane
tissue paper
background paper
glue
SETTING
plenty of space near lots of colors
space to put up work
MOOD
Where are kids taking this activity?
What's kids' mood
activity progresses?
How will I respond?
YOU IN RESPONSE TO CHILD
I want to let them experiment with what they know but teach new stuff too.
Kids really care about colors: naming, mixing, painting. Kids ready to learn more about colors. Kids like to work with me and don't feel I'm intruding.

Experimenting with Color

To help students think about when to enter into children's play they might read this section and think about it in terms of the chart. What steps would they go through in leading this art activity with children? Look at the way the chart is applied to this art activity on page 30 in *Child's Play*. Students might think of other activities with a similar purpose--for example, setting out ice trays with yellow in one cube, clear water in the rest, and letting children make shades of yellow with an eyedropper --and plan them using the process outlined in the chart.

To practice using the chart format, small groups of students could fill in a chart describing and evaluating the role Paul chose in "Water Tricks," and his response to the children during the activity.

Using the chart form, students could plan an activity that they might initiate at an appropriate time--when, for example, the children are engaged in a similar type of play. Of course, the fieldsite teacher should approve the plan before it is used with the children. Activities in *Doing Things*, or in the Play File, may also be used within this format.

Students should evaluate the success of the activity on the *Doing Things* Activity Form (teacher's guide for *Doing Things*), and enter a description of it in the Play File.

Students should watch the fieldsite teachers whenever they enter into children's play to see *when* they enter, what they *do*, and what *effect* it has on the play. These observations could be recorded in their journals for class discussion.

Re-sorting the Play File

The class should discuss and list on the board different ways in which the Play File could be sorted. Some of these might be:

> How old are the children involved in the play? (index tabs for each year or half year)
>
> What materials are involved?
>
> How much adult participation is there? (e.g., observer, supplier of materials, fellow player, instructor)
>
> How much do children relate to each other? (index tabs might go from "working alone" to "everybody involved")
>
> How much pretend play is involved?

Go through the process of re-sorting the Play File according to one of the suggestions. (*Child's Play* suggests sorting according to materials.) Degree of adult participation might be another interesting way to try, since it is discussed in this section.

Give back to each student the cards he or she wrote. Then, when the index tab labels have been agreed upon, ask students to bring up any cards that fit each label. The class could then divide into small groups, each group taking the cards under one label, writing a summary card describing the contents, and reading the summary to the class.

Discuss what was learned through this re-sorting that might help students in future instances of child's play. Are particular forms of play more suited to particular adult roles than others? (See *Child's Play* for questions about a re-sort by materials.)

Joining Children's Play

Emphasize that this section presents equally important ways to support play other than by planning an activity. The students should read page 32 of *Child's Play* and recall or reread "Just Joining In" (in *Getting Involved*).

In discussing the two anecdotes in *Child's Play*, ask students to turn to their Play File cards (and the data poster) and discuss what they already know about the play of four- and two-year-olds. You could also share some of the "Notes on Developmental Patterns" (p. 13 of this guide) with them.

Ask the students to discuss what the children in the anecdotes are doing and what they might be ready for. They might compare the differences in the play of the four- and two-year-olds with the differences they observed in "Half a Year Apart." Then they can make a list on the board or in their journals of possible ways in which an adult could join their play.

For each way of joining, list what the adult's intentions might be. They should realize that the context of the situations would alter their response to them. If the four-year-olds always monopolize the sand box, how would that affect the students' reactions? if two of the four-year-olds usually fight with each other and have never played together before?

A chart form such as the one shown here might be helpful in making a list of possible adult interactions.

It is important for students to feel comfortable about entering into children's play, realizing that they, like field-site teachers and every other adult who works with children, will not always take the best course of action (see the film, "Teacher, Lester Bit Me!"). They will enter into children's play with good will and enthusiasm, and if all does not go as well as they had hoped, they can just rethink the situation, and hope that the experience will be helpful in similar situations to come.

Anecdote I

If I...	*I would hope that...*
observed,	I would learn more about how children play.
keep others from interrupting,	the children would continue to build on their play.
provide more materials,	what I add would give the children new ideas about their play.
join in as the traffic cop, a gas station, or another car,	the children and I would have fun and they would get more ideas about their play.
suggest that they make cars,	they would learn from the process of making.

Anecdote II

If I...	*I would hope that...*
observe,	I would learn more about children's experimenting with words and movement.
play and talk with them,	they would start to relate to each other.
ask if they can make anything from the sand,	they would move from experimenting with the sand to planning an activity with it.

Selected Readings

Introduction

These readings give a sense of the different ways in which people have looked at the idea of play. Some look at the functions of play, some focus on concrete instances of play at different ages, some discuss the relationship between play and various aspects of development.

Toys and Reasons*

Erik Erikson

Erik Erikson is perhaps best known for his work on the formation of a sense of identity. His insights about human development have come from clinical practice with children and research into childhood in different cultures. According to Erikson, play helps prepare children to become adults by letting them explore their relationship to others and to the larger social world. This article is particularly useful for teachers in showing how one incident--Ben Rogers and the steamboat--illustrates the constructive nature of play and its multiple functions.

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*Reprinted from Erik Erikson, *Childhood and Society* (New York: W. W. Norton & Co., Second Edition, 1963), pp. 209-14.

Let us take as our text...a play episode described by a rather well-known psychologist. The occasion, while not pathological, is nevertheless a tragic one: a boy named Tom Sawyer, by verdict of his aunt, must whitewash a fence on an otherwise faultless spring morning. His predicament is intensified by the appearance of an age mate named Ben Rogers, who indulges in a game. It is Ben, the man of leisure, whom we want to observe with the eyes of Tom, the working man.

> He took up his brush and went tranquilly to work. Ben Rogers hove in sight presently--the very boy, of all boys, whose ridicule he had been dreading. Ben's gait was the hop-skip-and-jump--proof enough that his heart was light and his anticipations high. He was eating an apple, and giving a long, melodious whoop, at intervals, followed by a deep-toned ding-dong-dong, ding-dong-dong, for he was personating a steamboat. As he drew near, he slackened speed, took the middle of the street, leaned far over to starboard and rounded to ponderously and with laborious pomp and circumstance--for he was personating the *Big Missouri*, and considered himself to be drawing nine feet of water. He was boat and captain and engine-bells combined, so he had to imagine himself standing on his own hurricane-deck giving the orders and executing them:
>
> ..."Stop the stabboard! Ting-a-ling-ling! Stop the labboard! Come ahead on the stabboard! Stop her! Let

your outside turn over slow! Ting-a-ling-ling! Chow-ow-ow! Get out that head-line! *Lively* now! Come--out with your spring-line--what're you about there! Take a turn round that stump with the bight of it! Stand by that stage, now--let her go! Done with the engines, sir! Ting-a-ling-ling! *Sh't! sh't! sh't!*" trying the gauge-cocks).

Tom went on whitewashing--paid no attention to the steamboat. Ben stared a moment, and then said:

"Hi-*yi! You're* up a stump, ain't you!... You got to work, hey?"

My clinical impression of Ben Rogers is a most favorable one, and this on all three counts: organism, ego, and society. For he takes care of the body by munching an apple; he simultaneously enjoys imaginary control over a number of highly conflicting items (being a steamboat and parts thereof, as well as being the captain of said steamboat, and the crew obeying said captain); while he loses not a moment in sizing up social reality when, on navigating a corner, he sees Tom at work. By no means reacting as a steamboat would, he knows immediately how to pretend sympathy though he undoubtedly finds his own freedom enhanced by Tom's predicament.

Flexible lad, we would say. However, Tom proves to be the better psychologist: he is going to put Ben to work. Which shows that psychology is at least the second-best thing to, and under some adverse circumstances may even prove superior to ordinary adjustment.

In view of Ben's final fate it seems almost rude to add interpretation to defeat, and to ask what Ben's play may mean. I presented this question to a class of psychiatric social-work students. Most of the answers were, of course, of the traumatic variety, for in what other way could Ben become accessible to "case work"? Ben must have been a frustrated boy, the majority agreed, to take the trouble to play so strenuously. The possible frustrations ranged from oppression by a tyrannical father from whom he escapes in fantasy by becoming a bossy captain, to a bed-wetting or toilet trauma of some kind which now made him want to be drawing nine feet of water. Some answers concerned the more obvious circumstance that he wanted to be big, and this in the form of a captain, the idol of his day.

My contribution to the discussion consisted of the consideration that Ben is a growing boy. To grow means to be divided into different parts which move at different rates. A growing boy has trouble in mastering his gangling body as well as his divided mind. He wants to be good, if only out of expediency, and always finds he has been bad. He wants to rebel, and finds that almost against his will he has given in. As his time perspective permits a glimpse of approaching adulthood he finds himself acting like a child. One "meaning" of Ben's play could be that it affords his ego a temporary victory over his gangling body and self by making a well-functioning whole out of brain (captain), the nerves and muscles of will (signal system and engine), and the whole bulk of the body (boat). It permits him to be an entity within which he is his own boss, because he obeys himself. At the same time, he chooses his metaphors from the tool world of the young machine age, and anticipates the identity of the machine god of his day: the captain of the *Big Missouri*.

Play, then, is a function of the ego, an attempt to synchronize the bodily and the social processes with the self. Ben's fantasy could well contain a phallic and locomotor element: a powerful boat in a mighty stream makes a good symbol. A captain certainly is a fitting father image, and, beyond that, an image of well-delineated patriarchal power. Yet the emphasis, I think, should be on the ego's need to master the various areas of life, and especially those in which the individual finds his self, his body, and his social role wanting and trailing.

Play as a Growth Process*

Barbara Biber

A professor at Bank Street College of Education in New York, Barbara Biber argues that there are two major needs that play serves in young children: play helps a child learn about the world and acts as an outlet for strong emotions. Biber demonstrates these two functions of play by looking chiefly at dramatic play.

What do we have in mind when we think of play? What do children do when they play? Children's play has the quality of intense, absorbing experience, a bit of life lived richly and fully. There is zest and wonder and drama and a special kind of immediacy that is without thought for the passing of time. There is nothing to be accomplished, no sense of what is right or wrong to check the flow of spontaneity, no direction to follow. Whatever is at hand can become the suitable materials for play. The essence of the play experience is subjective, something within the child that may not necessarily become obvious to the one who observes the course or the form of his activity.

Play as an activity may take any one of numberless forms. It may be just physical activity, an overflow of energy, of exuberance. Besides running, skipping, hopping, children like to slide, seesaw, and swing. Although these play experiences require a degree of patterning in coordination, they belong among the natural playful uses which a child makes of his body. If his play is as free as his energy is boundless, he is likely to embroider the basic patterns: he soon finds it more fun to hop on one foot, to slide down on his belly instead of his bottom, to swing standing up.

Playing may be something quite different from the lively expression of physical energies. It may take quite delicate forms such as playing with sounds and words. The chanting of younger children, the nonsense rhyming of the older ones are play forms.

The child is playing when, with his hands, he impresses himself on things around him. He pounds the clay and smears the paint. He creates with blocks even when he is only stacking them high or lining them up low. He makes the mud take shape. He fits things together and takes them apart. There is pleasure and satisfaction in what one's hands can make of the physical world and the child, in his playful remaking of the world around him, lays the cornerstone of his feeling about himself in relation to that world.

Now we come to the world of play that is most challenging and enticing: dramatic play. Here the child can take flight. He needs no longer be a child. He can make himself over and be a wolf or an engineer or a mother or a baby who is crying. He can re-create the world not only as he really experiences it but even in the strange aspects that symbolize some of his deepest wishes and fears. It is this kind of play--or rather the values that it has for growth--that I would like to talk about most today.

What do play experiences do for child growth? If a child can have a really full wholesome experience with play, he will be having the most wholesome kind of fun that a child can have. For a child to have fun is basic to his future happiness. His early childhood play may become the basic substance out of which he lays down one of his life patterns, namely, not only that one can *have* fun but that one can *create* fun. Most of us adults enjoy only a watered-down manufactured kind of fun--going to the movies,

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*Robert H. Anderson and Harold G. Shane, eds., *As the Twig Is Bent: Readings in Early Childhood Education* (Boston: Houghton Mifflin Co., 1971), pp. 98-102. Reprinted with permission from *Vassar Alumnae Magazine*, XXXVII, 2, 1951. Reissued 1959, 1963, 1965.

shopping, listening to a concert, or seeing a baseball game and do not feel secure that some of the deepest resources for happiness lie within ourselves, free of a price of admission. This is one of these securities that compose a positive attitude toward life, in general.

In dramatic play, children also find a sense of confidence in their own impulses. There are no directions to follow, no rules to stick to. Whatever they do will be good and right. Wherever their impulses lead them, that is the way to follow. This is the freedom children should have in their play, an absence of boundaries and prescriptions that we cannot grant them outside of their play lives.

Another important by-product of play is the feeling of strength it yields to the child, a relief from the feelings of powerlessness and helplessness that many children feel keenly as junior members of our well-ordered adult world. In play we give them an opportunity to counteract this powerlessness to a degree. It is the child's chance to lay the plans, to judge what is best, to create the sequence of events. Dramatic play is one of the basic ways in which children can try out their talents for structuring life. The fact that they deal with symbols rather than realities does not detract from the sense of mastery.

As you watch children playing, you see the ingredients of the child world spread out before you, differing in complexity and elaboration according to the level of maturity. When a two- or three-year-old plays train, he does so simply. The train goes. It makes sounds. Just a block and a child saying "choo" may be Johnnie's idea of a train but very soon he meets up with Mary who has been very much impressed with the odd way that people sit in trains, looking at each other's backs. To another child in the group a train is not a train unless it whistles. Soon, a composite train emerges: it goes, it says "Choo," it whistles intermittently, people sit in it one behind the other. Children, at all levels, pool their ideas in free dramatic play, expose each other to new impressions, stimulate each other to new wondering and questioning. Can we fail to recognize this process as learning? Can we neglect to notice that here is learning going on in a social atmosphere full of pleasure and delight? In reliving and freely dramatizing his experience the child is thinking at his own pace with other children. He is learning in the best possible way.

More than that, the ways of the world are becoming delicious to him. He is tasting and re-tasting life in his own terms and finding it full of delight and interest. He projects his own pattern of the world into the play and in so doing, brings the real world closer to himself. He is building the feeling that the world is his, to understand, to interpret, to puzzle about, to make over. For the future, we need citizens in whom these attitudes are deeply ingrained.

We would be seriously in error, however, were we to assume that all play of young children is clear and logical. Horses are more likely to eat lamb stew than hay and what starts out to be a boat often ends as a kitchen stove without any obviously clear transitions. Often when play violates the line of adult logic we can see that it has a special kind of coherence all its own--perhaps the coherence of an action rather than a thinking pattern. Playing dentist may take the form of sitting on a keg and whirling one's feet around because the wonderful dentist's chair is the outstanding recall for the child. Teeth and drills may be altogether omitted while the child accentuates through his play what impressed him most. It makes sense in child terms even though it may not to the adult who is told that the children are playing dentist when what meets the eye looks like a crowd of whirling Dervishes. To understand children's play we must loose our imaginations from the restrictions of adultness and the limitations of logic that is tied in within literalness and objective reality.

If free play is to yield these values in terms of children's growth needs, it requires a skilled guiding hand, especially where children are collected in groups as they are in nursery schools. There is a way of setting the stage and creating an atmosphere for spontaneous play. Most important in this atmosphere is the teacher's sensitive understanding of her own role. Sometimes the teacher needs to be ready to guide the play, especially among the fives, sixes, and sevens, into channels that are beyond the needs of the nursery years. But she must guide only in terms of the children's growth needs. Her guidance may be in terms of her choice of stories, materials, trips, experiences. It may function through discussions. Without skillful guidance, a free play program for successive years can become stultified and disturbing to children.

One of the main problems with respect to play which we are working through as teachers is--How much shall the teacher get involved in the children's play? Shall she correct, suggest, contribute, participate? I don't have the answer, but I hope teachers will continue to think about and talk about this problem. We have left behind the stage of education in which the teacher was relegated to the background. We have still to discover what are the optimal points at which the teacher can step in, offering new material, or ideas to enrich the play. In our teacher training institutes we encourage teachers to have imagination and use it but if you teach this too well, the teachers themselves (and this goes for parents, too) will be expressing themselves in the play, and before you know it they will have taken away the play from the child. This, naturally, is closely related to teacher personality. Some people intuitively know when it is best to withdraw and take a passive role, when a new idea will not be an intrusion and when stimulation had best be indirect. It behooves us all as teachers to think: are we stimulating and developing the children by our active teaching or are we becoming so active that the children are overwhelmed and restricted by the flood of our bright ideas?

Day in, day out, we affect children's play by the things we provide for them to play with. We choose equipment and materials with care and thought and have accepted the premise that a good share of play materials should be of the "raw" variety--things like clay, blocks, paper, mud which the child can freely shape to his own purposes and upon which he can impress his own pattern. These are in contrast to the finished dolls and trains, trucks and doll dishes which come in finished form and are adapted, as established symbols, into the flow of the child's free play. One of the interesting questions in education today has to do with what balance shall be kept between raw and finished materials, recognizing that each kind serves a different function with respect to play and may meet varying needs of different individual children. This is an area for study and experimentation in which we have made only a fair beginning.

To return briefly to the point that children's play cannot always be understood from the vantage point of logic and realistic accuracy. The inner coherence of play is as often based on emotion as it is on logic or action. If it seems incomprehensible, rambling, or slightly insane it is because we cannot read the deep emotional life of children, because we do not understand adequately how feelings can transform thought, at all ages.

We know that children are full of feeling--deep and good, hard and strong feeling. They get mad and glad with intensity. Their feelings are as quick, as volatile as they are deep. This vital aspect of their life experience needs outlet through play quite as much as their developing curiosities and their effervescent energies. Many of us who can accept play as a child's way of interpreting life intellectually, often stop short at allowing children full freedom in expressing the feeling aspects of their lives. Or else we make the error of thinking of emotional

expression of this kind in terms of negative feeling, of avoiding repression of hostility and such. This, to be sure, is an important aspect of wholesome growth. The chance to express negative feeling through play can save the child considerable anguish. The dolls he is allowed to hit leave him more able to face his real life problems successfully.

But there is the positive aspect of a child's emotional life which should not be overlooked. Covering the doll lovingly with layers of blankets is as deep and important an experience as the smacking and the spanking. What we must remember through all of this is that the child does not necessarily play out what his actual experience has been. He may instead be playing out the residue of feeling which his experience has left with him.

Polish for Play's Tarnished Reputation*

Sara Arnaud, Nancy S. Brown, Nancy E. Curry, Margaret B. McFarland, and Ethel Tittnich

This selection describes the developmental differences in children, from infancy to age ten, based on the authors' clinical observations of play behavior in normal children. The authors describe the development of play activity, from fulfilling biological needs in infants through practicing motor abilities and experimenting with objects, to the emergence of dramatic play in toddlers and older children.

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*Reprinted from Sara Arnaud et al., *Play: The Child Strives towards Self-Realization* (Washington: National Association for the Education of Young Children, 1971), pp. 5-12.

[There are several useful functions of play:]

· Play, by virtue of its spontaneous, highly enjoyable qualities for children, acts as an energizer and organizer of cognitive learning. The variation and scope of play bring deeper and more extended cognitive gains than single-channel or narrow-channel teaching does --a fact relevant to Piaget's concept of assimilation, so beautifully explicated by Millie Almy.

· When shared with other children, play is a major vehicle for constructive socialization, widening empathy with others, others, and lessening egocentrism. While this function was held to be overvalued a decade ago, the present social climate casts it into increasing prominence.

· The power of play in helping children master anxiety and normal developmental conflicts, as well as traumatic experience, has been exceedingly well documented in the psychodynamic and psychoanalytic literature. In this, play provides both a humanitarian service in lessening the child's pain, and a cognitive service in lessening emotional turmoil disruptive to learning.

Meanwhile, on an entirely different front, new questions about play were being generated by the findings of ethologists--those naturalists who study animals in their natural habitats, away from the necessary constraints and artificialities of the laboratory or zoo. As it emerged from these ethological studies of diverse species, that the young (and indeed often the elderly) of many species engage in playful and even game-like activities, and, moreover, that the more complex the nervous system, the more playful the species, inevitable questions arose: What function does play serve in the survival of these species? Why the apparent association between nervous-system complexity and variety in play?...

THE FIRST YEAR OF LIFE

1. Play seems to evolve gradually as the infant's energies exceed his requirements for biological need fulfillment. Initially, play is closely related to the activities of primary need fulfillment and therefore is centered in mouth activities, as described by Brian Sutton-Smith and Piaget. These oral activities seem to represent the baby's actively augmenting the gratification of the feeding situation. (For example, the baby rhythmically trills his tongue against the nipple of the breast or bottle, thus augmenting the tactile experience within the oral cavity; lip movements not essential to sucking begin, these activities are most readily observed in the resting stage of the nursing rhythm.) From this beginning, babies seem to invest themselves in increasingly complex activities that extend the gratifications provided by their mothers and other caretakers.

2. As maturation progresses making successive motor activities possible, the baby responds to the emergence of each new capacity with intense playful exercise of capacities ascendant in his developmental thrust. Mittleman theorizes that there is a drive toward the expression of motor activities and gratification derived from such expression. This form of play includes vocal activities with attendant listening to sounds produced and experimentation in breath and saliva control and in mouth postures.

3. Mother-baby play maximizes the significance of each successive phase of the mutuality of mother and infant; each partner in the relationship seeks to realize gratification for self and the partner. Babies early select play responses evocative of pleasure in the mother as the mother adapts to the baby's cues expressive of his constitutional preferences and his emergent capacities. The opening and closing of eyelids grows into peek-a-boo in which each partner experiments in the anxiety of loss of visual contact [and] with the joy of reunion. The baby's body and that of the mother are available for their playful interactions. The infant's interest in play with objects is initiated by his playful exploration of his mother's body --the baby's hand brought against the mother's breast in nursing, or around her finger as she holds the bottle, gradually progresses to play with the buttons on the mother's dress, her hair, the apertures of her face alternated with play with the baby's own features and then to interest in the play objects in her hands. All of the phases of individuation as described by Mahler are played out in mother and child interactions and by the end of the first year by the child himself.

4. As Piaget has pointed out, babies' self-initiated activities bring them into contact with objects in their environments, these contacts stimulating the child and modifying the objects. Escalona has pointed out the greater frequency of such contacts in the experience of active infants than of quiet infants. These early contacts defined by Piaget as assimilative, progress to adaptive and purposive play in which certain activities are repeated and produce gratifying stimuli. But, such play with objects is observed only among infants who have had positive human relationships that have stabilized the sensory attention to tactile, visual, and auditory stimuli.

THE TODDLER PHASE OF PLAY

1. The toddler reproduces mothering behavior formerly passively experienced and alternates with dramatizations of the passive counterpart. There is continued playful exploration of the mother's body and the toddler's body with comparative concentration (e.g., mirror play). The peek-a-boo game continues and primitive hiding and seeking begins.

2. While practicing emergent motor skills, the toddler takes joy in experimentation in movements.

3. Dominant play themes such as containment and release and filling and emptying are evident. There is intense exploration of objects and their qualities and adaptive uses (e.g., block piling and knocking down).

4. Real dramatic play begins with simple themes of mother-baby experiences and increases in complexity of theme and action in duration. Objects now are given symbolic significance. Affiliation with animals is expressed both in dramatic play and in the playful use of stuffed animals.

THREE-YEAR-OLDS' PLAY

1. Because of its lack of a preconceptualized theme, the dramatic play of three-year-olds can be compared to the process-oriented behavior of the sensorimotor activities, in which the activity is a pleasurable end in itself and the product is not yet needed.

2. Play themes of three-year-olds involve loosely developed familiar activities--usually nurturant ones--in which the whole person is represented by a part or single aspect of his appearance or behavior.

3. When nonfamilial figures are represented in play, the familial or nurturant characteristics are extended and attributed to these nonfamilial figures.

4. Destructive and unmodified aggression is attributed to such nonfamilial characters or to TV characters with whom there is some association of aggression (Batman, Superman, etc.), and these roles elicit diffuse excitability and fear in the players.

5. Real and pretend are not firmly separated so that the child *becomes*, rather than *pretends* to be, the person that he represents. Perhaps for this reason, the baby role seems to have to be avoided, or disguised as yet, or projected onto a doll.

6. Roles are fluid and shifting, not clearly defined (e.g., the playing three-year-old can be the family dog at one moment and the mother the next).

7. Collecting or gathering is a characteristic of three-year-olds which with time becomes refined or discriminative in the context of dramatic play (e.g., all the puzzles and books may be found stuffed into the wheel toys and then hauled about; later the play theme of moving or picnicking will incorporate the collected articles).

8. The technique of repeating a play act in a ritualistic way is frequently employed and seems to function as a control of immediate time and space by making it more predictable (e.g., the child who always begins his school day with the same activity, that is, always goes to the easel or always begins with a small block building); such ritualization is also used symbolically in play as a coping mechanism (e.g., the use of play dough which is a familiar home activity, as a transition play activity after mother leaves), or it may appear as vestigial activities that have become superfluous when the context of the play changes while the activity has not (e.g., insisting on lining up chairs for a train game played earlier even if the play theme is now cowboys).

9. Separation-individuation is a major task of the threes and is reflected in their games of appearance and disappearance as well as in the occasional attempt to avoid the absense of mother by being the mother in play.

FOUR-YEAR-OLDS' PLAY

1. The management of aggressive impulses seems to be a key issue at four and is manifest in their play in a variety of ways:

    a. Portraying aggressive TV superheroes who attack, but also rescue.

b. Initiating ghost or monster play in which some innocent person, often a teacher, is designated as the monster from whom the children run. The play gradually develops into a "chase" in which the child becomes the "monster" or wild animal from whom other children run away excitedly.

c. The creation of a safe or "cozy" place where the occupants are labeled "good" and outsiders are viewed as intruders who are "bad."

d. Unbridled aggression sometimes frightens the more timid four-year-olds who seek an outlet in silliness, sometimes under the guise of play and sometimes verbally in the use of bathroom words or nonsense rhymes.

2. Masculine and feminine traits are exaggerated. For this kind of play all the trappings of masculinity or femininity are now needed.

a. To be a cowboy, boys want the entire outfit: hat, gloves, belt, boots, etc. The girls now portray the alluring feminine side of mother, as well as her nurturant one and require hats, scarves, veils, gloves, high heels. If all the necessary props aren't available, the play may be frustrated.

b. There is much testing of body competence in straightforward motor play which can be incorporated into a dramatic theme. "I'm a bat and I just have to practice running."

3. With the increased awareness of masculine and feminine roles and a more stable sense of self, the four-year-old has a clearer idea of who other people are.

a. Play no longer just centers around the home, but can be expanded to include beauty shop, store, firehouse, ranch--with appropriate roles played out in these settings.

b. Sex curiosity reflecting an interest in other children is approached under the guise of doctor play.

c. Discriminations of all sorts are made with children being excluded or included in play on the basis of differences and likenesses in sex, color, kind of clothes worn, etc.

4. With a firmer sense of self, the four-year-old can better distinguish between reality and fantasy.

a. He can put a certain distance between his internal self and the play activity by moving from self-action to toy-action (rather than being the tiger, he can use the toy tiger or puppet in tiger play).

b. More attributes of a character can be assumed without threat of loss of self. (Now he can play the *role* of baby rather than *be* the baby.)

c. He can play out experiences that interest, baffle, or frighten him. This play still has a tinge of the fantastic, as exemplified by the enactment of night fears in which ghosts come to terrorize sleeping children.

5. Hiding and burying are evident in sand and block play as well as in games where the children take delight in hiding from each other or from the teacher. This seems to be a higher level than the peek-a-boo separation play of the three-year-old.

6. The four-year-old can swing from stout independence to marked dependence in his play. This switching of roles is not as fluid as at three, for now a clear reversal of roles can be seen. (A harried "mother" may switch to needy baby role.)

FIVE-YEAR-OLDS' PLAY

1. There is a wide panorama of play at age five with many earlier developmental themes still being worked upon either as unsolved issues or as regressive phenomena. Some children are already moving into the games-with-rules play of the school-age child.

2. In the intent dramatization of every aspect of his widening world, the five-year-old responds to those external stimuli which mesh with his burgeoning developmental interests (e.g., the power and thrust of space exploration) and he has a demarcation between the realistic and the fantastic. ("This is just pretend.")

3. Play is used to help assimilate, comprehend, and master experiences as at earlier ages but at five this play can arise almost immediately after the stimulus of an unusual, interesting, or frightening experience (as evidenced in the play of the five-year-olds after witnessing a serious accident).

4. The five-year-old has the capacity to sublimate his aggressive or frightened feelings through dramatic play.

5. Pretend roles include both an enactment of real life roles (nurse, teacher, policeman, bride, groom, etc.) and of cultural folk heroes (spacemen, cowboys, kings and queens).

6. Although the sociodramatic play often has quite realistic elements as the children attempt to imitate perceived adult actions and reactions, their deeper fantasies (e.g., biting animals, monsters that kill) are often revealed in more structured dramas such as self-created puppet shows or dictated stories.

7. There is a heightened interest in romance which is revealed in the play of five-year-olds through exciting boy-and-girl chases, enactment of fairy tales ("Cinderella," "Sleeping Beauty") and bride and groom play.

8. As the five-year-old becomes more capable of dealing with the concrete world, he demonstrates a dawning capacity to deal with abstractions. In his play there comes to be a blending of the affective and the cognitive through the use of abstract symbols or adjuncts to his dramatizations (the making of paper money to be used to buy food at a pretend "Burger-King" restaurant).

THE DRAMATIC PLAY OF SIX- TO TEN-YEAR-OLDS

In a facilitating atmosphere which encourages spontaneous expression of the child's own interests, dramatic fantasy play continues throughout the six- to ten-year period. As the child grows older, this play often is cast in the form of a staged drama, with the children preparing their own props and developing their plot as they go along, with many on-the-spot improvisations even though the general plot of the drama remains the same over a period of weeks or even months. Occasionally they put their script in writing, but this in no way constrains them to stick to the script.

The most gleefully invested plays and role enactments--and remember, they are ones developed by *normal* children--are usually blood-and-thunder melodramas, dripping with gore, featuring ambush and attack, killing and death. They are peopled by ghosts, statues that come to life, grisly folk heroes (e.g., Dracula), vampires, and people who turn out to be very different from what they purport to be. The opposite sex, romance, and relationships between males and females tend to be treated in hostilely joking, disparaging terms; danger is implicit in them (e.g., the girls who enact a bride, whose bridegroom turns into a werewolf when he kisses her; the boys who enact a vampish female with a machinegun under her skirt).

A common current running through much of the dramatic play is that things are not what they seem to be; in particular,

benign, unsuspicious looking individuals are revealed to be monsters or to be working for the enemy, luring their friends into disaster.

What is notably absent from many of the plays (but not all) are parents; parentless bands of peers and siblings take center stage, usually threatened by mysterious forces or adult figures who are culturally symbolic of danger, such as vampires or Mr. Hyde.

Feeble attempts at rationalizing these bizarre fantasies and distancing themselves from them take the form of the children saying they are bad dreams, casting aspersions on the skill of the script writer (i.e., blame for the "craziness" of a play developed by several children is shifted to one of them), or the dramatic play is embedded in a clowning silliness and nonsense speech that seems to imply fantasy has no meaning.

The theme of aggression continues, often taking a strongly sadistic twist. Targets for aggression vary from a scapegoated child to a tattered fur piece christened Mildred (by the boys), which is hanged, cut, daubed with "blood," etc. Some aggression is constrained by rules of fairness and making sure that opposing forces are evenly matched ("Two against one ain't fair"). A good deal of hostile aggression is also expressed in bathroom talk (poopie, stink pot) and accusations of dirtiness, stinkiness, messiness. The children have also been known to use the bathroom as a hilarious setting for their self-produced plays.

By eight or nine, these dramas are usually enacted by all-boy or all-girl casts, with impersonation of the opposite sex when the plot requires such a role. Sex differences in fantasy content show the boys with greater concern for physical prowess and bodily injury, the girls more concerned with physical attractiveness.

The Role of Play in Cognitive Development*

Brian Sutton-Smith

In this selection, Brian Sutton-Smith, a professor at New York University, reviews research that found a correlation between playfulness and creativity. He cites other studies that indicate how game skills are related to other aspects of a child's personality and how games perform specific functions in different cultures.

THE FUNCTION OF PLAY

[V]ery little is known about what play accomplishes for human or animal organisms. This neglect of play's "function" seems to have occurred historically because of the key role of "work" in industrial civilization and the concomitant derogation of the importance of recreation and leisure.... In addition, and perhaps for similar historical reasons, explanations of behavior both in biological and psychological thinking have been serious and utilitarian in nature; that is, an activity has not been thought to be explained unless its direct value for the organism's survival could be indicated.

For this reason, play, which on the surface at least is not a very useful activity, has been interpreted most often as an illustration of the working of other "useful" functions, rather than a peculiar function in its own right. It has been said that in play the child "reduces tensions," "masters anxiety," "generalizes responses," or manifests

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a polarity of "pure assimilation." In each of these cases the explanation of play has been subsumed to the workings of theoretical concepts which could just as well be illustrated without reference to play.

In consequence, the research literature on play is mainly about variables that are not necessarily central to an understanding of play itself. For example, levels of social development (e.g., solitary, parallel, and the like) are said to be illustrated in the play of preschoolers; more severely punished children are said to express more aggression in their doll play; children are said to prefer to go on with play activities that have been interrupted; play and game preferences are used as evidences of sex-role identification, anxiety, intellectual level, race, environment, need achievement, levels of aspiration, and sociometric status....

In the literature of the past few years, however, there has developed a changing attitude towards the functional significance of play and games, and it is to this literature that the present article will be devoted....

In a great deal of current research and as a part of play's rehabilitation as a serious subject-matter, play has generally been identified with exploratory behavior. Both exploratory behavior and play have been described as self-motivated activities whose rewards lie in the gratifications that they bring directly to the participants (Berlyne, 1960). One typical finding from this work, emerging from many animal as well as some human studies, is that novel properties in the ecology (blocks, puzzles, colors, and games) increase the response levels of the subjects exposed to those properties. As subjects cease to be able to do new things with objects, however, their response to them decreases. Berlyne has indicated that other properties of objects which have similar effects are their complexity, their surprisingness, their uncertainty, and their capacity to induce conflict.

It has also been found that the greatest increases in response level are recorded for those objects with which the subjects can do most things, that is, which can be handled, moved, seen, touched, and so forth. Further, exploratory and play behavior, like other response systems, are susceptible to increase or diminution in response level as a result of appropriate parental reinforcements (Aldrich, 1965; Marshall, 1966). Finally, exploratory and play behavior in child subjects correlates highly with information seeking in general (Maw & Maw, 1965)....

For the purposes of this paper, we will provisionally suggest that play, while like exploratory behavior in being intrinsically motivated, is different from the latter in its greater emphasis upon the novel variation of responses according to internal criteria; play is an activity accompanied by the traditional and often-mentioned affective accompaniments of "playfulness," "fun," and "the enjoyment of the activity for its own sake."

PLAY AND COGNITION

Given this conception of play, we are in a position to ask what cognitive differences such variation seeking can make. In classical psychoanalytic and Piagetian theory, the play of the child is said to have a mainly compensatory function. For the analysts, play has little significance for intellectual growth except as it helps to reduce the amount of tension that might be impeding intellectual activity somewhere else. For Piaget, play permits the child to make an intellectual response in fantasy when he cannot make one in reality, and this protects his sense of autonomy. In addition, however, it helps to consolidate learnings acquired elsewhere and prevents them from dropping into disuse.

These two viewpoints may be contrasted with others in which the play itself is given a much more active cognitive function in the development of thought. Psychoanalyst Erik Erikson suggests that the young child's play is analogous to

the planning of an adult. Several generations of sociologists likewise have seen play as providing model situations in which the child rehearses roles he will later occupy seriously somewhere else.

While most of these sociologists emphasize the social value of the play, some also stress cognitive implications. For example, George H. Mead stated that children develop social *understanding* through having to take the role of the other into account in their own actions. That is, the child cannot hide very successfully in hide-and-seek unless he has also taken into account what happens when someone seeks (Mead, 1934; Goffman, 1961).

But these are general theoretical viewpoints whereas our interest here is in research investigations of play as a form of cognitive variation seeking. A useful lead is provided by the work of Lieberman (1965). She was interested in relations between children's playfulness and their creativity. Her subjects were 93 kindergarten children from middle-class homes attending five kindergarten classes in three New York schools. The children were rated on playfulness scales which included the following characteristics:

1. *How often does the child engage in spontaneous physical movement and activity during play?* This behavior would include skipping, hopping, jumping, and other rhythmic movements of the whole body or parts of the body like arms, legs, or head, which could be judged as a fairly clear indication of exuberance.

2. *How often does the child show joy in or during his play activities?* This may be judged by facial expression such as smiling, by verbal expressions such as saying "I like this" or "This is fun" or by more indirect vocalizing such as singing as an accompaniment of the activity, e.g., "choo, choo, train go along." Other behavioral indicators would be repetition of activity or resumption of activity with clear evidence of enjoyment.

3. *How often does the child show a sense of humor during play?* By "sense of humor" is meant rhyming and gentle teasing ("glint-in-the-eye" behavior), as well as an ability to see a situation as funny as it pertains to himself or others.

4. *While playing, how often does the child show flexibility in his interaction with the surrounding group structure?* This may be judged by the child joining different groups at any one play period and becoming part of them and their play activity, and by being able to move in and out of these groups by his own choice or by suggestion from the group members without aggressive intent on their part.

A factor analysis of the results led Lieberman to conclude that these scales tapped a single factor of playfulness in these children. But the finding to which we wish to call attention in the present case is the significant relation which was found between playfulness and ability on several creative tasks. That is, children who were rated as more playful were also better at such tasks as: a) suggesting novel ideas about how a toy dog and a toy doll could be changed to make them more fun to play with; b) giving novel plot titles for two illustrated stories that were read and shown to the children; and c) giving novel lists of animals, things to eat, and toys.

Unfortunately, the problem with Lieberman's work, as well as with much other work involving creativity measures, is that intelligence loads more heavily on the separate variables of playfulness and creativity than these latter variables do with each other. Consequently, we cannot be sure whether the findings reflect a distinctive relation between playfulness and creativity or whether these variables are two separate manifestations of intelligence as measured by conventional intelligence tests.

And yet it seems to make sense that the variations in response which constitute

playful exercise should be similar to the required variation in response on creativity tests. In other words, these two variables appear to be structurally similar....

PLAY AND NOVEL REPERTOIRES

What then is the functional relation between the two? While there are various possibilities, only one will be presented here as the concern is more with research than it is with theory. The viewpoint taken is that when a child plays with particular objects, varying his responses with them playfully, he increases the range of his associations for those particular objects. In addition, he discovers many more uses for those objects than he would otherwise. Some of these usages may be unique to himself and many will be "imaginative," "fantastic," "absurd," and perhaps "serendipitous." Presumably, almost anything in the child's repertoire of responses or cognitions can thus be combined with anything else for a novel result, though we would naturally expect recent and intense experiences to play a salient role.

While it is probable that most of this associative and combinatorial activity is of no utility except as a self-expressive, self-rewarding exercise, it is also probable that this activity increases the child's repertoire of responses and cognitions so that if he is asked a "creativity" question involving similar objects and associations, he is more likely to be able to make a unique (that is, creative) response. This is to say that play increases the child's repertoire of responses, an increase which has potential value (though no inevitable utility) for subsequent adaptive responses.

In order to test this relation, the writer hypothesized that children would show a greater repertoire of responses for those toys with which they had played a great deal than for those with which they had played less. More specifically, it was hypothesized that both boys and girls would have a greater repertoire of responses with objects for their own sex than for opposite sex objects. In order to control for differences in familiarity, like and opposite sex toys were chosen that were familiar to all subjects.

Four toys were selected that had been favorites during the children's year in kindergarten. The girls' toys were dolls and dishes; the boys' were trucks and blocks. It was expected that as they had all known and seen a great deal of all of these toys throughout the year, they would not differ in their familiarity with the toys, as measured by their descriptions of them, but that they would differ in their response variations with these toys as measured by their accounts of the usages to which the toys could be put. Nine boys and nine girls of kindergarten age were individually interviewed, and the investigator played the "blind" game with them. That is, of each toy, he asked, pretending that he was blind: "What is it like?" (description), and "What can you do with it?" (usage). Each child responded to each toy. The interviews were conducted in a leisurely manner, the longest taking 45 minutes and the most usages given for one object being 72 items.

The results were that the sexes did not differ from each other in their descriptions of the four objects. Both sexes did differ, however, in the total number of usages given for each toy and the number of unique usages. Boys were able to give more usages and more unique usages for trucks and blocks than they could give for dolls and dishes, although they had not differed between the two sets in their descriptions. Similarly, the girls displayed a larger repertoire for the objects with which they had most often played, dolls and dishes, than for trucks and blocks which had also been in the kindergarten all year, but with which they had not played extensively (Sutton-Smith, 1967).

As the number of responses was not related to intelligence, and as the children showed equal familiarity with all

objects (as judged by their descriptions), it seemed reasonable to interpret their response to this adaptive situation (asking them questions) as an example of the way in which responses developed in play may be put to adaptive use when there is a demand.

This principle may apply to games as well as play. While most of the activities that players exercise in games have an expressive value in and for themselves, occasionally such activities turn out to have adaptive value, as when the subject, a healthy sportsman, is required in an emergency to run for help, or when the baseball pitcher is required to throw a stone at an attacking dog, or when the footballer is required to indulge in physical combat in war, or when the poker player is required to consider the possibility that a business opponent is merely bluffing. In these cases, we need not postulate any very direct causal connection between the sphere of play and the sphere os adaptive behavior, only the general evolutionary requirement that organisms or individuals with wider ranges of expressive characteristics, of which play is but one example, are equipped with larger response repertoires for use in times of adaptive requirement or crises....

PLAY AS LEARNING

The view that something is learned by play and games has long been a staple assumption in the "play way" theory of education and has been revived amongst modern educators under the rubric of game simulation (Bruner, 1965; Meier & Duke, 1966). Evidence for effects of particular games on particular learnings are few, although where research has been carried out, it seems to be of confirming import. Research with games involving verbal and number cues seems to show that games result in a greater improvement than occurs when control groups receive the same training from more orthodox workbook procedures (Humphrey, 1965, 1966).

Similarly, research with games requiring the exercise of a variety of self-controls seems to indicate social improvements in the players.... As an example of this type of field research, the present investigator used a number game to induce number conservation in young children between the ages of [five] and [seven] years. The game known traditionally as "How many eggs in my bush?" is a guessing game in which the players each hide a number of counters within their fist, and the other player must guess the number obscured. If he guesses correctly, the counters are his. The players take turns and the winner is the player who finishes up with all the counters. Each player begins with about ten counters. Children in the experimental group showed a significant improvement from a pre- to post-test on number conservation as compared with children in the control group. The game apparently forced the players to pay attention to the cues for number identity or they would lose, be cheated against, be laughed at, and would certainly not win (Sutton-Smith, 1967)....

Similarly, cross-cultural work with games seems to show that games are tied in a functionally enculturative manner to the cultures of which they are a part. Thus, games of physical skill have been shown to occur in cultures where there is spear throwing and hunting. The older tribal members introduce and sustain these games which have a clearcut training value. Games of chance occur in cultures where there is punishment for personal achievement and an emphasis upon reliance on divinatory approaches to decision-making (Roberts & Sutton-Smith, 1966); games of strategy occur in cultures where the emphasis is on obedience and diplomacy as required in class and intergroup relations and warfare (Roberts, Sutton-Smith, & Kendon, 1963).

Still, all this research, though it implies functional relations between games and culture patterns, and between games and cognitive styles...is weak insofar as it does not allow us to draw conclusions concerning the particular facets of the games that have the observed influence.

Evaluation Approaches

These approaches are provided to give teachers the opportunity to build evaluation into the day-to-day activities in the EXPLORING CHILDHOOD materials. Teachers can adapt these suggested approaches to the goals and needs of their individual classes. Students and teachers should share and discuss the purposes, expected outcomes, and actual results of the evaluation approach chosen.

Approach	Description of Activity and Page References	Purpose	Evidence of Student Learning
Observation and Follow-up Discussion	Use this evaluation activity in conjunction with the film "Half a Year Apart," discussed in this guide, pp. 9–11. Divide class into two groups, one focusing on Josh, the other on Rachel. Ask students to record their observations that seem to fit the categories--"What interests Rachel or Josh and what can Rachel or Josh do?" Show film as many times as necessary until each group is satisfied with its chart. Have students use observations to discuss questions: · What are the differences between Josh's and Rachel's abilities? · What do the observations tell us about Josh's and Rachel's needs?	To evaluate students' ability to apply the concepts of development to play by having them: · focus on concrete actions · classify and synthesize developmental data · evaluate visual information, extracting that which is relevant for a particular purpose · think about the relationship between children's developmental abilities and their needs	Students record and discuss specific details, e.g., "Rachel blows bubbles," "Josh fills milk bottle, then pours out water." Students classify information and develop concepts, e.g., Josh *experiments*, Rachel *touches* and *feels*. (For other categories, see pp. 9-11 in this guide.) Students speculate on needs; e.g., Josh's play is supported by a variety of objects of different shapes and sizes. The water supports Rachel's need to touch and feel.
Essay	Ask students to apply the definition, "Play is not only what is done, but how it is done, and with what feelings," to a picture they choose from the Photo Essay (student booklet, pp. 3-16).	To evaluate students' ability to: · consider nonverbal sources of information such as actions and gestures · examine the conditions under which a play activity is done · recognize the expression of attitudes through play	Students take account of such things as: · doing activities: --at one's own pace --at one's own instigation · animation and happiness expressed by smiles, laughter, jumping, splashing · freedom expressed by dressing up and pretending, wandering and hiding

Approach	Description of Activity and Page References	Purpose	Evidence of Student Learning
Role Play Observation	Have students divide into small groups (four or five students each). Each group takes a turn selecting an object from among those pictures on page 23 of the student booklet, and picks an age (toddlers, 4- or 6-year-olds) to role play using the object. Groups waiting for their turn observe the role play, discuss their observations, and then report to the class identifying the "age" of the group doing the role play and supporting their conclusion with clues from the observed behavior. To prepare for the role play and to analyze their observations, students should use information drawn from the data poster and their play files (this guide, pp. 14-16) as well as their own recollections and insights.	To evaluate students' ability to: · note the differences in play at different age levels · understand the developmental patterns in play	In doing the role play, do students take account of one or more of the following dimensions of development? Social behavior: · dependence-independence · preoccupation with self · ability to cooperate and relate to others Physical development: · motor coordination · speech Type of play: · concentration on self and immediate surroundings · fantasy and symbolism · intentional repetition · exploration

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