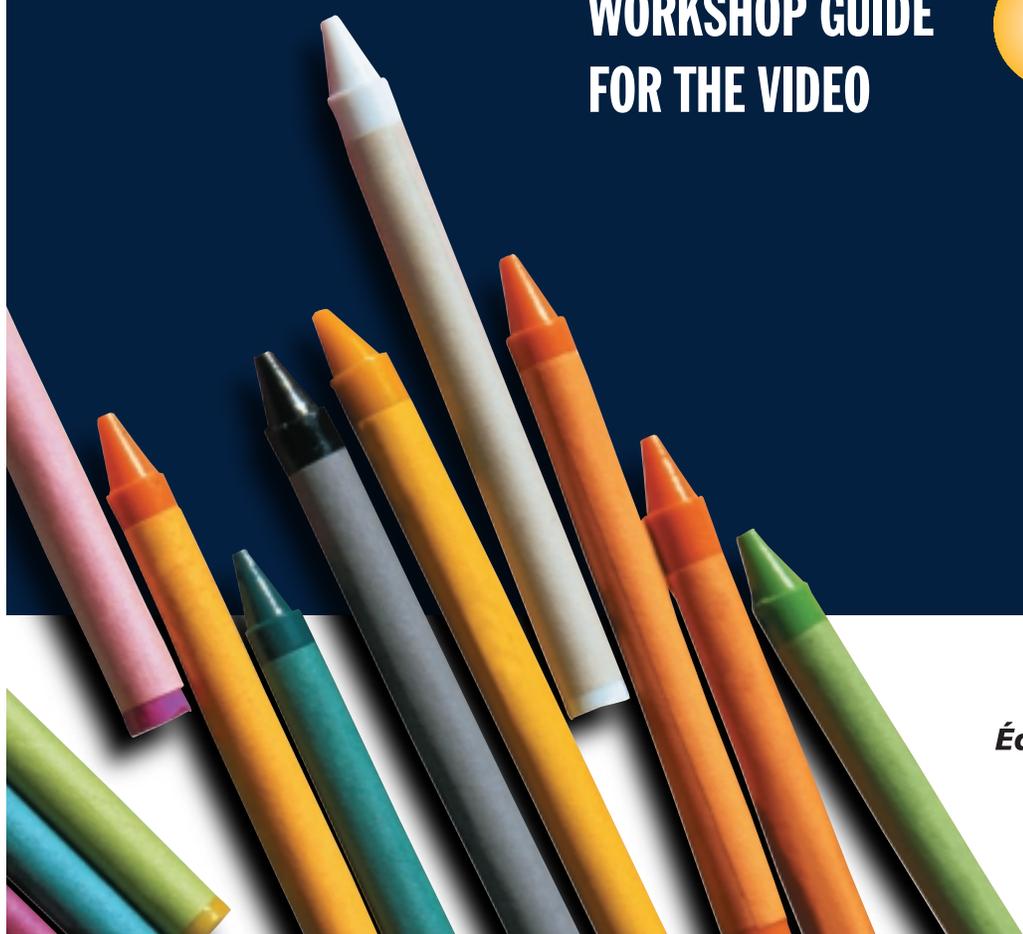
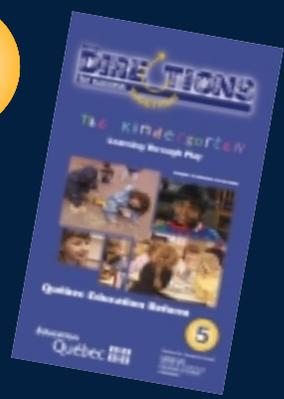


NEW
DIRECTIONS
for success
TOGETHER

The kindergarten
Learning Through Play

**WORKSHOP GUIDE
FOR THE VIDEO**

5



UQÀM SAV
Service de l'audiovisuel
Université du Québec
à Montréal



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1

INTRODUCTION

Links between the video *Learning Through Play* and the Québec Preschool Education Program

In play children are at their most competent (Jones and Reynolds, p. 9).

Objectives of the 2001 Québec Preschool Education Program

“The program enables 4- and 5-year-olds to develop psychomotor, emotional, social, language, cognitive and methodological competencies related to self-knowledge, life in society and communication. With the support of the teacher, children take part in learning situations drawn from their world of play and their life experiences and begin to play the role of students, active and capable of thinking” (Québec Education Program, p. 52).

“Through their play and spontaneous activities, children express themselves, experiment, construct their learnings, structure their thoughts and develop their world-view. They learn to be themselves, to interact with others and to solve problems. They develop their imagination and creativity. Spontaneous activity and play are their way of mastering reality; this justifies giving play a central place in preschool education and organizing the space and time accordingly” (Québec Education Program, p. 52).

(These objectives may be printed on acetates and shown to the participants as an introduction.)

As we can see from these quotes, the program acknowledges the importance of play in young children’s development. The video *Learning Through Play* and its companion guide were created to help deepen our understanding of children and play.



About the video *Learning Through Play*

General intentions

The video *Learning Through Play* should reinforce the kindergarten teacher’s and parents’ belief that play is a “solid foundation for learning” (Prescott in Jones and Reynolds, 1992).

Hopefully it will also be a way to encourage the commitment of adults to promoting and supporting children’s play by giving them reasons and ways to do so. It aims to increase their awareness of the different roles they can play to help children become competent players.

Content of the video

In this video, you will hear teachers and faculty members comment on what play is, identify different types of play behaviours and suggest ways to help children become master players. Clips of children at play and interviews with children are also included.

2

PRESENTATION FOR TEACHERS

1. Goals and format of the presentation

1.A This workshop should help teachers (or parents):

- Appreciate children's play and identify the learning going on.
- Pay attention to play, observe play and use it as a tool to know the children and assess and plan the curriculum.
- Examine their own attitudes regarding play.
- Reflect on their contribution to children's play.
- Think of ways to enrich children's play in their daily lives.
- Develop rationales to convince reluctant parents, administrators or colleagues of the value of play and its relevance in a kindergarten classroom and at home.
- Be more aware of their roles in play.

(This may also be on acetate or distributed to participants.)

1.B Structure of the workshop

The scenarios offered here are multiple, to ensure that the training session can be tailored to the interests and needs of the participants. Each presenter can choose from these proposals and design his or her own "menu" to adjust to the time frame, location and characteristics (size, experience, expressed concerns) of the group.

2. Before viewing the video

2.A Playing

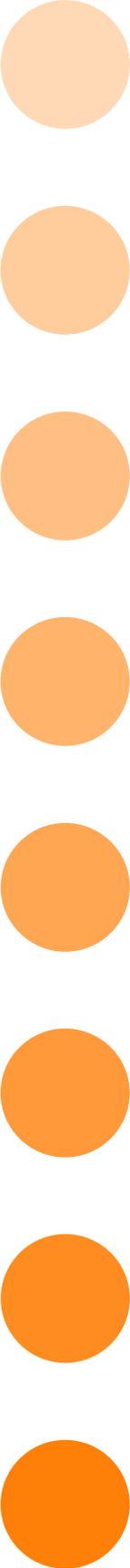
Ideally, before getting into a discussion on play, participants should have the opportunity to play with some materials.

Choose one of the following four scenarios, then go to the "What is play?" exercises (2B, p. 7).

Scenario 2.A.1

If the presentation (or part of it) can be done in a kindergarten classroom, participants could choose the materials they want to play with (e.g. blocks, sand, water, play dough, puppets) and play for a certain period of time (from 10 or 15 minutes to an hour). You can then all discuss what happened and what you think happens when children play; or go to the section "What is play?" (2B, p. 7).

(Appendixes 2 and 3 on the potential learnings with blocks and play dough may then be handed out as a reference.)



Scenario 2.A.2

If you are in another location, you could bring different kinds of blocks (small and large, in sufficient numbers for the whole group). After some time, figurines, cardboard, scissors, wire, felt pens and play dough could be introduced.

Announce the end of the play session a few minutes ahead.

Discuss what happened, and what happens when children play with blocks (*use Appendix 2*).

Scenario 2.A.3

The same thing may be done with any other type of materials available, such as play dough (in this case, refer to *Appendix 3*). After some time, you may add pipe cleaners, straws, wire, sticks, buttons, small pieces of cardboard, aluminum foil or cellophane paper to extend the play. Tools may also be added later on (e.g. knife, fork, garlic press).

The presenter may also divide participants into four groups: one in which each individual has a lump of dough, a second with the group working on one big piece of dough (the players may decide to divide it), a third playing with play dough and tools, and a fourth with play dough and objects to imprint in the dough (e.g. keys, wheels).

Play dough may be handed out individually (each participant has a portion) or in one piece (a large amount for a small group) or both.

Announce the end of the play session a few minutes ahead.

Discuss what happened, and what happens when children play with play dough (*use Appendix 3*).

Scenario 2.A.4

Another possible situation involves bringing in sheets or blankets (one per group) and asking the participants to play with them. After some time, add ropes, elastics, clothespins, balls, etc.

After 15 minutes of play, ask participants to list other games using this material. With the whole group, list all the suggestions made (*see Appendix 4* for some suggestions).

Then go to the “What is play?” (2B, p. 7) exercises.

2B What is play?

Play is the children's curriculum
(Jones and Reynolds, p. 55).

Depending on the group's interest and time allocated, choose one or both of these scenarios. You may also divide the group and have some participants work on the first scenario while others work on the second. Have them share their thoughts afterwards.

Scenario 2.B.1

What are the characteristics of play?

Ask the participants to express what play is. (This may be done in small groups or in a large group.)

If the activity is done in small groups, each group will represent what play means to it, using different "languages" (words, drawings, skits), and present the results to the large group. The leader then presents *Appendix 1* and makes links with the ideas expressed by the subgroups.

If the activity is done in a large group, the leader draws a sun, a circle with rays, on a large sheet of paper. The circle is used as a space in which to write the participants' ideas concerning the essential ingredients of play (pleasure, spontaneity, freedom as opposed to obligation: free choice of partners, materials, direction, duration). The rays are used for types of play (e.g. pretending, running) or consequences of play (e.g. using imagination, language development). Use *Appendix 1* to identify commonalities, additions and omissions.

Note to participants regarding *Appendix 1*: When one or more central components are absent from the activity, we are getting farther and farther away from real free play.

Scenario 2.B.2

What does **free play** correspond to in your class?

How much time is scheduled for free play every day?

Participants explain to each other, in small groups or within the group as a whole, what they mean when they say "free play," and how long it usually lasts.

Note: As mentioned in the video, children need long periods (45 minutes to an hour) to engage in deep play.

2.C. PLAY AND LEARNING:

“The critical and divergent thinking that children practice in play and problem solving contribute significantly to the higher level thinking skills they will later need”
(Jones and Reynolds, p. 89).

Scenario 2.C.1:

Each group chooses a form of play (e.g. building with blocks, modelling with clay, drawing, painting, playing with dolls). Participants web all the possible learnings this activity offers. The webs are then posted and presented to the group. The words on the web may also be grouped (using coloured felt pens) by the presenter or participants in categories corresponding to the six competencies of the program.

The presenter, using appendixes 2 and 3, shows how these activities may be cross-disciplinary and how they are closely related to the desired competencies.

Scenario 2.C.2:

The following list of questions may help participants reflect (in small groups or within the group as a whole) on their attitudes toward certain types of play, and on how they could increase the availability of some types of play experiences.

What is your favourite type of play?

In what area of the room or the playground do you most often stand?

Is there a type of play that you do not like or are not comfortable with (e.g. clay, sand, water, music, puppets, woodworking)? Is this activity done in your class? If it is not done or done infrequently, what are the children missing?

Would it be possible to diversify or enrich play opportunities in your class?

2D. INTERVENTION: The roles of the teacher in play

Teachers contribute to play in different ways, indirectly (e.g. planning, materials) and directly (stepping in). Some interventions contribute to the play and some bring it to a halt.

Scenario 2.D. 1:

Ask the participants to give an example of:

A supportive intervention in play	An intrusive intervention in play
<ul style="list-style-type: none">- Noticing a drop of interest in the house area, the teacher brings in empty pizza boxes to suggest a possible orientation of the play (in the video).- Playing within the script: the teacher contributes, but the child retains the lead.- Observing the children's interest, the teacher creates a new play centre with them (e.g. a child came in with a cast and the children are asking questions; would they like to create a hospital?).- The teacher brings the children on a site visit (e.g. a construction site) to stimulate more complex block-playing.- The teacher helps a child to be included in the play ("Do you need a receptionist? Maybe X could help you").	<ul style="list-style-type: none">- Instruction that does not support the integrity of play (e.g. not paying attention to the script: the adult comments on the nice castle the children have built when the children had been talking of a cabin in the woods).- Comments or questions based on a preconceived lesson plan.- Taking over the initiative from the children.

This may be done on a large sheet separated into two columns. Each person writes an example of each situation. It may also be done in small groups, with each group putting its examples on the wall for all to see. Ideally, this material may be transcribed and sent to the participants after the session, as a reminder.

At the start, give an example only if necessary. The list included here may be given out at the end of the exercise.

Note: There may be a discussion on interrupting play. Interrupting play is sometimes necessary for reasons of safety, and would then be considered a positive behaviour. But often play can just be redirected. If play needs to be interrupted, one must try to identify the origin of the problem: is it the space or the materials (it is not always the child!)? What need does this play fulfill? Can this need be accommodated some other way?



3. Viewing the video

3.A. Goals of the video

Just before showing the video, the presenter underlines its goals (see section above).

3.B. What to focus on

Scenario 3.B.1

Ask the participants to note the roles the different teachers in the video **say** they play. The examples viewed may be linked to the different categories of roles listed below (use Appendix 5).

Note: Roles are borrowed and adapted from *The Play's the Thing* (Jones and Reynolds, 1992).

Stage manager:

- Preparing the environment
- Creating order (so that things stand out and are inviting to the children)
- Providing materials
- Giving time

Mediator:

- Helping in conflict resolution
- Complicating play to keep it safe
- Problem solving to maintain play

Player:

- Playing with the children, while letting them lead

Scribe:

- Representing children's play
- Stimulating writing as play and communication

Assessor and communicator:

- Knowing the child
- Communicating to children about their learning through play
- Communicating to parents about children's learning through play

Planner:

- Preparing the scene for an emergent curriculum
- Looking at the environment
- Naming children's play scripts
- Introducing new themes

- Planning for literacy as a play script

- Debriefing: conversations with the children and adults and personal reflection on what happened so as to adapt the curriculum; then replaying and continuing observation and planning

4. After viewing the video

Scenario 4.1

Open discussion of the video. Do you agree or disagree with some of the statements (e.g. “It is better not to intervene in play”)?

Scenario 4.2

How did the teachers foster children’s play?

Scenario 4.3

Group discussion

How do **you** foster play in your environment (indoors and outdoors)? Are there new roles that you could take on? How does play help you assess children’s learning and interests and plan the curriculum?

How do you document the play (e.g. pictures, audio recording, videotape, portfolios, anecdotal notes, exhibits)? How do you communicate the learning through play to parents, to children (e.g. Internet, portfolios, documentation panels, journals)?

5. Taking it home: Ways to study play in the classroom

OBSERVING PLAY

Observation during play time permits attention to the uniqueness of each child (Jones and Reynolds, p. 76).

5.A The following questions may guide your observations (based on Frost, 1992):

5.A.1 Observing /assessing the setting

The teacher’s contribution to play always begins with the physical environment (Jones and Reynolds, p. 55).

- Is the space (indoor and outdoor) arranged to allow a free flow from one place to another?
- Is the play area too open (e.g. for playing house) or too closed? Is it crowded?
- Are there enough play choices?
- What are the children’s favourite spaces and materials?
- Are there unused spaces? Find out why (ask the children). What could be added or taken away to make the space more attractive?
- Are some play activities conflicting with others?
- Are play periods long enough to engage in serious play? Does the daily schedule need to be revised?

5.B. Looking at the materials

- Are the materials provided in sufficient quantity and variety?
- Do they offer a challenge to the children?
- Are they varied in complexity (from simple to super-complex). Super-complex materials (e.g. sand+water+tools) engage more children, for a longer period, and in more varied and creative ways (Kritchevsky and Prescott, 1995, in Mauffette, 1998).
- Are there natural elements?
- Do the materials reflect children's lives (type of home, family, culture)?

5.C. Looking at the group (Mauffette, 1998; Frost, 1992)

- What are the children doing? What proportion of the play is motor play, construction play?
- How long do they play in one space? Where do they play the longest? Look at the level of involvement and interest. (Are they merely toying with the materials or engrossed in complex cooperative play?)
- Is the play always the same or is it varied? Are there unpredicted play behaviours (positive and negative)?
- Based on what you have seen (e.g. their interests, capabilities, understanding), what experiences could you provide to extend their play? Could this generate a project?
- How are the children playing: individually, in twos, in small or large groups, by gender?
- Are girls or boys using certain specific, different places?
- How often do you have to restrict or redirect unwanted behaviours? Are there trouble spots?

5.D. Observing individual children

- Is the play setting right for this child?
- What seems to attract the child and lead to play? (*Related to Competency 2*)
- Do the play materials reflect the child's interests, family (type of family, living arrangement, culture)?
- Does the child play alone or with others? (*Competency 3*)
- What are the signs of social development (e.g. taking turns, sharing materials, verbal interaction, conflict resolution)? (*Competencies 3 and 4*)
- Does the child get along with others (cooperate, ask questions, volunteer information, dominate, etc.)? (*Competencies 3 and 4*)
- Is the child a leader or a follower? (*Competencies 2 and 3*)
- How does the child join in a group already in play mode? (*Competencies 2 and 3*)
- Does the child initiate and carry on a pretend sequence with other children? (*Competencies 3 and 6*)
- Is rapport established between the adult (you) and the child? (*Competencies 2 and 3*)
- In what type of cognitive play (e.g. functional, dramatic, construction, organized games) does the child engage? Does the child participate in different types of play? Is he or she willing to try new types of play? What types of play does he or she engage in predominantly? (*Competencies 1, 5 and 6*)
- Are the social and cognitive levels of play appropriate for the child's age? (*Competencies 3 and 5*)
- How extensive were the non-play activities (transition, onlooking, unoccupied) or aggressive behaviours? (*Competencies 2, 5 and 6*)
- Does the play evolve, i.e. become more elaborate over time?
- How does the child reuse new knowledge, strategies or techniques acquired in other activities? (*Competency 5*)



- Are pretend activities varied (object transformation, role assumptions) and verbally complex? *(Competencies 4 and 5)*
- Does the child play with a wide range of play materials? *(Competency 5)*
- Can you assess how this child learns through his or her play behaviours? *(Competency 5)*
- What is the content of the play (what themes does the child play out)? Are violence or family conflicts reflected in the play? Can you identify a concern (or interest) on the part of the child? *(Competencies 2, 3 and 5)*
- Does the child persist in play? Is the child's attention fleeting and characterized by brief, shallow play episodes or does the child persist in play roles over a period of time? *(Competency 6)*
- How does the child choose an activity, organize the materials, structure his or her actions, present his or her achievements and assess his or her learnings. *(Competency 6)*
- Does the child take proper care of materials and put them away after use? *(Competency 6)*
- Does the child depend on the teacher for instructions, modelling, involvement in play reinforcement or support? *(Competencies 2 and 6)*

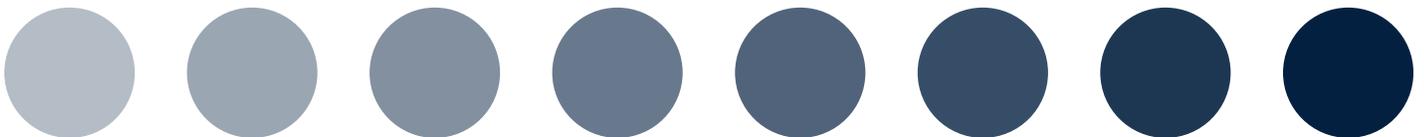
5.E. Anecdotal accounts of play

Frost recommends that children be observed individually during free play (indoor or outdoors) while recording anecdotes from each category (p. 94, Table 4.4).

Name

Date and Location (added by teacher)

1. Is the play setting appropriate?
 2. Are the play materials and equipment appropriate?
 3. Describe the child's social play.
 4. Describe the child's cognitive play.
 5. Identify the symbolic content of the play.
 6. Describe the child's interaction with peers and adults.
 7. Does the child persist in play?
-



You may also make a **summary of your observations** in a table like the following
 (adapted from J.L. Frost and S.C. Wortham, 1980, 1990, *Play and Playscapes*, Delmar Publishers, 1992):

COGNITIVE PLAY

		Functional (motor)	Symbolic (dramatic)	Construction	Games with rules (organized games)
S O C I A L P L A Y	A L O N E				
	P A R A L L E L				
	G R O U P				

Other behaviours:

Transition	Onlooking	Unoccupied	Aggression

Frost and Wortham conclude: "This information will be invaluable for assessing progress, diagnosing needs, reporting to parents, making program decisions and understanding the nature of children and play." We add that observing children at play helps us identify their interests, gives us leads to possible projects and allows us to redirect our interventions.

3

PRESENTATION FOR PARENTS

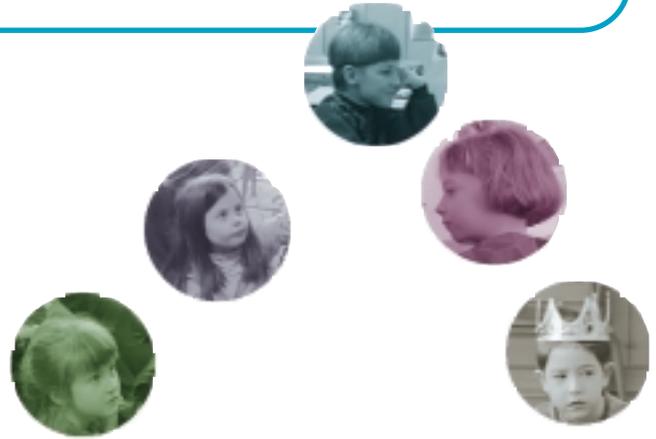
Introduction

Parents, who are the first educators of their children, are indispensable allies in achieving the educational mission of the school.

The Québec Preschool Education Program acknowledges the importance of parents' impact on the learning of children in and out of school. It also recognizes the importance of play in children's lives and learning:

“The program enables 4- and 5-year-olds to develop psychomotor, affective, social, language, cognitive and methodological competencies related to self-knowledge, life in society and communication. With the support of the teacher, children take part in learning drawn **from their world of play** and their life experiences and begin to play the role of students, active and capable of thinking” (Québec Education Program, p. 52).

“Through their play and spontaneous activities, children express themselves, experiment, construct their learnings, structure their thoughts and develop their world-view. They learn to be themselves, to interact with others and to solve problems. They develop their imagination and creativity. Spontaneous activity and play are their way of mastering reality; this justifies giving play a central place in preschool education and organizing the space and time accordingly” (Québec Education Program, p. 52).



Goals of the video

The video *Learning Through Play* should help parents:

- Appreciate children's play and identify the learning going on.
- Recognize the value of play and its relevance in a kindergarten classroom and at home.
- Pay attention to play, observe play and use it as a tool to know their children.
- Examine their own attitudes regarding play.
- Reflect on their contribution to children's play.
- Think of ways to enrich the play of children in their daily lives (at home and school).
- Be more aware of their roles in play.

I. WARMING UP BEFORE VIEWING THE VIDEO.

Once the presenter (teacher) and participants have introduced themselves, ask participants (in twos, subgroups or the group as a whole) to discuss the following questions:

What was your favourite game when you were small, and why?

What games do your children play at home? (Tally and make a graph of the number of children who play a certain type of game.)

What do you think about play in kindergarten?

2. PLAYING

Have parents play with some of the materials (*use Scenarios A.2, 3 or 4*).

3. WHAT DO CHILDREN LEARN THROUGH PLAY?

Write the parents' ideas on the board.

Use *Appendix 2 or 3 or both* (on acetate or paper) to identify commonalities in what was identified, in addition to possible additional learning.

Note: Participants will probably be surprised by how rich these activities are.

4. VIEWING THE VIDEO:

Ask participants to jot down words or expressions that capture their attention.

5. AFTER VIEWING THE VIDEO

Have parents share their reactions to the video.

If the presenter is the teacher of the parents' children, he or she may want to underline the similarities (and differences) of his or her class organization and activities and what is shown in the video (examples of learning through play by the children, teacher's initiatives to foster this and the role parents may play—by contributing materials, for example—in enriching the class play environment.

Parents and teacher may want to discuss how they are going to communicate with each other about the play and learning of the children.

In conclusion, the presenter gives parents the following “homework.”

6. AT HOME

Ask parents to observe their children at play, while thinking about the following questions:

What can you learn about your children by watching them play?

What can you do to enhance or vary your children's play and learning?

How can I share with the child what he or she is learning through play?

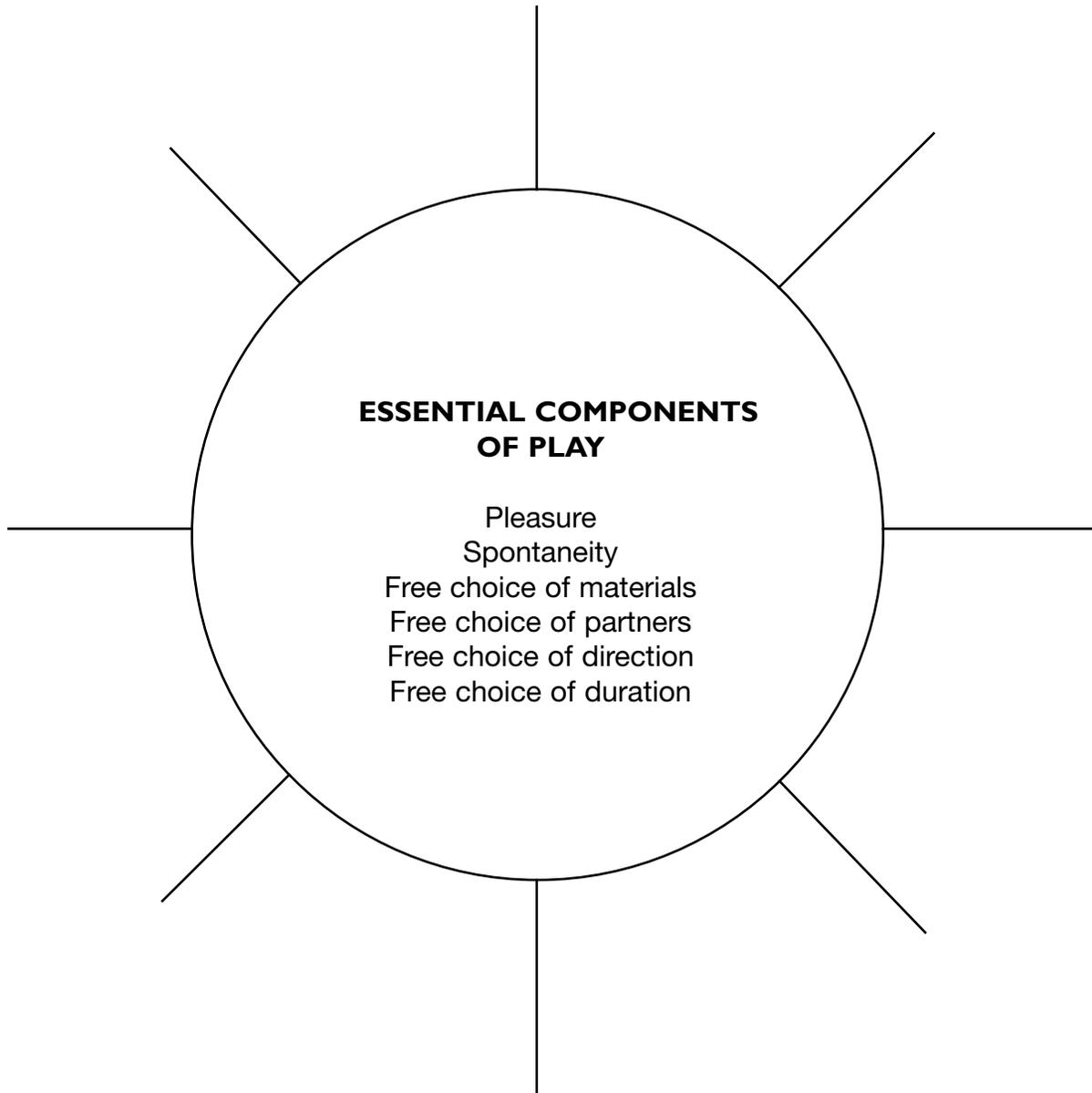
How can I show that I value the play activities my child does in school and the learning achieved through them?

APPENDICES



Appendix I

PLAY



DEVELOPMENTAL OUTCOMES

Potential Contribution of Block Play to the Kindergarten Program*
in relation to the development of the competencies targeted by the
Québec Preschool Education Program

Please note:

This list of possible outcomes of play with blocks is not exhaustive. It is meant to help the reader appreciate the richness of a common activity in kindergarten programs, and to demonstrate the cross-curricular nature of this activity and its powerful contribution to the mastering of all the competencies of the program.

Competency 1: To perform sensorimotor actions effectively in different contexts

- Fine motor/ gross motor (if large hollow blocks are used)
- Laterality
- Dissociation
- Dexterity, precision
- Eye-hand coordination
- Visual perception
- Tactile stimulation (texture)
- Position of objects in space

Competency 2: To affirm his/her personality

- Feeling of competence
- Expression of interests
- Self-confidence
- Autonomy
- Initiative
- Aesthetic pleasure

Competency 3: To interact harmoniously with others

- Cooperation: e.g. deciding what to do, agreeing on roles, sharing materials
- Conflict resolution
- Respect for others' work

Competency 4: To communicate using the resources of language

- Planning the project together
- Questions about concepts
- Exchange of ideas and solutions
- Name of the building
- Stories about the building
- Writing signs

Competency 5: To construct his/her understanding of the world

By manipulating materials and through discussion, children are introduced to different subject areas and concepts.

Art

- Patterns
- Symmetry
- Balance
- Colours (when coloured blocks are used)

Mathematics

- **Space:**
 - Euclidian geometry:
 - Shapes (e.g. triangles)
 - Lines
 - Planes (block faces)
 - Weight
 - Height
 - Length
 - Width
 - Depth
 - Measurement
 - Volume
 - Area
 - Symmetry
- **Topology:**
 - Proximity
 - Order (seriation)
 - Enclosure (inside and out)
 - Continuous or discrete
 - Ratio/scale
 - Shape of shadows
- **Projective geometry (geometry of viewpoints):**
 - Perspectives
 - Near, far
- **Other mathematical concepts and abilities**
 - Number (how many blocks were used)
 - Fractions
 - Adding
 - Subtracting
 - Inequality (more than, less than) and equality (same as)
 - Comparing
 - Classifying

Science and Technology

- Trial and error
- Predicting, inductive thinking
- Discovering
- Hypothesis (what if?)
- Gravity
- Stability
- Balance
- Weight
- Systems
- Interaction of forces
- Properties of matter
- Inclined planes, speed

Social Sciences

- People at work
- Interdependence of people
- Symbolic representation of experience

Representation Abilities

- Representing the building (before or after construction)
- Mapping

Competency 6: To complete an activity or project

- Planning the activity or project
- Perseverance, tenacity in carrying out the activity or project
- Putting away materials
- Presenting the activity or project; describing what happened, how things were done, difficulties encountered and learnings acquired.
- Expressing degree of satisfaction

* Adapted from: "Potential Contribution of Blocks for Early Childhood Curriculum," *The Block Book*, Elizabeth S. Hirsh, editor, NAEYC# 132, Washington, D.C., Revised edition, 1984.

Appendix 3

PLAY DOUGH (modelling clay)

Potential Contribution of Play Dough to the Kindergarten Program in relation to the development of the desired competencies of the Québec Preschool Education Program

Please note:

This list of possible outcomes of play with play dough is not exhaustive. It is meant to help the reader appreciate the richness of a common activity in kindergarten programs, and to demonstrate the cross-curricular nature of this activity and its powerful contribution to the mastering of all the competencies of the program.

Competency 1: To perform sensorimotor actions effectively in different contexts

Knowing their body:

- increasing their awareness of body parts and their relationship, through their representations of people
- developing their senses:
 - touch: cold, hot, hard, soft, smooth, rough, slippery, sticky, etc.
 - sight: colour, shapes, shiny, dull, etc.
 - smell: some brands are perfumed or we can add odours to home-made dough; clay itself has an odour
- coordination and dissociation
- fine-motor skills development: using tools and materials; improving their dexterity: pressing, pinching, pounding, poking, cutting, pulling, squashing, squeezing, stretching, rolling, imprinting, drawing, etc.; using different parts of their hands (knuckles); developing strength in their hands

Competency 2: To affirm his/her personality

- being aware of his or her impressions, likes and dislikes (e.g. “I don’t like it when it’s slimy.”)
- recognizing his or her feelings
- self-confidence and self-esteem
- sense of power and control over the environment (being able to change it)
- expressing himself or herself and creating
- talking
- emotional well-being: emotional discharge, letting off steam, doing and undoing (destroying), hitting, the calming effect of hands-on play

Competency 3: To interact harmoniously with others

Showing interest in others’ work, ideas and feelings

- identifying similarities and respecting differences
(comparing his or her work and techniques with those of others)
- showing interest in social and cultural characteristics of the environment
(sharing experiences with others)

Collaborating:

- making contact with others
- communicating
- accepting other people's needs (e.g. sharing materials, space)

Participating in the group:

- cooperating with other children (lending materials, participating in group projects): asking for, accepting and offering help; respecting other children's work

Competency 4: To communicate using the resources of language

By playing and talking with other children and the teacher, the child gathers pertinent information about the materials: (characteristics of play dough), work processes (how to) and representations (what a bird looks like), in addition to other information (their ways of doing things, their lives).

In discussion about the representations and about life, and by asking questions and making requests (asking for materials, help), the child:

- improves his or her communication abilities (understanding and expression)
- listens to the message of someone talking, respects the content of the conversation, tells his or her story (respects the logic of the story and the chronology—beginning, middle and end), describes a situation, asks questions, clarifies, asserts opinions and extends his or her vocabulary (naming tools, actions, representations, feelings, associations)
- develops the different uses of language: instrumental (“I want a bigger piece of this colour.”); regulatory (“Do this—you’ll see, it will hold.”); interactive (“What you did is nice.”); personal (“My dog...”); heuristic (“Why...?”); imaginative (“Okay, the dinosaur would be...”); and representational (“What does a dinosaur look like?”)

By playing and talking with the teacher, the child:

- improves vocabulary, articulation and grammar (e.g. enrichment, alternative expressions)
- increases his or her awareness of the written word: looking at books in relation to the representation he or she is working on (e.g. books on planes or farms, books with pictures of play dough scenes), spontaneously recognizing a letter (“Oh! I made an O! Look, this looks like a V!”)

Competency 5: To construct his/her understanding of the world

By manipulating the material and through discussion, the child is introduced to different subject areas and concepts.

○ Art

The child discovers:

Colours

Textures

Techniques

Characteristics of the material (e.g. certain doughs can be worked vertically, others cannot.)

Problem solving (representing all sides of an object)

Aesthetic satisfaction

Divergent thinking, fluidity

Balance

Symmetry/asymmetry
Positive and negative (holes) shape
Contrast, rhythm

○ **Mathematics**

Three-dimensional shapes (spheres, cylinders, etc.)
Conservation of quantity
Addition (adding dough)
Subtraction (taking some away)
Dividing, fractions (splitting in two)
Length (how long my snake is)
Width
Thickness
Depth/shalowness
Surfaces (when the dough is flattened)
Comparing dimensions and quantities (measuring): equal, more, less
Number (especially if the dough is used in the house corner (“I made three sausages, one for each of you.”)
Perspective, angles of vision (front, back, side, 360 degrees)
Lines (straight and curved)
Continuous or discrete
Juxtaposition (putting side by side), superposition (stacking)
In, out, under, over, beside, around (spatial relationships)
Classifying by one or more characteristics of the material: e.g. lining up little balls of dough from smallest to largest
Awareness of time (“This took a long time.”)
Problem solving (“This is too heavy, it won’t hold.”)
Balance
Symmetry/asymmetry

○ **Science**

Imprinting objects from nature (fossils, leaves, etc.)
Representing animals, insects, birds, etc.
Discovering evaporation (the dough dries) and absorption (clay and water)

○ **Social Sciences**

The child develops an awareness of the world around him or her, and represents the environment: e.g. parent with a baby carriage, farm, car, people with different trades, different houses.

The child becomes aware of geography: “I made a mountain, a lake, a river, a volcano.”

The child also acts on the environment:

○ Explores the environment:

- Observes facts, objects, modification of materials (cause-effect: when the dough is warmer, it softens); searches for explanations (“Why is the dough all cracked and dry?” “Why is this falling?”)
- Wonders about things and looks for answers (“How can I build a plane?”)
- Manipulates the materials (making an imprint) and tools

- Makes and tests predictions (“Maybe if I put more at the bottom, it will hold.”)
 - Makes trials
 - Makes choices
 - Communicates his or her experience and acquired learnings, describes his or her methods (“If you put more at the bottom, it will hold.”)
- Uses his or her creativity: uses materials in original ways, represents his or her ideas.

Competency 6: To complete an activity or project

- Perseveres or is easily discouraged (“I can’t do this!”)
- Organizes his or her time and space, selects the necessary tools, regulates his or her activity according to the resources available (e.g. quantity of materials), develops working procedures

Note 1: If the play dough is prepared by or with the children, then a whole other set of potential learnings is added (closely related to cooking activities).

○ **Mathematics**

Volume (size of the bowl)

Quantity (of flour, etc.)

Sequence (put this in before that, then...)

○ **Science**

Experimentation (number of drops of food colouring and resulting colour), synthesis, transformation of matter

○ Literacy: following the recipe (recognition of the symbols, linking spoken and written words to pictures and materials)

○ Visual and auditory memory

○ Fine motor development: dissociation of the wrist when mixing, preparing them for writing)

○ Etc.

Note 2

What is learned will depend on how the play dough is used by the children:

- Using the play dough as a printing tool (with paint)
- Using the play dough to secure sculptures and constructions (to hold a stop sign in the blocks corner) or in combination with other materials (pipe-cleaners, corrugated cardboard, etc.), thus adding potential learning related to building
- Using the flattened dough as a drawing surface and drawing with an instrument (e.g. a stick), adding potential learning related to drawing
- Using the flattened dough to imprint objects: recognizing which object (and part of that object) has left a trace, leading to deductions concerning shape, perspective and a high level of abstraction

Note 3: Even the way the materials are distributed will determine what is learned. The following situations provide very different experiences for the children:

- The play dough is handed out to the children: each child gets a small amount.
- The play dough is handed out to the children: each child gets a large amount.
- A very large clump is set on the table for a group.
- The children are responsible for getting the materials.
- The children are allowed to use the dough only in a special workshop.
- The children are allowed to use the dough in different corners.

Note 4:

If you are working with **clay**, the possible outcomes listed for play dough will apply, plus a few more:

- Absorption and degree of saturation are more obvious.
- Problems of adhesiveness are more acute.
- Drying time varies (with heat, exposure).
- Working with clay makes it possible to revisit a work (working and drying, or firing and painting).
- With large quantities children will make mountains, dig tunnels.
- The colours (grey, brown, reddish) and textures of clay are different.
- Clay has specific technical requirements because it dries (“Why has it cracked? It’s drying too fast, it needs a damp cloth.”), and it demands specific skills (different ways of joining pieces).
- Cultural awareness: clay has always been used, and in all countries; children may be exposed to art works and pictures of artifacts and works.
- Discovering where clay comes from is also part of the learning.

CONCLUSION

Modelling clay is one of the many languages of the child. While the child is working with play dough or clay, we can listen to him or her carefully (even taping the monologue, song or conversation) and observe him or her so as to identify competencies, abilities, knowledge, strategies, interests and preoccupations. Analyzing his or her processes, comments and results will help us identify emerging concepts and decide on what experiences to offer next and how to intervene.

Appendix 4

GAMES WITH BLANKETS OR SHEETS (a few ideas that participants have suggested)

Motor

Identifying objects hidden under the blanket
Using the blanket to bounce balls off other objects (as with a parachute)
Using it as a hammock (rocking someone)
Twisting it into a skipping rope
Pulling a partner sitting on the blanket
Running and making it fly
Passing under or over the blanket
Throwing objects into the blanket
Playing tug of war
Cooperative game: we are a giant turtle (everyone underneath), a caterpillar (one behind the other)
Making a slide for balls
Trying to step on it
With two blankets: throwing a beach ball to one another

Symbolic

Having a picnic on the blanket
It's a cape (for Batman, a prince, a queen), or a veil (wedding scenario).
Hiding behind it and playing with puppets
Camping (the blanket is a sleeping bag)
There's a storm, strong winds (together we shake the blanket); the wind goes down (we shake more softly).
Holding it up in the air: it's a bridge ("London bridge is falling down....")

Construction

Making a tent, a house, a puppet theatre
Making a tunnel (with chairs)

Games with rules

Identifying objects under the blanket (each takes a turn, can't look)
Identifying who is under the blanket
Singing or using music: skipping (hopping, jumping on one foot, etc.); when the music stops, everyone runs and sits on the blanket.

Etc.

Appendix 5

ROLES TEACHERS PLAY IN CHILDREN'S PLAY

Role	Teacher's action	Example
Stage manager		
Mediator		
Player		
Scribe		
Assessor and Communicator		
Planner		

Note: These roles are from Jones and Reynolds, 1992.

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