Like a mirror, documentation reflects our practice and our theory. Like a beacon, it lights the winding path of investigation. Documentation allows us to look at children’s thinking through their representation, conversation and play. In "The Hundred Languages of Children" exhibit and in documentation from Reggio Emilia, we see wonderful moments in children’s investigations. What we don’t see is the process behind the finished documents. That process can be a tremendous gift of discovery and understanding of our own practice. What are we, as teachers, doing and why? What are the children learning? If we want to learn more from documenting, we must engage in examining and extending the parameters of documentation. We must consider a deeper translation of the term documentation.
For Whom Do We Document?

For children
Children who see their own work and thinking documented may be inspired to revisit their experiences, to go deeper into their ideas. Through our documentation of their play, conversation, and representation, children understand that teachers value their work. This, too, may inspire them to continue their efforts. Children who were not originally engaged in an investigation may find themselves drawn in when they see its documentation displayed.

A few years ago, a group of children in my class became interested in disguising their own images. They made masks for themselves (using life-size photos and acetate) that, when worn, showed some of their true features but disguised others. They “painted” over their images on the computer. They traced photographs of their faces at the light table and used various media to turn themselves into something else. Initially, some of the children were not able to disguise themselves at all. They became uncomfortable whenever they saw themselves as someone or something else. They could dress up during dramatic play as long as they did not look in the mirror. We documented and displayed the disguise play of all the children. Months later, we noticed that the children who were once uneasy with disguise began to call up their portraits on the computer and completely alter their images. They began to trace and disguise their portraits, and play with the parameters of identity in ways they could not earlier in the year. I don’t believe that this would have happened without the presence of the documentation of the children’s earlier work, which served as reminder and inspiration. In this way and in others, a documented experience can become part of the culture of the classroom for all.

For families
Documentation can become more than just an exchange of information with parents and families. In a real sense, documentation makes it possible to form a community of learners with all the protago-

nists of the learning story: children, teachers, families and community. It can bring the members of the learning community into the school, and can create a bridge between the school and its families. I have found that through documentation, parents’ investment in the program grows. Documentation helps parents see and discuss their children in the context of the group, not in isolation or in competition with the other children. Through documenting, we assure that no child is invisible and all adults in the community of learners come to know the children well. Sharing our documentation establishes a relationship of reciprocity with families, and an atmosphere in which all adults strive to know the child and support her learning as a team, teachers and parents together. The process of documentation feeds the collaborative effort between home and school.

For colleagues
Through documentation, we make children’s and teachers’ work public. Once made visible, the work can become an inspiration for dialogue and reflection, and the focus of professional development with colleagues. Not only do teachers learn from the documentation of others, but documentation can also be an essential tool for communicating with administrators, regardless of the context. It makes children’s learning explicit. It is easier for teachers to assume accountability and justify expenditures when they understand what children are learning and can communicate it clearly to administrators.

For ourselves as teachers
Documentation makes more than the children’s learning transparent. It gives us a window into our own thinking and process as teachers. It leads us to observe well. The process of documenting helps us see children’s learning beyond our intentions. It allows us to study and learn about children’s thinking and knowing. When we have tangible documentation of classroom experiences in hand, we can analyze our observations for strands of children’s theories and interests, and that enables us to plan for future provocations.
The Documentation Cycle

- Teachers Observe Children's Play and Representation
- Teachers Provide Provocation
- Teachers Document
- Teachers Make Hypotheses About Children's Intent
- Documentation


We might think about documentation as a cycle that begins when teachers observe and document children's play, representation and conversation within a rich and provocative environment. We can then study the data in order to make hypotheses about the children's intent. At that point, we may decide that we need to observe more and think about the children's work in a different way. But eventually, in order to test the validity of our hypotheses, in order to discover the children's true intentions, and support continued interest and exploration, we will want to provide provocations to learn about the direction of their intent and to inspire the children to go deeper into their idea. We may ask ourselves, "What's behind the children's words?" "What about this particular idea has caught their interest so?" We may say to ourselves, "I think this is what they're thinking about," or "I think this is what's inciting their passion and setting their intellects on fire." Our guesses may not always be right. Only by observing children's responses to our provocations can we check our hypotheses. The cycle starts all over again as children respond to a new provocation (or don't!). A documentation panel is only the ultimate interpretation of an investigation. Understanding the process behind the panel is the true gift of documentation.

In the beginning

The early stages of documentation involve gathering data and compiling it into some form of temporary documentation, such as notebooks, temporary wall panels or daily logs, made accessible to children, teachers, and parents. But the process begins even before that. The first step is to set up an environment rich enough to sustain meaningful interaction: children with children, children with the environment, children with adults, adults with adults. For me, this means:

- an array of engaging, flexible materials that are accessible and ordered, from which children may choose;
- an environment that provides places for private reflection and encourages interaction;
- an environment that supports collaboration among all the members of the learning community;
- an environment that is transformable by the children in many ways with many possibilities;
- opportunities for children to learn many media and represent in many languages;
- opportunities for surprise, joy and investigation.

With an environment that encourages rich interaction, we can begin to document children's play, conversations and representation, their process and their thinking.
Adapted from log entry, November 5, 1998

Yesterday, the children noticed a "rainbow" on the floor (created by the beveled platter we hung in the window), appearing and vanishing repeatedly. They marveled in the phenomenon but did not seem to wonder why it was happening. Today, however, Janie, Charlotte, and Kristen recognized the same rainbow on the floor, intrigued now that the rainbow was not disappearing. They attempted to make it disappear by covering the rainbow with their bodies. Then the rainbow appeared on them. They tried covering the rainbow with large, sheer, colored cloths as well as some opaque ones. Still the rainbow "came through" onto the cloths.

The children heaped dress-up clothes on top of the cloths. Still the rainbow did not disappear. Kelsey thought perhaps Janie could carry the rainbow away on the clothes that covered her. She said, "Roll up in it and walk away." Janie did, but she left the rainbow on the floor.

JANIE: "But how can we get it off? I need some help!"

Kelsey went to get help. Charlotte joined the group and, later, Kristen. The children repeated their earlier process, covering the rainbow with Charlotte, and Charlotte with layers and layers of cloth.

Finally Kristen held up a thick white coat and said, "This thing is more heavier," wondering, I suppose, if a heavy, opaque object would hide the rainbow better than the filmy cloths they’d used so far.

When Kristen put the white coat on the pile, however, the rainbow appeared even brighter.

JANIE: "Aaugh!"

KRISTEN: "If you don’t want the rainbow, you have to take that thing off."

And the investigation ended for a time, with gales of laughter.

Alise Shafer [Evergreen Community School, Santa Monica] and George Forman [University of Massachusetts, Amherst] have written and presented about the potential of "ordinary moments with extraordinary possibilities" in children’s lives. The rainbow exploration was an ordinary moment. Studying my documentation of that moment gave me a window into the children’s theories about rainbows, their approach to solving a problem (cumulative theory – the more coats the better), collaboration (going for help, for example), expectation and causality (if the rainbow was disappearing yesterday, why is it not today?). It is through documentation that we are able to perceive ordinary moments as extraordinary. You never know when what seems to be an ordinary event will prove to be a seed of something much bigger.

We document, and we study the documentation. What are we looking for?

Here are some questions to keep in mind as you observe, document and study documentation:

What is the child trying to do, test, figure out or represent?

What is her intent?

What is her theory?

What is being learned here?

We are looking for thinking, passion, joy, confusion, persistence, problem solving and intent.
Sometimes, if we are listening, present in the moment but also revisiting through documentation, we can know enough to support the seeds of Big Ideas in children’s play. Documentation supported the evolution of the following exploration of “danger” in several ways. In response to the documentation of their play, the children reflected on their experiences, thoughts and feelings during their play, and they were inspired to revisit the play and extend their ideas. I believe the depth of their play helped the children to gain the emotional strength necessary to venture further and deeper into an emotionally charged idea. When I reflected on the documentation of this investigation, I was able to hypothesize about what was most frightening to the children, the resources for protection they were able to pull around them, and how they may have been able to grow emotionally through the depth of their exploration.

Over a few days in October 1999, we observed the children repeatedly engaging in play in which they hid from vampires under those same transparent cloths that children in another year had used to test their rainbow theories. After a time, they added layers to their protection. They took flowers under the cloths with them and played music to repel the vampire because, they said, vampires would flee from all things beautiful, and flowers and music were beautiful. There seemed to be a tremendous fear of the vampire; in fact, the children were not able to embody the actual being of the vampire for any prolonged period of time. Yet they played this scenario over and over. We documented their play, and were impressed with the repetition and expansion of their exploration. What began as ordinary play ended up as a yearlong investigation of danger.

After we brought some documentation of their play to the children during a class meeting, they extended their play with a new fervor. They built a “safe house” for protection.

MEGAN: I think, I think, I think pretend vampires are good, but there’s no such thing as real ghosts or vampires. But dinosaurs were alive in the olden days when there was Halloween a long time ago, but not now because they’re all dead.

MRS. O-W: Because they’re all dead. Are you saying they are like vampires and ghosts in a way?

MEGAN: Yeah, but . . . because they’re all Halloween scary stuff. Ghosts, skeletons and robots and . . . dinosaurs are all Halloween stuff and I think the pretend vampire can come to visit any time that we invite him, and we can call and tell his mom if he’s bad or not.

MRS. O-W: What will the vampire’s mom do if he’s being bad?

CHILD: Punish him!
WHITNEY: Take him away!

ANN PEARMAN: Spank his bottom. Children laugh.

MRS. O-W: You like thinking about the vampire being punished, eh? Children agree.

WHITNEY: Not going outside in the night, the whole night and explore.

LIZZIE W.: And smell flowers in his face.

RANDALL: And put him in time out.

ELLEN: Put him in his room.

RANDALL: And . . . throw his toys away.

CHILD: Or give his wings away.

CHILD: I know! More flowers make the vampires scareder and scareder and scareder.

Months later, long after we'd thought they had lost interest in this topic, the children built a safe house almost identical to the one built in October. This time it was robbers whom the children conjured to be their danger. The children taped pretend money to the safe house so that the robbers would try to take the money, which would distract their attention away from the children. Then, reconsidering, they untaped the money, saying, "The robbers will snatch the money and run away, and they'll be far away before they see it's not real, and find out they're poorer and not richer!" Now they seem to be luring in the danger, not just protecting themselves from it.

The children took the flower-as-repellent concept they developed in October to a more symbolic level. Two children painted flowers for the safe house. One painting was to go in the safe house for the children to enjoy. The other was to go on the outside to ward off bad guys, who do not like flowers. The children also constructed a robber-trapping chair by rolling pieces of duct tape to be sticky on both sides and attaching it to the seat of the chair. One child volunteered to be the robber to test the effectiveness of the chair. It seemed that it had become safe enough to embody the danger.

As part of this episode of danger play, the children began to make plans for possible danger. At one point, they planned to spend the night in the safe house, apparently so that they could face the danger and test their protection. They made elaborate preparations and then asked me to be sure to leave the door unlocked that night.

WHITNEY: What if a mummy comes? They could wrap us up with their wrap stuff that's around them! We should make a monster book. They'll hear us talking about what's in it, and they'll think, "They're just like us."

ANN PEARMAN: And they'll leave us alone.

It seemed that the children had come to protect themselves in a symbolic way, while venturing more bravely into the danger.

Then, weeks later, the children started constructing signs of danger. They began by drawing and cutting out footprints, which they taped to the floor in a winding path. The footprints, and later, hand prints, became scarier and scarier. One child drew a large portrait of a "bad clown." Another declared that the bad clown "makes everybody sleep walk, and they think they're doing what they're supposed to be doing but they're really not." Now they were constructing the danger symbolically. There was no sign of protection during those times. One child taped scraps of paper to the floor and said, "It's the torn of their costumes . . . like ghostes," I suppose suggesting that it's all just pretend, and what's frightening is really the familiar in disguise.
Documentation Media

Photography

Photographs in documentation are most effective when they are the truest representation of children's thinking and dispositions toward investigations. With no experience as a photographer, I have had to learn over time what to photograph and how to recognize which photographs might communicate most effectively. They are the photos in which I see relationship, problem solving, process, intent, passion or thinking. In short, they are the photos that speak. In a way, photography had to become a language for me before my photographs could be more than just snapshots.

Tape recording

I have found that even if I am supremely present in a conversation, I still miss important kernels of what's been said. Sometimes I tape record a single child talking about her theory or idea as she works. I listen to these tape recordings, transcribe and study them, sometimes multiple times for different interpretations. The following is a transcript of a conversation the children in my class had right after a new baby sister was born. I recorded the conversation, transcribed it, and then studied it to hear the children's theories about babies in utero. Much later, I revisited the transcript and recognized provocations (indicated in bold letters) for conversations or experiences we had later.

Conversation about Janie's new baby sister
October 27, 1998

JANIE: Her name is Campbell Elizabeth, and her feet are that tiny, and her fingers are that tiny, and her toes are that tiny, and I'm going to see her again today.

MRS. O-W: You're going to see her again today . . . Did you hold her? Tell us about holding her.

JANIE: You have to hold her head, because babies can't sit up, and you have to hold their bottom.
MRS. O-W: You have to hold their bottom, too, because . . .

JANIE: Because they can’t sit up.

MRS. O-W: Was she all wrapped up?

JANIE: Mm hmm.

BRIANA: And she was in an egg.

MRS. O-W: Was she in an egg?

CHILDREN: No.

KELSEY: She was in her mama’s tummy.

MRS. O-W: She was in her mama’s tummy?

BRIANA: But the egg was in somebody’s mama’s tummy.

Mrs. O-W: You think she was in her mama’s tummy in an egg?

CHILDREN: No! Yes!

JANIE: She’s my baby, and I get to talk about it.

MRS. O-W: Janie, what do you think?

JANIE: It came in her stomach.

MRS. O-W: In an egg?

JANIE: No!

MRS. O-W: No egg. Just the baby. Kristen thinks there was an egg. Tell us, Kristen.

KRISTEN: I just think it.

KELSEY: Excuse me, but at a museum, I saw a little screen that was teaching someone about babies, and Susan and me went over to watch it, and it’s an egg in its mama’s tummy, and then it grows and grows, then it pops out of the egg and it’s in a little bag.

MRS. O-W: The baby’s in a little egg, and the egg grows and grows? And then it pops out, and then it’s in a bag?

KELSEY: Yeah. A bag that’s made out of rubber or something.

MRS. O-W: A rubber bag inside the mommy’s tummy, you think?

CHILDREN: No! Yes!

MRS. O-W: Elizabeth, tell us what you think.

ELIZABETH: Because I just think so.

MRS. O-W: You think what?

ELIZABETH (shaking her head): The rubber bag in the mommy’s tummy.

MRS. O-W: You don’t think there’s any rubber bag in the mommy’s tummy?

ELIZABETH: Because my mommy told me some about it, and she didn’t tell me that a rubber bag came out of the mommy’s tummy.

ELLIE: Well, I know when my mommy had a brother, well, it was in a rubber bag, and first it was an egg and then it grew bigger and bigger and then it was still a big egg, and then it popped, and then it came in a rubber bag.

JANIE: No.

KELSEY: It pops.

MARSHALL: That would scare the baby.

JANIE: The baby couldn’t breathe through the bag. I know a lot about babies.

MRS. O-W: You do know a lot about babies because you have one now, don’t you? What do you think, Briana?

BRIANA: Only dinosaurs can lay eggs.

CLAIRE: And birds.

MRS. O-W: So you don’t think there’s an egg inside the mommy?

BRIANA: No. And, um . . . if Janie’s mommy says there’s not an egg, then there’s not an egg, because Janie’s mommy doesn’t really have an egg. She doesn’t lay it.

KELSEY: Only birds do that, and dinosaurs.
CHARLOTTE: My neighbor had a baby, and she said that it wasn’t an egg or a bag.

MRS. O-W: What did she say there was?

CHARLOTTE: Just a baby plain.

ELLIE: Well, my baby brother came like on a plastic bag without a top, just for his bottom.

MRS. O-W: So you think only the bottom of the baby’s in the bag.

ELLIE: Yeah.

KELSEY: Ellie’s right.

KRISTEN: I think there is an egg.

MRS. O-W: You think there is an egg. And what happens to the egg?

KRISTEN: It stays until the baby gets born, but it pops soon enough before the baby comes out.

MARSHALL: I think the baby stays in the tummy but it’s plain, and it grows and grows, and the mommy’s tummy gets really fat, and then she goes to the hospital, and it comes out.

JANIE: She has to stay for three days . . . And she’s gonna come home tomorrow, and there’s not a plastic bag on her or a egg. She just came out plain, my mommy and daddy told me.

REBECCA: Ducks lay eggs, too.

ELLIE: Well, my mommy, well, she said that it comes in an egg, and then the baby grows and grows and grows, and then its arms grow, and then its legs, and then its head, and then he’s born.

This wasn’t the end of the conversation but you can see that there was a dialogue among the children, and their theories changed through their interaction with each other. So what do you do with this conversation once you have it transcribed? It can be really helpful to pull out the salient issues, what you guess the Big Ideas might be, as you interpret them. If you think this is an investigation that will interest the children or if you want to find out if they are interested, you can go back to the children and say, “Yesterday, we had this conversation about Jane’s baby and these were your theories. This is what you said. What do you think about this?” Often it will take three or four conversations before you can hear any inkling of the children’s intent.

Taking notes

It can be difficult to get a conversation down on paper as it is happening and note taking cannot really represent the praxis and emotion as well as photographs or video or even tape recording. Yet there are times when note taking is useful and perhaps even the best way for us to process what is happening before us. It also keeps us still in front of children, which, I believe, represents a particular presence and respect that other methods of documentation might not. There are many different ways to take notes in the classroom. Sometimes when watching a child draw, I’ll try to reconstruct her process and include her words as she works. I’ve reconstructed the process of building a block structure using my own drawings, the children’s words, and photographs of various stages of construction. It would not have been as meaningful had I just taken a photograph of the finished product or even of the block structure as it was going up. If I wanted to document the way the children took things down, put them up and tried different strategies, I had to take notes or use a video camera.

Parents have also participated in documenting children’s work. For example, one parent from my classroom documented a water works construction, using diagrams of the children’s attempts to get the water to flow a certain way, along with the children’s words about their thinking and photos of their effort. While trying to observe three or four children working together, it is particularly interesting to study group process by writing down the sequence of the conversation along with your own reflections.

Videography

Video is also useful in capturing the process of a learning experience. I have found video editing to be a time-consuming process and challenging to
display, but there are experiences that only video can capture with integrity. This is true of any situation in which praxis is key to understanding children’s intent. Video is also useful as documentation for children. It allows them to see themselves, their actions, and the exercise of their intent in a new way. (see George Forman’s article, ‘Instant Video Revisiting: The Video Camera as a Tool of the Mind’ for Young Children” in the online journal, Early Childhood Research and Practice, Vol. 1, No. 2)

Interpreting the Data

In order to make any permanent display of documentation, we have to choose which photos, notes, and transcripts to use. Those choices require interpretation of the data. What was the meaning of this encounter; this child’s representation, this entire investigation? I believe that one of the gifts of documentation is that it requires us to think about and interpret our observations in the classroom. It helps us to ask the questions: What is the children’s intent? What is the Big Idea? Where could we go? Where are the children going to go with this idea?

Documentation allows us to chart the path of an investigation both as it grows and when it’s over (two very different processes that will result in different insights). This can be done through the construction of webs. Once, we constructed a web as a yearlong investigation around “shelter” progressed. Keeping the web helped us interpret new developments in relation to what had gone on before and allowed us to project possibilities. Another time, I constructed an itinerary of an investigation around trees after the investigation was over, in order to think about where the provocations lay in the learning story.

Naming the Investigation

All documentation is interpretation. We choose what to photograph, which pieces of conversation to use, what to discard, and on what aspect of an investigation we will focus documentation. We interpret the children’s intent. Naming the investigation gives us a chance to go deeper in that interpretation. What about this small moment seems important in the context of the culture of this particular class at this particular time? How and why did these ideas develop and build among the children? Naming the investigation can be a powerful exercise.

Display

The display of documentation includes photographs, children’s words, children’s representations, artifacts, teachers’ reflections and interpretation. When considering how to display documentation, think about drawing in the eye. The organization of documentation is not necessarily sequential, but logical overall.

The Possibilities of Digital Documentation and Keeping a Daily Log

I construct daily logs on-line that include narrative, transcripts of conversations, photographs of children working, scanned images or photographs of children’s work, and quotations from children’s thinking. It would be wonderful to include video clips as well if you have the technology to do so. The logs document group process. I include classroom encounters and endeavors of import to the group. Sometimes I’ll include one child’s work when I suspect it may become a provocation for others or when it seems to be the child’s response to ideas of the group.

I have found that digital construction streamlines the process of compiling documentation, leaving more time for reflection and interpretation. Digital archiving is efficient and conserves precious space. In constructing the log, I compile the data into a cohesive narrative, add reflection where appropriate, publish to a web page and e-mail the link to interested parents. Parents can have access to documentation on a regular basis whether or not they are able to come to the classroom. I do keep printed copies in the classroom for parents to read and as temporary documentation for children to revisit the previous day’s experiences. I also use the printed copies with the children at times, as provocation, and I study them for strands of interest, patterns of passion and thinking, and in search of possibilities.
Some parents’ responses to the on-line daily log:

"I just wanted to let you know that your daily e-mail log is very much appreciated. It allows us to talk about very specific school things with L. at night and have much more meaningful conversations, it’s very easy to use, it helps me understand exactly how the children are developing, and how and what they are learning."

"Susie and I have enjoyed the log of activities. It allows us to connect to you, [your assistant], W., and her classmates in an innovative manner. The information creates a frame of reference that permits us to have more effective discussions with W. about what she is experiencing and learning in school..."

"Pam, I know a great deal of work goes into putting these logs together every day. I just want you to know that it is the highlight of my workday when I get an e-mail from you with that day’s log. Having a glimpse into L’s day puts a GIANORMOUS (to borrow one of L’s interesting word combinations) smile on my face. Thank you so much!"

One child’s response after she and her parents read the log together:

"Dear Mrs. Oken-Wright,
I like the e-mail you send us and I like the pictures with it. And I hope you get this good e-mail and I hope you like it as much as I like yours. I hope Lucky and Snowflake [the goslings we’d recently hatched] are doing very fine and can you please get Snowflake to be quiet. I hope you always have good weekends and I hope all your wishes come true. I will see you tomorrow at school.
Love, Randall"

Digital documentation pages

I think that the possibilities of digital documentation for layering in final documentation products (as opposed to daily logs, which are immediate and temporary documents) surpass those of wall panels. I am not suggesting we choose one over the other. In fact, it is much easier to construct physical wall panels when all the data are already on disk, ready to be printed, than to juggle mountains of photos, notes, and other paper. In a digital documentation panel, we can include related material such as what inspired an investigation or what happened after an investigation by layering it under the "home" page. For example, the first page of on-line documentation could be a like a photo journal of photographs, artifacts, children’s thinking and interpretation with links for those who want to go deeper. The links could lead to items such as a full transcript of a conversation, more detail through photographs, narrative and artifacts, and further reflection. Readers of a digital documentation page who want to know more could also link to an associated study or representation of the flow of negotiated learning.

Conclusion

We see ourselves, our thinking, and our process reflected as we live the process of documentation. Unlike a mirror’s reflection, however, which is temporal... gone as soon as we step away from the mirror, documentation leaves the image reflected behind for as long as we’ll have it, lighting the way along the path of negotiated learning.