# BUILDING ON LEARNER THINKING

## A FRAMEWORK FOR DATA-DRIVEN FORMATIVE ASSESSMENT IN INSTRUCTION

# AGENDA & ASSUMPTIONS

Getting Grounded – Affirmations for intentional teaching

The Framework

- collecting
- organizing data
- summarizing
- analyzing & synthesizing
- decision-making

Putting it into Practice

# THE INTENSTIONAL TEACHER

Intentional teachers gather data that are needed to guide instruction, ensuring that all children grow and learn.

# TRADE THIS FOR THAT

## This…

- Thick, data notebooks stocked with stale data
- Rigid, fixed lesson plans designed with imaginary students in mind
- Data-rich, information-poor classrooms whereby data is collected but never used.

## That…

- Organized notebooks with active/fresh data-sets provided by teachers & student
- Flexible lesson plans designed to meet the needs of YOUR students; in real time
- Data-rich, information- rich classrooms whereby data informs instruction

# LET'S GET ON THE SAME PAGE

## Formative Assessment

- Monitor student learning to provide ongoing feedback that can be used by teachers to improve their teaching and by students to improve their learning.

- Help students to identify their strengths & weaknesses & target areas that need work.

- Low stakes assessments

## Formative Assessment

*Formative Assessments are not the end of the teaching and learning process; they are the starting point.*

# THE FRAMEWORK

Six steps used to garner knowledge from raw data: (a) collecting and (b) organizing data; (c) summarizing, (d) analyzing, and (e) synthesizing the data into information to be used in (f) decision-making.

# COLLECTING DATA

## Use Guidelines & Checklists

- To focus observation

- To organize observational data into a manageable provide of the child's knowledge, skills & behavior

- To set reasonable expectations for children within a particular age/grade

- To ensure that all aspects of curriculum are addressed

# COLLECTING DATA

Make a plan

- Create a schedule or timeline for observing & assessing student progress

- Explore modes of meaningful observation for your class

- Create a structure for recording observations

## Class Meeting Observations

Class Meeting Observations          Date: _4/12/19_

Topic: _Discuss playground conflict/soccer_

NOTE:                                      P = participated somewhat
Nick & Victor had argument                 PA = participated actively
Nick requested the meeting                  Q = quiet

| Names | | Comments & Reflections |
|-------|---|------------------------|
| Alex | PA | V & N argued last year |
| Bonita | P | "this happens w/other kids too "suggested 2 play area |
| Carla | Q | |
| Collin | PA | |
| Devan | P | related personal stories |
| Erik | PA | Sug. N & V write apology ltrs. |
| Frank | ABS | Asked N & V questions for details |
| Horace | Q | |
| Ingrid | PA | |
| Kate | P | Volunteered as note taker |
| Lara | PA | "Nick, maybe you and Victor should play in different games" |
| Marcus | PA | |
| Nick | PA | Told conflict clearly – owned responsibility |
| Paul | Q | Seemed focused |
| Rajit | PA | |
| Roxanne | P | Begins all w/ well, I think...many comments not related |
| Shayna | P | |
| Trina | ABS | |
| Victor | P | Hesitant to speak much shrugs w/ ideas |

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Child: _Tony_          Date: _2/5/2019_          Time: _2:00 PM_

Observer: _Mrs. R_

| Behavior | Rating | | | |
|----------|--------|--------|-------|-----|
| | Always | Usually | Never | N/A |
| Makes contribution to discussion | | ✓ | | |
| Contributions relevant to topic | | | ✓ | |
| Looks at person speaking | ✓ | | | |
| Asks questions of other contributors | ✓ | | | |

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## Choice Record

Week of: _4/8 -12_

| NAMES | Blocks | Table Toys | Art | Computer | Dram. Play | Writing Center | Library |
|-------|--------|-----------|-----|----------|-----------|----------------|---------|
| Annie | I | | | II | III | | |
| Brian | | P I | PPP III | | | | II |
| Maya | II | | C I | I | | II | I |
| Shayguan | | | DCC III | I | II | | |
| Tyrell | III | LL II | | II | | | |

L = Lego     D = Draw     M = Math manip     P = Paint

P = Puzzles   C = Collage

**Math Activity**: _Spin a Step_                     Date: _12/18/18_

I = Independently

H = with help

N = no

| Names | Shows interest in the game | Follows rules | Plays cooperatively | Maintains focus | Counts accurately | Adds to solve problem |
|-------|------|------|------|------|------|------|
| Ben | I | H | H* | I | I | I |
| Elise | H | I | I | H | I | H* |
| George | N | H | H | N* | H | H |
| Patsy | I | I | I | I | H* | N* |

Notes:

-Ben didn't want to give up the spinner when it was the next person's turn Held it, kept spinning it put it on the floor

-Elise read numbers on spinner, moved correct # of spaces, needed cubes to do addition

-George wandered off between turns; said I hate this game when the spinner landed on a number he couldn't use

-Patsy needs practice with numbers to be successful w/game. Others gave her help

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Item: _House assignment_

Child: _Oliver_              Date: _5/13/2019_              Time: _9:30 AM_

Observer: _Mrs. K_          Setting: _Block area_

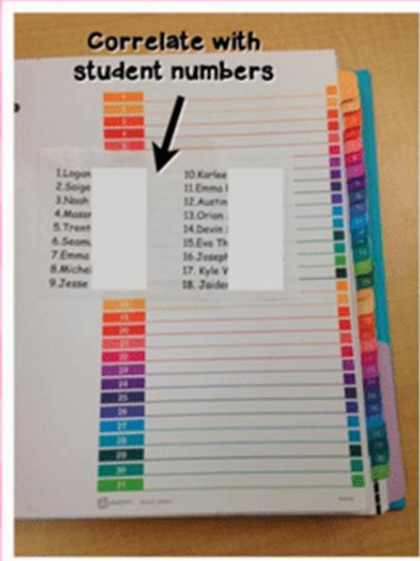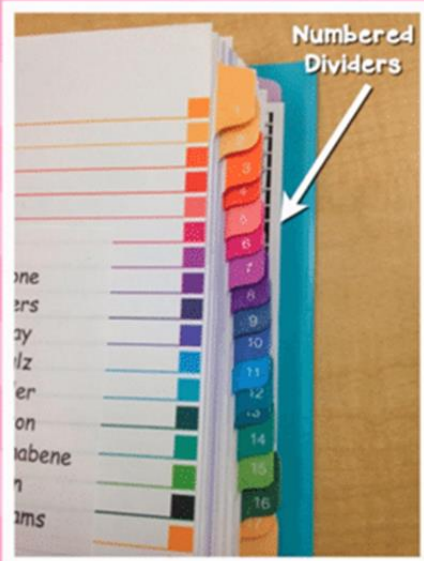Assignment: To build some kind of house for a family to live in.

-Built 5 of these in a row.

-Made wooden people talk

-Borrowed furniture from dollhouse

-Spent 20 minutes

-Worked alone
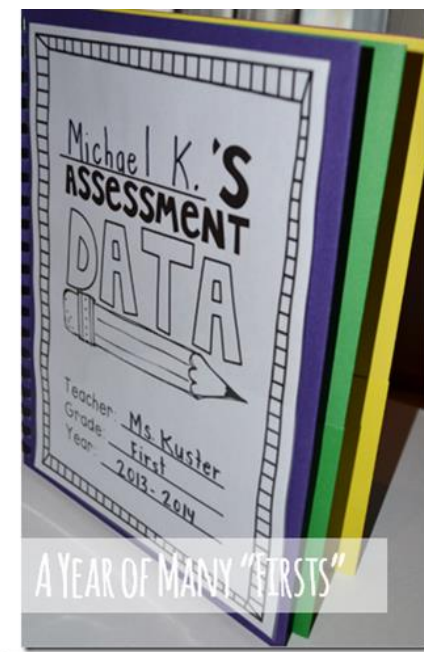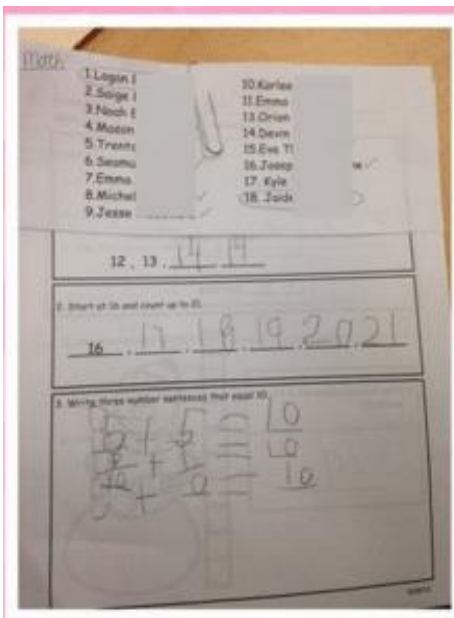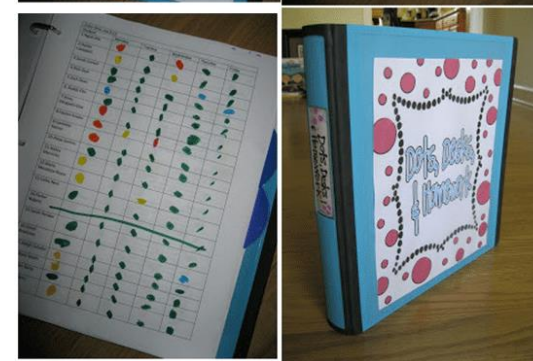
-Talked with others

-Called it "the New York apartment."
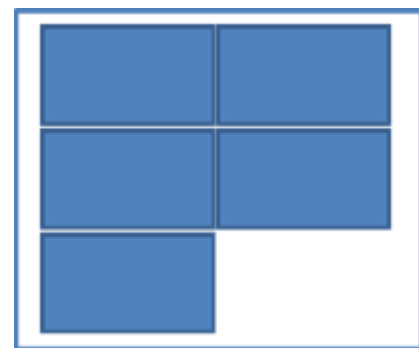
# ORGANIZING DATA

- Data Walls
- Data Binders
- Data Files
- Sticky Notes

# Student Data Binder

Numbered Dividers

Correlate with student numbers

First Grade Smiles



DATA DATA DATA DATA
DATA DATA DATA DATA

Teaching SPECIAL THINKERS





Crate with numbered folders



Michael K.'s ASSESSMENT DATA

Teacher Ms Kuster
Grade First
Year 2013-2014

A Year of Many "Firsts"

# Data/Portfolio Collection Timeline

| Before the Start of the Year | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Create & Store Individual Portfolios<br><br>Devise Procedures for Collecting Work<br><br>Consider Methods to Portray Learning<br><br>Plan for Core Items Collection | Collect | | Collect<br><br>Review & Select | | Collect<br><br>Review & Select | | Collect<br><br>Review & Select | | Final Portfolio Selection | Review & Evaluation of Portfolios<br><br>Share Portfolios with families | |



Writing Portfolios



Individual Student Files

-RainbowsWithinReach-

# METHODS TO PORTRAY LEARNING

- Recording Forms
- Photographs, videos, and/or audio tapes
- Anecdotal Records
- Multiple drafts or stages
- Sketches & diagrams
- Work pictures

# CORE ITEM COLLECTIONS

- An area of learning is a strand of the curriculum that guides the collection of Core Items

- Each domain encompasses many areas of learning

- Careful selection of areas of learning results in Core Items that convey meaning information about the child's thinking and progress

Child_____

Teacher _____Age_____

## Core Item Collection Plan

Directions:  List the areas of learning in the spaces below.  Make a copy of this form to include in each child's portfolio.  As you add each Core item to the portfolio, check off the appropriate collection period.

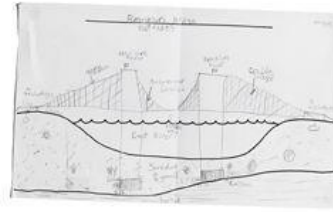| Language & Literacy | | Fall_____ Winter_____ Spring_____ |
|---|---|---|
| Mathematical Thinking | | Fall_____ Winter_____ Spring_____ |
| Scientific Thinking | | Fall_____ Winter_____ Spring_____ |
| Social Studies | | Fall_____ Winter_____ Spring_____ |
| The Arts | | Fall_____ Winter_____ Spring_____ |

# HOW DATA ANALYSIS & ACTION HAPPENS

## City & Country School: Grand Central Station & Brooklyn Bridge

The children worked towards a scaled, representational construction that reflects their growing store of knowledge about the city, its history and the interconnectedness of the world. Children were expected to work together toward a common end, resolve conflicts, make compromises and recognize each other's needs and abilities.

Research skills are developed through trips, use of the Library and general inquiry. The children take many trips in order to further their studies, including research on the subjects of transportation and the many businesses and jobs found in New York City.

What Is Research?

– To find things out about something.

– Sources – Books, Computers, Grown-ups, other children. – Yourself, visit the site.

– Who – Scientists – Historians, Architects, teachers, students, children.

What are we going to Research?

- B. Bridge – Parts – Stages of Parts/when completed
- John Roebling
- Washington + Emily Roebling
- Ferries
- How People lived in the 1800's – clothing
- Manhattan/Brooklyn
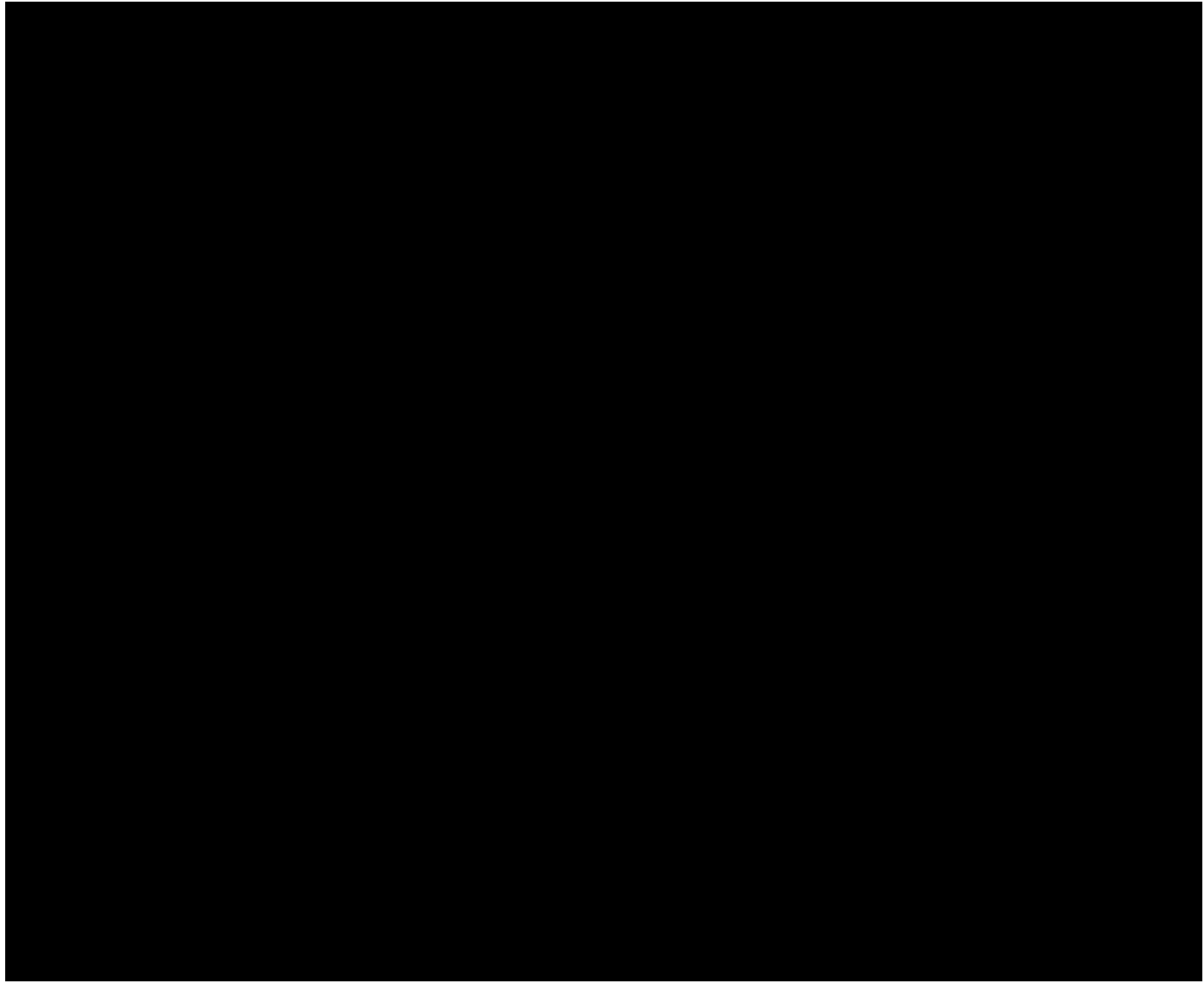- Transportation

Brooklyn Bridge
1. Brooklyn caisson — Sebastian
2. New York caisson — Cate
3. Brooklyn Tower — Rebecca & Alexandra
4. New York Tower — Toby & Willa
5. Brooklyn anchorage — George
6. New York anchorage — Aaron
7. Brooklyn approach ramp } Roadway Committee
8. New York approach ramp }
9. Main cables — Luke
10. Suspender cables — Lena
11. Roadway — Jordan & Hugo
12. Cable stays — Harper
13. Details (flags, plaques, lights...) — Everyone

# Ring-Around-The-Rosie: Documentation

This example concentrates on the graphic representations of the Ring-Around-The-Rosie game produced by three children: Julia (four years, ten months), Leonardo (five years, six months), and Giovanni (five years, seven months). The example is emblematic of the individual learning that is constructed within and with the contribution of the group.

The children play Ring-Around-The-Rosie, talk about "Ring-Around-The-Rosie," predict the way in which they can be represented graphically, and then draw them.

Giovanni: Drawing a Ring-around-the-Rosie is easy! Because you draw some kids with their faces in front and then... not all of them with their faces, but also with their backs.

This is the Ring-Around-The-Rosie that Giovanni drew after making a verbal prediction of the representation. He comments on his drawing as follows: I drew a different kind of Ring-around-the-Rosie, with the kids with their heads in front.

Leonardo: I think it's easy to draw a Ring-Around-The-Rosie of kids because you draw a round shape like this (he traces it in the air), then the kids... then... it's done.



Once his drawing is completed, to his great satisfaction, Leonardo comments on it like this: Look what a great Ring-Around-The-Rosie! There's an arm here that's a little long; but otherwise it wouldn't reach!
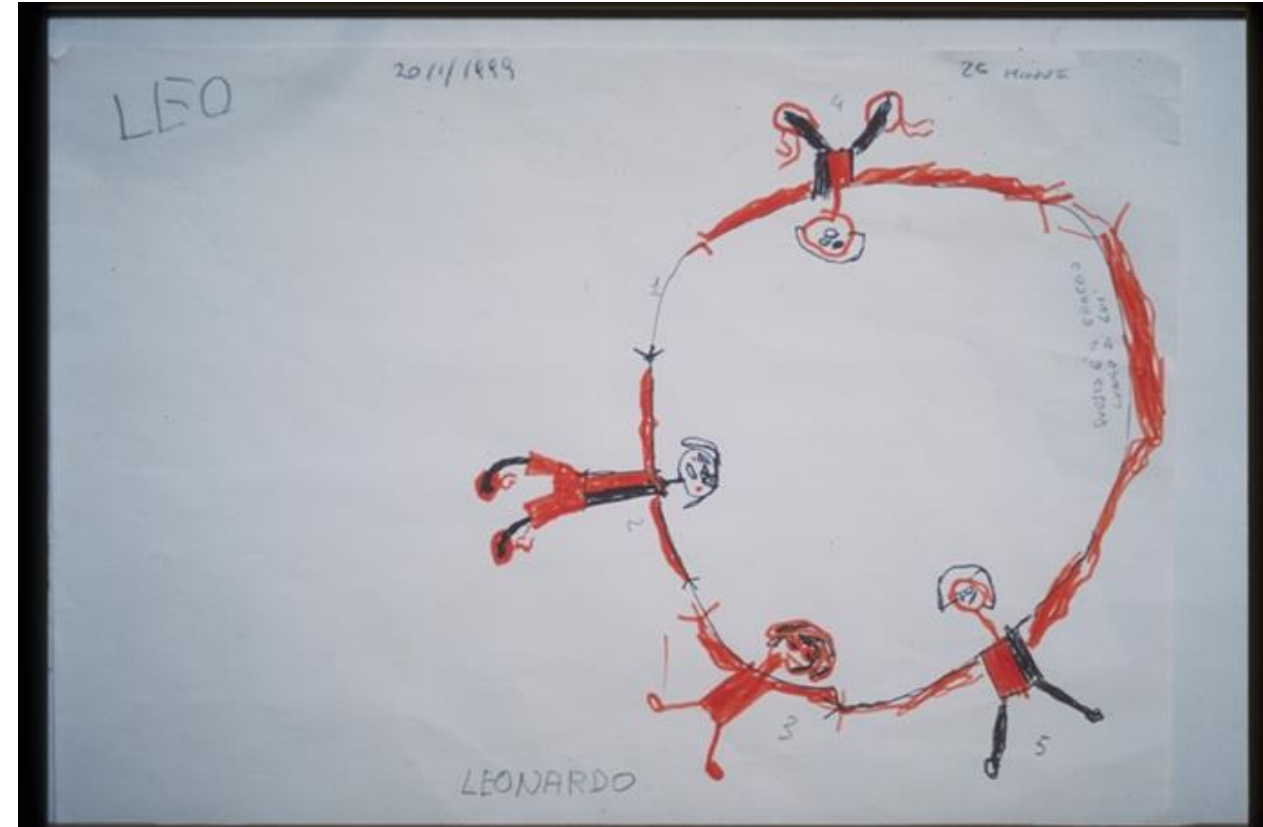
When the children have completed their drawings, they are called on in groups to comment on their own Ring-Around-The-Rosie and those of the other members of their group. The groups are formed partly following the children's own suggestions and partly under the guidance of the teachers, who take into account the different strategies adopted by the children, both in the way they define the problems and in the search for different ways to resolve them.

The children begin to make their first comments, and then turn to Julia: What about your drawing, Julia? Will you show it to us?

Julia (leaning her elbows and forearms on her drawing): "No, okay, I know I got it wrong, I made a line, not a circle of children... it's hard!"
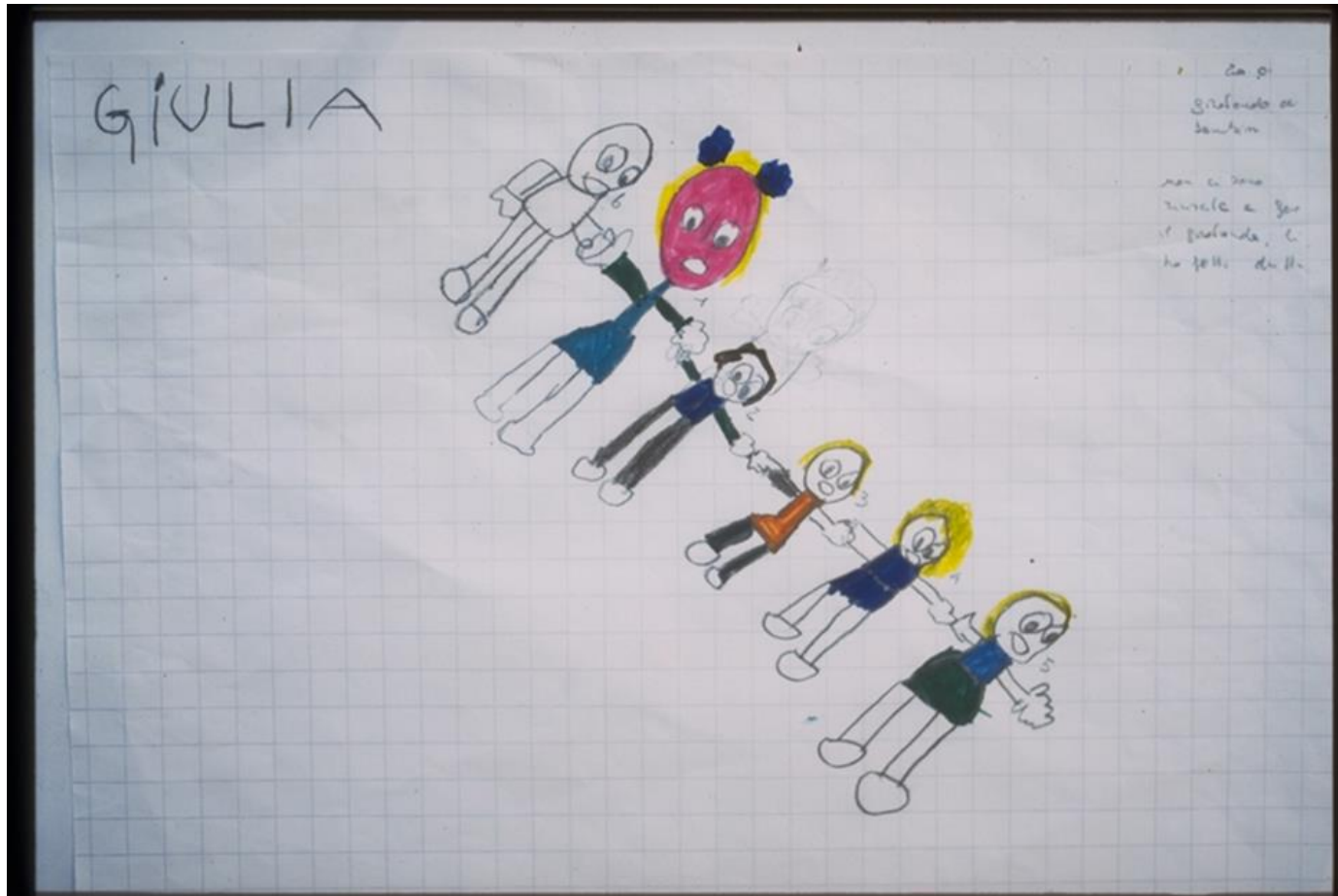


Julia: Well, they're not really Ring-around-the-Rosie but we did the best we could.

Giovanni: (laughing) Why don't we all stand like the kids in our drawings?

Julia: I want six kids because I drew six!

She examines her drawing at length and appears to be wondering how to get her classmates to stand in the strange diagonal position she has drawn.

She solves the problem by positioning the children's heads in a diagonal position with her hands. She also carefully positions her friends' hands and feet in order to make them accurately match the Ring-Around-The-Rosie she drew. Open your arms out, your hands aren't exactly holding each other tight, they're only touching.

Leonardo also calls out the number of classmates he has drawn in his picture (four). Lying down in the position drawn by Leonardo sets off an outburst of general hilarity.

Giovanni says: In Leonardo's picture he's looking at the kids from above, he's up there and we're down here lying on the floor.



Leonardo: To make it into a real Ring-Around-The-Rosie we need everyone to stand up!

Leonardo: No, this isn't right. This Ring-Around-The-Rosie is kind of small and a little silly. The backs are turned toward the other backs, but the bodies have to face the other bodies. Julia: But the picture is always still. How can you make the Ring-Around-The-Rosie so that it shows?

Giovanni: Come on guys, let's try to do a Ring-Around-The-Rosie for Julia, then we can see what we look like, like a photo!

Giovanni: There are some kids that you only see their backs. I can see Julia's back; she's looking at Giorgio's face; Leonardo's side (profile), who's looking at Matteo's face.