A Habitat for "Coco": A Social Studies Investigation with Preschool-Aged Children

Mary Bowne, Associate Professor

South Dakota State University

Jennifer Kampmann, Assistant to the Teaching, Learning, & Leadership Dept. Head

South Dakota State University

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Introduction

Every investigation begins with a "spark" or provocation; something that ignites conversation and action by the teacher and/or children. Learning takes place through the process of construction, thus answering the endless "whys" and the meaning of things, others, and life (Rinaldi, 2006), which can be accomplished through projects and investigations. As a teacher, nothing is more rewarding than seeing children's enthusiasm for learning, specifically the zest to ask questions and take control of their own learning. When teachers create lessons that are engaging, provoke questions, research, and collaboration, the static classroom environment now transforms into a dynamic environment where action research can occur. It is then that teachers become more excited to teach, children are excited to learn, and most importantly, everyone comes with a passion to co-construct knowledge.

Constructivist methods allow people to construct their own understanding of the world through experiences and reflections. In other words, when individuals encounter new experiences or ideas, they must compare them to their previous ideas and experience, changing what they believe, and taking in or discarding new information as relevant. They are active in gaining new knowledge by asking questions, exploring, and assessing what they know and what they have learned (DeVries, Zan, Hildebrandt, Edmiaston, & Sales, 2002).

Early childhood education has long been synonymous with integrated curriculum; the process by which the field mixes together a set of related learning concepts (such as science, math, and literacy) into one congruent arrangement of lessons. Typically the content of what the rest of the learning world would call "social studies" (the integration of social science and humanities) is covered, in preschool terms, under the auspices of the social-emotional learning domain (Parker, 2009). Brewer (2006) suggests that social studies indeed has a broad reach into many domains: "anthropology, archaeology, economics, geography, history, law, psychology, religion, sociology, humanities, mathematics, and

natural sciences" (p. 296). By breaking down social studies into its many topical areas it is apparent that this content domain is more diverse than basic social and emotional concepts. This approach fits with the two main goals of social studies proposed by the National Counsel of Social Studies (NCSS), which include: a) social understanding (the process by which a person comes to know their place in the world); and b) civic efficacy which means to assume social responsibility (Parker, 2009).

The greater purpose of social studies is to embrace the larger themes that encompass lifelong questions like, "what kind of people do we want our children to become?", and "how do we encourage them to be citizens of the world?" This focus addresses important topics of the classroom and school community (Garrison, 2006). Importantly, it is necessary to find a curricular approach to make the learning most understandable and meaningful to the children, including the use of inquiry-based methods (Hill, Stremmel, & Fu, 2005) and constructivist learning and teaching (DeVries et.al., 2002).

Hands on activities such as role play, dramatic play, pretend play, imaginative play, and other activities all help to make social studies concepts leap off the pages of a text and become integrated into the children's existing schemes as the play scenarios relate to their lives (Beardsley, 2004). Using methods that tap into children's existing knowledge enhances their learning by giving them a point of reference with which to make associations (Hill, Stremmel, & Fu, 2005). This approach informed our approach to a lively and informative study about a pet hamster named Coco, a member within a 3- & 4-year-old preschool classroom.

Classroom demographics

We work at a Reggio Emilia inspired laboratory school on the campus of South Dakota State University. Our project took place in a 3-and 4-year-old classroom with 17 children, and involved a mentor teacher, four student teachers, and six assistant teachers. As an accredited school, we emphasize a rich classroom environment and close observation of children's interactions.

The project

We found that our children were constantly fascinated with the classroom pet, a hamster named Coco. In fact, the children were so interested in caring for her that we let the children take her anywhere in the room they wished, as well as discussing her within small group times. For example, many times we would hear the children discussing Coco during small groups and would then find Coco in the block area, an area frequently visited by the children. As seen in Figure 1 below, the protagonist in the investigation is Coco, who is present at the farm within the block area.

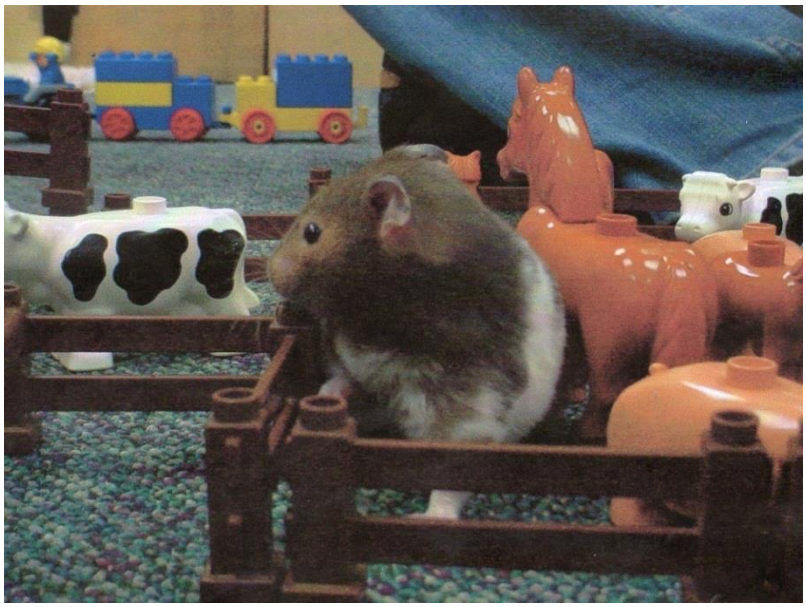

Figure 1: Coco playing in the "farm", or block area with the children

We would plan for each area and, with the children's intentions and questions in mind, set-up each area to reflect the children's interests. For example, when we wanted to know what the children's next steps would be in the process for building a home for Coco, we would sit down with a small or large group and ask a simple question such as, "What materials would you need to build Coco a home?"

Then, taking the children's ideas, we would write them down so the words were visible to view. We would reread the children's ideas and ask if the ideas should remain or be taken off the list. Then, we would take that list and begin to group those ideas into themes. Those lists were then used in future planning, bringing out new materials to areas, etc. The themes provided us with the children's understandings and unanswered questions. For example, based on Figure 2, the majority of children's ideas demonstrated the concept of humanism (the application of human characteristics to an inanimate object).

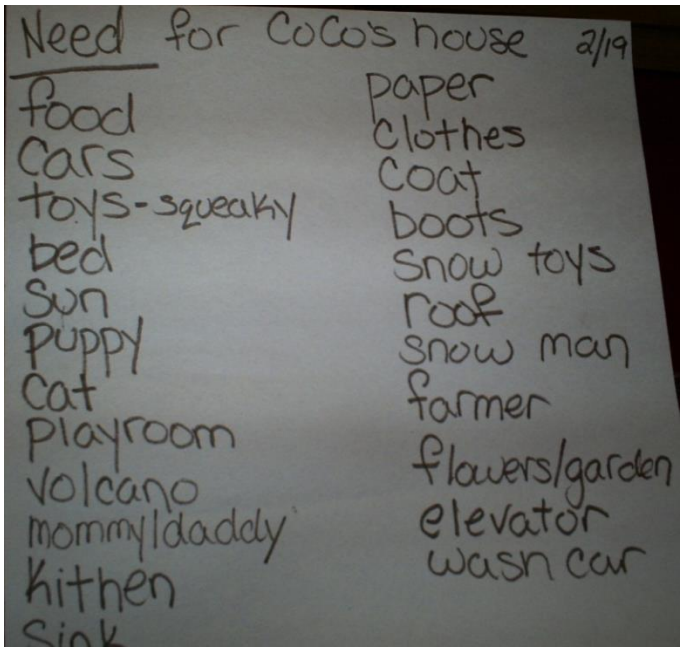

Figure 2: A listing of the large group of children's ideas of what Coco's habitat needs as prompted by the question, "What would Coco need for a habitat?"

The children's realization that Coco needed a habitat set in motion a full investigation. We put Coco on a secure table with magnifying glasses with paper and pencils with small groups of children. The children, along with the teachers, looked at every aspect of Coco's behaviors and actions and compared those to their own. The children would then "re-build" the areas of the classroom in order to support Coco's behaviors, actions, and explorations. After some discussion periods, a web-based article

we read, and based on the children's intentions of incorporating Coco into different parts of the classroom environment, we saw the genuine social studies-based interest and question arising from the children and themselves…what does Coco need for her habitat/environment?

Step 1: Capturing children's dialogue. Based on the question, we spent many hours capturing dialogue among the children based from small and large group discussions, between the children and teaching staff, and between children and Coco in relation to the overall environment for Coco.

Step 2: Webbing for possibilities. We made a web of possibilities to help them decide what Coco needed for her habitat, and where to focus their attention. Figure 3 shows Coco's original cage/habitat. Figure 4 shows the web the teachers developed using the children's small group ideas.

Figure 3: Coco's original cage/habitat

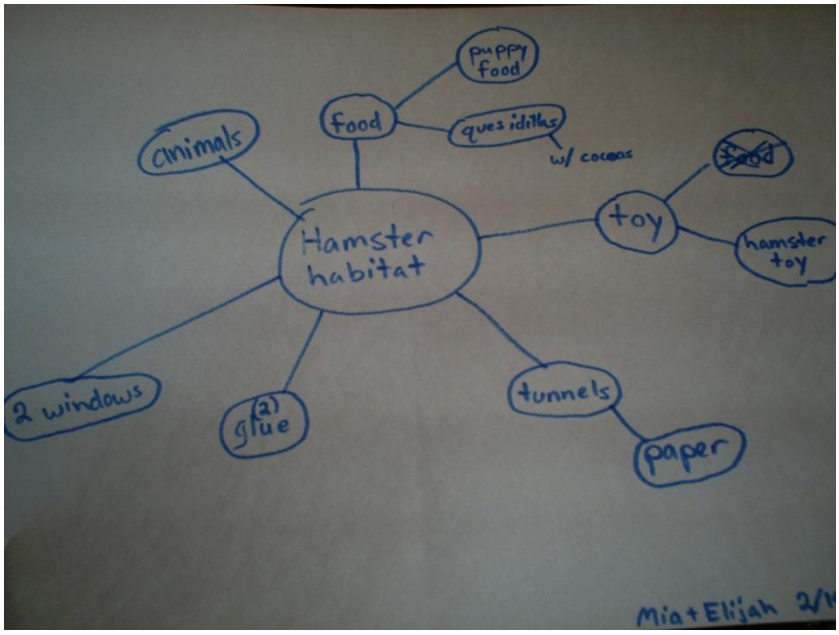

Figure 4: Webs based from the teachers' planning of children's small group interactions prompted by the question, 'What would Coco need for a habitat?"

Step 3: Looking for themes: We also noticed there were several themes or ideas emerging/being discussed by the children:

- Applying human characteristics to the hamster
- Choosing items for the hamster habitat, relevant to what they need in a human habitat
- Representing items that are familiar to the children from within the
- Immediate classroom environment (i.e., pulling in ideas/projects the classroom were also involved in such as growing plants in the classroom---therefore Coco also needed plants/garden.)
- Incorporating many unique physical characteristics that Coco possesses that humans (the preschoolers) do not. These ideas were taken from conversations with the children.
    - Nose and whiskers were constantly movement/twitching
    - Five fingers on the hamster feet but no thumb

- Ears perked straight up when she was focused or excited about something
- Body flattened to fit into very small surroundings
- Hands held her food when she ate
- Mouth was used as a way to explore her surroundings

Step 4: Creating lessons. Once we had taken the time to listen to the children thoroughly and thoughtfully and record their ideas, we needed to think carefully about constructing lessons to support the children's discovery and inquisitions. In the next figure (Figure 5), the web shows how the South Dakota Social Studies Early Learning Guidelines were already being demonstrated through the use of various activities, initially introduced and discussed by the children and teachers together. In addition, the connection in the curriculum is shown, as we planned our next steps for one of the week's lesson plans.

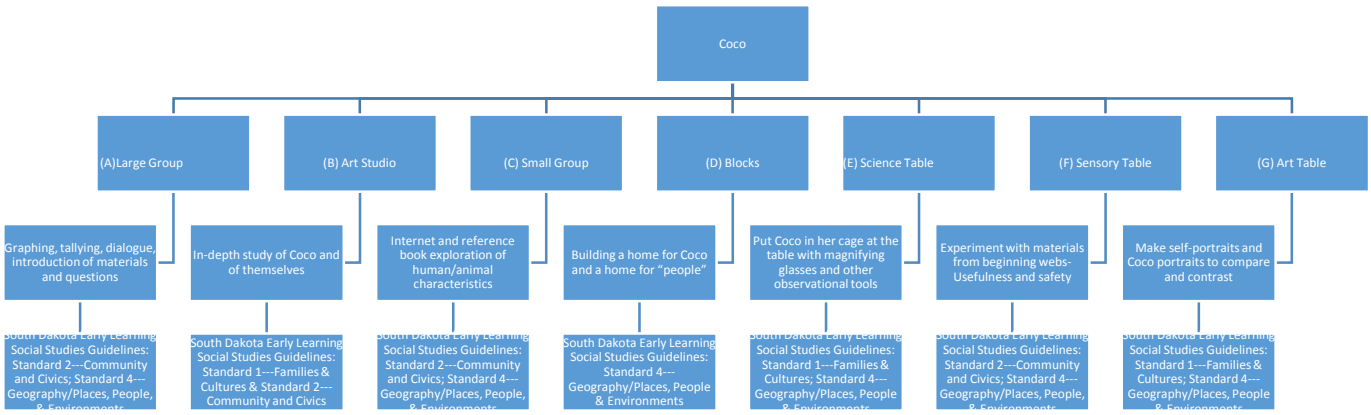

Figure 5: The various activities within specific areas of the center and how several of the South Dakota Early Learning Guidelines for Social Studies were being met. A more detailed review of each area is described below as taken from the teaching staff lesson plan log.

A. On Monday, during large group time, reintroduce the webs the children created the previous week. Gather the materials they have requested along with items that would apparently not be safe or useful in the new hamster habitat. Have children use a democratic system of voting and tallying to decide what materials will be used in the primary assembly of the hamster habitat.
B. In the art studio, set out Coco's cage in the center of the large work table. Tape long unit blocks along the table edge to create a barrier. Let Coco out on the table and have a small group of children intensely watch and notice the unique animal characteristics that Coco had. Use the white board to make a list of human/animal characteristics (have mirrors available for self-inspection).
C. In small group, take 3 to 4 children at a time to the computer resource room and search for hamster habitats, other animal habitats and home/school rooms. Make a list to take back to large group of items specific to animal/human groups for discussion. This time can also be used to gather photos for creating the hamster habitat.
D. Print large (8x10) photos of hamster different hamster homes and different human homes/schools for children to use as reference when building with unit blocks. Add the 3D action figures. (Action figures are small photos of the children and classroom pet that are glued onto foam core board and then cut out for incorporation into block or manipulative play.)
E. Place Coco in her cage at the science table for two days and have clipboard, paper, writing utensils and magnifying glasses for children to explore and represent what they see. Have the *Hamsters for Those Who Care* book also at the table. For the other two days in the week, have the human torso out and the same exploration materials for investigation of their bodies.

F. Use the sensory table for a preliminary hamster habitat. Have all the materials from the concepts webs available for incorporation into the table. Also have the various habitat drawings and photos taped to the wall behind the table for reference.

G. Place Coco at the art table with the clay and clay materials for representing her in creative arts. Set aside and have another two days with paint for representation. Then replicate with mirrors for one week of self-exploration/representation.

As the investigation continued, the next step was to gather materials and begin building the habitat for Coco to use. A conscious decision was made to spilt the class into two building groups for three reasons: 1) extended opportunities for discussion and reflection on the part of the children; 2) to afford children and teachers smaller groups with which to work for better one-on-one teacher-child contact (in this case 9 children to 4 teachers); and 3) an opportunity to extend aural and oral language development among the children through conversations.

Leading the Lessons

As each group would work on their habitat, we implemented a modified World Café approach[1] where one teacher and 2 children would move to the opposing group. They would ask the group questions about their choices in materials and set up of the environment and then report back to the original group. This allowed for a more focused discussion of intent in planning and choosing materials by reflecting on the children's previous work in webbing and researching about animal habitats and adaptations. Children in the receiving group then had to defend their choice of materials and intent to plan while the visiting children had to summarize data collected and help lead group discussions on whether-or-not to incorporate any ideas from the other group into their habitat. The children utilized the original cage Coco was placed in day after day to help with these reflections and overarching ideas,

[1] World Café Approach---http://www.theworldcafe.com/method.html

knowing what was best for Coco and yet making it "their own." Based on their reflections and conclusions, the children created the following habitat for Coco (Figure 6).

Figure 6. Coco examining the new habitat the children created for her.

Meaningful Assessment

As the curriculum was well under way, we knew there should be some discussion about appropriate and thorough assessment of the children's learning. We made a list of the tasks we had to complete throughout the semester in order to gather evidence that we had met the guidelines we had set out to accomplish. We understood the need to utilize both quantitative and qualitative data, such as a documentation panel as described below. Therefore, they collected the following items while the investigation took place:

- Collection of work samples, drawings, clay figures, and dialogue to reflect
- Identification of human and animal characteristics/needs/environments

- Pre and post conversation and graphing about similarities and differences in Coco and themselves
- Pre assessment KWL (What do you know, what do you want to know, and what did you learn?) chart about what they knew about Coco
- Post KWL chart about what they learned
- Photos and video to support written documentation
- Documentation panel (presentation/panel showcasing learning taking place through the use of photographs, work samples, video clips, conversation logs, etc.) to reflect learning and standards met

We knew we would need to communicate all assessment findings to others, parents, and administrators, showing what learning took place throughout this project. Day-to-day conversations and a documentation panel served as the main source of information for parents and others within the environment.

Content Learning

Content learning took place within the classroom and beyond. As the children played, they not only engaged in a variety of social studies areas, they were also engaged in activities that stimulated all areas of development, motor, social, emotional, cognitive, and language. We demonstrated this through the creation of the documentation panel as well as the individualized electronic portfolios made for each child in the classroom.

Since accountability in the classroom is being demanded by many local, state, and national areas and entities, we realized the importance of supporting inquiry-based, constructivist educational practices with evidence of how early learning guidelines (Figure 7) were being met. Below one can see how an integrated, inquiry curriculum encompasses a multitude of learning.

Figure 7. South Dakota Early Learning Guidelines Met Embedded as Project Progressed

Standards	Benchmarks
Standard 1: Families & Cultures	Identify themselves as individuals and as belonging to a family
Standard 2: Community/Civics	Demonstrate confidence in expressing individual opinions and thoughts
	Demonstrate respect for the thoughts and opinions of others, even when different from their own
	Demonstrate and identify communities to what they (and others) belong
	Take responsibility for simple tasks that contribute to the well-being of the group
Standard 4: Geography/Places, People, and Environments	Describe where they life and where others live
	Identify various living environments
	Draw or build representations of environments with materials
	Name resources and describe how they help us be good stewards of the environment

Conclusion

This investigation provided unique learning experiences not often sought out as typical or traditional classroom practices. The children constructed their own understanding of their social setting in the preschool classroom as a cohort of 3 & 4-year-old children through experiences and reflections. They encountered new experiences and ideas, changing what they believed and discarding the prior knowledge as irrelevant. Together, the teachers and children built a new understanding of anthropology from a 3-and 4-year-old perspective by looking introspectively at the smallest member of their classroom community….Coco the Hamster. What started out as the children's natural curiosity with a living animal turned into a unique investigation involving inquiry-based learning and constructivism approaches with several social studies components. The children and teachers alike identified this learning opportunity as an intrinsically fun and enjoyable life-long experience. The student teachers, assistant teachers, and children felt valued and respected, knowing their input, ideas, and questions

were inputted into the classroom. The process and learning that took place compelled everyone to transmit and foster greater knowledge of subject matter, the topic, and one another.

We wanted to explore with the children, the differences and similarities between what animals need and what humans need for survival and recreation. In addition there are some very unique physical qualities about Coco that we wanted to explore with the children and how those physical qualities were similar/different from their own; specifically why the animal species needed those adaptations. Although this rich exchange of ideas and data collection came to an end due to the conclusion of the school year, the time spent with the children, exploring their place in a social setting, was well worth the unfinished project.

(As a side note, Coco is still alive and well and is living in the home daycare of one of the student teachers that engaged in this project.)

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