Participants in this study will be children aged 18 months to 4 years, recruited from daycares around the Worcester/Boston areas. We will discuss our project with the director and teachers of the center. Permission to recruit from this daycare center will be obtained by the director and consent forms will be distributed to individual parents along with a letter of introduction from the director of the daycare.

Parents of potential child participants will be sent a letter explaining the nature of the study, its intended purpose, as well as the institutional affiliation of the researcher, along with a request for parental permission to participate in the study. This letter will be sent by the Director of the center on the basis of the written proposal we submitted to her. The tasks involved in the study will be explained to parents and the letter will indicate that their refusal to participate in the study will have no negative bearing on the child’s experience in the day-care environment. Only children with parental permission will be involved in the study. On the day of the study, children with parental permission will be asked if they “want to play a game” with the researcher. Only children who agree will be tested. Moreover, if a child shows any unhappiness during testing, he or she will...
Research on young children's symbolic abilities concerning maps is very limited, as symbolism research has focused almost exclusively on print and literacy development. DeLoache's work with three-dimensional models shows that it is not until about 31/2 years that children can use a simple model to search for a hidden toy. This work has not been linked to children's understanding of maps. We will test the hypothesis that maps are easier than models, when everything else is controlled for, for several reasons. Children have watched adults use maps, may have looked at globes and maps with their parents, and thus may have some sense of what they are for. Also, because maps are rather uninteresting "objects" (as opposed to 3-dimensional models), the idea they are used for something may be more salient; e.g., they may be more clearly symbolic.

In our study, we will try to get an insight into children's understanding of one core aspect of the symbolic function of maps-intentionality. The children will first be screened for their familiarity with maps; e.g., "Do you know what a map is?", "What is a map used for?", "How do you use a map?". The parents will also be given a questionnaire about their child's previous map experience; "Does your child know what a map is and what they are used for?", "Do you and your child look at maps together?", "Does your child watch Dora the Explorer or any other educational television show that highlights map usage?".

The children will be randomly assigned to one of two conditions: the "No intentionality" condition and the "Highlight intentionality" condition. Both conditions use the model room task borrowed from DeLoache (1995). In this task, a room and a small replica of the room are presented to the children; a big toy lives in the big room and a small identical toy lives in the replica. The small toy is hidden in the replica and the child is instructed to look for the big toy in the
same place in the big room. For the children in the “No intentionality” condition, DeLoache’s methodology will be followed. For children in the “Highlight Intentionality” condition the game will be conducted in the same way as the “No intentionality” condition except that these children will be told before the hiding/retrieval trials “Do you know what a map is? Well, this small room model here is really like a map. We are going to use this small room like a map so you can find the toy hidden in the room.” If the child fails to find the toy, the experimenter helps him or her, so there is never a sense of failure. This task should take no more than 15 minutes.

question4

a.) All asks will be presented to the child in the context of a game. The primary experimenter will spend considerable time in the classrooms in which testing occurs, so as to become a familiar and non-threatening presence to the children in the room. In addition, classroom teachers can be present during all testing procedures, and will be available to answer any questions or concerns children may have in the wake of their participation. If a child becomes distressed, she or he is immediately comforted and returned to the classroom.

b.) The confidentiality of participants will be maintained by assigning subject numbers and removing children’s first and last names from the data after it is collected. Children’s names will not be included when the data is analyzed or reported, and if anecdotes are used for presentation purposes, all participant names will be changed or removed. The data will be kept in locked cabinets at Clark University. Both parents and teachers will be aware of these efforts.

c.) Debriefing is not necessary in this study as children’s thinking regarding symbols is the topic of interest, and no attempt will be made to change or manipulate these beliefs in any way. Indeed, our research objectives are to tap into children’s symbol understanding in such a way as to avoid significantly affecting their current beliefs and understanding. Should questions or concerns arise for children after testing has occurred, classroom teachers will be aware of
Dear Parent or Guardian, September 15, 2004

I am an Associate Professor at Clark University. My students and I are conducting research on young children’s symbolic development, especially of their understanding of simple models and maps. We will be conducting a series of short studies at your child’s daycare [insert daycare name], which I have reviewed with the directors [insert names], and would like your permission to include your child in our project.

Our studies investigate how young children use simple maps and three-dimensional models to find hidden toys. We are not testing any ability a child is supposed to acquire at a certain age, but rather, are comparing their understanding in different areas of symbolic development. Our studies are presented as games (looking for toys and hidden stickers, which they keep) and are part of on-going conversations with the children; they are meant to give insight into children’s thinking and do not differ much from everyday activities at daycare. Children’s names and individual responses will not be used in any publication or presentations and will be kept entirely confidential.

If you give your child permission to participate, we will ask your child whether he/she wants to come play with one of us in a quiet corner of the room or of the playground at a time that will cause minimal disruption to their normal daily routine. Your child is, of course, free to refuse. Teachers are free to stay with the child and participate in the “games.” If the child shows any unhappiness during the session, we will return him/her to the teacher immediately, with thanks and praise. All children will receive the same positive feedback, during and after our sessions with them. Children will be engaged in these tasks for a maximum of 15 minutes at a time.
It is our belief and hope that this project will provide valuable information about children’s map understanding abilities, and will help us develop novel teaching strategies. Indeed, we already know that the tasks we have designed will be enjoyable for the children, and stretch their current understanding of maps and models. We will be more than happy to share the results of our studies with interested parents and teachers. We are available to answer any questions or concerns that may arise prior to or during this experiment. We thank you for considering your child’s participation in this study.

Sincerely,
Marianne Wiser Rebecca Marcin Clark University Clark University Professor of Psychology Under-graduate student Frances L. Hiatt School of Psychology Frances L. Hiatt School of Psychology 508 …. and 508 …. or email …. September 15, 2004

SYMBOLISM STUDIES. PLEASE RETURN TO YOUR CHILD’S TEACHER OR TO THE DIRECTOR. THANK YOU

Please sign and return this slip if you are interested in having your child participate in this research project:

My child ____________________ has my permission to participate in the Children’s Understanding of Writing, Maps, and Models study being conducted by Rebecca Marcin, an under-graduate student working under the supervision of Professor Wiser of Clark University. I understand that my child’s participation in this study is entirely voluntary, and choosing not to participate in this study will not affect my child’s experience at daycare. I understand that my child’s name and identity will be kept entirely confidential, that my child’s name will be removed from the researchers’ records and replaced with an identification number, and that my child’s responses will be used only in group analyses and will not be made public in any way. Finally, I understand that my child will be told that he/she does not have to participate in any or some of the games presented if he/she so chooses.
question 6

This study’s design does not prevent full disclosure to the parents of participating children, and such full disclosure is provided in the above consent form.

question 7

It is our belief that the procedures involved in this investigation provide minimal, if any, risk to participating children. We have considered that some children may find these tasks cognitively demanding, and will perhaps grow tired or frustrated in the face of these challenges. However, it is our experience that these tasks are no more challenging or difficult than what children encounter in their regular classroom environment. Usually our participants ask for more. If the novelty of the testing situation or tasks presented proves to additionally tire or stress some children, procedures are in place to minimize any potential risk. Primarily, children will be repeatedly assured that they are doing great. Additionally, children will be informed that they can terminate any task in which they participate if they do not feel up to completing it. Finally, we will offer short breaks from the activities to those children who appear to have more difficulty concentrating or transitioning into new activities.

A letter from the Daycare Center allowing the researcher to conduct the study was also part of the proposal application.