Earlies educators are in a bind. Teacher education programs are calling on them more and more to help students practice critical thinking and develop intellectual character (Ritchhart, 2002); yet school funding depends on meeting Common Core standards, which do not explicitly assess critical thinking until the high-school level (NEA.org). Add to that an over-engineered content curriculum, and thinking becomes a luxury that is quickly lost amid more immediate concerns (Cabrera and Colosi, 2012). As a result, we are raising a generation of “excellent sheep” who flourish amid standardized tests but are increasingly unable to think for themselves (Deresiewicz, 2014). The problem, we suggest, is that today’s teachers are in such a rush to give students the answers that they are not allowing them time to ask the questions. As a result, students cannot find the “deep structure” of issues. Bodies of knowledge thus strike them as disconnected facts, quickly forgotten. The solution, as suggested by recent work in cognitive science, is to teach critical thinking through teaching content (Willingham, 2007). In what follows, we propose a way of organically integrating content and thinking through games, story books and art. With this, we put children into the driver’s seat, encouraging them to ask their own questions, to propose their own answers and to join their peers in joint inquiry through dialogue. In a word, we propose teaching children philosophy as early as possible. Tom Wartenberg has made considerable progress with his picture-book philosophy curriculum designed for elementary schools (Wartenberg, 2014). But what of younger children? Combining the resources of Rollins College’s Philosophy Department and Child Development and Student Research Center, we set out to find “how low can we go?” Over four terms’ of trial and error, we have adapted and distilled Wartenberg’s methods into a model that works for the Center’s 4-year-olds, and we have tested this model on a larger scale through a one-term collaboration with the Winter Park Day Nursery.

Wartenberg’s Storybook Model

As Tom Wartenberg has argued elegantly, figures from Plato to Descartes wrestled with the same “big ideas” that appear in familiar children’s books. While Aristotle’s *Nicomachean Ethics* provides a useful springboard for thinking about courage, the *Frog and Toad* story, “Giants and Dragons,” presents many of the same issues and concepts. And it does so in a much more approachable way. Writing for second-grade teachers, Wartenberg argues against the assumption that to teach philosophy one must first have studied philosophy. On what Wartenberg calls the ‘teacher-centered’ model, the teacher knows the content, the students don’t, and the teacher’s job is to pour knowledge into students’ empty minds. By contrast, Wartenberg articulates a learner-centered model, which recognizes that children are people with their own interests, concerns and ways of approaching things.1
Wartenberg’s model channels children’s natural curiosity and imagination into discussions of big ideas about the world, knowledge and life. His typical lesson starts with reading a storybook aloud. After this, the teacher / moderator helps the group fill out a ‘story matrix’ or chart designed to focus children’s attention on the philosophically relevant big ideas at play in the story. When dealing with “Dragons and Giants,” for instance, the teacher may ask whether at various points in the story, Frog and Toad were (a) in danger, (b) afraid, (c) brave. From here, Wartenberg offers a set of “discussion questions” designed to get children thinking about the relation of bravery to fear and danger: Can Frog and Toad be brave if there is no danger present? Are they brave if they are afraid? Are they brave if they are not afraid? These questions lead the children from the particulars of the story to thinking about issues more abstractly. To facilitate this, the teacher encourages them to disagree with one another, to back their positions with examples from personal experience and to provide reasons for their views. In transitioning from one particular to another, children start to articulate the ‘big ideas’ that connect them. This exchange is structured by a series of nine rules which the moderator helps the children practice and internalize. The ultimate goal is not to arrive at a consensus, but to help children identify, articulate and give reasons for their own views about the big idea under discussion.

We can attest to the fact that Wartenberg’s model works beautifully with the elementary school students for whom it was developed and, when presented the right way, with older students as well. Yet what of younger children, in particular those who cannot yet read? This is the question we set out to answer.

An Experiment in Preschool Philosophy

The partnership between this article’s authors came about by accident. In Spring of 2015, Kenyon’s undergraduates were working at Fern Creek Elementary which had to cancel two weeks of meetings on short notice. When asked whether we could work with the Child Development Center (CDC) instead, Terorde-Doyle responded, “why not?” We thus took four lessons, which had been designed for a 5th- and 6th-grade gifted course, and used them with 3- and 4-year-olds. The first lesson was characterized by mutual incomprehension. By the fourth, though, we had made enough progress to see the potential. The following Fall term, we made a concerted effort to see how low we could go. We initially drew the line at speaking in full sentences, and split our 3- & 4-year-olds into two groups of roughly 8 each. Each group met with undergraduate discussion-leaders in 20 minute blocks, 24 times over the course of 6 weeks. Our guiding question has been: what would it take to adapt Wartenberg’s model for use in preschool? By the time we were done, little of the nine rules, story matrix and discussion questions was left. Given the CDC’s practice of referring to everyone as friends (children are “little friends”, college students and other adults are “big friends”), we came to refer to this as our “Philosophy Friends” project. In what follows, we will set out the Philosophy Friends Model we have developed. This represents an intermediate stage in a larger project. Longitudinal assessment of critical thinking in participant children as opposed to control groups would, of course, be ideal. The present study lays the groundwork of viable pedagogical methods that would make such a study possible. The evidence we have in support of our method’s success is anecdotal. Nevertheless, we have noted changes in how children interact with teachers, parents and each other. All of this adds up to a change in the culture of our school that is striking enough to warrant further research.
We ourselves are pursuing such work at the CDC and hope that the present study will prove useful for others interested in similar undertakings.

The Rules of the Game

As with all preschool practice, initial structure largely determines the quality of the experience for children and adults alike. Wartenberg gives nine rules of “How We Do Philosophy”...

1. We think about what we heard.
2. We answer the questions as clearly as we can.
3. We listen carefully and quietly, with our hands down, to what someone is saying.
4. We decide if we agree or disagree.
5. We think about why we agree or disagree.
6. When it’s our turn, we say whether we agree or not and why.
7. We respect what everyone says.
8. We all have valuable comments to make.
9. We have fun thinking together!

These rules work wonderfully well with the elementary school students for whom they were devised. Our first step was to distill Wartenberg’s nine rules into three --we listen; we think; we respond-- and to present them in a way appropriate for our children’s developmental level.

Rule number 1: We listen. We symbolized the rule visually by moving a hand to an ear. In teaching the rule, we asked the children when they listen, how they listen, and why they listen. Some typical responses were, “when others are talking”, “with our ears”, “so we can be safe.” Recognizing that the rule itself was not enough for our purposes, we set out to practice listening skills with a series of activities. Children participated in musical listening games, distinguishing certain sounds from different musical instruments. We played telephone, as each child was told a word and asked to “pass it on” to their neighbor as we sat in a circle. The game brought laughter and silliness as children whispered into each other’s ears. The game itself, while fun and interactive, showed us that perhaps children needed to “play” with the concept of philosophy before actually philosophizing. Over time, however, the skill took root. Children got better at listening to teach other. At the same time, we adults got better at actually listening to children as we helped them articulate their own ideas.

Rule number 2: We think. We symbolized the rule visually by placing a finger to our heads and displaying an expression of deep thought. While easy to represent, the thinking rule required children to engage in a level of self-reflective ‘thinking about thinking’. The conversation about how we think was key in supporting their comprehension of this rule. We planned ways to connect their understanding of ‘thinking’ to particular moments in the day where we saw them actively thinking. There were many teachable moments when we verbalized for the children how their understanding was evolving. We asked the children to show us what thinking looked like. We asked, “How do we know if you are thinking?” We also began asking a series of open-ended questions at those points in the day when all students met as a single group. This became the time where we intentionally planned thinking games, just as we had planned listening games. We asked questions like, “If you could be any animal, what would you be?” Children pondered these questions and then displayed or spoke about their ideas. In keeping with our philosophy curriculum, we asked the children to show us their thoughts in actions, pretending to be the animal in dramatic representation. We supported their
reflection by noticing their pondering as they enacted these animal ideas and stating that “you are thinking with your brain.” We asked, “why did you choose that animal?” The answers reflected their state of mind, with some children stating, “It’s because Mommy likes them,” or “I saw them at the zoo.” Asking children what they are thinking is itself a philosophical undertaking. Their comments exemplified the cognitive emphasis on children’s experiential base and their close affinity to familiar people and places. To get children to consider alternative reasons for their thoughts, we took every opportunity to ask them why they thought as they did.

Rule Number 3: We respond. We invoke this rule by pointing to one child and then another saying, “<Child 1>, do you agree or disagree with <Child 2>? Say why.” To practice this, we tape a line on the floor and have someone make a claim, e.g. about the best flavor of ice cream. Everyone who agrees stands with that friend; everyone else moves to the other side of the line. We can then ask children why they have taken the stand they have, and we prompt them to use the phrase, “I (dis)agree because...” The habit of agreeing and disagreeing has led to a wide range of conversations during the children’s play experiences, such as a prolonged debate, initiated by the children themselves, about who owns the ocean. Rule number 3 has been an eye-opener. As teachers, we are so often dictating process, structure, or behaviors for safety reasons and management control, that we seldom allow children the chance to form clear opinions, to decide whether they agree or disagree. In a word, the rules encourage a form of metacognition which empowers children to think for themselves.

Working with Pre-K Attention Spans

Following Wartenberg’s model, we began our project by reading books with small groups of children and then working through a story matrix. Given that our children could not yet read, we did this all aloud. We quickly realized that once the story was over, our children’s attention had moved on. Attempts to stretch out an activity were torturous for all involved. To work around this problem, we began raising questions from our story matrix during the reading of our books. In reading Dr. Seuss’ Lorax, for instance, undergraduates focused the children on philosophically relevant details at key points during the story. The children made predictions, drew conclusions and engaged the philosophical puzzle of how many trees the Once-lor should have taken. Children commented:

“He’s going to cut down all the trees.”
“He’s going to make them sad when they are all gone.”
“They would be happy if some of the trees were cut down.”

One child reflected on how her dad had cut down a tree because her mother was allergic to its flowers. Such instances of reflective thinking show the children taking positions, making assumptions and drawing conclusions (Daniel and Auriac, 2011).

But when it came to asking open-ended discussion questions, discussion quickly went off the rails. 4-year-olds are simply not cut out to sit still and discuss abstract issues for more than a couple of minutes. Our initial conclusion was that discussion of abstract ideas simply asks too much of a 4-year-old’s cognitive development. Over time, however, we realized that our asking them to sit still was the real problem. We thus took two steps to meet the children where they are, allowing them to think in the embodied manner that comes naturally to them.
Thinking with our Bodies. First, we augmented Wartenberg’s standard lesson by introducing our stories’ big ideas through games and activities. For instance, as preparation for discussing moderation in the Frog and Toad story, “Cookies,” we had our children mix paints. While they were occupied in this very hands-on activity, our undergraduate leader asked: Is this too much blue? Is this not enough red? Is this green just right? By the time we turned to the story, the children had a working vocabulary of excess, moderation and deficiency. Over time, we found that the activities made more of an impression than the storybooks. To prepare for discussing courage in “Dragons and Giants”, for instance, we blindfolded individual children and had their friends guide them around the room. Four weeks later, when we were reading Madeline for other purposes, a child brought up the blindfolding activity. By the end of term, our undergraduates were divided on whether it would be better to get rid of storybooks altogether when dealing with preschool.

Thinking through Art. Second, we recast Wartenberg’s open-ended discussion questions as prompts for art projects: How many trees should the Once-ler have cut down? What does bravery look like? How many cookies are just right? As children worked, we asked them about their creations. Rather than get in the way of verbal discussion, the art enabled it. Children who could not sit still to discuss abstract ideas would narrate their creations at length, engaging with us and with each other as they worked. In the terms of developmental psychology, the art project provided scaffolding for the free-flowing discussions which the children could not carry out while sitting still. In the spirit of the Reggio Emilia tradition, art provided a vehicle for learning that was ultimately not about the art.

Preparing Carefully: Philosophical Puzzles & Backwards Course Design

Early in the project, we enlisted our colleague from Theater, Thomas Ouellette, to lead undergraduates through a workshop in reading storybooks aloud. After sitting through one of our sessions at the CDC, Thomas commented, “this is the kind of thing where you have to prepare carefully and then just wing it.” This has become our mantra. According to the Philosophy Friends Model, “careful preparation,” amounts to a form of backwards course design, as we start with our ultimate goal and work backward in our planning:

The Goal: Children’s Discussion. What we are ultimately after is the children having their own discussion, which we facilitate by enforcing the philosophy rules.

Step 1: Articulate a Puzzle. To spark such discussions, we seek out questions that will allow children to articulate and plausibly defend opposing views. We are not, however, interested in matters of mere opinion; e.g., “What is the best flavor of ice cream?” Nor are we engaging in the ‘Socratic Method’, if that is understood as asking questions which had already been answered by adults; e.g., “Why do some rocks float?” Rather, we seek out authentic philosophical puzzles, i.e. problems that matter, for which there is not a single clearly agreed upon answer at present, but mostly likely only 3 or 4 main contenders. For instance, “Why should we share?” This question, which may seem simple, can be answered in a number of different ways, each of which has been defended in the philosophical literature:

a. An authority told me to do it (relativism / divine command theory)

b. It makes my friend happy (altruism)

c. It makes me happy (egoism)
d. It makes everyone happy (utilitarianism)
e. It treats everyone fairly (deontology / rights-theory)

By choosing questions that we adults cannot answer conclusively, we set the stage for children to have substantive disagreements and make them our peers in very real ways. For instance, during an activity involving sweets, we asked children whether we should share leftovers with their other friends. One child replied, “No” (egoism). Another replied, “yes, because it’s being a good friend” (deontology). When pressed about why friends should share, another child responded, “because it’s happy when everybody’s happy” (utilitarianism).

Step 2: Design Activities. Children have amazingly creative minds and tend to think in concrete terms. To introduce them to our puzzles, we devised a series of activities. Unlike normal Pre-K teaching, we encouraged disagreement, albeit within carefully controlled parameters. We would, for instance, set the children a task but give them insufficient resources for each of them to carry it out. Such activities set the stage for teachable moments: when Adam needs a paint brush, but Susie doesn’t want to share, we can ask both Adam and Susie their reasons and get them to listen to each other’s. If a suitable story book is available we follow Wartenberg's lead, albeit raising questions during the reading, not after it. While reading Doctor Seuss’ “If I ran the Zoo,” the children were asked, “what if the zoo unlocked all the animals?” Responses included:

- “I would lock the zoo up, I wouldn’t want the animals going crazy.”
- “Are there rules at zoos?”
- “I would get new ones, they will show you tricks.”

These exchanges tend to last no more than a minute, yet they plant the seeds of ideas.

Step 3: Process Ideas by Creating Art. The final step in our lesson planning is to devise a closing art project. If our mini-discussions plant the seeds, engaging with artistic media allow them to blossom. The switch from one kind of activity to another resets the attention clock in a way that allows children to keep processing their new ideas. To guide them along, we put our philosophical puzzles in the form of open-ended prompts, e.g. paint a picture of friends sharing, which will allow us to engage children in conversation while they work.

While these lessons are carefully crafted around philosophical puzzles, what children experienced is a series of games, storybooks and art projects, albeit with a fair deal of talking along the way. In effect, we take the activities that fill a 4-year-old’s normal day and arrange them to serve a philosophical purpose.

Winging It: A Culture of Philosophy

Through this careful planning, we established an “intellectual environment” for thinking (Ritchhart, 2002). During formal lessons, we observed children wrestling with puzzles, taking positions and engaging each other in critical discussion. On the playground, we noticed the use of philosophical vocabulary, as children began to structure their own interactions phrases such as “I disagree, because…” Critical thinking seeped into everyday routines, and reflective thinking flourished. One child’s father, himself Rollins faculty, reports that during bedtime stories his daughter informed him, “Daddy, you’re doing it wrong. You’re supposed to ask questions.” For the children, philosophy was license to express and explore their thoughts on ethical puzzles and life’s big ideas.
Over time, we realized a difference between how teachers and undergraduates approached the Project. Given that undergraduates met with children for relatively short periods through the week, there was a good deal of planning involved, as they actively sought to precipitate disagreement and discussion during the little time they had. The CDC’s teachers reported a shift in how they viewed their own interactions with children: rather than trying to snuff out disagreement and confusion, they came to fan the flames, albeit in productive, rule-governed ways. The Project’s most lasting benefit is perhaps how it has transformed the culture of the school. While lesson plans carefully designed around philosophical puzzles provided the opportunity to practice new skills and nurture various perspectives, it was only after these skills and perspectives became second nature that the project really took off. Our children took the driver’s seat, asked their own questions and engaged each other in thoughtful, rule-governed dialogue. When it comes to the content curriculum, such students are well poised to see connections between ideas and to retain what they have learned, for the simple reason that they are teaching themselves.

The CDC is not a typical school but a developmental psychology lab blending the traditions of Dewey’s lab school at the University of Chicago and the art-based curriculum of Reggio Emilia. Many of our students are the children of faculty, while all of them benefit from close daily contact with undergraduate researchers. This is a mixed blessing. While it provides the opportunity and the support for things like the current Project, the fact that we could get a bunch of professors’ kids to do philosophy is not likely to impress skeptics. The point of the Project is to bring about social change, inoculating students as soon as possible against the current culture of standardized testing. For that to succeed, we need to work on a much larger scale.

In Fall 2016, we thus put our methods to the test at Winter Park Day Nursery (WPD). While only three blocks from Rollins’ campus, this Pre-K serves families of a socio-economic status which is much more representative of a typical US state-supported school. While our long-term goal is a multi-year, formal assessment, our present goal was simply to find how well methods developed at a college-run lab school would translate into a more representative pre-K. After six weeks working with four groups of six to eight 4-year-olds, our answer is quite definitely: yes. In general terms, children engaged in the Philosophy Project tend to develop along similar lines. We thus propose the following benchmarks for assessing children’s interactions during lessons, unstructured play time and at home:

1. Engage with stories and activities at a basic level
2. Give relevant answers to questions
3. Disagree with peers in a civil way
4. Give reasons for positions
5. Revise positions based on peers’ reasons

While our data collection up to this point has been anecdotal, our WPD groups generally made less progress than the one group running simultaneously at the CDC. The WPD groups did, however, make better progress than CDC groups did the first two terms we worked with them. This suggests that pedagogical method is at least as significant a factor as the children’s socio-economic status. In many respects, a 4-year-old is a simply a 4-year-old. By the end, most children had advanced to benchmark 3 or 4 and sometimes 5 during our meetings. The other significant factors came down to space, time and culture. At WPD, we worked with four groups in a single large room. Children showed marked improvement those times we could bring individual groups outside and away from
the distraction of other groups. What’s more, half of the CDC’s 4-year-old’s had worked with a prior Philosophy Friends class when they were 3.10 Just as importantly, their teachers have been at it longer: after four terms, the philosophy rules have become part of the CDC culture. Logistical challenges working with WPD often left teachers unaware of undergraduates’ goals. As a result, children were exposed to mixed messages, as undergraduates would encourage disagreement only to have teachers tell them to reach a consensus. By the end of the project, we were all much more on the same page. A month later, teachers report that they have “become more open to introducing abstract ideas such as courage and friendship,” whereas before they would “assume the children were too young for that.” Some have begun integrating such ideas into their cultural lesson plans, e.g. talking about peace and friendship in connection with China, and have come to a new appreciation that for some subjects, “everything is perspective.”

For those engaged in early education, we hold out this change in school culture as a goal that has long-term value and may be accomplished within the pre-K system as it currently stands. In practical terms, this means teaching the three rules, embracing philosophical puzzles when they spring up, and treating children—at least in some registers—as our intellectual peers. While formal training in philosophy is not necessary to undertake such a project, the children’s wonderments and deep thinking inspired us grown-ups to expand our own horizons. It is in this last respect that children have something to teach us: if we honestly listen to what they think and join them as they explore life’s big questions, then we might nurture and develop the childlike wonder that Aristotle once identified as the beginning of philosophy.

References
Wartenberg, Thomas (2013). *A Sneetch is a Sneetch and Other Philosophical Discoveries*. West Sussex: Wiley-Blackwell.

Endnotes

2 Kenyon’s students have spent one term working with a 5th- and 6th-grade gifted class at Fern Creek Elementary and two terms working with 1st- through 6th-graders at the Walden Community School, both in Orlando.
3 Wartenberg 2014, 44.
4 The following discussion of the Philosophy Rules is also laid out in our (2017) “The Three Rs of Thinking: Nurturing Discussion in Preschool”.
6 As Wartenberg argues, one does not need formal training in philosophy to teach it. Yet, some background research into the history of philosophy will be quite helpful when it comes to identifying puzzles. Jostein Gaardner’s novel, *Sophie's World* (2007), offers a historical overview of Western Philosophy in a fun and accessible way. Wartenberg, *A Sneetch is a Sneetch and Other Philosophical Discoveries* (2013) takes a topical approach, introducing adults to philosophical big ideas through familiar children’s books. For those with a bit more background, Matthews, *Socratic Perplexity and the Nature of Philosophy* (1999) is a goldmine of puzzles.
7 Piaget’s developmental model might suggest that children’s concrete thinking would preclude them from the abstract thought required for philosophical discussion. Matthews 1994 argues elegantly against this suggestion.
8 Similar to our activities, a ‘suitable’ storybook is one that encourages questioning and disagreement. While there are certainly plenty of these out there, few of them are short enough to work for 4-year-olds. The works of Arnold Lobel and Leo Lionni are notable exceptions.
9 On one occasion, for instance, two children got into a raised-voice disagreement over whether each animal in Michael McClintock’s *A Fly Went By* caused the next to run away. They kept talking, however, eventually realized that they in fact agreed and then calmed down. To my thinking, this exceeds the level of rational discourse displayed in some recent presidential debates. During another discussion, prompted by Molly Bang’s
When Sophie Gets Angry—Really, Really Angry, one girl said “it is okay to get angry but you still have to be nice,” while another held to her position, “you shouldn’t get mad.”

At the time, these meetings where frustrating enough, e.g. children contradicting themselves without recognizing it, that we decided to focus our efforts on 4-year-olds instead. That said, the children we worked with at 3 ended up being the strongest of the group of 4s. This suggests that there is further work to be done in pushing the minimum age for philosophy even lower. While working through puzzles requires children to recognize and respond to contradiction between views, 3-year-olds are quite capable of learning the philosophy rules through games, and may be exposed to philosophical concepts (courage, friendship, fairness, etc.) even if they are not yet encouraged to interrogate those concepts.

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