Promoting School Readiness and Early Child Development:
Findings from Cognitive Elicitations

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INTRODUCTION AND SUMMARY

There is a growing collection of voices in the United States calling for greater attention to the conditions in which our young children are living, growing and developing, and the outcomes that follow when those conditions are unhealthy. Social science research continues to detail the ways in which everything from the composition of paint on the walls in a home to parents' patterns of community involvement can have a long-term effect on how a child grows and develops. At the same time, neuroscientific research continues to uncover the particular means by which the brain processes a rich variety of experiential factors and translates them into developmental outcomes.

Advocates with an interest in the healthy development of young children have access to a growing arsenal of data pointing to the importance of various sorts of programs, from prenatal care to social services for parents. What is less clear is whether they have the right tools for conveying all this understanding to the public so as to build support for those programs that support school readiness. The wealth of new scientific findings brings obvious advantages, but also creates a challenge for advocates: How can the multiplicity of messages about early childhood development be integrated into a clear and motivating picture?

As a part of the David and Lucile Packard Foundation's ongoing effort to promote the welfare of young children, they commissioned the research reported on here, which investigates the American public's understandings of early childhood development, and the ways in which Americans might be brought to engage with the issue more actively. The Packard Foundation and others in the early childhood field hope and believe that the concept of "school readiness" (and perhaps the term itself) will be effective as catalysts to engage public interest and action on a broad variety of particular issues, from mental health to nutrition to family planning. Advocates hypothesize that the idea of getting kids ready for school will serve as a powerful and motivating organizing frame through which to view a range of issues which bear on early childhood development (ECD). In conversations with a diverse group of forty Americans engaged in their communities, and through cognitive analysis of those interviews, we tested that hypothesis, and explored other aspects of public understanding that have a bearing on attitudes and policies towards ECD.

Methodology

The research for this project entailed 40 in-depth, one-on-one cognitive interviews (elicitations) with parents who are civically and/or religiously active, key indicators used by all the FrameWorks researchers to identify likely voters and community influencers. The elicitations took place in Rhode Island, Arizona, Kentucky, and Wisconsin. Subjects were diverse in terms of ethnicity, gender, political orientation, age, and socioeconomic status.

One important aspect of the cognitive analysis applied to these interviews is that it aims at identifying default patterns of thinking, by which we mean those meanings which are readily available to people and to which they turn for interpretation in the absence of other meaningful cues. It does not focus on cataloguing everything an individual might know, since people often have intellectual knowledge which fails to come into play as they go through their natural thought process about an issue. It also does not focus on eliciting explicit opinions, since people are used to repeating ideas familiar from public discourse, even when these ideas do not guide
their everyday thinking. Cultural Logic's approach emphasizes patterns of thought and the relationships between one idea and another.

(See the Appendix for a more detailed description of elicitations and the cognitive approach.)

**Strategic Summary of Findings and Recommendations**

"School readiness"

Although Americans want children to succeed in school, and recognize that there are factors which make them either more or less prepared to do so, the concept of "school readiness" is not an organizing principle in lay people's minds. It is not a clear and motivating concept which is ready to be "tapped into."

**Missing Understandings -- the Developmental Black Box**

Lay people care a lot about whether kids (their own and others) are developing properly, but they lack coherent understandings which could make the concept of development more focused and meaningful.

- **Visible Learning Vs. Hidden Development:** People tend to think of development in terms they can grasp directly. E.g., default understandings of learning tend to involve *observable scenarios* -- trial and error, an adult explaining a fact, an adult setting an example, etc. -- but no sense of how the *hidden development* underlying observed behaviors comes about.

- **Filling a vessel vs. Creating a tool:** People are more likely to think about filling a child's head with important knowledge than helping *create* the kind of brain/mind that a child needs in every sort of situation.

In particular, there are three key ideas which are weak in public consciousness:

- **Total Environment:** A child's development is shaped by everything from chemicals in paint to interpersonal relationships.

- **The Developing Brain:** Unlike most of the body, the brain is very different at birth from what it will eventually become. The developing brain translates experiences of all kinds into developmental outcomes.

- **Multi-track Development:** Physical, Intellectual, Social, Emotional and Regulatory development are all critical and all interconnected.

**Models to be reckoned with**

In addition to understandings directly related to development and learning, there are three other conceptual frameworks which are consistently evoked whenever people think of children, and which should be taken into account in any communications about early childhood development. Each presents both challenges and opportunities.

- **Child rearing takes place within the family "bubble":** Thoughts of young children automatically lead to thinking in terms of life within the family. The challenge arising from this model is that a family-centric view can make it less natural to understand the role of the larger community in the child's life, and the role of the child in the larger community. There
is an opportunity as well, since promoting successful development can be framed to fit naturally with the family's goal to provide love and nurturance.

- **The goal of childrearing is to raise a successful and self-reliant child:** Future success (in whatever specific form) is a universal theme when the topic is young children. The opportunities here are straightforward, and in fact it is people's motivation to help children succeed in life that is the basis for the "school readiness" strategy. There is a challenge, though, in the fact that American notions of success include the idea of a child who is self-reliant; the more self-reliant a child is the further s/he moves from the motivating sphere of family and love.

- **Caring for a child means keeping her safe and healthy:** The "defensive" view of health and safety presents a challenge: the priority on protecting children can tend to preempt thoughts about development (e.g. when people think of a good daycare facility as a safe one). On the other hand, there is a very real connection between awareness of development and a more proactive perspective on health.

*Why help other people's kids? -- nurturance vs. enlightened self-interest*

There are two main avenues for creating motivation on these issues:

- **Tapping into adults' natural nurturant instincts towards children:** Adults regularly express sympathy for children who are not their own, and the more general desire to help kids. People easily extend their maternal/paternal instincts to all children. It may be possible to tap into this child-directed altruism by framing development in terms of broader notions of health (always a strong concern for parents), or nurturance, or by focusing on the unfairness that socioeconomic factors impose on children (a riskier strategy).

- **Tapping into people's desire to make their own world better:** People are also motivated to improve children's outcomes because of how they perceive society will be improved. Most people are conscious of the role that children play as members of our own communities and environments. The children around us have impacts on us, both now and as they grow into adolescence and adulthood.

*Recommendations*

Several strategic directions suggest themselves from the elicitations. (Each of these is discussed in more detail in Cultural Logic's analysis of the materials currently used by advocates.)

- The idea of "school readiness" will be more motivating if used in combination with effective language for conveying more general ideas about early child development.

- In order to do this, advocates need clear and effective ways (i.e. simplifying models) for bringing "hidden development" into sharper focus in people's minds -- ideally including notions of multi-track development, the "total environment," and the developing brain.

- In addition to pursuing the Success route -- by talking about school readiness -- advocates should explore ways of tapping into the other two motivating domains which are inevitably associated with young children: Family/Love and Health/Safety.
Advocates should also take advantage of people's interest in leaving the world a better place and improving society in general by improving the conditions in which our children are growing and developing.

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School Readiness as a Promising but Problematic Frame

In principle, the idea of "school readiness" is one that should be compelling to the American public as a whole. It appeals to a widely shared value rather than one with narrow relevance -- most Americans believe that schools serve an important function, and nearly all agree that education is important both to individuals and to society. Just as importantly, it relates to a practical need rather than solely appealing to altruism or empathy -- schooling is understood as a practical requirement no matter what your values or goals in life. Furthermore, Americans' practical instincts tell them that, if we have a school system we ought to do what we can to make sure we are getting the most out of it. In short, school readiness seems like a concept that nearly all Americans should be able to get behind, regardless of political leaning, ethnicity or any other major dividing factor. However, if this idea is going to be used to sell Americans on a wide variety of attitude shifts and policy directions to make children's lives better, there are several important catches that must be addressed.

Not a salient concept

First, neither the idea of "school readiness" (or "ready to learn") nor these terms have much currency. It is an organizing principle for experts, but not for average people, even those who care a great deal about kids. As one simple illustration, the term "school readiness" shows up almost exclusively on "expert" and "insider" web sites. More importantly, our interviews show that school readiness is not a concept people typically use to reason with. When they think about the things we do to help children learn and grow, the idea of getting them ready to thrive in school does not often occur to them as a focus.

Q: When you read to your kids or have them read to you or playing board games or playing outside, a lot of the things that you mentioned, are you thinking ever that it is good that I'm doing this because it will help get them ready for that first day at kindergarten?
A: Rarely, but yes. Rarely.

I think because our kids so far [have] been confident and above what you would expect for their age, it has not been a concern. It has not been, "oh gosh, I have to get going on reading
to them because pretty soon they are going off to kindergarten and they can't read yet." You know it has not been an issue yet.

They understand that children need certain knowledge, qualities and abilities in order to do well as they start school, but the concept of "school readiness" is something like "things you keep in the trunk of your car" -- people can come up with examples, but the category is not one they are used to thinking in terms of. It is not an idea that exists robustly in people's minds, ready to be tapped into. When people are asked directly about school readiness there is very little consistency in their answers. While their individual responses are perfectly reasonable, the variation between them reflects the fact that there is no shared understanding of school readiness that easily comes to mind.

Q. What do you think are the most important things that help prepare a child for school?
A. Definitely a-b-c's and the basic fundamentals. Yeah, like right from wrong. Because -- a-b-c's would be a big help. And numbers.

Q. Are there certain things a child should know before they go to school?
A. Well, first of all they need to know how to act. They need to know certain manners, they need to know how to contain themselves, how to sit down when they're asked to sit down. So I think that's the first step, is having some home training.

Q. What do you think are the things that pre-school-age kids need to learn to be prepared for school?
A. I think more that they really need to focus on art and music-type manipulative skills, because they're ... transferable for them, and every kid can kind of hang out and play and do those type of things. Because they learn ... their fine motor skills as well as their large motor skills...

Understanding "School Readiness" Depends on Understanding Early Childhood Development

If the lack of a ready model of school readiness were the only catch, then the obvious solution would be a campaign to popularize the terms and the concepts. Teaching people to think in new ways is never easy, but at least the goal here would be a straightforward one and the rewards for success would be great.

The second catch, though, is more serious and fundamental: If people have no clear understanding of early childhood development -- if it is a process happening inside a "black box" and outside of their awareness -- they can never fully appreciate what it means to be ready for school. Early childhood development is the missing link between a child's various circumstances and that child's readiness to do well in school. Even if the model of "school readiness" (and the term) were well established, we expect that people's motivation on the issue would be disappointingly low because it is harder to engage with an issue when you lack understanding of
it, or have a confused, contradictory set of understandings. This is exactly what we have previously found on the global warming issue, for example -- average people know the term, and generally believe in the phenomenon, but usually lack engagement due to a very scattered and incomplete understanding of the issue -- and the same seems to be true here. Put simply, there is no coherent model of early childhood development in the mind of the average American. We are aware of children's behaviors, but the developmental processes leading to those behaviors are unknown. As a consequence, any effort that counts on the public's concern about early childhood development is significantly handicapped. Advocates need effective ways of talking about early childhood development in order to make discussions of school readiness meaningful and motivating.

A WINDOW INTO THE "BLACK BOX" -- MODELS MISSING FROM THE PUBLIC'S UNDERSTANDING

Of course, average people do know a great deal about children's growth and development -- they know that kids typically learn to walk before they learn to read, that they become gradually less dependent on their mothers, that they go through a babbling stage before they are able to speak intelligibly, etc. Many of them (though not all) are even comfortable using the term "development." But in ways that are critical to the ECD issue, lay people tend to have major gaps and blind spots in their understanding. Here are some central ideas that experts understand in a way that average people do not:

- **The "Total Environment"**: A child's developmental outcomes reflect his or her environment in an infinite variety of ways. Everything about a child's environment matters -- from chemicals in paint to interpersonal relationships.

- **The Developing Brain**: The brain develops in fundamental ways as kids grow. Development of the brain is the mechanism by which experiences of all kinds are translated into developmental outcomes such as skills and personality traits.

- **"Multi-track Development"**: Early childhood development can be described as a simultaneous, multi-track process. Physical, Intellectual, Social, Emotional and Regulatory development are all critical and all interconnected.

In order for average Americans to become significantly more engaged with the general issue of Early Childhood Development and the more specific issues associated with school readiness, they will need to internalize at least some additional understandings about these three topics -- not on the level of expert models, but in much simpler terms which clearly capture the essence of the expert knowledge. In order to see just which ideas are missing from lay people's current thinking, we will consider each of these three topics in more detail.

**The Total Environment**

Average people do not have a strong grasp of the link between various aspects of a child's circumstances and the child's hidden processes of development.
For example, they are likely to believe that children raised in poverty have significant disadvantages when entering school, but they are unlikely to have a clear understanding of what those disadvantages are. Consequently, they are very unlikely to think of improving economic conditions in a neighborhood as a way of helping kids be more successful learners. They see the need for programs that help disadvantaged kids to better in school, but they are much less likely to think in terms of alleviating the disadvantage itself, in order to improve conditions at developmental stages prior to school.

Certain factors tend to dominate people's thinking about what helps kids get "ready for school" -- e.g. whether parents read to them. Other factors, such as lead paint in the home, whether or not the mother received prenatal care, whether or not there were mental health services or family support programs available in a child's community, or whether a child might be lacking in confidence due to lack of a nurturing bond with parents -- are essentially off the radar screen. The picture in people's minds is fragmented and disproportionate, with some factors receiving more attention than they deserve (e.g. learning the names of colors) and other, more important factors barely represented at all.

Note: This topic is very important, but also needs to be treated cautiously. It is not about reinforcing the idea of the superparent, who knows everything there is to know about the science of child development. Instead, it is about informing the public about systemic thinking, in which every aspect of a community and every policy decision is linked to potential impacts on our kids' bodies, minds, brains and futures.

The Developing Brain

While headlines about brain development may seem to have been prominent in American news for the past several years, the information coming out of the brain research has penetrated only shallowly into the American public consciousness. The public has picked up on some ideas; for instance, the idea of a special period of development between the ages of zero and three is relatively well known.

[T]here's just so much acquisition going on, especially zero to three years.

It is clear that there are windows of opportunities for development of certain behaviors and relationships. Times of maximal ability to acquire language skills and things like that, that if we miss those opportunities, if those kids are deprived of those, that it will be difficult or impossible [to catch up].

However, only a small minority of our subjects (5 out of 40) referred to the brain spontaneously during lengthy discussions of children's growth, learning and development. People have a sense of what it means to think like a child, and ways in which we can influence a child's behavior, but no particular understanding of -- or even awareness of -- the physiological systems underlying these experiences and behaviors.

People tend to think of a brain which is picking up new information, but not a brain which is changing in important ways in response to experiences of every kind (including eating and other physical events).

*No concrete mechanism*
Part of what this lack of knowledge means is that lay people do not have a practical sense of a mechanism linking the experiences in a child's life to the developmental outcomes later. This is an important point because Americans are especially likely to focus on problems when they understand them at a practical level. While knowledge about the brain is not practical in the same sense as knowledge about car mechanics or cooking, the fact that the brain can be described as a mechanism helps make various problems relating to the brain feel more concrete, real and addressable. Those subjects who do mention having heard about findings from brain research are not skeptical. This information seems practical, believable and relevant to them, even if they have not absorbed it deeply or in detail.

Q: Can you recall anything that you’ve run across in the news about brain biology, the ways in which the brain develops in the first few years of life?
A: I recall reading something about that but I don’t recall what the findings were.
Q: Do you remember whether you found that study credible?
A: It seemed like it was a credible study and it seemed like it had some significant information and it was worthwhile to look at. ... I would say it is really interesting if it’s from a credible organization and [relevant to] what they’re saying.

If you don't have good prenatal care, and you don't have a good brain, you're worthless.

Multi-track Development

Experts in child development know that "children's readiness for school is multi-faceted, encompassing the whole range of physical, social, emotional, and cognitive skills that children need to thrive" (from "School Readiness Indicators: Making Progress for Young Children," Rhode Island Kids Count, June 2001). Physical, intellectual, social, emotional, and regulatory development are all essential and all connected. But average Americans currently have no coherent picture in their minds of this "5-way development." While people do understand that children grow and develop in a variety of ways, they do not understand much about the processes of development, or about how these tracks of development are related to each other. Instead, to the extent people are aware of these distinct facets of development, they seem to happen separately, and to exist as separate topics in people's minds (with certain exceptions -- people are very aware of self-esteem as a social/emotional quality that impacts academic performance, for example).

A missing term -- the "Whole Child"?

A good reflection of the fact that the development of the "whole child" is not a commonly understood idea is the fact that we have no common language for talking about this idea. There is no existing term (or concept) referring to the child who has successfully developed in all five areas. None of the possibilities, for example, really captures what psychologist Stanley Greenspan has referred to as a child with a "Healthy Mind": winner?, self-actualized?, thriving?, capable?, ready?, ready-to-learn?, ready-for-school? (And of course, the fact that Greenspan
needed to coin a term is revealing in itself\(^1\) -- see also the use of term "the school-ready child" in RIKC document cited above.) Even the term "whole child" is one coined by experts to express an idea with no real counterpart in public discourse.

An example of a missing conceptual link: socialization

In the minds of the people we spoke with, a child's social success in school depends almost entirely on the learning that happens once the child is put into an environment with other kids. That is, social skill -- the ability to get along with others -- is understood as something that children acquire by practice and observation in social settings. The piece that is typically missing from this understanding is that early bonds with parents play a critical role in determining how well children are able to socialize; that is, lay people typically do not consider social skills in developmental terms, or in connection with other aspects of a child's growth and experience.

Visible Learning vs. Hidden Development

Scientific understanding of cognitive development has evolved rapidly in recent decades, and public understanding naturally lags far behind. This is another area which clearly reflects the difference between people's commonsense understanding -- i.e. of learning -- and the expert models. In particular, people tend to think in terms of simple and observable scenarios of learning -- you teach a child a fact, or show a child a skill, or teach by example -- all of which leave out developmental mechanisms. People are aware of what they are able to see when it comes to learning, but not of the more complex and subtle ways in which a child's intellectual, social and emotional capacities are being formed by their experience, including the brain mechanisms involved. It is as though people think about how to "fill" kids' heads with the right knowledge, but do not think of how we are actually shaping or even creating the "tools" they will have for the rest of their lives (intellectual, emotional, social, etc.).

Lay people use lots of metaphors to talk about development, learning and behavior, presumably because these are topics people have little concrete understanding of.

\[I\]f we don't instill a sense of discipline and values and that kind of thing in our children, our society eventually is going to be a place where things just don't have much structure

\[I\] think it's evident in our culture with drugs, gangs, violence, all that kind of thing, that the time we don't spend with our kids keeping them on track and making sure they understand our values and our way of life and what we want for them, and in the end means that it's easier for them to get sidetracked.

\(^1\) Building Healthy Minds: The Six Experiences That Create Intelligence and Emotional Growth in Babies and Young Children. Stanley Greenspan, M.D. with Nancy Breslau Lewis. 1999.
Q: What's happening inside a kid's head when he or she is just sitting on Mom or Dad's lap with a book?
A: Um, I think without knowing it, they are absorbing a lot of things.

Q: You mentioned a couple times about the brain. ... Tell me more about your sense of brain development in preschool kids, 0 to the first day of kindergarten.
A: Nutrition. I think they need routine. I was just reading about this again how the brain likes pattern.

People also talk about kids crossing thresholds, kids' circuits being overloaded, making an impression on a kid, formative experiences, kids being ahead or behind, etc.

Faster Learning vs. Better Development

Another indication of people's difficulty in grasping developmental perspectives is that when trying to think about the advantages of programs like Head Start, they tend to focus on when kids are learning things, rather than the long-term benefits to the children's development.

Q. Were your kids in Head Start?
A. Yeah. I really think you have to have early education, because if the kids start early, they want to set goals for themselves when they get older and go to college, instead of not going to, and just ending with a regular job, and then being a/you know, then they're going to be in a struggling mode when they get older.

[Y]ou know maybe the best thing is if our parents can't be there with their children to teach these things [i.e. colors, how to count], then maybe the best bet is to start [a program like Head Start] at 3 and 4 so that by the time they get to 5 years old they're not already behind. I mean it's a shame to think that a kid can be 5 years old and they're already behind.

When you've got two parents in a family working, or you've got a single parent, it's time that just has to be spent developing children and getting them to read at a very early age. That's the key, because you can't catch up. I found that when I was going to school, you wait 'til the last night to take an exam, you never pass. You've got to build, everything is a building block.

While most people agree that it would be hard to "catch up" if you start with various disadvantages as a child, this sense is often vague, and not connected to any particular idea of developmental doors that have closed and so forth.

When lay people do try to think about how children learn, the following are some of the patterns that make most sense to them. While none of these is "wrong," the overall pattern leaves out any sense of what is happening inside the child.

Learning as explicit instruction
Probably the most common sense of the word 'learn' has to do with a person in a situation where explicit knowledge is being conveyed, such as a child having something explained by a parent or teacher. Along similar lines, people's first ideas about what kids 'know' typically have to do with facts and concepts, such as numbers and the names of colors, rather than, for example, knowing to be nice when dealing with other children. Again, one moral is that it is easy to think about basic and familiar scenarios involving children, but less natural to think from a developmental perspective.

I don't know whether it's just in Kentucky or not, but there is a kind of Head Start program where children ... can get involved and it's at ... an elementary school, and it's not like day care. It's structured in an educational setting, and when they get to kindergarten, they know their colors, they know how to count.

If it is a good daycare and as the kids get older, you are not just going to babysit them, you are going to start to introduce academics so to speak.

An important caveat here is that learning in this sense can quickly shade into the domain of formal schooling. Despite the positive tone of the second quote above, people are generally very uncomfortable with the idea of pushing toddlers into the academic sphere too early. If people jump from 'learning' to schooling, they are likely to become uncomfortable once they think of very young children in that context. The word "education," too, is strongly associated with formal education in kindergarten and beyond. In the following exchange, the subject starts by talking about early childhood programs, but unconsciously switches gears, presumably because the topic of education naturally leads him to think of older children and more formal schooling:

350 million dollars [for Early Head Start]? It's peanuts. You've got 50 states, and assuming they're all equal in population, which they're not...that's $7 million dollars a state. I mean, doesn't seem like much money to me. I mean we're a state of a million people, so if you did it on a per capita basis, we'd probably get three dollars and fifty cents. Not much money... I think, you know, it's interesting--it's not whether it's Bush or Clinton or Democrat or Republican, but if you figure out that you want to have a top educational system in the world at the elementary and High School level, then you've got to fund it. And you've got to say this is a national priority.

Learning as developing habits (behavioral model).

People often think of learning as acquiring habits. Again, this is not a developmental perspective, but one that is based on observable behaviors and scenarios.

I think when there's a certain habit when you read to a child, or tell them a story or something like that, that gets them in tune with doing it on their own eventually. That would be one thing for them to have under the belt by the time they're 6, to have that, not instinct but that curiosity to go walk up to the bookcase and grab a book and check it out, read it. And from there develop some kind of awareness or affinity for that kind of action, the action of grabbing the book and sitting down and exploring it, you know. I think that's important.

I know for me, with my parents reading to me and that kind of thing, I learned that education was really important, and it became just something that I did, just another part of growing up.
Learning happens by imitation.

Imitation is another form of easily observed scenario. Interaction with parents is understood as one of the main ways children have an opportunity to learn through mimicking.

[A] child's going to mimic your behavior, so if they see you respect other people and do things in moderation and not expect to get everything you want, then from the time they can observe, they're already learning that.

Learning requires practice.

Social skills are an example of something that children are understood as learning through experience, trial and error.

[T]hat gets back to the issue, is it better to pay the mother to stay home with the children or go to work? And in that case I would say ... probably I'd have to go with providing assistance to get them to work and support day care, simply because of what will happen down the road, and the socialization

[L]et's face it, home schooling today is bigger than it's ever been, and it's always been proven to be successful. But uh, you know ... there's always that question, what about socialization?

Daycare isn't about development

Attitudes towards daycare reveal quite a bit about lay people's understanding of early childhood development. The general pattern is not surprising, given what we have said so far and what other researchers have previously reported: for members of the public, daycare is largely about factors other than how it can contribute to a child's development. Our interviews confirm that daycare is thought of primarily in terms of two frames -- its necessity for families where economic realities make it impossible for a parent to stay at home with the child, and the health and safety risks it can pose to a child.

When people get beyond logistics and safety issues and consider what constitutes quality in a daycare setting means, they do feel that kids should be active rather than just "sitting around," but the most common thought is that providers should be people who care about kids. While experts know that nurturance and emotional bonds promote healthy development, the reasons lay people express typically relate to children's comfort and happiness, rather than to development.

I think that the people who are doing it [providing daycare] really need to have a heart for kids and really love them. I think that is so important. Just enjoy the children where they are at. I don't think they have to have a lot of things to manipulate and all that kind of stuff but just to feel comfortable with the person taking care of them.

Since he was so young, I wanted to make sure that ... he wasn't going to sit there crying forever before somebody came to see what was wrong with him ...because I held him so much and I knew that he kind of wasn't used to just sitting there, I wanted to make sure that if he just wanted to be held that there was somebody available to do that.
MODELS TO BE RECKoned WITH

There are three strongly established conceptual domains which enter into the discussion whenever lay people talk about young children: Family, Success, and Health/Safety. Any attempt to frame children in scientific, political or economic terms will run up against these much stronger associations. Each of these models presents certain challenges to advocates on the early childhood education issue, but each must be dealt with and each also offers opportunities.

Childrearing takes place within the family "bubble"

Children are understood first and foremost as members of their own families. Their reality is defined by what goes on in their own homes, and the interactions between themselves and their family, particularly their parents. It is regarded as natural and appropriate that a child's life should be defined in this way, and even if a young child cannot be at home for practical reasons, then she should be in an environment that is similar to a home. If daycare is used, it should be an approximation of the family.

Most people want to leave their kids in a family-type environment. They don't want it to be like a corporate setting. [regarding styles of daycare]

An obviously positive implication of this view is that it promotes the kinds of loving bonds that experts know are important for healthy development. The early love and nurturing a child receives, especially from parents, are sometimes explicitly recognized as important for outcomes.

So with my son ..., I think that's why he is the way he is [i.e. very bright and successful] because in the first year he had a lot of nurturing.

Another positive consequence of this emphasis on the role of the family in a child's life is that nearly everyone, including conservatives, agrees that it is appropriate to pay taxes for family leave, and even that such programs should be increased.

The Closed Family and the "Child-Home-Family" Nexus

The chief challenge arising from the family-centric view is that it leads to thinking in which there is no natural relationship between the child and the broader community. A strong default assumption, even among people who sometimes express other views, is that parents have nearly full responsibility for determining their kids' outcomes. The corollary to this view is that we should avoid interfering in the raising of a child whenever possible.

Q: Do you think that some people have the right to impose themselves into the way other people raise their kids?

A: That's a sticky one. I suppose there is ... I suppose most people would have a limit, a line, where they would feel like okay this behavior crosses the line.

In my side, I wouldn't tell another kid, "no, don't do that." Unless, if it will endanger themselves, yes, I would, if they're in danger. But if they do something bad, like ... just
outside, I'm not sure what the parents let them do, but I won't go ahead and say, "no, you're not supposed to do that."

If a child was in harm’s way, I would step in. In terms of disciplining another person's kid, you kind of have to watch out, because our culture isn't a culture that condones that.

This common default way of thinking obviously presents obstacles to achieving a broader perspective on community responsibility for the welfare of children. When the family is essentially a "closed system" -- operating, for better or worse, independently of anything outside the home -- opportunities for helping the child are limited. The "closed family" view is consonant with American individualism, and it is strongly reinforced by public discourse.

The Community Child -- an alternative mode of thinking

Fortunately, people have a competing understanding which they also "toggle" to regularly. This second view treats children as members of the larger community -- which can be defined as an extended family, a neighborhood, a town or city, the country, or anything in between. In this broader view, we all have a responsibility to look out for the welfare of "our" children, and we all have a stake in children's health, happiness and ultimate success. The phrase 'it takes a village' cropped up in several interviews.

Q. Do you think it's other people's business how someone raises their child? Is it society's business?
A. Society's business, how we raise a child? Yeah. It's everybody's business, because the population affects everybody. And people that are more civil, that are really better educated, become better and more productive citizens.

Q. Why is it anybody else's business how I raise my kid?
A. Because we're all part of a society, and the success of our society and culture is interdependent on everybody who lives in it, who's part of it.

In this independent mode of thinking, people see the child in terms of her role in the community, either now or later. In the short term, the child is a needy and vulnerable person who deserves help and attention from those around her. Over the longer term, the child grows into an active agent who has impacts on the community.

Well, I feel that children are our precious resource, and if we don't nurture them and try to encourage them to do well and to make a difference, then it really damages the environment.

Yeah. I mean the scores are down, the work force is less qualified, this whole push on educational reform is coming primarily from the business community because they can't get qualified workers. And if you have a society that's built on jobs, then you're going to have to/gonna really have to have an educated work force. And, more important than that, you're gonna have to have people that are educated and know what a democracy means, what our
constitution means--especially in this day and age. And if you just shuffle people through a system, eventually, in a 50 year period, you're gonna really be a totally different country. And that's a possibility. So education is the key to our whole country.

<table>
<thead>
<tr>
<th>Member of community</th>
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<tbody>
<tr>
<td>Now: Needy member of community</td>
</tr>
<tr>
<td>Near Future: Factor in community life as adolescent</td>
</tr>
<tr>
<td>Long-term: Eventual worker, citizen, consumer, etc.</td>
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The child as a member of the community, now and later

People are also sometimes conscious of the more specific fact that helping kids now means reducing society's bills later.

Well, I think it's been proven that kids that get off to a slow start or a "no start," uh, require special education, require extra tutoring, and that's a very expensive thing, so that if we could really get to kids a lot earlier we'd prevent a lot of heavy expenses later on.

If we are just doing merely custodial care for those kids at a time when their intellectual and their social development-- I mean day by day, week by week growing, we can't afford to miss that opportunity and it seems to me that we end up-- the classic case where we end up paying for it later in different ways and we will continue to do that, and I'm afraid we are just not aware of it so we find ourselves spending more for prisons and we don't know why.

Overall there is a real tension between the Closed-Family and Member-of-Community views -- people typically believe both and often have a hard time weighing them against each other. They may even switch back and forth during the same brief conversational exchange.

Socioeconomic status as a possible bridge between family and community

One potential way to bridge between the sphere of the family and the community sphere is by reference to socioeconomic factors. Everyone (including the conservatives we spoke with) recognizes that poverty impacts families' ability to raise their children well. People are quick to recognize that poverty leads to trouble of all kinds, including behavioral, academic, and emotional problems.

Teachers know. They can see it. They can see when kids come to school with dirty clothes on, hair ain't combed, hygiene/teeth ain't brushed. Teachers can see it.

This tack would have to be handled very carefully, though, because broad-based programs that help everyone are seen as "fairer" and more appealing, and, just as importantly, because there is the risk of evoking stereotypes about people in poverty and provoking a backlash against programs to help them. Bostrom’s recommendations about the “opportunity frame” may meet this important criteria.
Bad parents vs. Bad situations

Another potential downside of the family-centric view is the demonization of some parents. If children's growth and learning is almost entirely the responsibility of their parents, this would suggest that the blame for poor outcomes falls squarely on parents' shoulders. In fact, though, we found that this "parental deficit" model is not dominant, though people did express it. It seems to be the case that public discourse and hasty thinking support the parental deficit understanding, while on further reflection people generally have a more sympathetic and realistic view. (We speculate that this is why our findings here do not match the common finding from opinion research that people are eager to blame bad parents for bad kids.) Here are three examples where subjects seem to shift perspectives within the same interview. They seem to "toggle" between the bad-parent view and a "parenting-is-hard-work" view:

**Q.** Do you see people having kids that maybe shouldn't have kids?

**A.** Yeah, I see that all the time, but hey, who am I? I ain't their judge and jury. You know, the way I look at that is, they've got to stand before a just God. You know, so, hey, it's a book being written on all of us. When our day is finished on earth, we have to stand before a just God, and he's going to look at everything we've done good, everything we've done bad. It's on them.

vs. (same informant, later)

Well I feel that if a [parent] is not making over the poverty line, if they're trying to work and raise a family, I think the government ought to help them out. You know, if a person is really trying, I think the government ought to kind of subsidize and cushion it a little bit for them.

**Q.** Is it better to train parents or to invest in better childcare centers?

**A.** Invest in childcare.

**Q.** Why?

**A.** Because a lot of people probably ain't gonna do it.

vs. (same informant, later)

I think parents, especially young girls/I know they have programs for that [parent education], I've seen that. In High Schools ... /but they have to be ready, because a lot of girls...they're not ready for it. I think [parent education] would be great.

And this is one of the biggest shortfalls, is getting parents involved in education. They just don't. They don't show up to PTA meetings, uh...this is what I've heard is the biggest problem in the schools, is getting parent participation in their kids' education.

vs. (same informant, later)

I think you have to help the parents in lower income groups become educated and realize the importance of education to their children. That's the key thing. ... [A] lot of people don't have the ability to get out of their own circumstances and environments and it's almost
impossible. I mean, we're sitting in a diner now, and most of these people are just making it, they probably have two jobs, I mean they have no money for books for their kids. They have no time. So this is the group you've got to help. You've got to figure out how to help them. And it's not just throwing money at a day care center, I mean you've got to figure out how to do it right.

Community stakeholders can take hope from the fact that, upon reflection, people generally come around to acknowledging the difficulties parents must face.

[T]here are other things [besides lack of knowledge] that inhibit them from being effective parents. So many single parents. So many two parent homes but both parents work, Dad works two jobs, Mom works one, there are x number of children over the national average in the household, there may be other generations needing to be in the household; and with that low amount of resources, there may not be the chance to do much outside the home, to stimulate the learning and the perspective in the early years.

Both liberals and conservatives typically also agree that it would be a good idea to give more adults parent training.

I think a lot of fathers shy away from these kind of situations, and we need to somehow make them do it. It's just part of getting the tax break ..."we will not allow your kid in this Head Start until you come here and show up and take a course." Make it part of the deal.

Q: Is it better to train parents or to invest in better childcare centers?
A: Train 'em all! Anybody who wants it, anybody who's going to take time out of their schedule to go get some training, let 'em go get it. Childcare providers, parents, if they want to learn, teach 'em. Don't deprive 'em.

The bottom line regarding views of parents seems to be one that is positive for advocates: While people are reluctant to interfere directly in family matters (e.g. by disciplining other people's children) they are very comfortable with doing things to help make families stronger and to give parents a better chance of success.

The goal of childrearing is to raise a successful and self-reliant child

It goes without saying that parents want their children to succeed in life. This is implicit in most of the things they say about their children. They are not simply interested in keeping a child happy and healthy now, but in doing what they can to insure that the child will do well in school, in work and in other areas of life in the future. This emphasis on success is the implicit motivational basis for the "school readiness" framing of early childhood development.

One characteristically American aspect of "good childrearing" is an emphasis on producing children who are assertive and self-reliant.
Independence, by definition, means greater distance from everyone, including parents.

*I'd rather see a child get themselves in trouble for being creative and figuring out how to get in there, than just Mom Mom Mom Mom--or I shouldn't say mom--Dad Dad Dad Dad, you know, I want that Coke. And to me that's disabling a child, in some ways.*

This model, which reflects the general pattern of American individualism, presents challenges to advocates. Images of family and affectionate bonds are strongly motivating, and the more the idea of an autonomous child is emphasized (i.e. a child who can succeed without help), the more we background the idea of a loving bond with the child and, by extension, a role for the community. In this sense, the autonomous child is a healthy image on one level, but a problematic one on another.

Caring for a child means keeping her safe and healthy

One of the most immediate findings from any research on people's thinking about young children is that health and safety concerns are top of mind. They are often the first things people mention when asked about "good daycare" for example.

*I guess the/you're looking for clean and safe facilities, and the right number of staff per children, and you're looking at activities that help the children grow intellectually rather than make sure they stand in line and be quiet.*

*Out on the playground, I just have this vision, she's like so small and all of a sudden her world gets way bigger, you know. She's in this really safe little pre-school, this safe little yard with two adults there, and now she's going to be on this HUGE playground with big kids and two adults for the whole playground, and I don't know.*

*Well, there's just so many kids in one area, especially when they're infants, they just get so sick. [T]heir immune systems are so immature... Like me taking my child and dropping them off at this kind of institutional type place [i.e. a day care center], my little infant baby, I just couldn't stomach that.*

Rather than working against both of these default patterns of thought, advocates may be able to effectively frame development as an aspect of health -- developmental factors are, of course, closely related to other kinds of health, and this framing may tap into motivations that are already strong.

**Conclusion: Motivations and Opportunities**

No matter what cause an organization addresses, it needs to understand the motivations that can increase engagement on the issue. Here is a summary of key motivating factors that surfaced in our elicitations on children and early childhood development. While these are already known to
advocates on some level, it is useful to catalog them explicitly, and to consider which ones are and are not being effectively evoked.

- **Nurturance/Altruism**: We should help kids because it's the right thing to do. There are various ways of doing this, including helping them get better prepared for school, looking after their health in ways that are more broadly defined to include promoting healthy development, and giving them a kind of love which is broadly defined to include providing the conditions that promote better developmental outcomes. Each of these approaches requires an educational component that teaches people how development works and what we can do to help more kids achieve better development.

- **Societal/Community Interdependence**: We should help kids because society as a whole depends on the welfare of individuals. The view was often expressed that society is deteriorating in a variety of ways -- families are weaker, values are weaker, institutions and communities aren't as strong or stable as they used to be, etc. There should be strong potential in framing early childhood development as a factor that can strengthen all the aspects of society that we value most.

- **Investment**: The general model of investment is deeply rooted in American culture (e.g., “an ounce of prevention is worth a pound of cure”), and has the potential for helping the public see that investing in kids now will allow us to avoid larger problems later. A strong caution must be emphasized, however: There are many ways to misuse this frame – investment into blackmail, or transforming nurturance into cold accounting are two examples of the kinds of traps that advocates are likely to encounter with this frame.

- **Making adults' lives better**: This is a variant of "Societal/Community Interdependence," but over a shorter term. We should help kids because they are part of our own living conditions. Kids who are happier and healthier -- i.e. whose development has been more successful -- are more pleasant to be around, and promoting early childhood development improves our own quality of life.

Note these descriptors are not meant to serve as “messages,” but rather to convey the content that must inform these reframes.

See Cultural Logic's evaluation of current materials being used by advocates on the child development issue -- "What Kids Need and What Kids Give Back: A Review of Communications Materials Used by Early Childhood Development Advocates" -- for a discussion of how the last of these motivations is relatively neglected by advocates, though it offers powerful opportunities for raising levels of engagement.

**Possible strategies/tactics**

Based on our research, we recommend considering the following more particular strategies, in order to take advantage of the motivations mentioned above.

- **Keep in mind the importance of referring to "Level One" ideas such as Family, Love and Health when dealing with early childhood development issues.** Scientific approaches, for example, are unlikely to connect with people in a directly motivating way (but advocates are likely to turn to them nonetheless, since new scientific information is so compelling for those positioned to appreciate them -- this is a tempting trap).
• Develop simplifying models for early childhood development. Advocates need clear, vivid ways of conveying the essence of expert understandings (including the recent brain research) of Hidden Development, including the Total Environment, the Developing Brain and Multi-track Development. These might include, for example, an elaborated metaphor based on Nutrition or one involving essential Tools.

• Pursue the concept of “school readiness” only in conjunction with new ways of talking about what development is and how it works.
About the Author

*Cultural Logic*, directed by anthropologist Axel Aubrun and linguist Joseph Grady, is an applied cognitive and social science research group that helps organizations frame their messages for maximum effect. Working with a network of experts and partner organizations including the FrameWorks Institute, Cultural Logic focuses on research relating to public interest issues. Topics have included global warming, violence reduction in communities, conserving the Chesapeake Bay, global interdependence, gender equity in schools, and toxins in the domestic environment. Axel Aubrun, Ph.D. is a psychological anthropologist whose research and publications take an interdisciplinary approach to problems of communication and motivation. Joseph Grady, Ph.D. is a linguist whose research and publications focus on the relationship between metaphor and other aspects of thought and communication.
APPENDIX -- “THE COGNITIVE APPROACH”

This appendix discusses the assumptions and principles that form the basis for the “cognitive approach” taken by Cultural Logic.

Frames

Researchers who study cognition and culture have established that people understand all concepts in terms of related networks of ideas, also known as frames. For example, the concept of a “father” is not understood in isolation, but in connection with understandings of mothers, children, families, biology, responsibility, and so forth. People are usually unaware of the frames they are using, and the frames themselves are usually expressed indirectly. They are revealed most clearly in the language and reasoning a person uses in connection with a concept. Seeming contradictions in the way a person discusses a topic can be particularly enlightening, because they may reveal conflicting frames at work. It should be noted as well that "frame" is a general term — used somewhat differently in different disciplines — to refer to more specific concepts such as cognitive model, cultural model, and cultural theory, discussed below.

Cultural models vs. cultural theories

A cultural theory is a set of explicit propositions that describe the nature of some general phenomenon (R. D'Andrade 1995, The Development of Cognitive Anthropology). Cultural theories are typically the most apparent and immediately coherent structures of knowledge — the ones that are volunteered by focus group participants for example, and the ones that lend themselves to direct description and summary by the analyst. Cultural theories are closely related to public discourse and, because they are explicit understandings, to rhetorical positions adopted for purposes of argument.

A cultural model, by contrast, consists of a set of largely implicit assumptions that allows a person to reason about and solve a problem (D'Andrade 1995). A cultural model specifies relationships between a given concept and others — specific domains (e.g., School) are typically connected to broader cultural assumptions (e.g., understandings about Achievement or Growth). Cultural models are associated with private understanding and individual reasoning.

A classic example of the difference between cultural models and cultural theories is provided by Strauss's study of blue-collar workers in Rhode Island (1992). Her informants clearly understood, and explicitly articulated to the interviewer, the American model of self-made Success. In some cases, they even claimed that this style of success was important to them. Close analysis of discourse, however, revealed that these men were actually basing their behavior on an implicit model of a Breadwinner, which is more strongly related to ideals of husband and father than to wealth and status.

Cultural models, while less explicit and more challenging to identify than cultural theories, typically have more directive force — i.e., they are more relevant to understanding what people actually do.
Cognitive Analysis

An important assumption of this view of human motivation is that a variety of cultural models typically compete for expression in a given defined situation. Putting it simply, people often have conflicts about basic issues. For example, many Americans believe that a woman should work outside the home; a contradictory assumption, held by many of these same people, is that women should stay in the home and nurture children. Though contradictions such as this one often find partial resolution (e.g., through the contemporary American notion of the "Supermom"), typically such deeply held beliefs are compartmentalized; i.e., only one will be invoked in a given context.

Cognitive analysis first identifies the relevant deeply held models to which a given subject such as "School" is connected (literally or through metaphor). Second, it attempts to map the fault lines that predict which of the models will be expressed as action in a given situation, often triggered by particular cues. Third, it suggests a picture of the dynamic relationship between public messages, cultural models, and individual action around a given topic.

Metaphors

It is a universal finding of cognitive linguistics that people use metaphors to think, speak and reason about the world, even on topics as familiar as “weather” — i.e., some of the cultural models used to reason about any given topic are metaphoric models. For example, teenagers are sometimes metaphorically understood as unfinished objects, materials that haven't been formed into their final shape. The metaphors people use to think and talk about teenagers contribute to guiding adults' behavior towards adolescents, including whether and how they choose to nurture, ignore, discipline, or otherwise engage with adolescents.

Cognitive interviews

Because cultural models tend to be organized into distinct and recognizable patterns, they lend themselves to qualitative investigation. The cognitive interview format is designed to approximate a "natural conversation" (Quinn 1982). In an interview situation people are often most comfortable providing cultural theories (explicit and familiar explanations which are known to have general currency); the semi-structured interview puts them in a situation which encourages them instead to do their own reasoning about the issues we are interested in, i.e., to use the relevant cultural models.

Skilled interviewing shifts the informant away from a "performing" mode and toward a "training" mode. The natural give and take of a conversation puts informants in a position of teaching the interviewer how to think about a given issue. The analyst's job is to identify cultural assumptions, first in the interview setting by responding to and subtly challenging or asking for clarification of intuited premises, and second in the analysis of transcriptions by making these assumptions explicit.
Subjects and sample size

Because a culture is defined by a set of broadly shared understandings and assumptions, studying cultural models is analogous to studying the structure of a natural language. One does not need a large group of speakers to determine the basics of a language's grammar and syntax — a few speakers will typically suffice. Similarly, working with only a relative few subjects, one can identify the commonly held belief system typical of those subjects’ culture. In-depth work with a relatively small group of informants has been the norm in cognitive anthropology, allowing researchers to work more closely with subjects than is possible using large-scale methodologies. Findings from cognitive interviews may subsequently be expanded upon and refined through quantitative methods, which may establish, for example, how strongly particular models are held in different segments of the population. Where the cognitive approach identifies the nature of the models, carefully devised quantitative research, using fixed-form surveys for example, can establish the distribution of the models (see Kempton et al 1995).