



The “Acid Bath”:
ECD Information in the State Legislative Environment
Findings from Cognitive/Ethnographic Research
in Four New England States

A FrameWorks Research Report

Prepared for The Frameworks Institute

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Introduction

The mission of the National Scientific Council on the Developing Child is to bring about change in the way that society addresses the developmental needs of children, and one of the key audiences for Council communications is policymakers. They decide what the standards will be for services like childcare facilities and providers; help determine how we will collectively address the challenges faced by children in poor homes and neighborhoods; agree on measures we will take to deal with the impacts of maternal depression; and so on. In addition, many of them are skilled and high-profile communicators who play an important role in public discourse of all kinds, including on those topics of interest to the Council.

To take advantage of these important opportunities the Council has in the past year initiated a project to create ties with policymakers at the level of state legislatures. This effort has included the creation of a formal partnership with the National Conference of State Legislatures, and has also involved research into how state legislators think and communicate about early childhood issues, and into the environment in which these legislators operate. Understanding this particular context will be a key to crafting the communication strategies that are the most successful with, and helpful to, state legislatures – including the development of effective messages, as well as identification of the most appropriate messengers and most promising situations in which to make information available, and so forth.

This document reports on a cognitive-ethnographic round of research with state legislators in four New England states, designed to help the Council better understand the unique demands and opportunities of the legislative environment. This research builds upon earlier work by the FrameWorks Institute, Cultural Logic and Public Knowledge.

RESEARCH DESCRIPTION

Cultural Logic researchers conducted interviews at state capitols and legislative offices in the Spring of 2005. In Hartford CT, Providence RI, Augusta ME and Concord NH, researchers conducted one-on-one conversations of 20-30 minutes (supplemented by several phone interviews). When possible the encounters were recorded and transcribed for later analysis. All subjects were assured that the conversations were anonymous.

The conversations were partly exercises in open-ended “thinking aloud” on topics related to early childhood development in the legislative context, including the kinds of policy decisions that bear on children’s development, the kinds of development research that influence policy, and so on. More specifically, however, the encounters were designed with several goals in mind.

- Cognitive elicitation of patterns of thinking
Analysis of the interviews involved “reading between the lines” to explore unspoken patterns in subjects’ understandings and discourse related to ECD.
- Ethnographic “micro-studies”
The conversations, and the researchers’ experience in each of the state capitals, entailed careful observation about the context and environments in which people and information exist. The focus of the research was not only on what subjects said, but also on their interactions with each other and with the messages and information around them.
- Assessment of particular communication strategies
The researchers introduced some particular framings of ECD into the conversations, in order to assess the impacts on subsequent discussion. In part, these framings build on the “Brain Architecture” simplifying model already in use by the Council – (See discussion below).
- An opportunity to pick legislators’ brains
In addition to the more “indirect” aspects of the research listed above, the conversations were also an opportunity to hear directly from people intimately familiar with the state legislative environment, and to learn from their specialized knowledge and experience. While this type of direct solicitation of information was not the focus of the study, it did complement other findings in a number of interesting ways.

Subjects

The individuals we spoke with deliberately included a broad mix:

- 14 Women, 6 Men
- 12 Representatives, 5 Senators, 3 Staffers
- 9 Democrats, 8 Republicans, 3 Other
- 7 in New Hampshire, 5 in Maine, 4 in Connecticut, 4 in Rhode Island

Some had a great deal of experience on children's issues, while others did not. Some were in leadership positions, while others were "rank and file."

Focus of Analysis

The thrust of the research was an investigation of state legislatures as *environments* where ideas and information about ECD must penetrate and spread, where they live and die, mutate, etc. This environment includes two dimensions:

- External/Cultural
Whom do legislators talk to? What is their day like? Where do they get information? Whom do they trust?
- Internal/ Cognitive
What is the nature of legislators' understandings? What kinds of ideas typically receive emphasis? How can the conceptual repertoire be characterized?

In earlier research, Cultural Logic has analyzed American default understandings about ECD, which are profoundly different from scientific perspectives in many ways, and can powerfully interfere with people's ability to learn this type of information. Based on other research (conducted by Cultural Logic, the FrameWorks Institute and Public Knowledge), it is also clear that elites and community leaders, including state legislators, typically share the same default understandings (cognitive and cultural *models*) as the public.

Yet state legislators are clearly not *just* thinking like other Americans. They find themselves operating in a kind of extreme information environment that calls for different kinds of thinking, learning and speaking. They relate to information in particular ways. This research explores the cognitive intersection between this environment and the kinds of messages that the Council is working to promote.

FINDINGS 1: CRITICAL ROLE OF ACTIVE “CHUNKS” OF INFORMATION

Because most policymakers are intelligent, sophisticated thinkers, it is often assumed that it is not necessary (or desirable) to radically simplify crucial information when communicating with them. It is feared that this means “dumbing down” science-based knowledge, and will weaken its influence. Yet the single clearest finding of this research – and one of the most surprising, on some levels – is that for reasons having nothing to do with legislators’ level of sophistication or intelligence, it is if anything *more critical to use effective simplifying models with state legislators than with the general public*. The importance for the Council of continuing to develop simple, concise explanatory strategies for key concepts related to ECD cannot be overstated. Communication with state legislators must be built around *user-friendly, vivid, explanatory “chunks” of information that can organize thinking and guide discourse*.

The following analogy expresses the researchers’ conclusion about the importance within the legislative “information environment” of offering messages that are boiled down to a powerful essence: The information display formats used on car dashboards are extremely simple, not because drivers are stupid or illiterate, *but because they are very busy being responsible drivers* (i.e. keeping their eyes on the road).

Good data and persuasive reasoning are not enough to ensure a hearing in a state legislature. Sound arguments and important messages get lost in the shuffle every day. If information is going to have an impact in state legislatures, it must be carefully designed to be able to survive and even thrive in this exceptionally demanding “information environment” – an “acid bath” where ideas are inevitably boiled down to their essence.

Background: Simplifying models

As a great deal of research in the cognitive sciences has demonstrated, people typically rely on *analogies* as they learn about, think about, and talk about complex, abstract concepts. These analogies help people organize information into a clear picture in their heads. Most advocates know that the best way of teaching the public a new understanding about an issue is to use plain language and common sense, to “boil down” the issue to its simplest terms, and to offer analogies and metaphors based on familiar and concrete images. These analogies are examples of what we refer to as simplifying models (e.g. the heart is a *pump*).

An effective simplifying model is one that can be quickly learned and easily conveyed, and is flexible enough for presentation to people in multiple ways, both verbal and visual. It must be able to survive in sound bites, print ads, word of mouth, and other brief communications. Most importantly, a successful simplifying model must capture the essence of an expert understanding, rather than reinforcing common misunderstandings and unhelpful default assumptions. (Note that empirical testing is often required to assess these qualities of an explanation.)

Furthermore, simplifying models related to public interest issues must explain a topic in such a way that they effectively set up the policy solutions supported by experts. Ideally, they should also anticipate and inoculate against opposition arguments. In addition, they must be “honest”, in that they are not open to charges that they misrepresent or mislead.

They need “breadth” in order to resonate with experts as well as laypeople. They need to be interesting, sensible, memorable, repeatable, and useable in conversations of all types.

“Causal Stories”

Closely related to simplifying models, are vivid, concrete (and literal) *causal stories* – explanations and examples focusing on cause and effect. (E.g., “Maternal depression creates stress in children’s lives by making it harder for mothers to engage in the critical type of interaction where they are ‘in sync’ with their children’s gestures, communication, and moods.”) These are also very powerful tools for communication. Like simplifying models they help people understand an issue at a new level, help them reason in a practical way, imply courses of action, and so forth.

In the sections that follow, we discuss the state legislative context, and the special importance of concise, effective explanation there.

An Oral Environment: Information moving through talk

As they met with state legislators and watched them work, the researchers were struck by the degree to which knowledge and argument is conveyed through spoken communication – between colleagues in the hallway, in quick conversations, formal testimony, committee hearings and workshops, and so forth. These exchanges are typically quite informal, even though they are central to the whole process of legislative decision-making.

We sit here and we caucus and talk about one issue or another. You talk with the heads of committees and you talk about your bills and you say what’s important and then you try to talk with different groups, and you try to bring everybody on board with your legislation. You’re always talking to people. It’s a lot of selling and it’s a lot of listening and it’s a lot of give-and-take.¹

In addition to efficiency and habit, an important reason for the degree of oral communication in state legislatures has to do with trust. Lawmakers may have no means and no time for determining the reliability of written material, but if they speak with someone face to face, especially someone they have reason to trust, they feel more confident taking in information, attributing it, and making use of it. Everyone relies on people they know, or people who have been “vouched for,” in order to navigate in this environment overloaded with information, in which people are “out of their depth” on many issues, and where the reliability of information is always in question.

¹ In order to preserve the anonymity of the conversations, no identifying information is offered in connection with any of the quotes presented in the report.

In short, the state legislature environment is very largely about speaking and listening, and in order to have an impact, knowledge must be in a form that can survive oral transmission.

You get the legislators who are really big on kids' issues, really big on health and human services issues. And then they have the information and they start to share it.

Speech, we know from various avenues of research, is heavily reliant on various kinds of conceptual “short cuts” and cultural conventions, and does not make room for the reasoned, logical progressions that we associate with classrooms or written expositions, for example.

Since any knowledge that is successfully introduced to state legislatures is inevitably (and quickly) translated into oral form, *communicators are missing an important opportunity if they fail to “take control of this process” by ensuring the information comes in forms that can be reliably repeated in conversation.*

An Overloaded Environment: Busy people and the radical simplification of ideas

State legislators (and legislatures as a whole) are inundated with requests, information and other communications on a constant basis – they are faced with more input than a person can realistically understand and interpret.

They're drowning. It's not because they're stupid . . . When they're really overloaded . . . they just can't take in anything.

Partly this is a function of the fact that legislators are, in principle, responsible for any type of problem or issue that concerns the state. This situation in itself places tremendous (if not impossible) demands on policymakers who must make decisions in these areas based on whatever information they are able to take in, and who must shift from topic to topic at a moment's notice.

When you're a legislator, you have to almost be an expert in so many different things. And there's no way to have an in-depth knowledge, it seems, on any one thing because then it's to the detriment of something else.

Legislators specifically complain that they are faced with more written information than they can conceivably deal with.

We probably don't scratch the surface of what we get to read. For me, I like to go to meetings. I like to hear people talk. I like presentations. And I don't get through the stuff that I should be reading.

There's all these documents that are filed with the Committee and they're unread. Nobody reads them, nobody looks at them. If you're going to be so lucky as to get your point across -- it's one side of one sheet on pretty paper with bullet points.

When you've got something that's got summary and bullet points, and you can look for further, more in depth stuff, that's probably helpful.

In this context, it is clear that information must be boiled down and sharpened in order to have a chance of breaking through – it must be organized around small but critical “working parts” that assist in understanding, like new “cogs” that allow reasoning to proceed more effectively. There may be exceptions in cases where a given legislator or staffer possesses a particular level of interest or background, or an especially critical mind:

A: Have they done double-blind studies or something where they measure what they deem are appropriate interactions and then others? How would they measure that?

Q: Yeah, looking at what's actually happening. Brains start forming in the womb. They continue to form through infancy and childhood . . .

A: Well I believe that, it's just how do they measure it?

Q: With scanning techniques and so on.

A: I'm with you there. But in terms of the scientific study. How would you say this group has got the right interactions, and so we measure the development? This group does NOT, and we measure them, too? And how do we determine who falls into each group. I'm just curious how they would measure that? And then measure the [contrast in] brain development. Anyway I'm probably getting off topic but I'm curious about it.

But even in these cases, the information will then need to be passed along to others who don't share the same priorities or prior knowledge.

Again, it is critical for communicators to anticipate and guide the predictable boiling-down process, rather than merely hoping the right bits of information survive, or that the state legislators or their staffers themselves find productive ways of condensing it.

A Rhetorical Environment: Scientific Information and Politics

State Legislators work in an environment charged with political argument. Yet at the same time, many policymakers are interested in solving problems independent of politics. Scientific information has the potential to help with one of the most difficult challenges presented by this environment: it offers legislators a tool for staying in, and keeping others in, what we refer to as “reasonable mode.”

Staying in “reasonable mode”

This is our designation for the mental stance in which people are ready to take in new information, gain new understandings, and reason in practical ways about an issue. In “rhetorical mode,” by contrast, the prime object is to “take a stand,” to emphasize one’s own beliefs in contrast to the beliefs of others.

Naturally, in state legislatures the pull towards rhetorical mode can be very strong. Any tool that can help anchor people in reasonable mode (and help them make it easier for others to stay in this mode) can be very helpful – it is when people are in reasonable mode that they have highest likelihood of acting on the kinds of information offered by the Council.

A number of lawmakers interviewed by Cultural Logic researchers expressed strong optimism about the power of information to lead debate/action in the right direction. In other words, these lawmakers believe that reasonable mode is, or at least can be, central to legislative decision-making.

For most people, scientific knowledge is strongly linked to reasonable mode. If the science seems careful and objective and is not seen as “biased” or “distorted” then it is information that legislators will treat as significant and useful.

Agenda aversion

However, because of the rhetorical environment of state legislatures, many lawmakers will need to be reassured that the science really is “objective” and not distorted in order to support a political position. Legislators naturally have a very strong sensitivity to “agendas” and to efforts at manipulation. In addition to being presented in a manner that can inform *conversation* (see previous discussion), information must be presented in a way that does not trigger lawmakers’ “agenda alarms.”

A: They all use the National Council of State Legislatures. It’s information that is not biased. It’s quality research. It’s keen attention to trends, it’s addressing queries that come from elected officials. It’s nonpartisan.

Q: Why don’t they use the Children’s Defense Fund?

A: Some do and some don’t. But what you hear is: The data’s not reliable. There’s too much ideology. There’s a bias, and an agenda. So I think that material needs to be as much as possible . . . ‘agenda-free’ isn’t right. Because if one is focused on say birth to eight it’s not agenda-free. There is an agenda. But, you give information that is useful and uncontested. [That] means that it needs to be proven, research-based, and of use to elected officials.

One of the challenges for experts offering information on ECD, then, is to avoid creating the impression of being involved in advocacy per se. Material presented in the wrong way can easily be dismissed out of hand. Effective communications should carefully

focus on content and tone that are objective, evidence-based, trustworthy, and not agenda-driven.

Note that even given the best of intentions and efforts, it will not be possible to evoke and maintain reasonable mode all the time:

There's going to be a group of legislators who will disbelieve [surprising] data as politically driven, and so, untrustworthy.

But on the whole, scientific information – particularly, in the form of user-friendly explanations of “how things work” – is a powerful tool for minimizing this problem, and reassuring legislators that the information is a resource for them, rather than an attempt at manipulation.

Connection with “Materialist” vs. “Mentalist”

In earlier reports to the Council, Cultural Logic has discussed a distinction between “Mentalist” and “Materialist” perspectives on children. A person operating from the Mentalist perspective thinks and talks about the abstract and subjective world of *morality, learning, reasoning, wanting, remembering*, etc. The Materialist view focuses instead on things like *causal mechanisms, risk factors, brains and neural connections, stressors, chemicals, hormones, damage to systems*, etc. Lay people typically operate almost exclusively within the Mentalist perspective, while developmental experts operate in Materialist perspective. These different perspectives cause people to see childhood issues very differently, and can lead them to very different conclusions about what children need.

Overall, the Mentalist perspective is much more closely associated with Rhetorical mode – both can involve moral judgments about what kids need entirely independent of empirical fact, for instance. On the other hand, Reasonable mode is particularly consistent with the Materialist perspective. This scientific way of looking at children focuses on actual cause and effect, and leads naturally to a practical, problem-solving approach. By giving lawmakers tools for maintaining a Materialist perspective – which is not the most natural or comfortable perspective for anyone but experts – effective scientific communications can short-circuit many problems related to rhetorical mode.

A Public Environment: Justifying Actions to Constituents

In addition to guiding their reasoning and decision-making, the information that legislators use has another extremely important function: It helps them make the case for their actions to the people who put them in office. This is another significant reason why information is much more helpful when it is repeatable, user-friendly, clear, and brief. Furthermore, such information can help an audience of (potential) supporters stay in reasonable mode and can head off unproductive debate.

Importantly, this “justification” function of explanatory models is not merely a convenience for elected officials. It is also a critical opportunity for helpful understandings to enter public understanding and discourse. As leaders with a high

profile, lawmakers are in a unique position to take useful understandings and “set them into motion” in the larger culture. This conduit function is one of the significant reasons to target legislators in the first place, and to take care with how information is presented.

A Task-Oriented Environment

In a scientific context, information can be important just because it tells us something we didn't know before. In the legislative environment, however, information is only important if it supports some potential course of practical action (or inaction). The task before legislators is to craft practical proposals that will have predictable effects.

I think [information related to the brain] needs to be more real-life, and less academic. What is the environment that creates [a given outcome]? They need that information. I don't think the actual research is as valuable to them.

Q: Speaking as a busy legislator, what information do you think actually does change policy orientations?

A: Information that is researched that is not theoretical but concrete and practical and summarizable . . . synthesized, analytical research summary information, that describes what some states are doing and what some regions or even towns and cities are doing that's really working, that has performance outcome measures that show progress.

In a policy-making environment where the competition for dollars is fierce, legislators are looking for information that helps them think and talk confidently about results. This aspect of the legislative context highlights one of the key qualities of an effective explanatory “chunk” – it has a dynamic dimension related to cause and effect, and helps people (including legislators) think in active terms. (E.g., “When you put a child in an abnormally high stress environment for prolonged periods of time, the brain releases stress chemicals at very high levels, which can actually interfere with the growth of the brain, the connections among cells, the formation of healthy nerve circuits.”)

A lack of cause and effect information allows policymakers to do nothing and hope for the best. Pieces of knowledge that demonstrate cause and effect can be used by lawmakers to “help” their colleagues out of this inertia. When this knowledge implies effectiveness about the kinds of policy actions that legislators oversee, it helps legislators get past another barrier to action: the sense that a given problem falls outside the legislature's purview. This is a particular problem in the area of children's issues.

You might sometimes see a legislator say: “We can't fix every single thing. Some of this belongs in community, families, churches, other types of institutions rather than state government.” The challenge for us is finding where our participation does make a difference.

In addition to simplifying models and other effective explanations of *how things work*, communicators can increase their impact by providing concrete examples that illustrate cause and effect. For instance, one legislator spoke of bringing colleagues on a “field trip” to an intervention center for children with disabilities. In addition to the personal and emotional engagement created by the in-person visit, the experience certainly helped legislators get a more concrete sense of the causal connection between the interventions and the outcomes. The next best thing to such a visit is a description that vividly captures the reasons that a particular action has the beneficial or protective effects it does.

A Diverse Environment

Communications with state legislators are addressed to very diverse groups of people, each of whom is ultimately called upon to have an opinion. State legislatures are made up of individuals with different levels of education, in different areas; and from all different professions and occupations (teachers, doctors, business managers, social workers, criminal lawyers, etc.)

We have people here who haven't finished high school to people who have PhD's in physics.

All of these individuals bring their own forms of specialized knowledge and assumptions to their work as legislators, any of which may have shaped their understandings of topics such as Early Childhood Development. They also bring a diverse set of experiences that they have accumulated as parents, aunts, uncles, grandparents, or simply as members of communities where children are developing.

Furthermore, once in the legislature, they each pursue their own course in terms of issue areas where they focus their time and energy. A legislator may become a specialist and even a legitimate expert on certain topics that are of particular interest to the legislator or to constituents. He or she may serve on particular committees and take leadership roles specific to certain topics, and will be recognized by other legislators who rely on that individual for insights into related issues.

Of course, the most obvious sign of difference between some legislators' thinking and others is party affiliation. Underlying this surface distinction is the range of cognitive and cultural models that only roughly follow the usual left-right spectrum – including different understandings of individual and family responsibility, the role of community, self-reliance, government's duties, government intrusiveness, social justice, charity, understandings of good kids and bad kids, and so on.

In order to make sense to and appeal to as much as possible of this extremely diverse audience, information must be presented in its most essential and concrete form. It should convey an understanding that can act as an effective and constructive “least common denominator” for a wide variety of individuals. On one hand it is critical to avoid the possibility that the information is misunderstood (or not understood at all). On the other, it is important, as far as possible, to avoid triggering unwanted associations or objections

– to keep people in reasonable mode, where they can make appropriate judgments about what needs to be done.

Note that since the diversity within legislatures of course mirrors the diversity of the public as a whole, communications that work for one are likely to work for the other as well.

FINDINGS 2: MESSAGE CONTENT

In addition to exploring the general context of state legislatures, the researchers were also interested in the capacity of particular ways of talking about children and development – including the Brain Architecture simplifying model – to guide discussion in productive directions.

Brain research findings as a powerful type of information

The conversations with state legislators confirmed that research into brain development is widely perceived as interesting, important, and relevant. Quite a few legislators mentioned studies and talked about having heard about the brain science, whether in popular media or from child development experts and advocates. And many expressed a desire for better and more useable information about ECD. Findings from this kind of research are often seen as relevant both for the legislators' own understanding of children's issues and for making arguments for and against policies.

Cause-and-Effect Mechanism

Findings from brain research are seen as relevant in part because brain science talks about *mechanisms*. We know from experience on other issues (as well as from cognitive science principles and findings) that an understanding of a cause-and-effect mechanism helps people accept and engage with new information.

What I think that research has done is it made people more aware of the importance of those [early] years. And I think most people were sort of kind of in the back of their mind knew those years were important. But this really says: "Yeah here's why, because this is what happens during that time."

On some level, this legislator is acknowledging people's interest in mechanisms, and the Materialist perspective more generally.

New information

Brain findings also get people's attention because they offer information and perspectives that are felt to be new.

I consider myself to be a very well educated person who thinks about these things and tries to keep up. But I was not aware there being scientific research that talked about the interactions between young people. And stress as having that much to do with brain architecture.

Many lawmakers have been voting on legislation related to children for years or decades, and may be confident that they have all the information they need. But effective

presentations of brain science findings – and of new *mechanisms* in particular – have the capacity to cut through and make an impression.

Naturally, there are some legislators who do not believe that science per se is relevant to their work, but there were many direct and indirect indications during the course of the conversations that brain science findings, properly presented, have the power to guide decision-making on issues related to children and development.

The “Brain Architecture” Simplifying Model

Some of the legislators and staff we spoke with readily picked up on the idea of brain architecture during the course of the conversations.

Having people who know something about how to raise a little kid with C.P. available who can help you develop that child’s brain architecture the best you can is enormously important when you’re a new parent. [legislator whose child has cerebral palsy]

Q: Do you feel like that brain science adds to your appreciation of the importance of early experiences?

A: Absolutely, because when you talk about the brain architecture, there’s also the brain physiology and all of the physiological changes that go into the development of that architecture . . . I do feel there’s a real consistency with what I’ve studied and what I read and believe in, in terms of early human development and this work. It’s affirming. [Legislator particularly active on children’s issues]

In these cases, the model performed its intended functions of anchoring the discussion in Reasonable mode and the Materialist perspective, and keeping the focus on practical intervention.

On the other hand, for a variety of predictable reasons, most legislators did not adopt new terms or concepts during conversations where they, after all, were not expecting to be exposed to new information. Like the public, legislators have a strong and rich set of understandings relating to children and what they need. These understandings feel perfectly adequate and satisfying (eliminating any “appetite” for new information), even when they contradict the science. For instance, the extremely common understanding that “every child is different” and has utterly different needs acts as a powerfully resistant force against certain kinds of expert messages. The “Horatio Alger” model of kids overcoming adversity is another stumbling block, with policymakers perhaps even more than with the public.

I could see my colleagues being resistant if they sort of do what I do, which is take their life experience and say: “That wasn’t what I saw. I’ve dealt with kids who had severe deprivation issues or other kinds of issues when they were young and they’ve done just fine.”

“Solid Kids”

During the conversations, researchers also introduced another explanatory tool (which they attributed to experts such as members of the Council). They explained that when brain architecture develops in a healthy way, the result is a “Solid Kid” – who, in turn, helps form the foundation of a solid community and a solid economy.

This explanatory model, based on images of structure, solidity and building blocks, was easily accepted by legislators, and struck some as a significant addition to what they already know about kids.

Q: Do you think people generally get that argument? That good solid kids mean a good solid community, and a good solid economy. That it's a basic building block.

A: I think that presenting it in that frame is more important than just saying “Healthy kids.” What were you referring to? The brain . . . ?

Q: The brain architecture.

A: Paying attention to the brain architecture is good because then they'll be good college students. I didn't know that until you sat down here. I mean I already know the concept of healthy kids, but. . . .

Most state legislators and staffers reported that the argument about investing early in order to reap greater rewards is a familiar one. What the brain research offers is a potential way to make such information new, more concrete, and more rooted in clear cause and effect.

The general concepts of solidity and structure, inherent in the brain architecture model, are worth developing and refining further, as organizing principles for many of the messages the Council would like to convey.

RECOMMENDATIONS AND CONCLUSION

Education, Not Advocacy

The Council should continue to work to position itself as a *resource* for advocates and legislators, rather than as a moralizing voice that tells them what they must do. As the Council continues to build a reputation for supplying scientific information that hasn't been filtered or distorted by a political agenda, it should be able to reach a growing number of legislators – and to acquire an increasingly influential voice in policy debates. As members of the Council already perceive, to the extent that information seems to be explicitly backing a particular policy, it is likely to be viewed with suspicion and even discounted as biased and “agenda-driven.”

Tools for Understanding (and Communication)

Given the information overload in state capitols, it is surprising to consider that quite a few legislators expressed a genuine desire for *more* information about children and their development – to help them think about policy issues, and to talk more effectively about these issues with colleagues and constituents. This pattern, perplexing at first, is easier to understand when we remember that without effective tools for *organizing and making sense of information*, legislators often remain just as at sea (or more so) than if they had no access to it at all. The real need is for conceptual tools (frames and simplifying models) that allow legislators to get a handle on the information in ways that have been impossible before.

Anticipating the “Acid Bath” Effect

Instead of imagining one's reports being carefully read in oak-paneled offices, Council members will do better to imagine them being skimmed, quickly summarized in corridor conversations, and recalled to memory weeks after being read, and challenged in the course of politically-charged discussions. If communications are to have any useful effects under these conditions, they must be built around the “nuggets” that are intended to stand out and to survive.

The Council's products should be anchored by simplifying models and other concise and concrete explanations and examples. Here is one reflection of the power of a clear and vivid point – in this case, regarding the link between children's literacy and their later likelihood of serving time in prison:

When I say third grade literacy levels are so clearly the tipping point for success or failure in school that some states are now using third grade literacy levels to plan prison cell growth construction, they get it. They get the stupidity. Why would you invest in concrete instead of literacy? The metaphor for that is profound because it's so stark.

Science vs. common sense

One of the chief pitfalls for science communicators is that their messages can sound irrelevant. This happens either when the connections to “real life” are unclear, or when the science seems only to reinforce ideas that were clear already.

I mean, there's studies galore of all kinds of different things. And everybody knows that the brain develops and you are a product not only of your genetics, but you're a product of your environment.

It is critical not only that the Council continue to emphasize practical implications, but that communications emphasize ways in which developmental science supports action beyond or different from what people already support based on “common sense,” their own experience, what their grandmother taught them, etc. The Council is not just offering a technical version of what everybody already knew.

One of the powerful ways of ensuring that messages sound and are new is to focus on the active “chunks” – including mechanisms that are not intuitively obvious, yet are clear and simple.

Another is to help legislators understand a bit more about *how* the field knows what it does. The sense of what developmental scientists are able to investigate is often very weak, and this is one reason that scientific findings do not always have the impact they should: If people have no real sense of how conclusions were arrived at, they have less confidence that the findings are real.

Consider the following quote from a legislator who knows more than most about child development. He is talking about the kind of research that would be helpful, yet his understandings of what researchers can do is quite limited.

I don't know how many families now actually take the time to read to children at night. If you had some way of measuring the amount of time that's spent on game-boys and video stuff and computer hyperactivity versus reading versus nurturing, versus actual conversation with children, when it would matter the most. I think we would all be disturbed and troubled by the trends.

There is no sense reflected here that science has access to any data nearer the mark than the “amount of time” spent in these activities. Another legislator, who is sympathetic to children’s welfare issues, talks about the science-based arguments as though they required a leap of faith.

*There's no way for you to say that this person would have had these struggles if they didn't get the [social] service. **It's a matter of sort of having intellectual faith** that this is actually going to happen. And that you've prevented something bad from happening by doing something in the present. I don't know. It's a frustration . . . I think you have to show somebody very clear examples of a young person at age two who has not suffered and a*

young person who has, and have some clear [way of showing], that this has to do with the fact that he wasn't afforded the same kinds of environment. I don't know quite know how you do it.

While skepticism of this sort is appropriate in a general sense, the legislator's doubts also reflect a lack of understanding about the solid findings that *are* available. Knowing more about how scientists know what they know would certainly help. Of course it will never make sense to offer legislators the kinds of methods discussions that are imperative in a journal article, for instance. But when possible, communicators will increase their impact if they can offer concise and concrete descriptions of what science is currently capable of.

Introducing Science More Formally into the Legislative Process

Scientific information has an obvious role in helping policymakers think more productively about the legislation and budgets they struggle with. It can also help shape material that is instituted more formally into the process, including definitions and guidelines.

To me the brain architecture story is part of "best interest of the child" and understanding child development in the custody issues ... I'm not sure that belongs in statute, but maybe in rules or in training for family court judges.

While it is not the Council's role to help write legislation, it is worth keeping in mind this potential application of the communications, and pointing out these intersections between science and law when appropriate.

Further Research

This report has focused on the *content* of the material that is likely to have the most impact with state legislatures. However, a communications strategy for state legislatures must also take other factors into account, including:

- The most effective messengers and spokespeople for conveying information
- The most advantageous moments for presenting information
- The best formats for conveying ideas (e.g. visual vs. verbal, or a combination of both)

One of the factors that emerged in this research, for example (echoing findings from the focus groups conducted by Public Knowledge), is that *local* sources of information are given special credence in state legislatures.

Information needs to come through sources that are local enough that people trust them. Who is putting it out is important.

When citing sources of information, legislators frequently mentioned organizations and advocacy groups with a local presence, as well as actual individuals, whom legislators could name, discuss, and form working relationships with.

Making a closely related point, several lawmakers recommended identifying key legislators in a state who can spread the message to others, and observed that the specific social networks that develop in each legislature have a significant impact on the decisions that are made, as ideas are shared and reinforced through these networks.

In order to do the best job possible navigating the local social environments of state legislatures, the Council should continue to gather a fuller picture of the situation in each capital where communications are planned. This research might entail careful ethnographic research and/or the enlisting of skillful, knowledgeable and “well-connected” local players (in addition to assistance provided by the NCSL).

Testing

It would certainly be worthwhile doing more to test the actual impacts of specific communications materials with a legislative audience. This would involve showing material to legislators and assessing afterwards (either immediately or after a period of time) what they have taken away and how it has affected their thinking and discourse. The material could be in any of a variety of forms, from one-page briefs to op-eds to videos.

Observation of discussions

The research reported on here involved conversations between researchers and legislators (or staff). It would also be extremely enlightening to observe discussions among legislators and staffers themselves – to see first hand what models, terms, and concepts are in play; which ones end up dominating the discussion, and so forth. This observation might happen in public hearings, in committee meetings, or at workshops where legislators are learning together about a given issue area.

As a complement (or second-best alternative) to in-person observation, it would be very helpful to have access to minutes or transcripts of discussions of matters related to children and ECD.

Conclusion

Since state legislators are a diverse group drawn from all walks of life, they resemble an (especially successful and influential) cross-section of the public in most respects. Legislators and the public share most of the same default patterns of reasoning, a similar range of values and priorities, the same kinds of wisdom, most of the same gaps in their knowledge. But the state legislative *environment* is very different from the context in which average citizens operate, and this means that the types of messages that are suitable for one environment are not necessarily well suited to the other. For instance, although most legislators are, for the most part, working with the same cultural models as their constituents, some models are more powerful in the legislative context than they are

with the public – e.g. models related to “return on investment.” This is an instance where the content of a message makes it a better fit with one setting than another.

The focus of this report has been on the *form* of information that is best suited to the “acid bath” of state legislatures – highly condensed “nuggets” of understanding, which can help organize and guide reasoning and discourse. While simplifying models and similar explanatory strategies are important tools for communicating with the public, they are even more critical in the legislative context – in many cases, they are the only aspect of a communication that is likely to survive.

About FrameWorks Institute: The FrameWorks Institute is an independent nonprofit organization founded in 1999 to advance science-based communications research and practice. The Institute conducts original, multi-method research to identify the communications strategies that will advance public understanding of social problems and improve public support for remedial policies. The Institute’s work also includes teaching the nonprofit sector how to apply these science-based communications strategies in their work for social change. The Institute publishes its research and recommendations, as well as toolkits and other products for the nonprofit sector at www.frameworksinstitute.org.

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