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**A Working Document on the Abecedarian  
Educational Program and its Probable  
Relationships to Child Outcome Behaviors**

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**Email question from Jim Heckman:**

*I am trying to ascertain the following: Which curricula are more cognitively oriented, which ones teach discipline and self-control. How does Tools of the Mind fit into this program? For example I want to really understand which components of the curriculum map into which components of the behaviors produced.*

**Initial email response from Joe Sparling:**

Jim, this is a good question and deserves more than an email response. I would be willing to write up 4 or 5 pages on this (with references) for the Abecedarian Approach – although a conclusion that I have already reached is that there is usually no simple 1 to 1 relationship between curriculum design/input and child behavioral outcome. (Tools of the Mind notwithstanding.)

It is true that we put a lot in and had particular outcome hopes and expectations, but when you work over the whole sweep of the birth to 60 month period (or birth to 36 as in IHDP) the trail of cause and effect gets very diffuse – with many overlapping trails. There actually are unanalyzed data in IHDP that recorded individual curriculum items for individual children and their mastery of each that could be the basis of such an analysis, but I doubt that the results would be very clear because the curriculum items can't be exclusively assigned to 1 particular expected outcome. (That's a possible doctoral dissertation that is yet to happen.)

I have written on this dilemma and called for a "broad-spectrum" curriculum approach in early childhood – especially in the first 3 years.

What is important to keep in mind about Abecedarian is that LearningGames was 1 of 4 major educational components. There is a substantial Vygotskian orientation in most of these – which, I suppose gives our work, even though ours starts at a younger age, some possible similarity to Tools of the Mind. For example, with private speech, teachers use a 3N Strategy (notice, nudge, narrate) that identifies (announces) what the child is doing, introduces a new element (usually a question), and then narrates the child's ensuing response(s) – all in a play context.

There is also a strong emphasis on joint attention – even though I had never heard of joint attention when I began developing the activities. Anyway, this is getting into the few pages that I volunteered to write. I will not be back in the USA until Nov. 11 – so could not turn to that task until then. Let me know if that would be helpful and if the time frame is okay.

*Jim, what follows is not a coherent paper, but is a series of "points" that I would like to make about the Abecedarian Approach and how it may have its effect. Some of the data figures and tables I relied on are reproduced in the body of the text for your and any other reader's convenience – and full bibliographic references are given along the way rather than at the end of the paper. At some point, I may (with Craig) develop this into something presented in a more formal and coherent way. I do not believe there is evidence that individual parts of the program map onto individual outcome measures. Rather, the program elements are overlapping and affect all of the outcome areas to some degree. Despite my skepticism on this relationship, I've provided a kind of input/output map on page 10. The only program element that has been demonstrated to carry an effect when used alone is LearningGames. (See point 2 in the paper.)*

## **Eight Points**

The Abecedarian Approach is a suite of teaching and learning strategies that were developed for the Abecedarian Studies (the Abecedarian Project, CARE, and IHDP), three longitudinal investigations to test the power of high quality early childhood services to improve the later academic achievement of children from at-risk and under-resourced families.

Eight points from the research studies are especially important in understanding the Abecedarian Approach (the educational program of the Abecedarian Studies):

1. The Abecedarian Approach begins at birth
2. Education in the Abecedarian Approach is “broad-spectrum”
3. Cognitive and language results occur early and continue
4. Later reading and math achievement are mediated by early cognitive skills
5. Preschool cognitive advantage + social adjustment + motivational advantage account for years of education at age 21
6. Academic locus-of-control and classroom behavior may offer an additional explanation
7. Staff training in the Abecedarian Approach positively affects caregiver behavior
8. Training in the Abecedarian Approach focuses on adult-child interactions and features a language priority within these interactions.

### **1. The Abecedarian Approach begins at birth**

A key feature of the Abecedarian Approach is that its educational program begins at birth. This dramatically separates it from High/Scope, Chicago Child and Family Centers, and Tools of the Mind. At the time these other programs enroll children, the Abecedarian Approach has already had a large part of its effect. Thus the Abecedarian educational strategies had to work not only at ages 3 and 4, but needed to be broad and flexible enough to reach developmentally younger children as well. It had to work in child care settings that have little in common with preschool “classrooms.”

Ramey, C. T., & Campbell, F. A. (1977). Prevention of developmental retardation in high-risk children. In P. Mittler (Ed.), *Research to Practice in Mental Retardation, Vol. 1 Care and Intervention* (pp. 157-164). Baltimore, MD: University Park Press.

### **2. Education in the Abecedarian Approach is “broad-spectrum”**

A broad-spectrum curriculum, like the Abecedarian Approach, spans all the years before school and fits into all the ordinary events of a caregiving day. It is appropriate for children who are developing normally, those at developmental risk, and those with identified disabilities. “Broad-spectrum curricula exist because professionals who facilitate development recognize that each child is more than a collection of skills and attitudes. The ‘more’ can be seen in the pattern by which the skills fit together and reinforce each other. The broad-spectrum curriculum is congruent with the goal of developing an individual who is internally integrated and whose skills are generalized across many situations of life. Because of its emphasis on life situations, a young child’s broad-spectrum curriculum, when being implemented, looks like play. This type of curriculum comprehensively spans large blocks of time and is incorporated into all or most of the things the child does during the day” (Sparling, 1989, p. 2).

Sparling, J.J. (1989). Narrow- and broad-spectrum curricula, two necessary parts of the special child's program. *Infants and Young Children*. 1(4), 1-8.

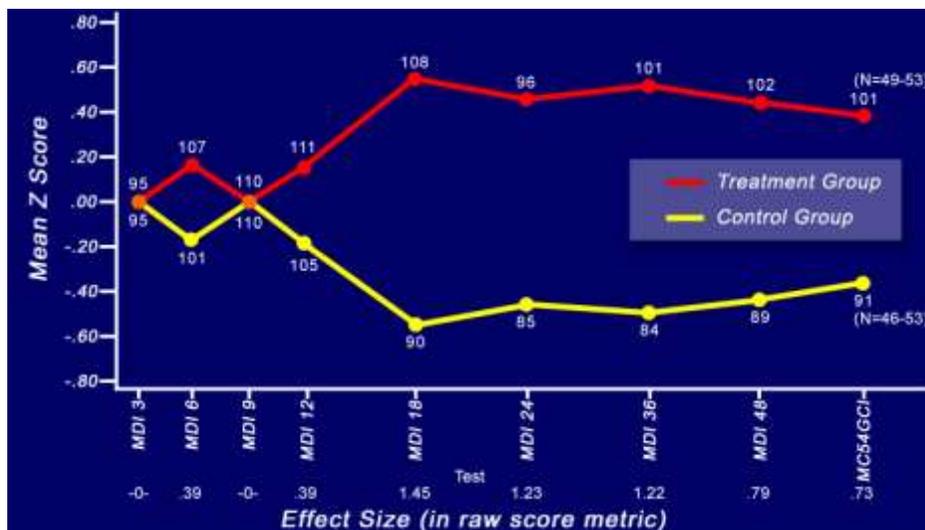
In 1998, a broad-spectrum curriculum (*LearningGames, The Abecedarian Curriculum*) was used in a head-to-head test against a narrow-spectrum curriculum (Neurodevelopmental Therapy, a specific form of physical therapy) at Johns Hopkins University. The researchers randomly assigned 48 infants (12 to 19 months of age) with mild to severe spastic diplegia to receive either 12 months of physical therapy (Group A) or 6 months of physical therapy preceded by 6 months of *LearningGames* (Group B). Masked outcome assessment was performed after both 6 and 12 months of therapy to evaluate motor quotient, motor ability, and mental quotient. After six months, the infants in Group A had a lower mean motor quotient than those in Group B (49.1 vs. 58.1,  $P = 0.02$ ) and were less likely to walk (12 vs. 35 percent,  $P = 0.07$ ). These differences persisted after 12 months of therapy (47.9 vs. 63.3,  $P < 0.01$ , and 36 vs. 73 percent,  $P = 0.01$ , respectively). There were no significant differences between the groups in the incidence of contractures or the need for bracing or orthopedic surgery. Group A also had a lower mean mental quotient than Group B after six months of therapy (65.6 vs. 75.5,  $P = 0.05$ ). The researchers concluded (in a very conservative statement) that routine use of physical therapy in infants with spastic diplegia offered no short-term advantage over *LearningGames*. A more straightforward interpretation is that *LearningGames* offered both a cognitive and motor advantage to these children with cerebral palsy.

Palmer, F.B, Shapiro, B.K., Wachtel, R.C., Allen, M.C., Hiller, J.E., Harryman, S.E., Mosher, B.S., Meinert, C.L., & Capute, A.J. (1988). The effects of physical therapy on cerebral palsy. A controlled trial in infants with spastic diplegia. *New England Journal of Medicine*, 318, 803-808.

### 3. Cognitive and language results occur early (\*by age 18 months using standardized tools, earlier with lab-based assessments of learning) and continue

In considering whether the Abecedarian Approach has mainly a cognitive or a social focus, it is important to keep ones eye on the program's measured outcomes. No other program has attempted to measure cognitive outcomes over such a long period of development – nor has any produced such sustained cognitive and later school achievement results.

Z scores and mean standardized scores for abecedarian treatment and control children



Ramey, C.T., Campbell, F.A., Burchinal, M., Skinner, M.L., Gardner, D.M., & Ramey, S.L. (2000). Persistent effects of early childhood education on high-risk children and their mothers. *Applied Developmental Science*, 4, 2-14.

It was reasonable in the Abecedarian research design to measure cognitive development, since we were avowedly trying to affect it. The FPG Center was 1 of 12 Mental Retardation Centers funded by the Kennedy MR legislation of the 1960's. Our goal in the Abecedarian Project was to reduce mild, familial mental retardation and school underachievement in at-risk children. Therefore, we designed a program that we thought would have both a cognitive and school achievement effect. Our strategy was simple: keep development moving on schedule at every step of the way, and do not allow it to fall behind. Thus we paid close attention to the standardized "developmental milestones" and designed activities (LearningGames) at every age that mapped onto these milestones. Obviously, if these games were mastered on schedule, development was proceeding normally. (This is an over-simplified explanation of the subtlety of LearningGames, but makes the main argument for a direct link to cognitive development.)

#### 4. Later reading and math achievement are mediated by early cognitive skills

Improving cognitive performance would not be a satisfying result if there were no evidence that improved cognition had a direct bearing on (mediated) school achievement. Peg Burchinal has provided the analysis that clarifies this relationship. Data tables from 2 of her (multiple author) papers are presented below. The first shows that preschool cognitive skills mediate reading and math achievement at age 8. The second table shows that preschool cognitive skills mediate reading and math achievement at age 21.

Evidence of mediation: Treatment-control differences & effect sizes for achievement growth curves

	Reading Achievement	Math Achievement
<b>MODEL 1 – NO MEDIATOR: academic scores = f(treatment group, time)</b>		
Mean Difference	6.4	4.6
Effect Size	1.31	.70
<b>MODEL 2 – IQ AS MEDIATOR: academic scores = f(treatment group, time, pre-K cognitive skills)</b>		
Mean Difference	3.3	1.9
Effect Size	.75	.30
Percent Reduction	43%	57%

Burchinal, M. R., Campbell, F. A., Bryant, D. M., Wasik, B. M., & Ramey, C. T. (1997). Early intervention and mediating processes in intellectual development among low-income African American children. *Child Development, 68*, 935-954.

**Table 6**  
*Evidence of Mediation*

Model	Adjusted means			Effect size	
	Treated	Control	Difference <sup>a</sup>	Pooled sample <i>d</i> <sup>b</sup>	Test <i>d</i> <sup>c</sup>
<b>Reading</b>					
Model without IQ	93.5	86.7	6.8	1.40	0.45
Model with IQ	91.9	88.1	3.8	0.79	0.26
% reduction				44	42
<b>Math</b>					
Model without IQ	91.6	86.1	5.5	0.86	0.37
Model with IQ	91.7	89.1	2.6	0.40	0.17
% reduction				53	54

<sup>a</sup> *Difference* refers to the difference between the treatment and control group. <sup>b</sup> Pooled sample *d* = the effect sizes calculated using the pooled standard deviation (reading model without IQ *SD* = 4.85; reading model with IQ *SD* = 4.92; math model without IQ *SD* = 6.41; math model with IQ *SD* = 6.42). <sup>c</sup> Test *d* = the effect sizes calculated using the standard deviation of the Woodcock–Johnson Psycho-Educational Battery (*SD* = 15).

Campbell, F.A., Pungello, E., Burchinal, M., & Ramey, C.T. (2001). The development of cognitive and academic abilities: Growth curves from an early childhood educational experiment. *Developmental Psychology*, 37, 231-242.

### **5. Preschool cognitive advantage + social adjustment + motivational advantage account for years of education at age 21**

Following the same analytic strategy (mediation of effects), a three-study analysis (see the next table) showed that a predictive model comprised of (1) cognitive advantage plus (2) social adjustment plus (3) motivational advantage accounted for 100% of the preschool effect on years of education at age 21. This 3-part model – cognitive/social/motivational – makes a great deal of intuitive sense and relates closely to the other observations in this paper. The fact that these 3 predictors explain respectively only 77.94% and 38.15% of the preschool effect for Perry Preschool and Chicago Child-Parent Centers, suggests that the Abecedarian intervention is more tightly aligned and its program more congruent to the cognitive/social/motivational hypothesis.

*Jim, I noticed that in the Early Childhood Interventions Group conference call on 9 Dec. 2011 you made a comment that the “cognitive approach” did not have an effect in the Curriculum Comparison Study conducted by High/Scope. I think it is important to not saddle the concept of “cognitive emphasis” in early childhood programs with the baggage of the “Direct Instruction” program (also called DISTAR) you were referring to. This approach is used at age 4 and throughout elementary school and is mainly an “instructional model.” It is described in one of the High/Scope publications as follows:*

In the **Direct Instruction model**, teachers followed a script to directly teach children academic skills, rewarding them for correct answers to the teacher’s questions.

*While one could think of this as “cognitive,” it certainly is a narrow, didactic approach to cognitive learning – and is a long cry from what we used in the Abecedarian Approach. In other words, I don’t think we should let the negative baggage of this pedagogy (which is relatively*

*inappropriate in early childhood) taint the interpretation of the much broader cognitive stimulation such as that of the Abecedarian Approach.*

Table 19.5. *Percentage reductions in main effect of preschool participation associated with hypothesized mediators for years of education at age 21 (controlling for gender, mother's education, and father at home)*

	Perry Preschool % Reduction	Abecedarian % Reduction	Child-Parent Centers % Reduction
Main effect of preschool	.535	.567	.401
<i>Hypotheses one by one</i>			
Cognitive advantage	77.94%	87.30%	40.15%
Social adjustment	35.51%	46.38%	38.15%
Motivational advantage	32.34%	47.80%	28.69%
Family support	12.20%	24.16%	30.73%
School support	37.01%	1.41%	46.63%
<i>Cumulative models</i>			
Child behavior model	77.94%	100.00%	38.15%
Cognitive + Social adjustment + Motivation			
Child behavior model + Family support	62.99%	100.00%	46.13%
All 5 hypotheses including School support	57.94%	100.00%	60.34%

Reynolds, A.J., Englund, M.M., Ou, S-R. Schweinhart, L.J., & Campbell, F.A. (2010). Paths of effects of preschool participation to educational attainment at age 21: A three-study analysis. In A.J. Reynolds, A.J. Rolnick, Englund, M.M. & J.A. Temple (Eds.) *Childhood Programs and Practices in the First Decade of Life*. Cambridge, UK: Cambridge University Press.

## **6. Academic locus-of-control and classroom behavior (as measured by the Schaffer Classroom Behavior Inventory) may offer an additional explanation**

Academic locus-of-control data (Intellectual Achievement Responsibility Scale), collected during the kindergarten and first grade years on the first 2 cohorts of the Abecedarian Project, showed that the high-risk Abecedarian control children had lower perceptions of control over their academic success than did their low-risk (middle and upper SES Chapel Hill) classmates. However, beliefs in personal control over successful academic performance increased for the Abecedarian experimental children to approximately the same level of academic control as that perceived by their low-risk classmates. For the experimental children in this study, academic locus-of-control was positively related to task-orientation, less distractibility, and internal motivation (Classroom Behavior Inventory) – providing a possible explanation for how beliefs (locus-of-control) may be translated into classroom behaviors. It is equally (and simultaneously) likely that the preschool intervention program gave the experimental group straightforward experience and practice in task-orientation and focused behaviors that may not have depended on the children's beliefs. *Comment to Jim from Sharon – these changes are indicative of what Adele Diamond and others now classify as executive function, located in the prefrontal cortex.*

Walden, T., & Ramey, C.T. (1983). Locus of control and academic achievement: Results from a preschool intervention program. *Journal of Educational Psychology*, 75, 347-358.

## 7. Staff training in the Abecedarian Approach positively affects caregiver behavior

In a recent randomized study, child care providers were trained in the Abecedarian Approach and implemented it in family child care homes. (As a shorthand name, the Abt Associates researchers called the program “LearningGames,” but, in fact, it included all 4 elements of the Abecedarian Approach.) The study included 150 family child care providers across 22 Massachusetts family child care networks. The homes of the child care providers were randomly assigned to treatment or control conditions within the networks. The intervention consisted of training the supervisory personnel from the family child care networks, who, in turn, visited providers and passed along the training on the Abecedarian Approach.

As the following table indicates, the intervention had statistically significant impacts on all 3 provider outcomes measured. That is, compared with the control group, the Abecedarian Approach caregivers had substantially higher frequencies of rich oral language interactions, interactions to support children’s understanding of vocabulary or concepts, and responsiveness to the children. The effect size for the treatment-control differences was about 0.4, which by convention is labeled a moderate effect size. Also, none of the provider baseline covariates significantly predicted the 3 provider outcomes. The consistency of the findings suggests that the Abecedarian Approach intervention, despite the apparent variability in the extent to which providers implemented a fully realized model, was able to make a significant difference in how providers talked to and interacted with the children in their care. [Data were gathered on children, but not analyzed due to turnover during the 2-year length of the study.]

Impact of the Abecedarian Approach on 3 classes of behaviors of family child care providers

	Control Group Mean	Treatment Group Mean	Treatment Effect	SE	Statistical Significance of Impact (t-value)
Rich oral language interactions	-0.18	0.22	0.40**	0.11	3.72
Support for development of vocabulary/comprehension	-0.17	0.20	0.37**	0.10	3.58
Responsiveness to children	-0.19	0.23	0.47**	0.16	2.97
Key: * = p < 0.05; ** = p < 0.01.					

Administration for Children and Families (2010). Evaluation of Child Care Subsidy Strategies: Massachusetts Family Child Care Study Study. Ann Collins, Barbara Goodson, Jeremy Luallen, Alyssa Rulf Fountain, & Amy Checkoway. Washington, DC: U.S. Department of Health and Human Services.

*Comment to Jim from Sharon: I think the early response contingency (frequent, varied, constructive feedback to the child and opportunity to learn about cause-and-effect relationship in multiple situations) in the infancy and toddler age period are vital, as were exploration and scaffolding that were explicitly emphasized in LearningGames and the Abecedarian Approach.*

## **8. Training in the Abecedarian Approach focuses on adult-child interactions and features a language priority within these interactions**

Abecedarian Approach staff training is mostly about adult-child interactions and includes observation and critique of videos and participatory role play of interactions. The Abecedarian adult-child interactions that are emphasized:

- Are playful
- Are responsive (the adult builds on the child's behaviors)
- Are rich in language; ask question on multiple levels (using the 3S strategy: see, show, say)
- Carry informational content
- Encourage joint attention and task orientation
- Narrate the child's actions (using the 3N strategy: notice, nudge, narrate) and provide a template for his later private speech
- Even though they are playful, have some characteristics of school tasks (e.g. pay attention in Part A of a game in order to succeed in Part B of the game).

Some of these features may be similar to features of other programs. For example, 3N probably has something in common with "reflective thinking" in Tools of the Mind; 3S probably has something in common with "scaffolding" in Tools of the Mind, and definitely is similar to the Montessori "3-part lesson." Conversational book reading (which features 3S and joint attention) has much in common with other forms of interactive book reading and dialogic reading – although it reaches much younger ages. LearningGames activities have many features that cover all the bases including skills, informational content, self-regulation, and attention.

So, does the Abecedarian Approach focus on cognitive development, social development, or motivation? *Probably all of the above.*

If an academically at-risk child has daily experienced multiple, individualized games, reading sessions, and information-filled caregiving/language interactions from responsive adults during 3 to 5 years of educational child care, then the experience of school (even though it is taught mostly in groups and is not individualized) is likely to be easy to comprehend and respond to. The experience of successfully playing a game with a caregiving adult will map onto the experience of doing a lesson with a teacher.

From his or her early experience, the child expects to receive adult input, to pay attention, to respond, and to succeed. This is the social, attitudinal, and learning dispositions advantage the child brings to school.

Moreover, the child enters school developmentally on track (from mastering all the knowledge and skills incorporated in the games) – and does not have to play catch-up. This is the cognitive advantage that enables the child to benefit from each succeeding experience as it presents itself.

\* \* \* \* \*

The adult-child interaction and language focus of the Abecedarian Approach are "packaged," for the sake of training and implementation in 4 convenient resources: LearningGames, Conversational Reading, Language Priority, and Enriched Caregiving. These are elaborated in the following pages, beginning with an input/out map.

**Proposed Abecedarian Input/Out Map**

We begin the description of the intervention program of the Abecedarian Approach with a hypothesized *Input/Output Map*. The program elements in the left-hand column below will be revisited and expanded in the following pages of the document. The map is meant as a kind of crude topographical view of the “space” of the intersection between the Abecedarian Approach (the program inputs) and the Abecedarian child effects (the program outputs). The darker boxes are hypothesized to be areas of strong influence (mountains), the lighter boxes to be areas of moderate influence (hills), and the unshaded boxes areas of little or unknown influence (plains).

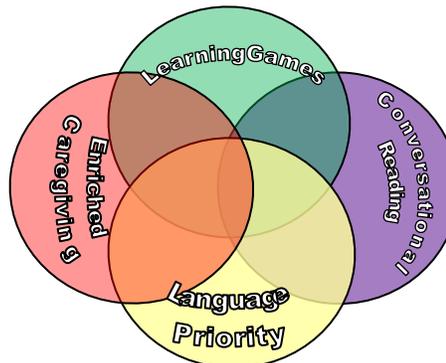
INPUTS (Program Components)	OUTPUTS (Child effects or pathways to effects)									
	Cognitive* advantage		Executive function		Motivational advantage		School behavior		Social adjustment	
	Knowledge	Skills	Self-talk	Planning	Internal locus-of-control	Goal direction	Attention	Task orientation	Turn taking	Cooperation
LearningGames	Dark	Light	Light	Light	Dark	Light	Dark	Light	Light	Light
Conversational Reading	Light	Dark	Light	Light	Light	Light	Dark	Light	Dark	Light
Language Priority	Dark	Dark	Dark	Dark	Light	Light	Light	Light	Light	Light
Enriched Caregiving	Dark	Light	Light	Light	Light	Light	Light	Dark	Light	Dark

\*Cognitive advantage includes vocabulary and language oral facility. The wider columns under cognitive advantage reflect the large contribution hypothesized and confirmed for the child’s cognitive advantage in the Abecedarian Approach.

*Jim, as stated earlier, I don’t personally believe that the inputs/outputs are as neatly related as this grid implies. I have created this is a heuristic aid to understanding the intervention.*

*Jim, my thoughts about the Abecedarian Approach are elaborated in substantial detail in a forthcoming book by Ramey, Sparling, and Ramey: Abecedarian: The Ideas, the Approach, the Findings being published in early 2012 by Sociometrics Corporation. The next pages give a thumb-nail sketch.*

**The Abecedarian Approach is comprised of these elements:**



In the Abecedarian Studies, these elements were used in full day care combined with home visits and/or parent groups – and provided a link between these service components. Because these elements comprised the educational intervention in all our research investigations, and produced positive results, we think they are the core (or the “active ingredients” or the “carriers”) of the Abecedarian effect. The four Abecedarian elements are simply different ways of looking at adult-child interactions. In all the elements, the interactions are individual, frequent, intentional, and responsive. Because these elements formed the intervention in all our research investigations, and produced positive results in all our longitudinal studies (except with the CARE home visit group), we think they are the core – or the “active ingredients” or the “carriers” – of the Abecedarian Approach.

**LearningGames.** *LearningGames* is a set of 200 individualized, game-like activities that are shared between an adult and 1 or 2 children. Each child experiences at least 1 or 2 *LearningGames* episodes per day. (In IHDP, the modal number of daily episodes was 6.) The games include many items that are familiar to parents and teachers. They are based on the concepts of Vygotsky and Piaget and can be thought of as “individualized adult-mediated play sessions” or “bite-size pieces of curriculum.” There are 3 types of games:

- Games that are seamlessly integrated into the routines of caregiving
- Games in which the adult joins and enriches in-progress child play
- Games in which the adult initiates an interaction, inviting the child to join in.

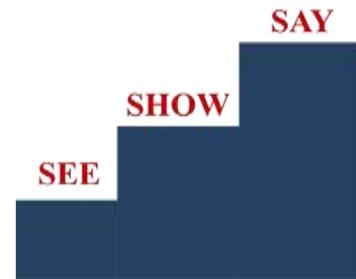
These are basic principles of *LearningGames*:

- Simple but deep
- Focuses on adult-child interaction (mainly 1-on-1 interactions & some small group experiences)
- Made up of individual items (pages) that teachers can use but can also be given to parents – parents and teachers use the *same* materials
- Flexible – used in different types of programs (including day care and home visiting).

**Conversational Reading.** The second element of the Abecedarian Approach is modeled on the way parents and children read together rather than the way reading typically occurs in the classroom. Conversational reading is based on the concept of “joint attention.” In the Abecedarian Approach every child (age 0-3) is read to individually each day, and pairs of children ages 3-4 are read to each day.

These are basic principles of Conversational Reading:

- Goes back and forth, like a conversation
- Appropriate from infancy through age four (or older)
- Engages one or two children at a time
- Employs an easy and memorable strategy consisting of three parts (3S is the memory aid for these three parts)
- The 3 S's are used as stair steps, each a little more advanced than the last
- Can be used by both educators and parents.



**Language Priority.** In the third element of the Abecedarian Approach, educators and parents emphasize language throughout the day. They respond warmly whenever children make an attempt to “talk” to them. They try to create longer “conversations” with individual children. The 3N Strategy (notice, nudge, narrate) is used to turn any event into an occasion for rich language stimulation.

These are basic principles of Language Priority:

- Emphasize language in every event of the day
- Respond to children’s language overtures
- Extend “conversations” so that they include several turns on the same topic (extended discourse)
- Use a strategy (e.g., 3N) for surrounding spontaneous events with adult language
- Share language priority techniques and explain the importance of language with the child’s family.



**Enriched Caregiving.** The Abecedarian curriculum approach affirms that, in the first five years of life, education and caregiving cannot and should not be thought of as distinctly different activities. The phrase “enriched caregiving” is intended to remind all of us (researchers, parents, caregivers, teachers, and program administrators) that “care” for an infant or young child can and should do several things at once. Care can meet the vital needs that support life and stimulate growth while also being responsive to the individual child’s own preferences, abilities, and life situation. Further, care frequently can be enriched with educational content. By highlighting the pivotal role of care in the education of young children, the Abecedarian approach imbues all of the child’s day with educational meaning.

Basic Principles of Enriched Caregiving:

- If possible, divide your group so that each adult has a specific group of children she always cares for (or does most of the care for)
- Respond as quickly as possible, do not wait until the child has cried a lot before going to him or her
- Take educational advantage of the fact that you are in close physical contact with the child during most caregiving routines (speak softly and directly to the child, with eye contact)
- Explain the process of what you are doing and name the objects you touch during care routines (and when the child is ready, invite the child to take the lead in naming the caregiving actions and associated objects)

- Ask questions about what will come next
- Let the child have specific responsibilities during care routines
- Put some appropriate educational materials near the scene of a caregiving event
- Think about the educational content (for example naming colors, textures, or counting) that might fit into a care routine – and include it
- Repeat, repeat, repeat.

\* \* \* \* \*

*Recently, I developed a checklist to enable anyone implementing the Abecedarian Approach in a preschool classroom or child care room to self-monitor their faithful implementation of the program. It appears on the next 2 pages.*

### Evidence of Implementation of the Abecedarian Approach in the Classroom

The Abecedarian Approach comprises 4 key elements: LearningGames, Conversational Reading, Language Priority, and Enriched Caregiving. To document the existence of these elements in an early childhood education program, answer the questions listed in this checklist, either through self-reflection or observation. The numbers at the left may be circled for the corresponding question. A well-implemented Abecedarian program will have most questions answered in the *always* or *usually* range. The checklist can be a tool for self-assessment, staff mentoring, and supervision.

<b>Abecedarian element: LearningGames</b>				
Always	Usually	Occasionally	Never	Do educators...
1	1	1	1	1. Keep weekly plans specifying activities (games for adult/child interaction) for individual children?
2	2	2	2	2. Daily engage in short interactive sessions (games for adult/child interaction) with individual children or very small groups (e.g., 2 children) based on the weekly plan?
3	3	3	3	3. Engage each child in more than one game per day?
4	4	4	4	4. Play the same game with a child more than once per day?
5	5	5	5	5. Keep a record of each child's progress and mastery of the assigned games?
6	6	6	6	6. Share the child's individualized games with families, explain the games and encourage the families to use them at home?

<b>Abecedarian element: Conversational Reading</b>				
Always	Usually	Occasionally	Never	Do educators...
1	1	1	1	1. Daily engage in reading with every child, 1 child (under age 3) at a time, or 2 children (age 3 or over) at a time?
2	2	2	2	2. Stimulate and engage in coordinated attention with the child?
3	3	3	3	3. Use a strategy (e.g., 3S) for eliciting multiple levels of child response?
4	4	4	4	4. Ask multiple types of questions (e.g., wh questions)?
5	5	5	5	5. Use strategies for building literacy knowledge and skills?
6	6	6	6	6. Share conversational reading techniques and discuss the importance of conversational reading with families?

Abecedarian element	Questions and/or notes
LearningGames	
Conversational Reading	

<b>Abecedarian element: Language Priority</b>				
Always	Usually	Occasionally	Never	Do educators...
1	1	1	1	1. Emphasize language in every event of the day?
2	2	2	2	2. Respond to children’s language overtures?
3	3	3	3	3. Extend —conversations so that they include several turns on the same topic (extended discourse)?
4	4	4	4	4. Use language that reflects warm and positive affect?
5	5	5	5	5. Use a strategy (e.g., 3N) for surrounding spontaneous events with adult language?
6	6	6	6	6. Use a strategy (e.g., 3S) for eliciting responses from children, and does the strategy allow for both motor and/or oral responses?
7	7	7	7	7. Share language priority techniques and discuss the importance of language with the child’s family?

<b>Abecedarian element: Enriched Caregiving</b>				
Always	Usually	Occasionally	Never	Do educators...
1	1	1	1	1. Link educational objectives (evidenced in weekly plans) to care routines?
2	2	2	2	2. Deliver informational content related to what is happening in care routines?
3	3	3	3	3. Explain processes during care routines?
4	4	4	4	4. Give the child specific, and age-appropriate responsibilities during care routines?
5	5	5	5	5. Encourage children to practice skills (e.g., cooperating, listening, counting, color recognition) during care routines?
6	6	6	6	6. Use language priority techniques during care routines?
7	7	7	7	7. Share enriched caregiving techniques and discuss the importance of enriched caregiving with families?

Abecedarian element	Questions and/or notes
Language Priority	
Enriched Caregiving	