1304.21(a)(1)(i)-(iii) In order to help children gain the skills and confidence necessary to be prepared to succeed in their present environment and with later responsibilities in school and life, grantee and delegate agencies’ approach to child development and education must:

I. Be developmentally and linguistically appropriate, recognizing that children have individual rates of development as well as individual interests, temperaments, languages, cultural backgrounds, and learning styles;

II. Be inclusive of children with disabilities, consistent with their Individualized Family Service Plan (IFSP) or Individualized Education Program (IEP);

III. Provide an environment of acceptance that supports and respects gender, culture, language, ethnicity and family composition.
Reflection

What image comes to mind when you hear the word temperament?

Learning Objectives

Participants will be able to:

• List and compare the 9 temperamental traits identified by Thomas and Chess as they appear in infants and toddlers,

• Identify genetic (nature) and environmental (nurture) influences on the expression of temperamental traits,

• Describe and provide examples of the concept of “goodness of fit” and “poorness of fit” between the adult and individual child,

• Identify ways in which culture influences the expression of temperament traits,

• Discuss the impact of temperament on a child’s social-emotional foundations of development such as impulse control and expression of emotion.
Early Research

• New York Longitudinal Study by Stella Chess and Alexander Thomas


Nine Temperaments Traits

• Activity level
• Biological Rhythms
• Approach/Withdrawal
• Mood
• Intensity of Reaction

(Bolded traits are most stable over time)
DVD: Flexible, Fearful, or Feisty

The Nine Temperamental Traits

Impact of Temperament:

- Can determine caregivers’ reactions to the child.
- Affects how the child interprets and makes sense of life experiences.
- Shapes the child’s choices of activities and environments.
Temperament & Development

Recent Research

Sources: Theodore Wachs, Temperament and Development: The Role of Context in a Biologically Based System, Zero to Three, March 2004
and
Marti Olsen Laney, Psy.D, The Introvert Advantage: How to Thrive in an Extrovert World
and
Linda Gilkerson and Rebecca Klein, Editors, Early Development and the Brain, Zero to Three, 2008

Ross A. Thompson, Janet E. Thompson, and Julia Luckenbill, The Developing Brain and Its Importance to Relationships, Temperament, and Self-regulation

Stability of Temperament

There are moderate levels of stability of individual temperament patterns over time.

We would expect to see greater stability in temperament patterns within a given situation rather than across situations.
Definition of Temperament

“..early-appearing patterns of observable behavior that are presumed to be biologically based and that distinguish one child from another.”

Rothbart & Derryberry, Zero to Three, March 2004

What Influences Individual Differences in Temperament?

- Genes
- Brain Processes
- Family Environment
- Nutrition
- Culture
- Biomedical Conditions
- Toxic Substances

Temperament and Development: The Role of Context in a Biologically Based System, Theodore Wachs, Zero to Three, March 2004
Genetic Influences

“Genetic influences typically account for between 20% and 35% of individual variations in temperament.”

“Stronger genetic influences are found for negative temperament domains (such as fear and inhibition) than for positive temperament domains such as positive affect and approach.”

Goldsmith, Buss & Lemery, 1997

Gene / Environment Interaction

- Environments can influence how genes are expressed. Their intensity can either reduce or increase genetically based risks.

- The child’s experiences play a significant role in shaping temperament-based behaviors.”
Temperament Described in Two Dimensions:

“Reactivity” refers to individual differences in the arousability of the child: how easily the child is moved to action. It includes temperament traits such as activity level, intensity of reaction, and the emotional qualities of temperament.”

“Self-Regulation” refers to individual differences in managing these reactive tendencies. It includes temperament traits such as approach/withdrawal, persistence, distractibility, adaptability, and emotional qualities related to emotional self-control, (such as soothability.)”


Temperament Is Affected by Experience

• Reactivity is controlled by brain and hormonal systems related to emotion and stress that enable newborns to become highly aroused. Differences in reactivity appear in from birth.

• Young children who are frequently in difficult and stressful situations, may become more irritable and reactive and less capable of self-regulation than other children.
Self-Regulation

• “…the brain systems that enable infants to manage their arousal and calm down take a longer time to mature.

• “…these brain areas—which are also associated with long-term planning and engaging in complex activities—continue to develop into adulthood. (Thompson et al, 2011)

Ross A. Thompson, Janet E. Thompson, and Julia Luckenbill, The Developing Brain and Its Importance to Relationships, Temperament, and Self-regulation

Parental Behaviors

Children who were initially highly inhibited became less so over time if their parents set firm age-appropriate limits on their children’s behavior, helped their children practice appropriate coping skills, and responded less frequently, or were less solicitous when their child exhibited stress.

Environments & Nutrition

“Research has shown that children living in more chaotic homes—that is, homes that are noisy, crowded, and poorly structured, where nothing has a time or a place—are more likely to be easily irritated and have more intense negative moods than children living in less chaotic homes.”

“Researchers have linked iron deficiency anemia to lower levels of alertness and increased amounts of negative emotionality in both neonates and older infants.”

Source: Theodore Wachs, Temperament and Development: The Role of Context in a Biologically Based System, Zero to Three, March 2004

Differing Views of “Ideal” Traits

• In China, teachers viewed shy, sensitive children as socially and academically competent.

• In North America, teachers viewed shy, sensitive children as lonely and depressed.

• In Sweden, shy, socially reserved behavior was not consistently associated with any negative long-term outcomes, yet in North America, such behavior was found to hinder careers.

• Nearly 40% of children in the US are being raised in families that may espouse somewhat different socialization goals and may value different “ideal” traits than those promoted among Anglo-American families.

Vivian L. Carlson, Xin Feng, Robin L. Harwood, Zero to Three, March 2004
American Nuclear Family

“..most American parents are intensely concerned with early self-regulation in feeding and sleeping routines because such routines enable the accomplishment of necessary adult and family tasks in a single caregiver environment.”

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**Temperament Combinations Most Frequently Observed in Clinical Settings**

<table>
<thead>
<tr>
<th>Temperament Combination</th>
<th>High Energy, Low Adaptability (Feisty)</th>
<th>Sensitive, Low Adaptability (Cautious)</th>
<th>Low/Average Energy, Low Adaptability</th>
<th>High Energy, High Adaptability</th>
<th>Low Energy, High Adaptability (Flexible)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active, slow adapting or intense slow adapting</td>
<td>34.75%</td>
<td>25.5%</td>
<td>21%</td>
<td>12.5%</td>
<td>6.25%</td>
</tr>
<tr>
<td>Active, low persistent or active, low persistent and slow adapting</td>
<td>Sensitive, intense and withdrawing or sensitive, withdrawing</td>
<td>Low/average activity and slow-adapting or low/average intensity and slow adapting or low persistence</td>
<td>Active and/or intense plus adaptable or approaching</td>
<td>Low in intensity and/or low in activity Adaptable Approaching</td>
<td></td>
</tr>
</tbody>
</table>

Kristal, Jan *The Temperament Perspective: Working with Children’s Behavioral Styles*, 2005
Activity: Achieving a Goodness of Fit

1. Have each participant complete the Temperament Assessments (Handouts #7) for their own temperament.

2. In small groups using a different colored pen, have each participant chart their temperament on Handout #8, the Chart of Temperament Traits.

3. In a small group, take a few minutes reviewing the differences in your temperament traits. Then share how you would want your primary care teacher to adapt his/her care strategies to meet your needs and achieve a “goodness of fit” (assuming you are 18 months old).

4. Each group reports to the larger group strategies the teacher will use to achieve a goodness of fit for each of their “children.”
Closing Thoughts…

“Fairness to infants is not treating each child the same!”

“Understanding temperaments is the key to all relationships!” - J. Ronald Lally, Ed.D.