

# Early Intervention Programs for Children with a Global Developmental Delay: A Portrait of What Goes on in Quebec, Canada

*AAMR 2006*

*Montreal, Queen Elizabeth*

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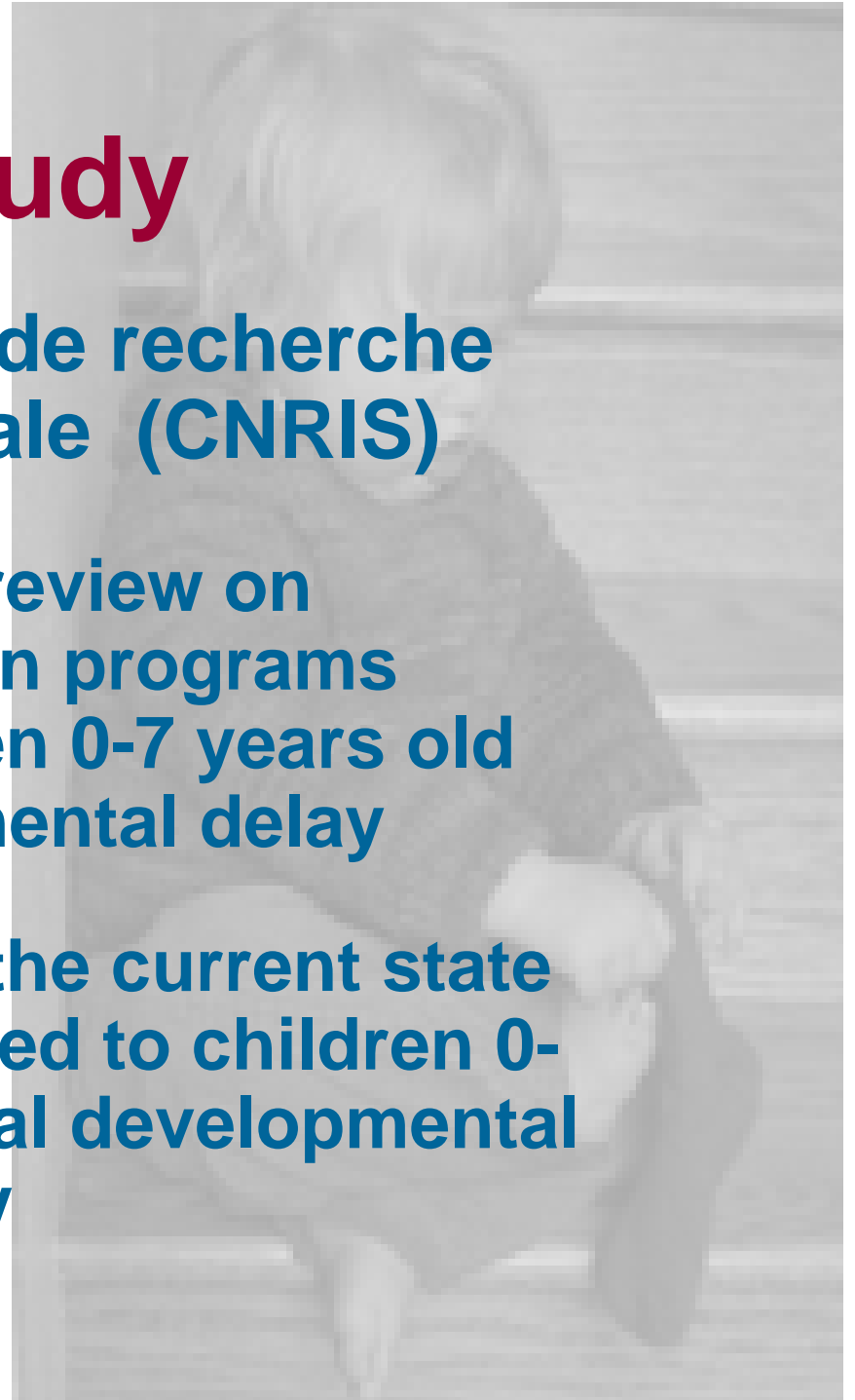
# Presentation plan

- Context of the study
- Research questions
- Research protocol
- Results
- Conclusion
- Question period



# Context of the study

- Consortium national de recherche sur l'intégration sociale (CNRIS)
  - Conduct a literature review on evaluated intervention programs developed for children 0-7 years old with global developmental delay
  - Provide a portrait of the current state of interventions offered to children 0-7 years old with global developmental delay and their family



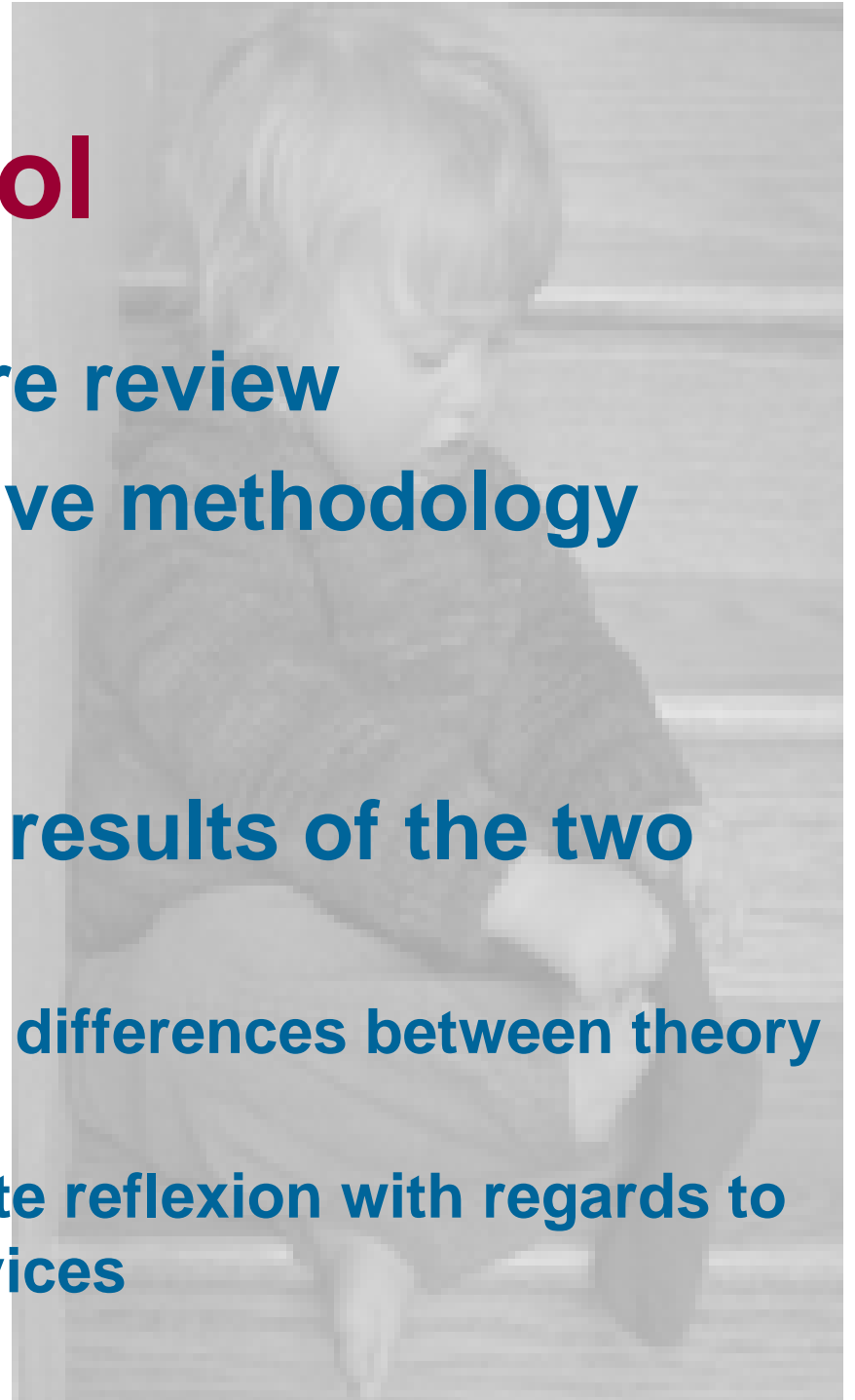
# Research Questions

- **What is the current state of intervention programs developed for children 0-7 years old with global developmental delay from the point of view of the scientific community?**
- **What is the current state of interventions offered to children 0-7 years old with global developmental delay receiving services Rehabilitation Centers for the Mentally Impaired Person (RCMIP)?**



# Research Protocol

- **Phase one: Literature review**
- **Phase two: Qualitative methodology**
  - **Focus groups**
- **Combinaison of the results of the two phases**
  - **identify similarities and differences between theory and practice**
  - **raise questions / promote reflexion with regards to the development of services**

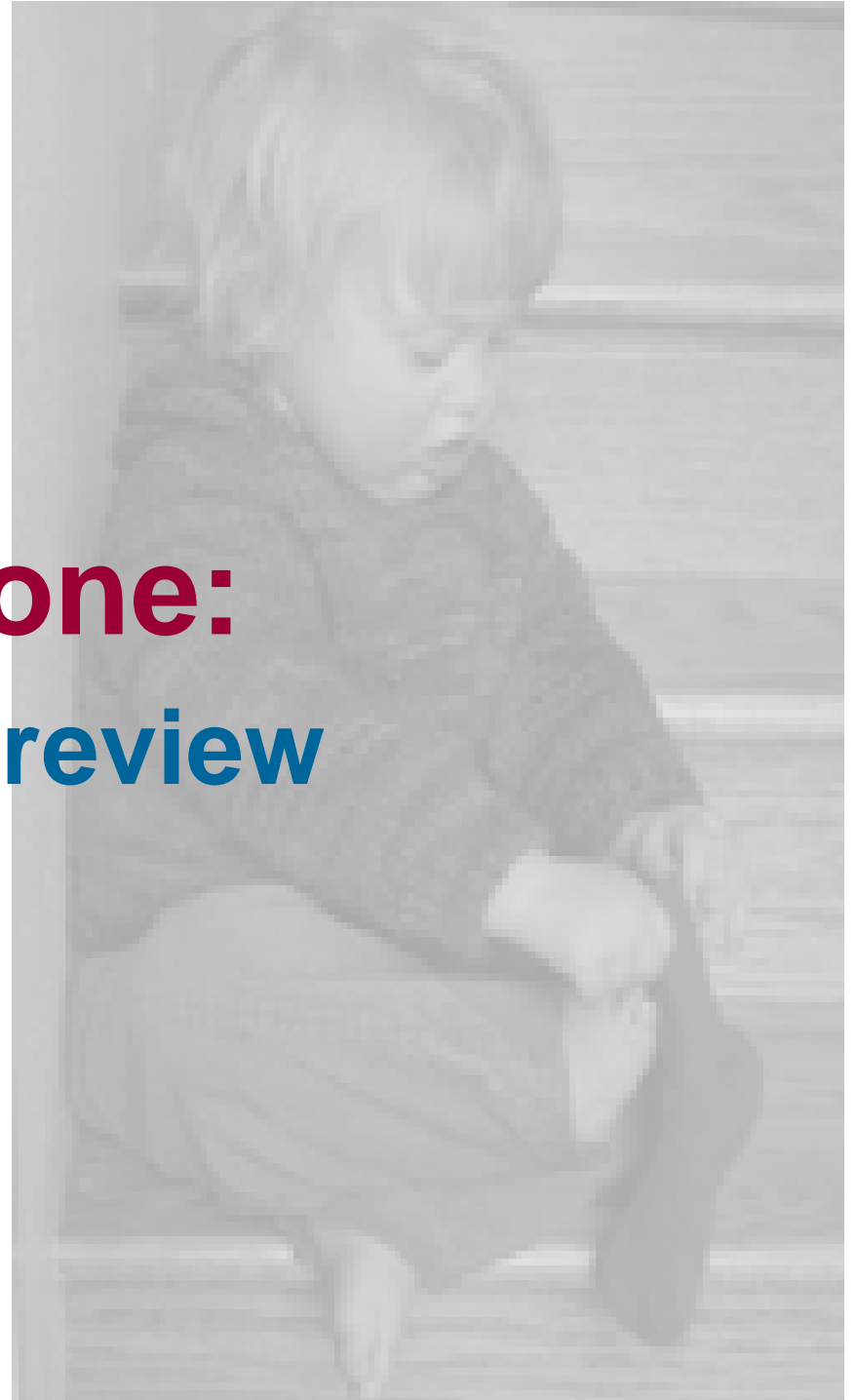


# Mission of Rehabilitation Centers for the Mentally Impaired Person (RCMIP) (n = 23)

- The Rehabilitation Centers for the Mentally Impaired Person (RCMIP) are public institutions in the health and social services network, with the mission of providing adjustment, rehabilitation and social integration services to intellectually impaired individuals (children, adolescents, and adults) as well as support services to their families.
- RCID's deliver services to approximately 30 000 people in the province.
- One has to be referred by a Local Community Health Center (LCHC) in order to benefit from RCID services.



# Phase one: Literature review



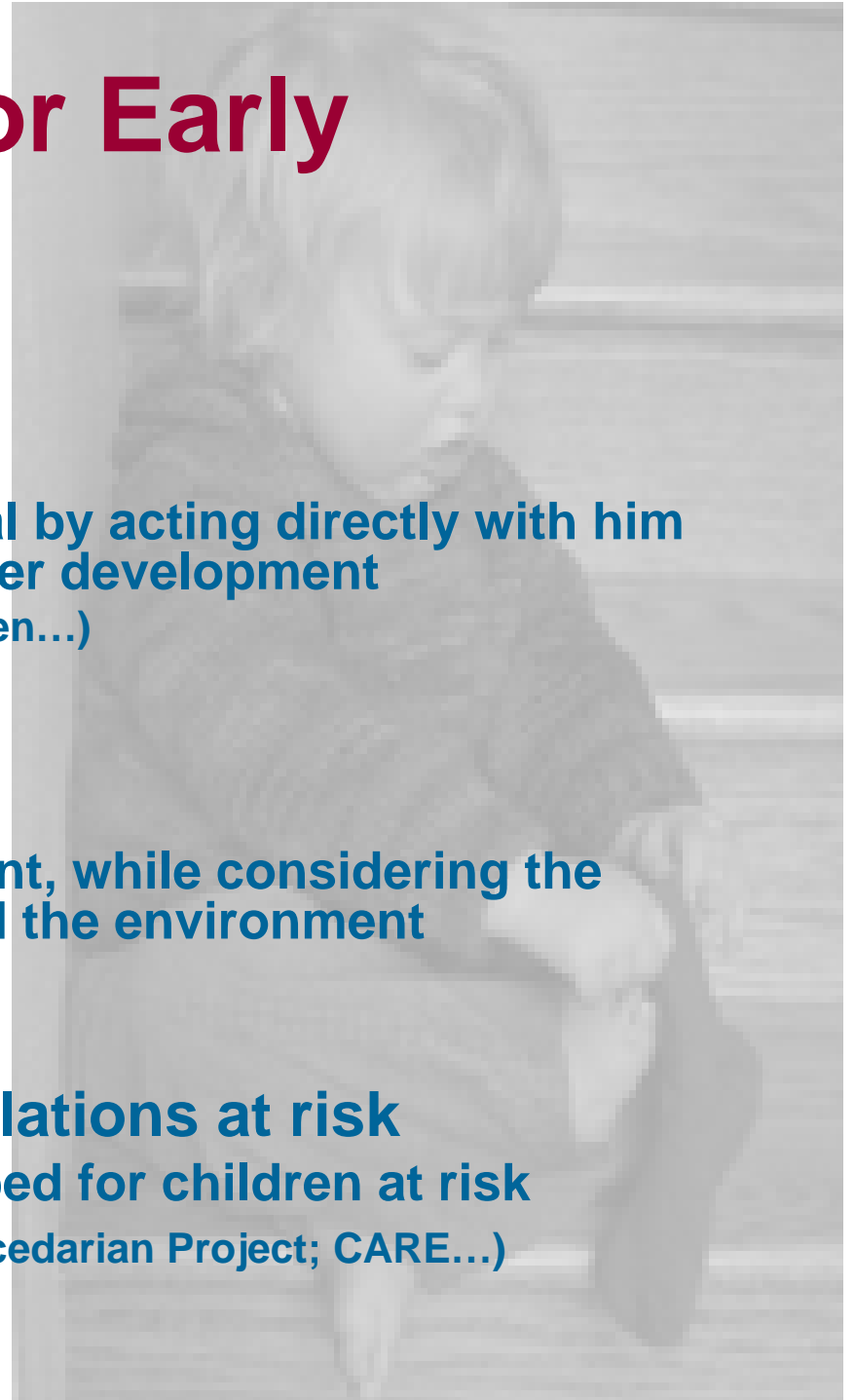
# Research Strategy

- **Data Base**
  - PsycINFO, ERIC, Psychology and Behavioral Sciences Collection, Family & Society Studies Database, Famili@
- **Key words**
  - Global developmental delay (25 in english; 2 in french)
  - Enfant (Early childhood; enfant)
  - Early intervention; program effectiveness; program evaluation, program\*intervention
  - Literature-review; meta analysis
- **1974 to 2006**
- **Over 100 titles, 80 kept for further analysis**



# Early Stimulation or Early Intervention

- **Early stimulation**
  - Maximise the child's potential by acting directly with him in different aspect of his or her development (eg. : Lehane; Portage; Heren & Heren...)
- **Early intervention**
  - Has broader goals.
  - Focuses on child development, while considering the child's reality, the family, and the environment
  - Includes early stimulation
- **Early intervention for populations at risk**
  - several programmes developed for children at risk (eg. : Head Start; The Carolina Abecedarian Project; CARE...)



# Methodology : descriptive analysis

- **Studies interested in EI involve a variety of**
  - Populations
  - Actors involved
  - Intervention settings
  - Variables
  - Programmes
  - Methodological approaches



# Current methodological problems

- Lack of control group
- Small or non representative sample
- Sensitivity and validity of instruments
- Difficulty in measurement of family implication
- Lack of contextual information in programme implementation
- Short programme duration



# Basis of Early Intervention

- **Neurobiology**
  - Plasticity of the brain
- **Education Sciences**
  - Equality of chances
- **Developmental Psychology**
  - Early stimulation
  - Ecological perspective



# Ecological Approach

## Key Features

Family involvement

Parents'  
responsiveness

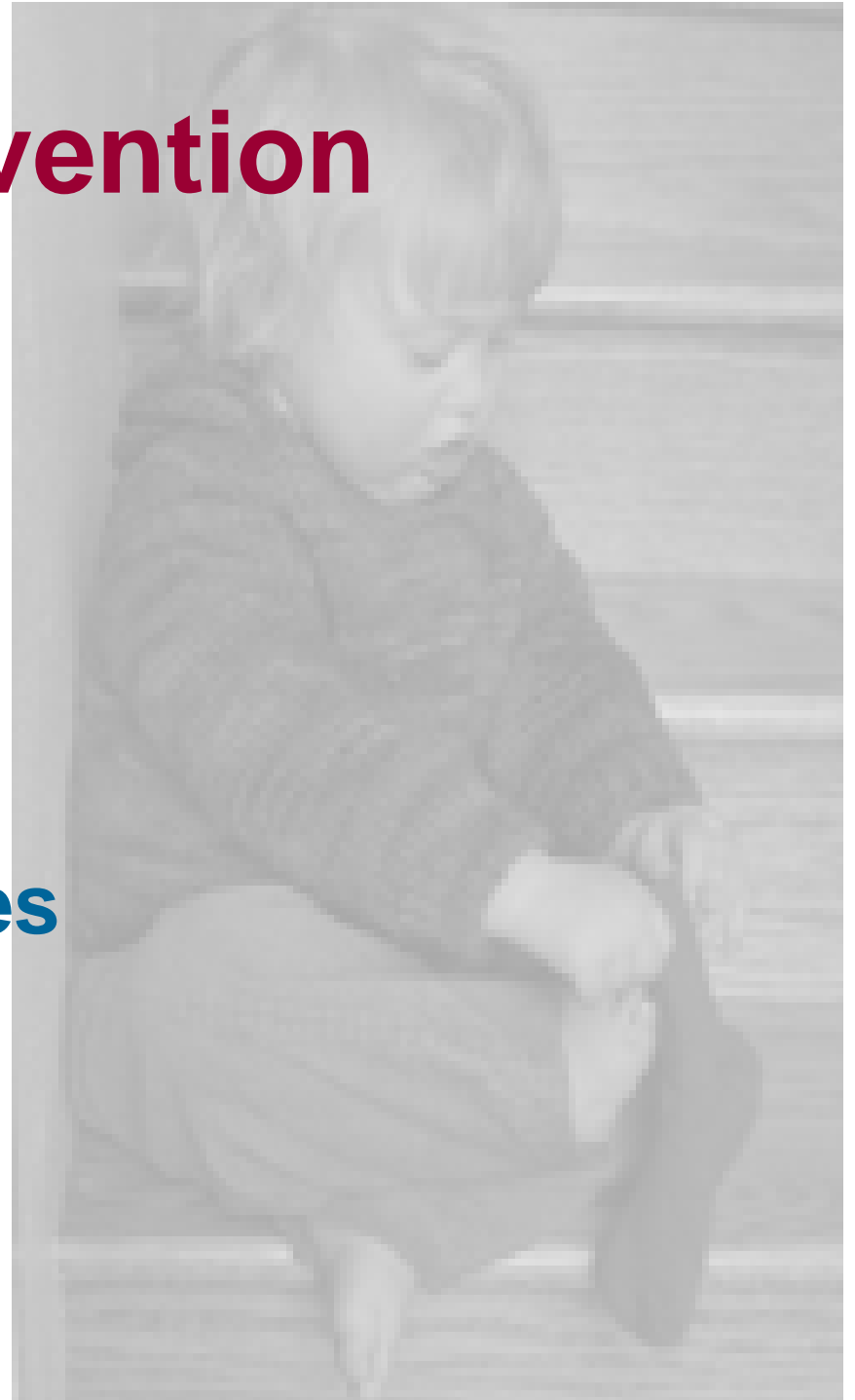
Natural environment

Learning  
opportunities



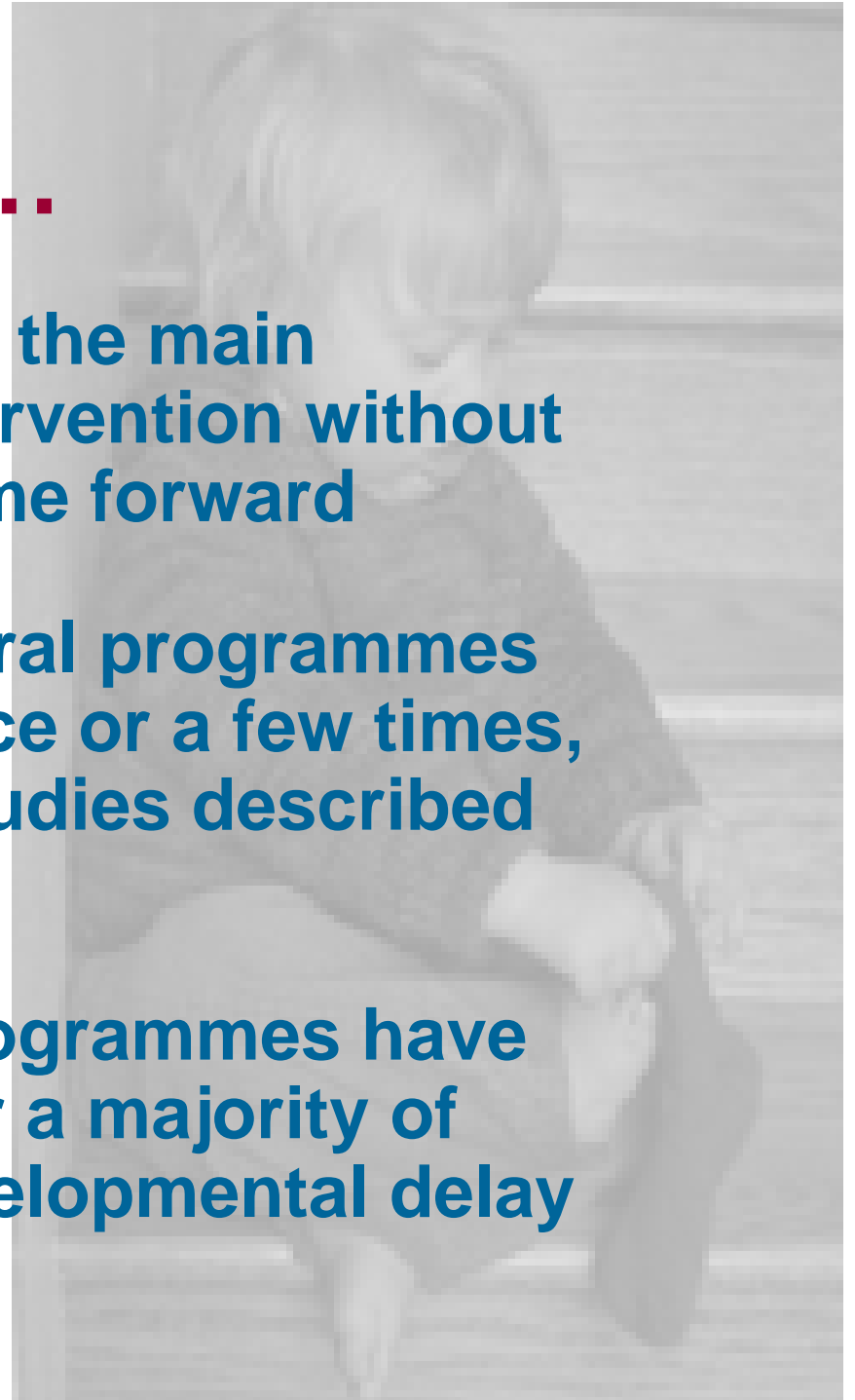
# Successful intervention factors

- Age
- Intensity
- Natural environment
- Individualized services
- Family involvement
- Transdisciplinarity



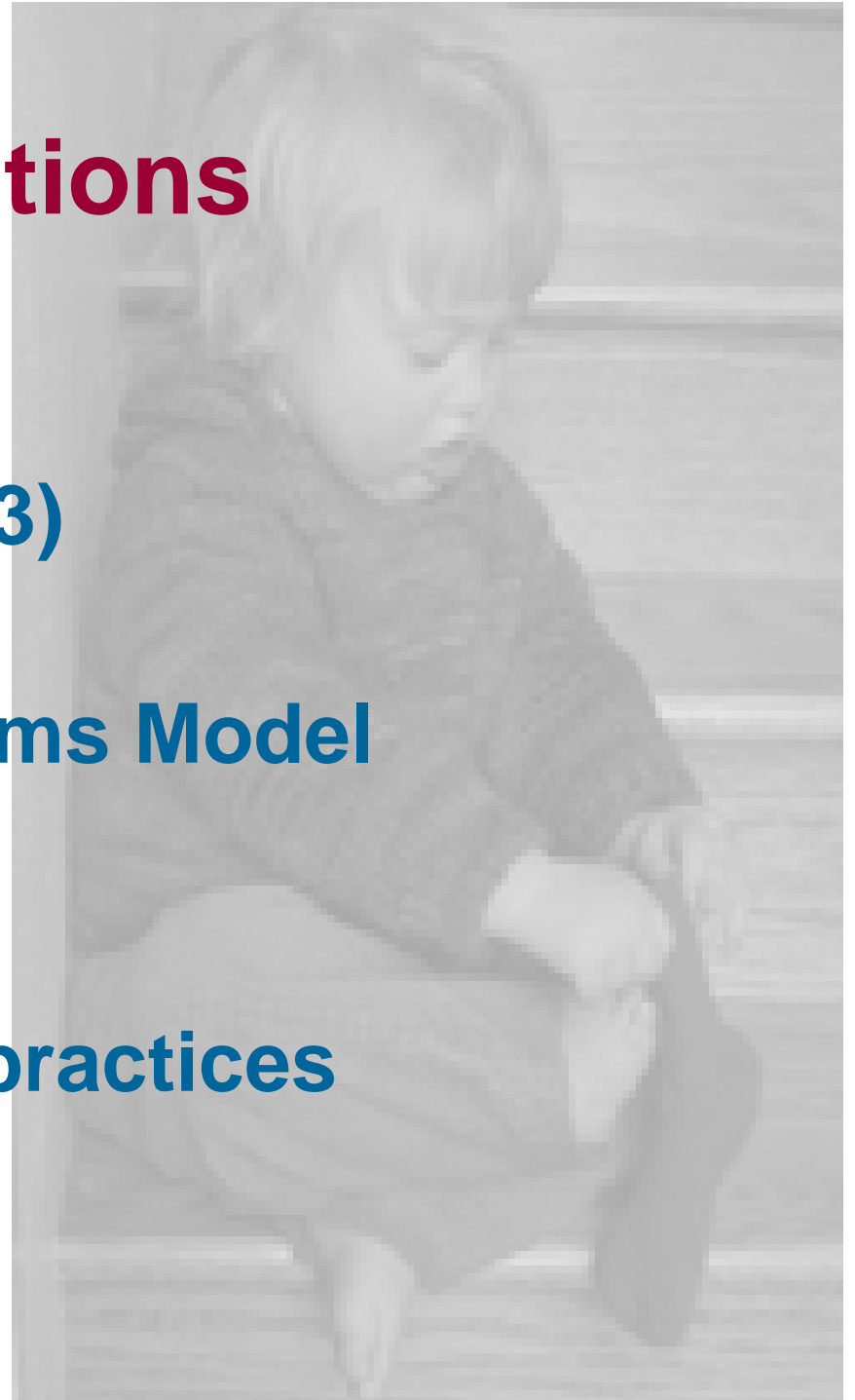
# Keep in mind that...

- Our research underlines the main orientations in early intervention without bringing a key programme forward
- Several specific or general programmes have been evaluated once or a few times, but unfortunately few studies described or documented them.
- No early intervention programmes have been proven efficient for a majority of children with global developmental delay



# Models of interventions

- **Unified Theory**  
(Odom & Wolery, 2003)
- **Developmental Systems Model**  
(Guralnick, 2001)
- **DEC Recommended practices**  
(Sandall et al., 2005)



# **Unified theory: Odom and Wolery (2003)**

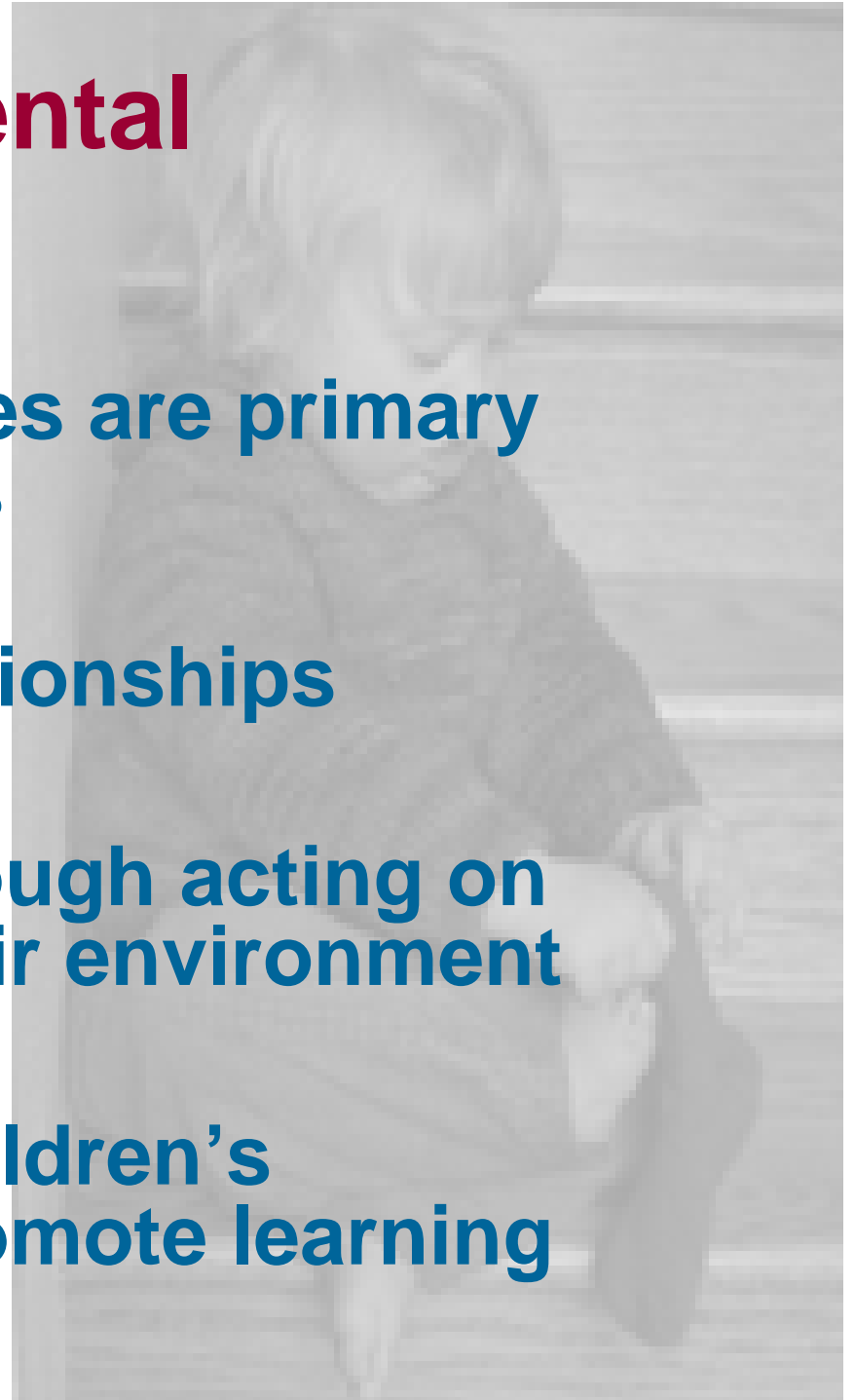
**Theory made up of assumptions shared by professionals using different approaches**

**Eight (8) fundamental principles and evidence-based interventions for each principle**



# Eight (8) fundamental principles

1. Families and homes are primary nurturing contexts
2. Strengthening relationships
3. Children learn through acting on and observing their environment
4. Adults mediate children's experiences to promote learning



**5. Promoting children's participation in more developmentally advanced settings**

**6. EI practice is individually and dynamically goal-oriented**

**7. Transitions across programmes are enhanced by a developmentally instigative adult**

**8. Families and programmes are influenced by the broader context**

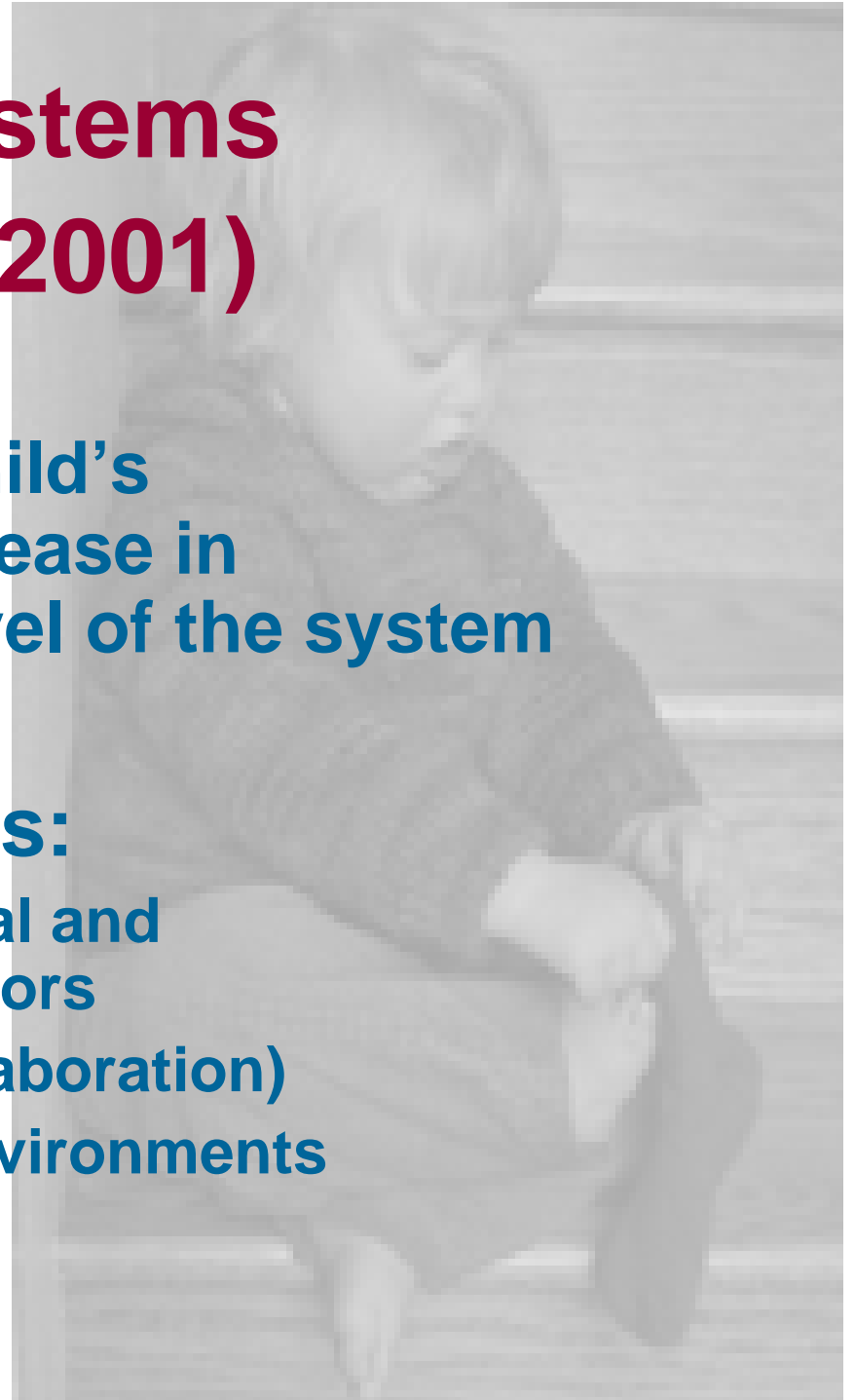


# **Developmental Systems Model: Guralnick (2001)**

**Goal: maximization of child's  
development and increase in  
collaboration at all level of the system**

## **Fundamental principles:**

- 1. Knowledge of biological and environmental risk factors**
- 2. Integration (family collaboration)**
- 3. Inclusion in various environments**



# According to Guralnick...

**As soon as a child is eligible for early intervention services, an assessment must be conducted and take into consideration:**

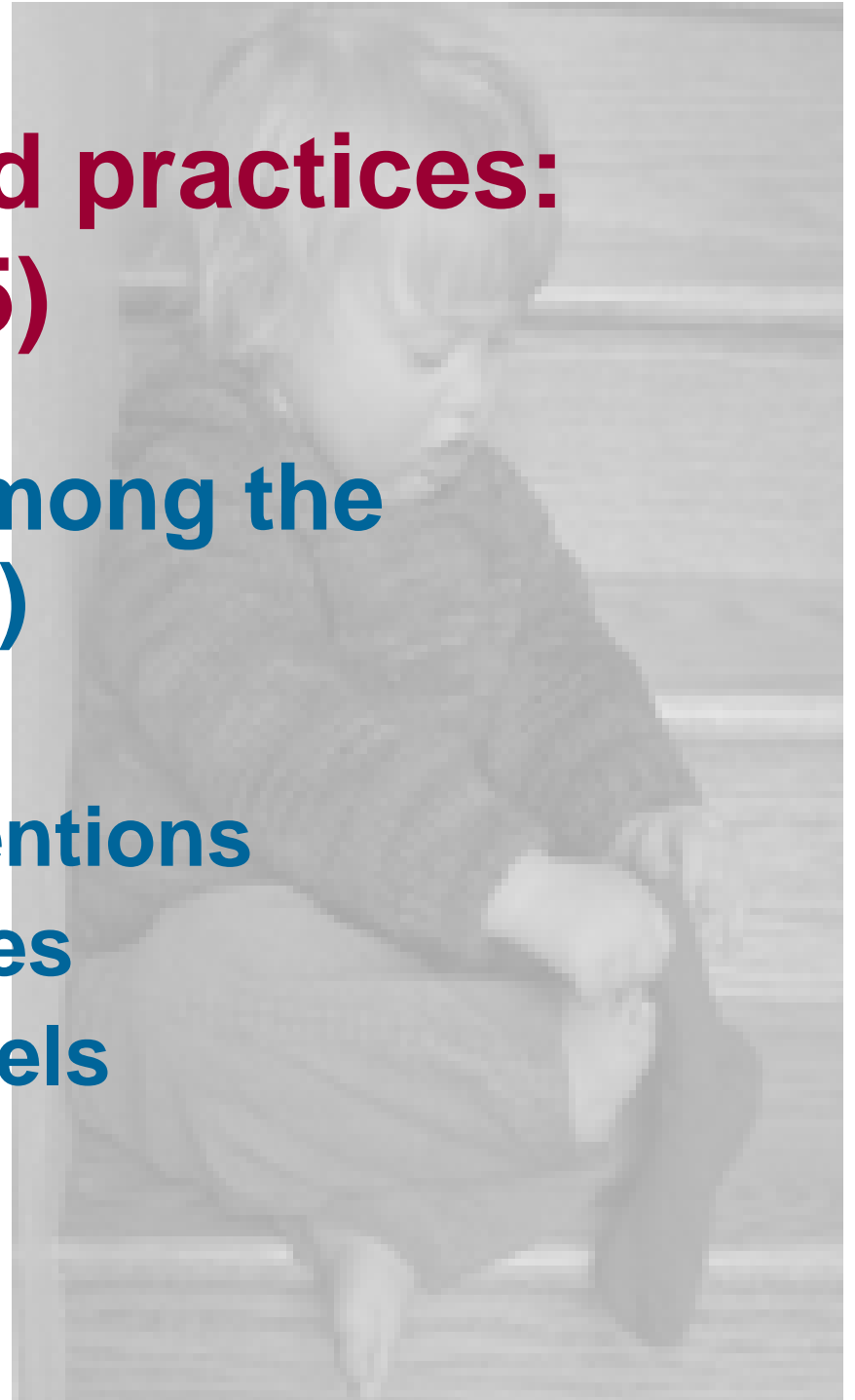
- **Parental needs for information**
- **Adaptation challenges within the family**
  - **Indications of psychological distress**
  - **Dysfunctional family environment**
  - **Level of competence and confidence in parenting skills**
- **Need for resources**



# DEC recommended practices: Sandall et al. (2005)

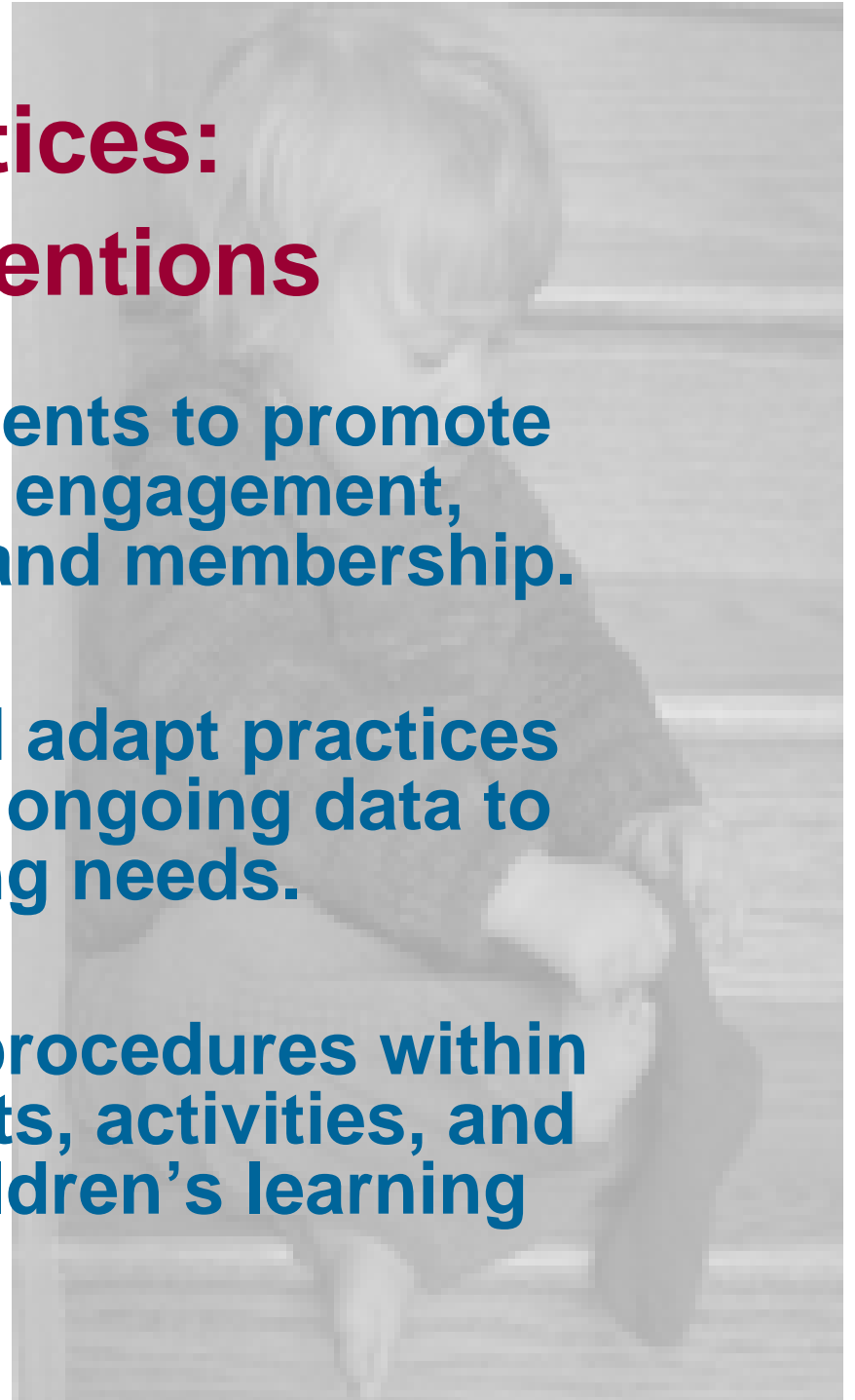
## Three categories among the best practices (240)

- **Child-focused interventions**
- **Family-based practices**
- **Interdisciplinary models**



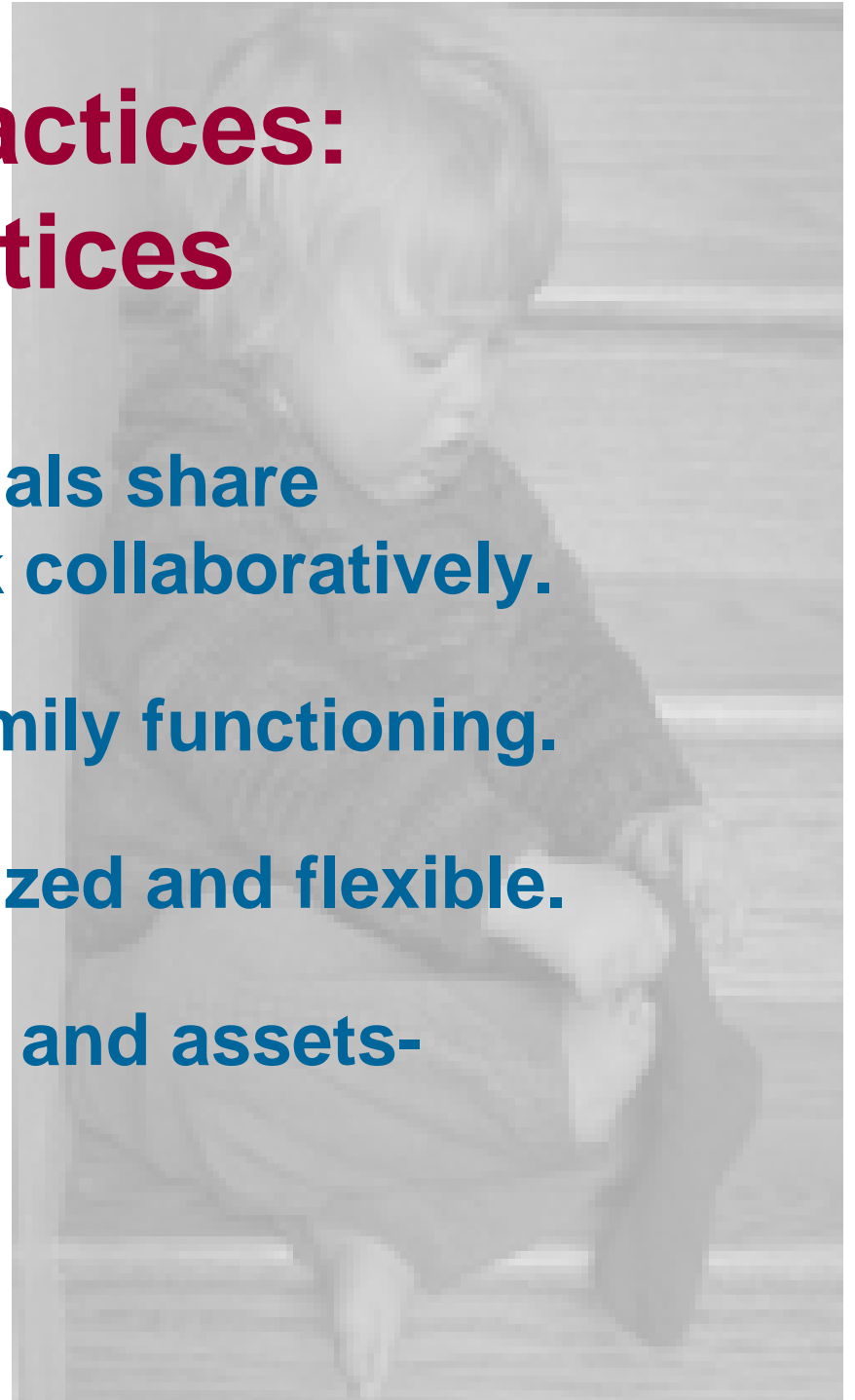
# Recommended practices: Child-focused interventions

- Adults design environments to promote children's safety, active engagement, learning, participation, and membership.
- Adults individualize and adapt practices for each child based on ongoing data to meet children's changing needs.
- Adults use systematic procedures within and across environments, activities, and routines to promote children's learning and participation.



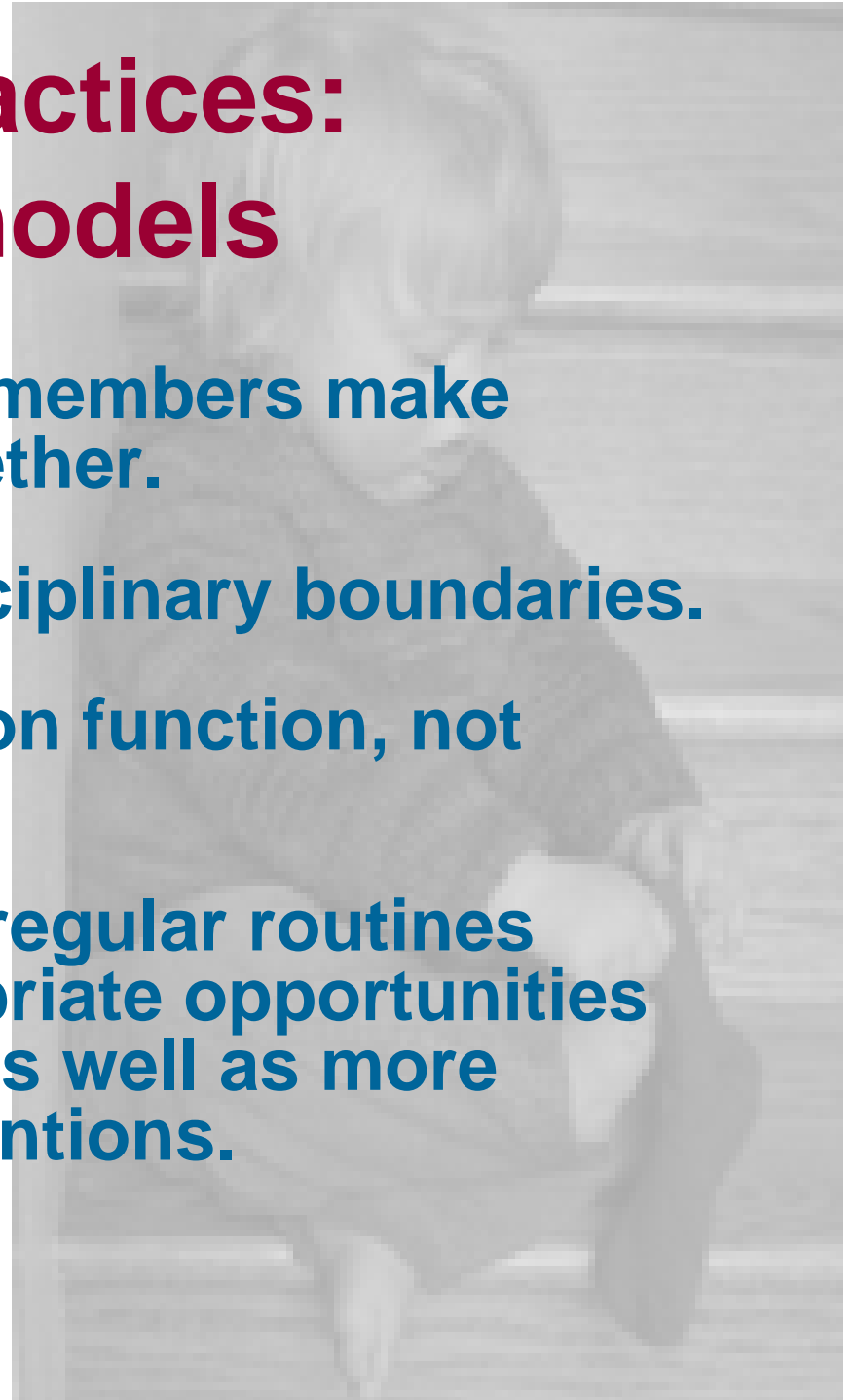
# Recommended practices: Family-based practices

- Families and professionals share responsibility and work collaboratively.
- Practices strengthen family functioning.
- Practices are individualized and flexible.
- Practices are strengths- and assets-based.



# Recommended practices: Interdisciplinary models

- **Teams including family members make decisions and work together.**
- **Professionals cross disciplinary boundaries.**
- **Intervention is focused on function, not services.**
- **Regular caregivers and regular routines provide the most appropriate opportunities for children's learning, as well as more opportunities for interventions.**



# Phase two: Focus groups



- **Qualitative methodology : focus groups**
  - Describe the current state of practice
  - Identify the trajectory of services
- **8 groups between May and August 2005**
- **49 participants**
  - 37W, 12M
  - Educators, health care specialists



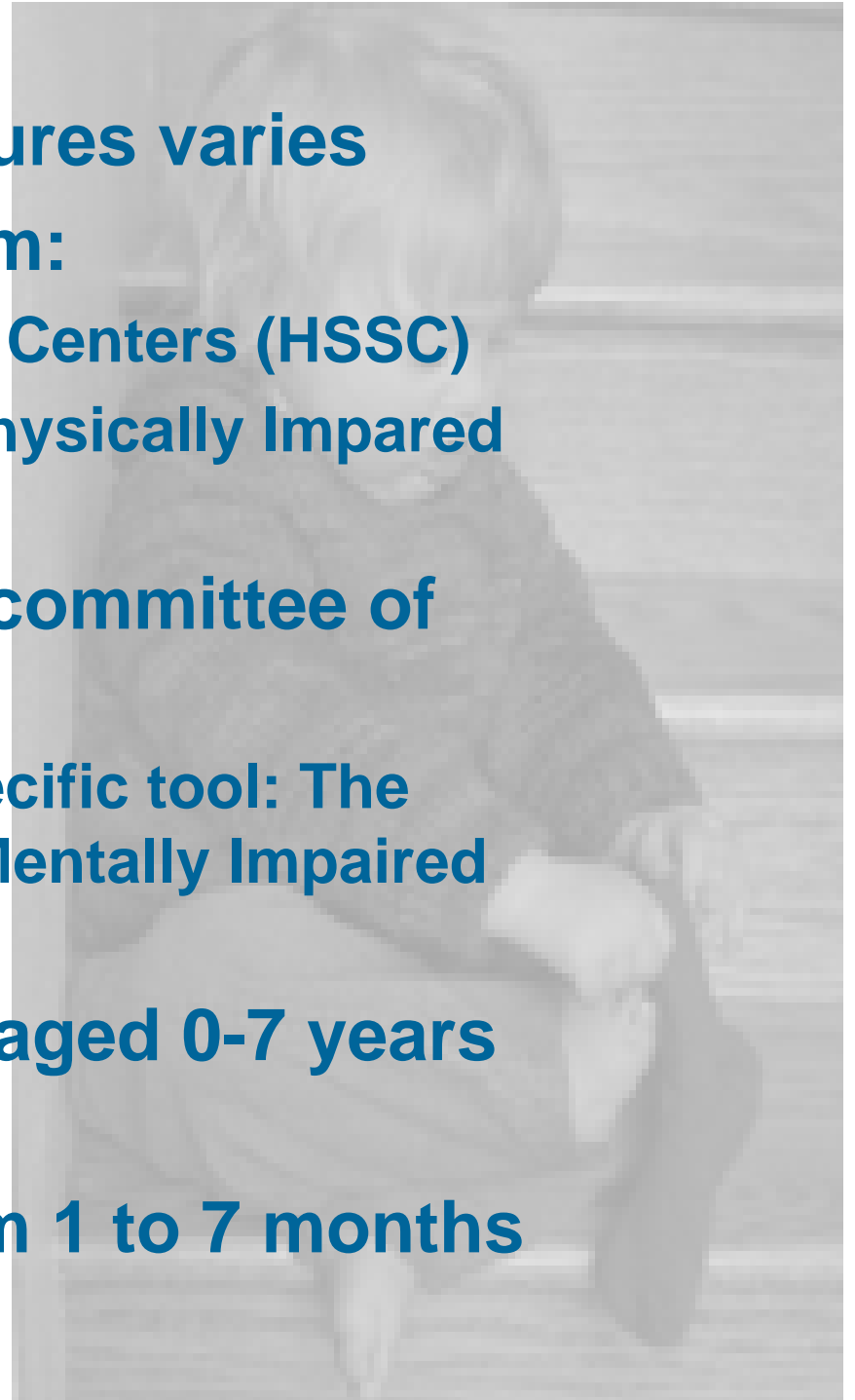
# Accessibility Process



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- **Knowledge of the procedures varies**
- **Referrals come mainly from:**
  - **Health and Social Services Centers (HSSC)**
  - **Rehabilitation Center for Physically Impaired Persons (RCPIP)**
- **Referrals made to access committee of RCMIP**
  - **Referral studied using a specific tool: The Access Mechanism for the Mentally Impaired Person (AMMIP)**
- **Priority given to children aged 0-7 years old**
- **Waiting period varies from 1 to 7 months**



# Referral's acceptance



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- **Referrals accepted when fit inclusion criteria**
  - **Diagnosis**
- **Accepted referrals are given to educators**
  - **Priorisation according to age**
  - **Waiting period and intensity**
- **Data collection**
  - **Professionals**
  - **Actors involved**
  - **Resources**



# Educator's assessment procedures



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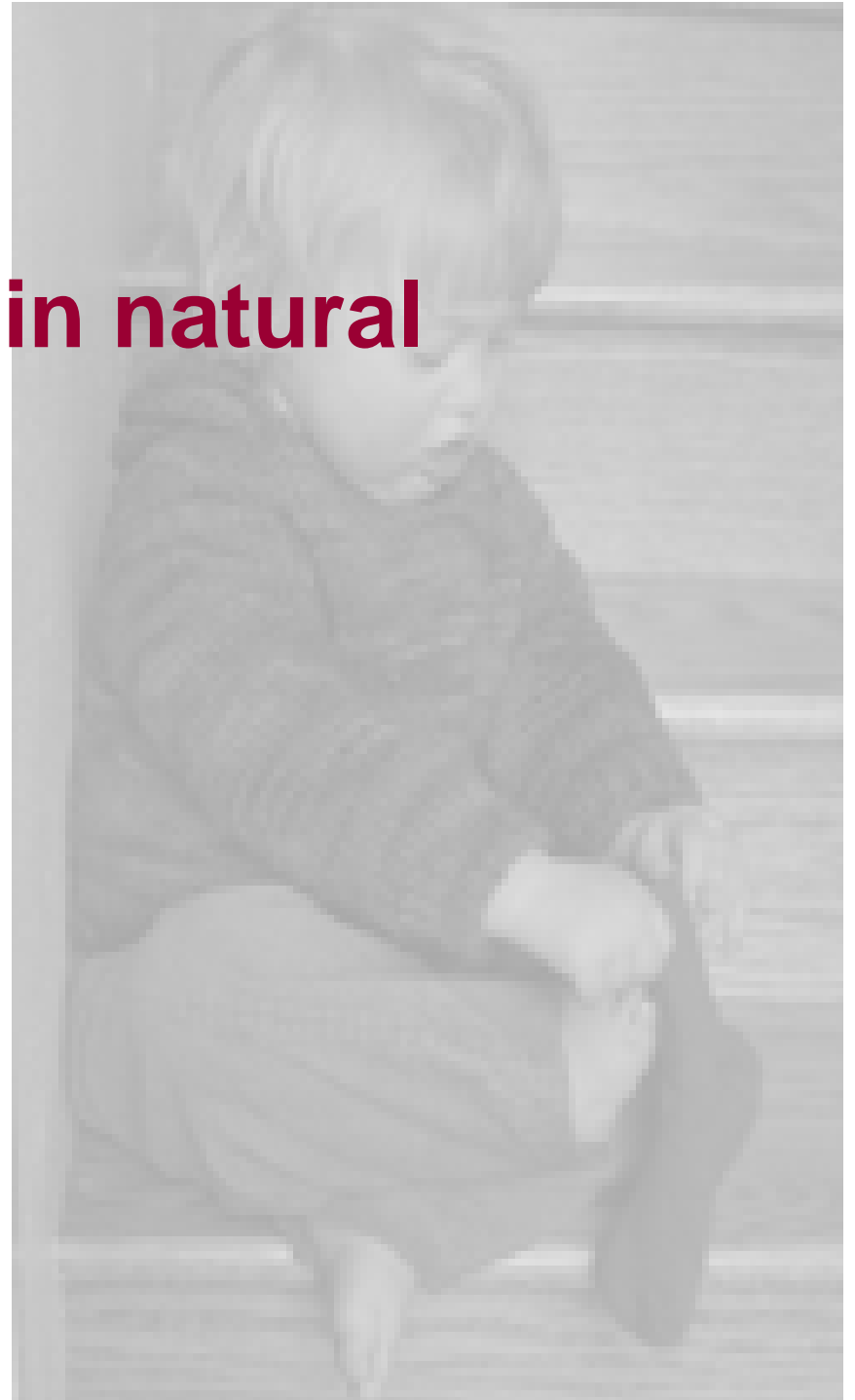


- **Task observations in natural environment**

- **Assessments**

- **Harvey**

- **Brigance**



# Roles and functions of the educator



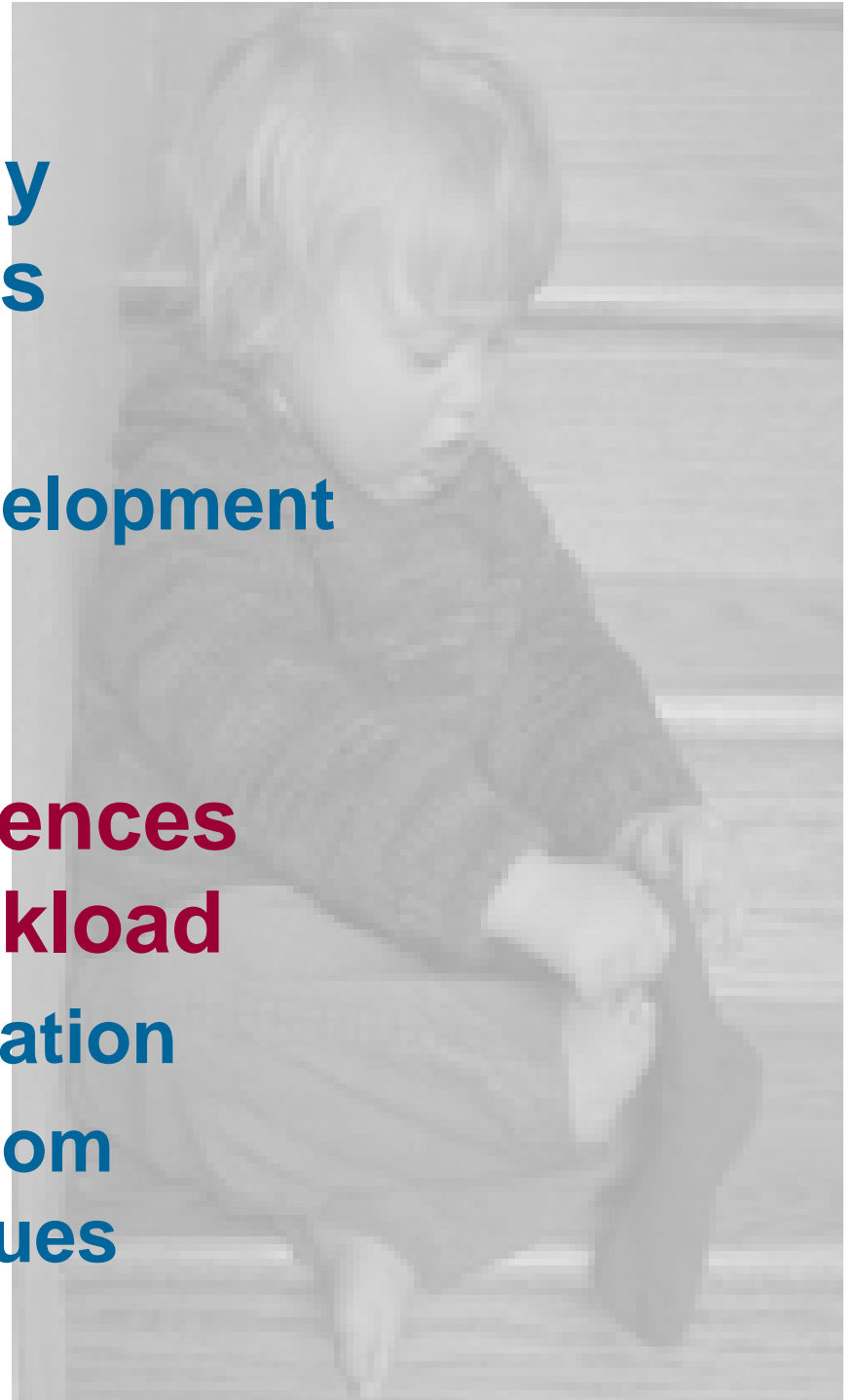
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- **Educators: most present in the family environment**
  - **Services more adapted/suited to family and child's needs**
- **« Continuous » presence adds functions**
  - **Pass on information between family and other professionals**
  - **Inform and guide family**
  - **Emotionally support family**
  - **Inform partners about family progression and their difficulties**



- **Added functions imply abilities and qualities**
  - **Flexibility**
  - **Role substitution (development of new competences)**
- **Lack specific competences leads to increase workload**
  - **Need continuing education**
  - **Need better support from superiors and colleagues**



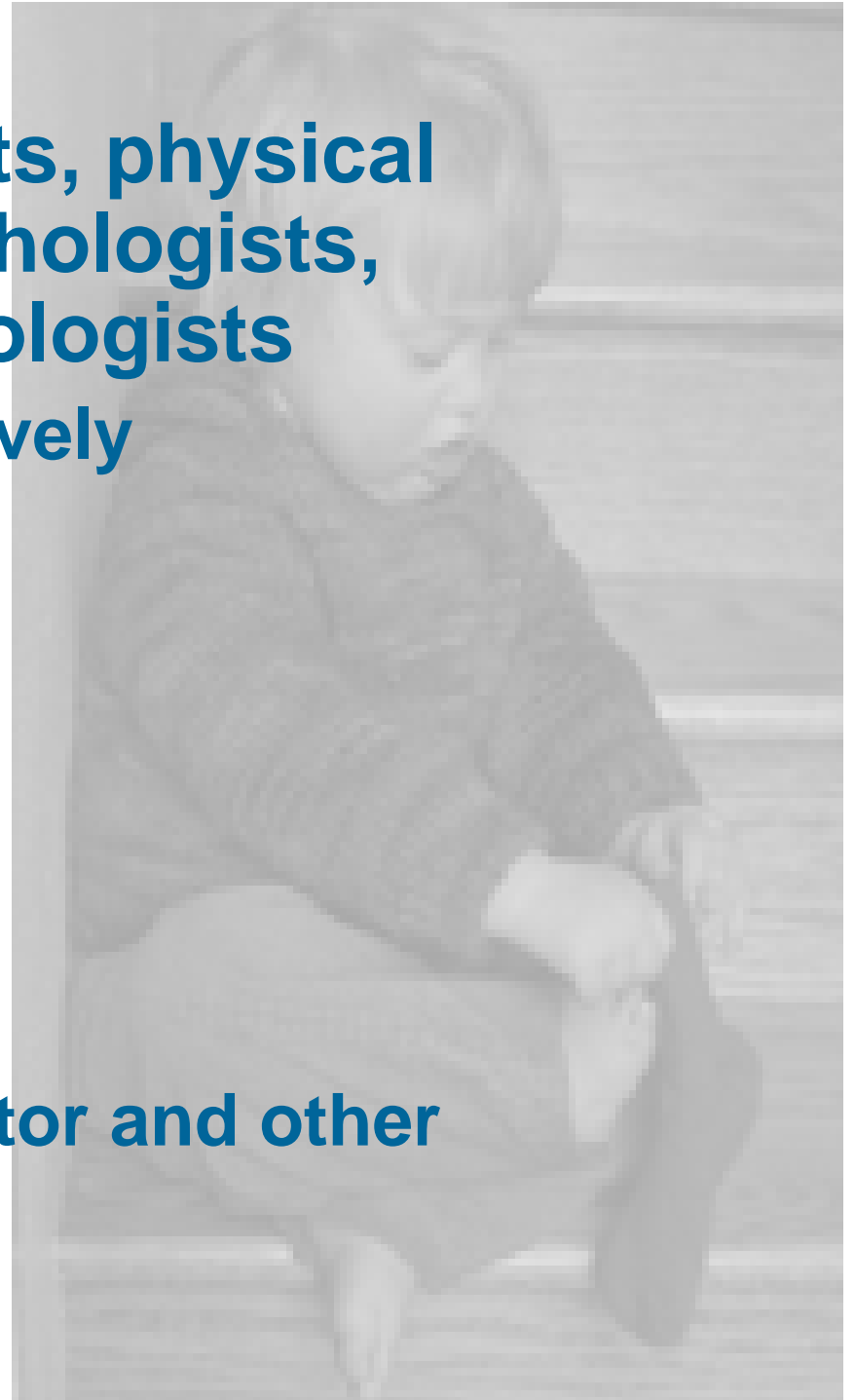
# Partners in the Rehabilitation Center



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- **Occupational therapists, physical therapists, speech pathologists, social workers, psychologists**
  - Will be involved selectively
- **Main functions are:**
  - Assessments
  - Consults
  - Interventions
  - Support
  - Liaison between educator and other specialists



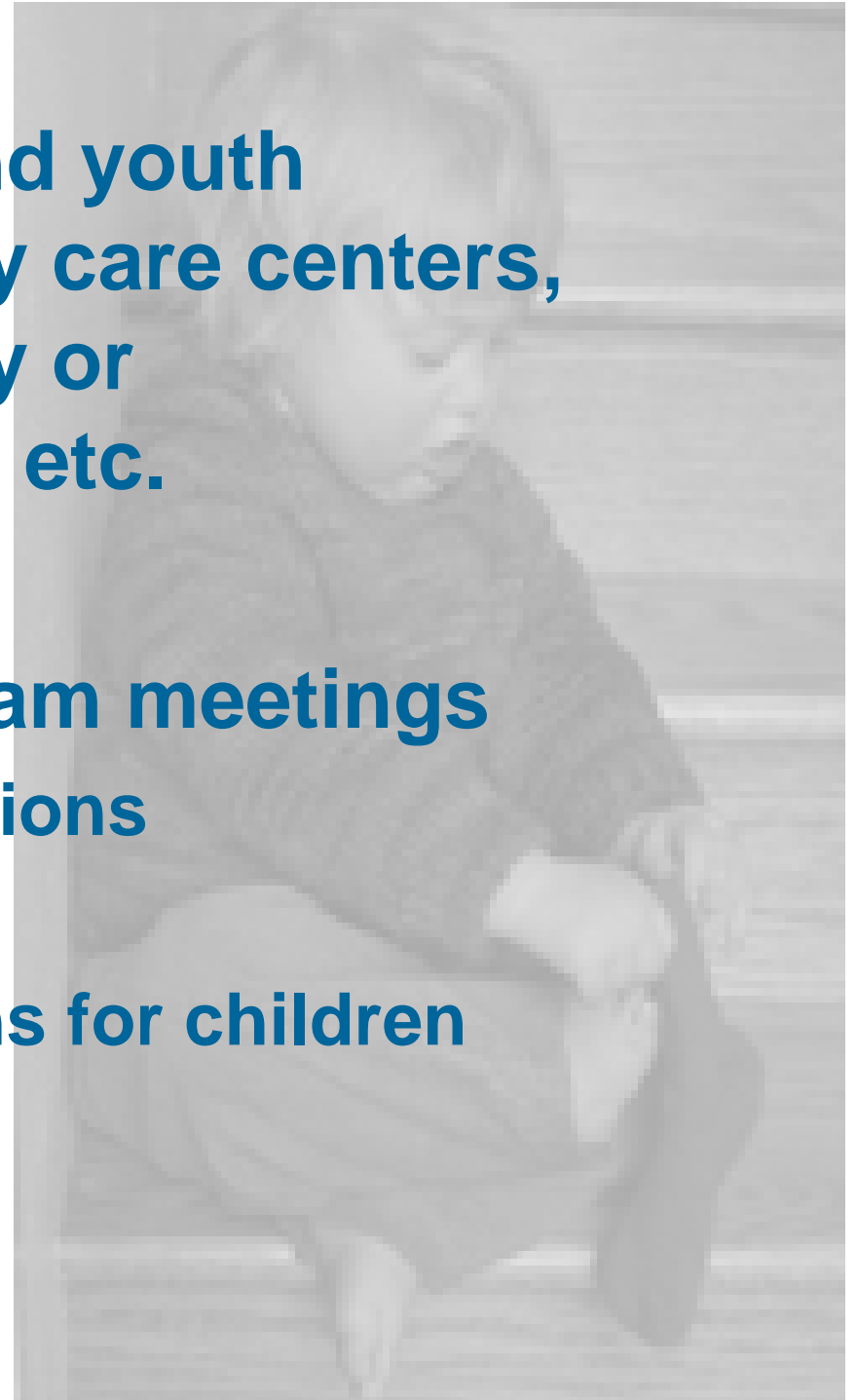
# Partners outside the Rehabilitation Center



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- **HSSC, RCPIP, child and youth protection centers, day care centers, hospitals, schools, city or community resources, etc.**
- **Educators instigate team meetings**
  - **Specify roles and functions**
  - **Avoid repetition**
  - **Harmonize interventions for children and their family**



# Intervention approaches



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- **Individualized approach**
- **Positive view of the child (potential)**
- **Family centred approach**
- **Systemic approach**



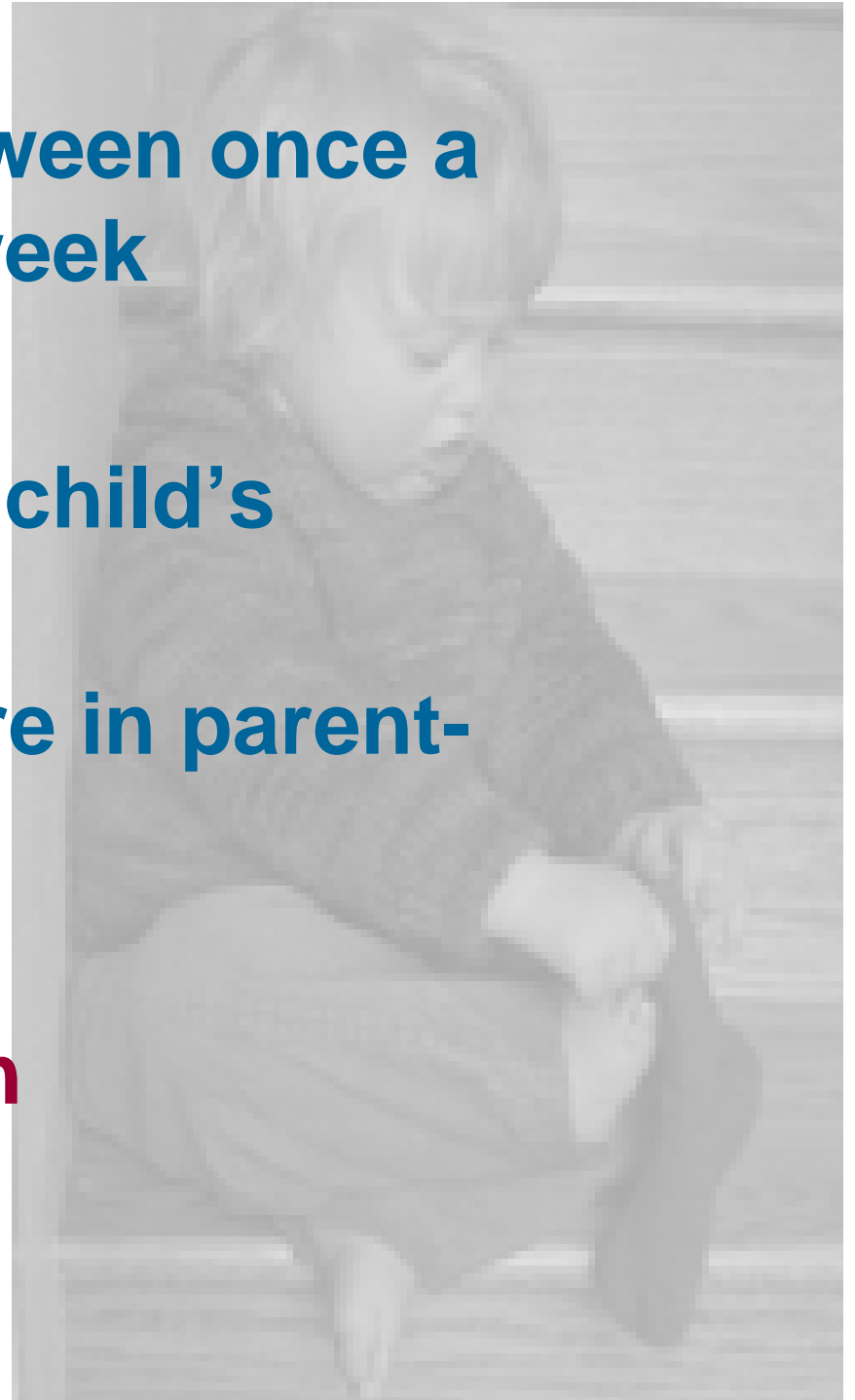
# Intervention strategies



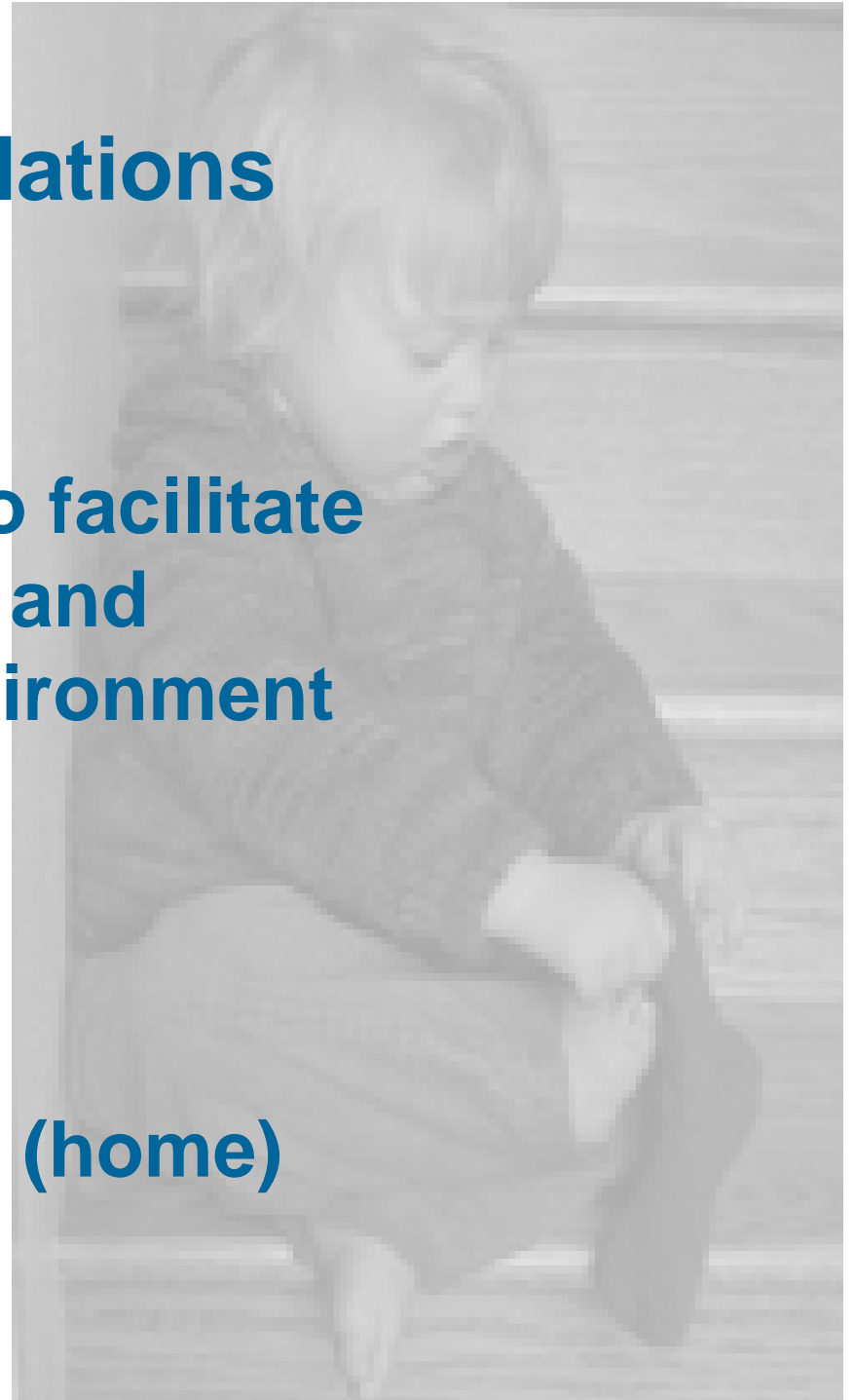
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- **Frequency varies between once a week to every other week**
- **Tasks observations**
- **Interventions respect child's interests**
- **Importance of pleasure in parent-child interactions**
- **Include siblings**
- **Avoid parental burden**

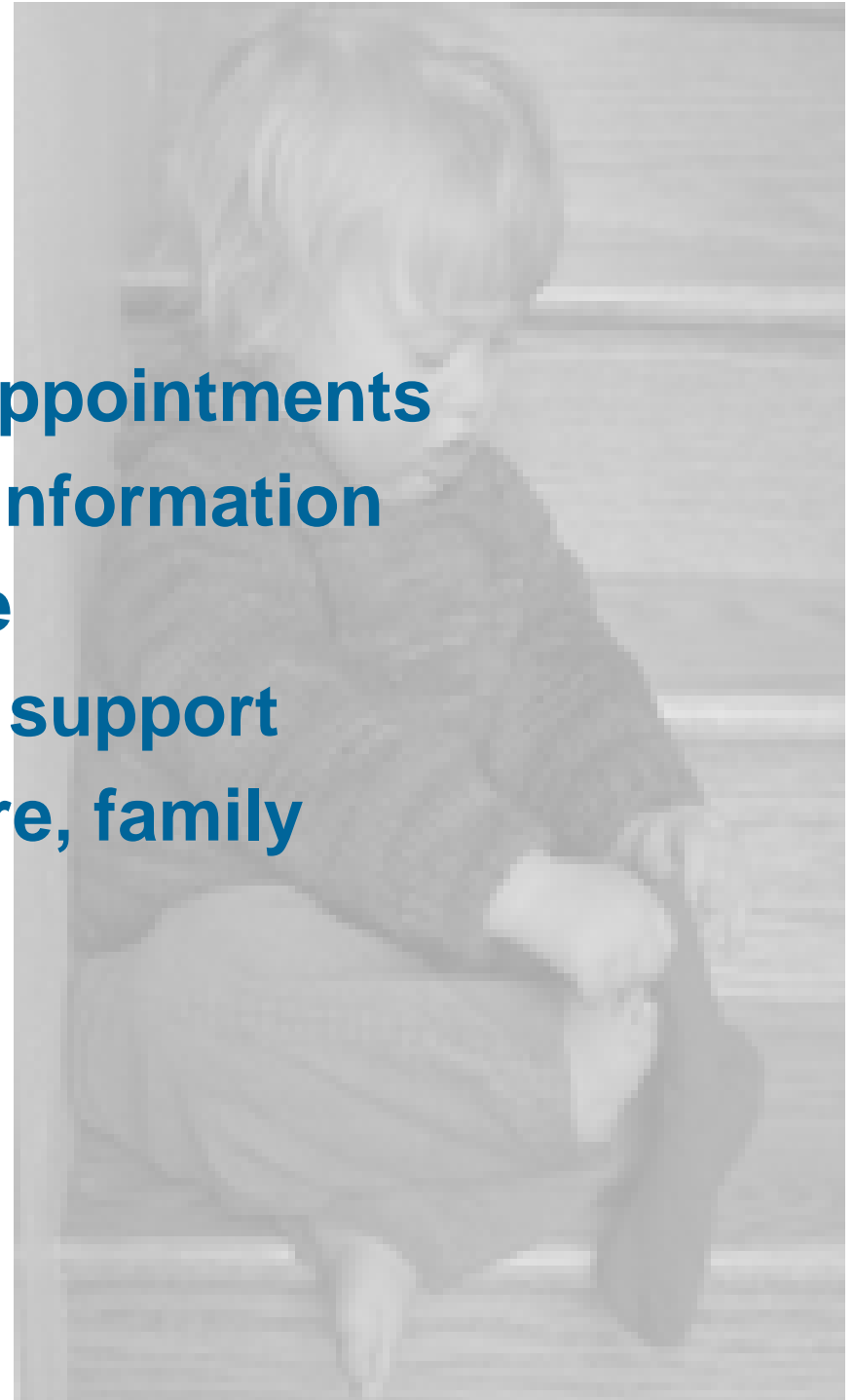


- **Frequent recommendations**
  - **Communication**
    - **Pictogrammes**
  - **Objects/toys/games to facilitate development of skills and interactions child-environment**
- **Modifications**
  - **Routine**
  - **Physical environment (home)**
  - **Other environments**



- **Parental support**

- **Accompany them to appointments**
- **Pass on and simplify information**
- **Be sensible to respite**
- **Provide psychosocial support**
- **Respect values, culture, family environment**



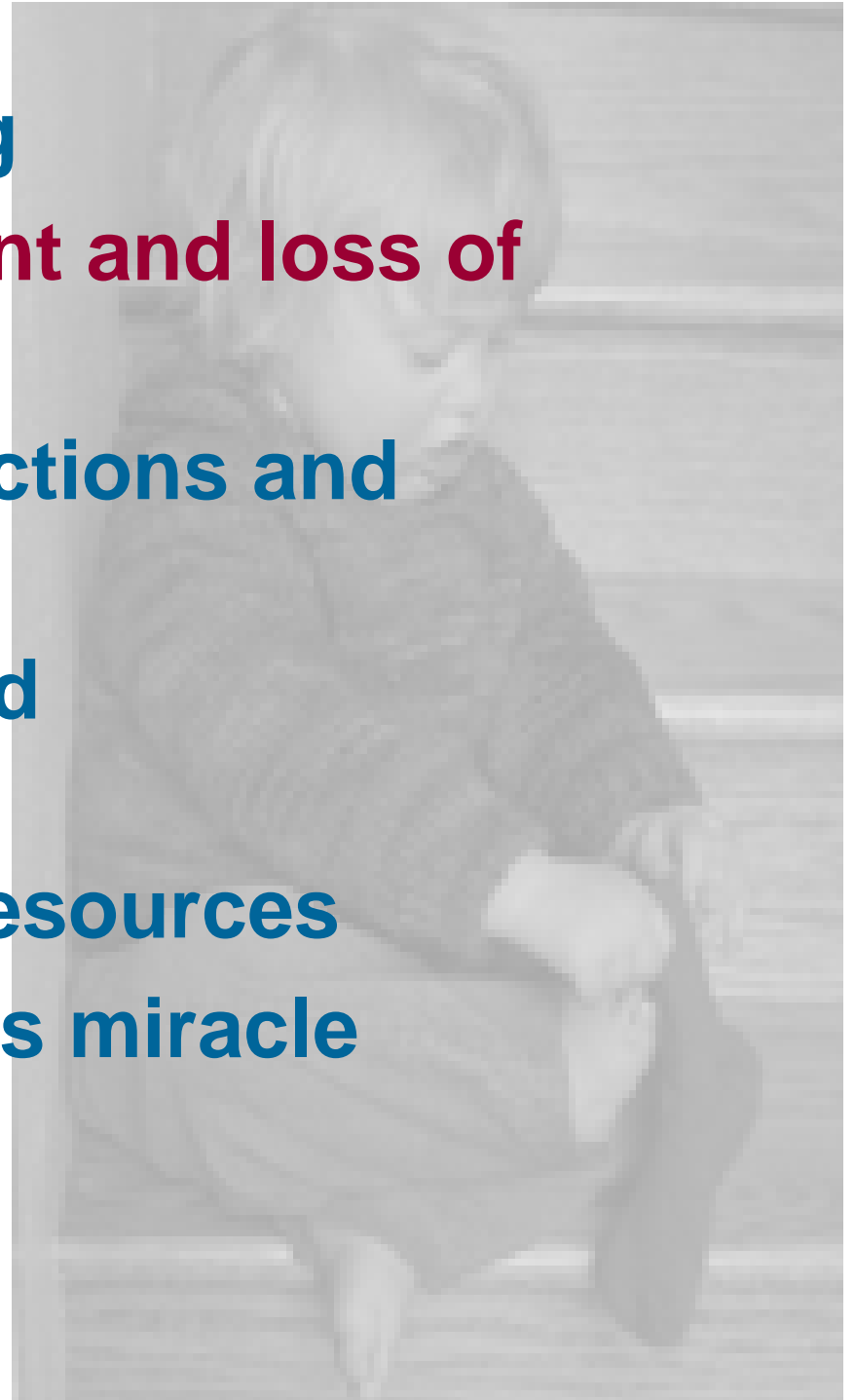
# The down side...



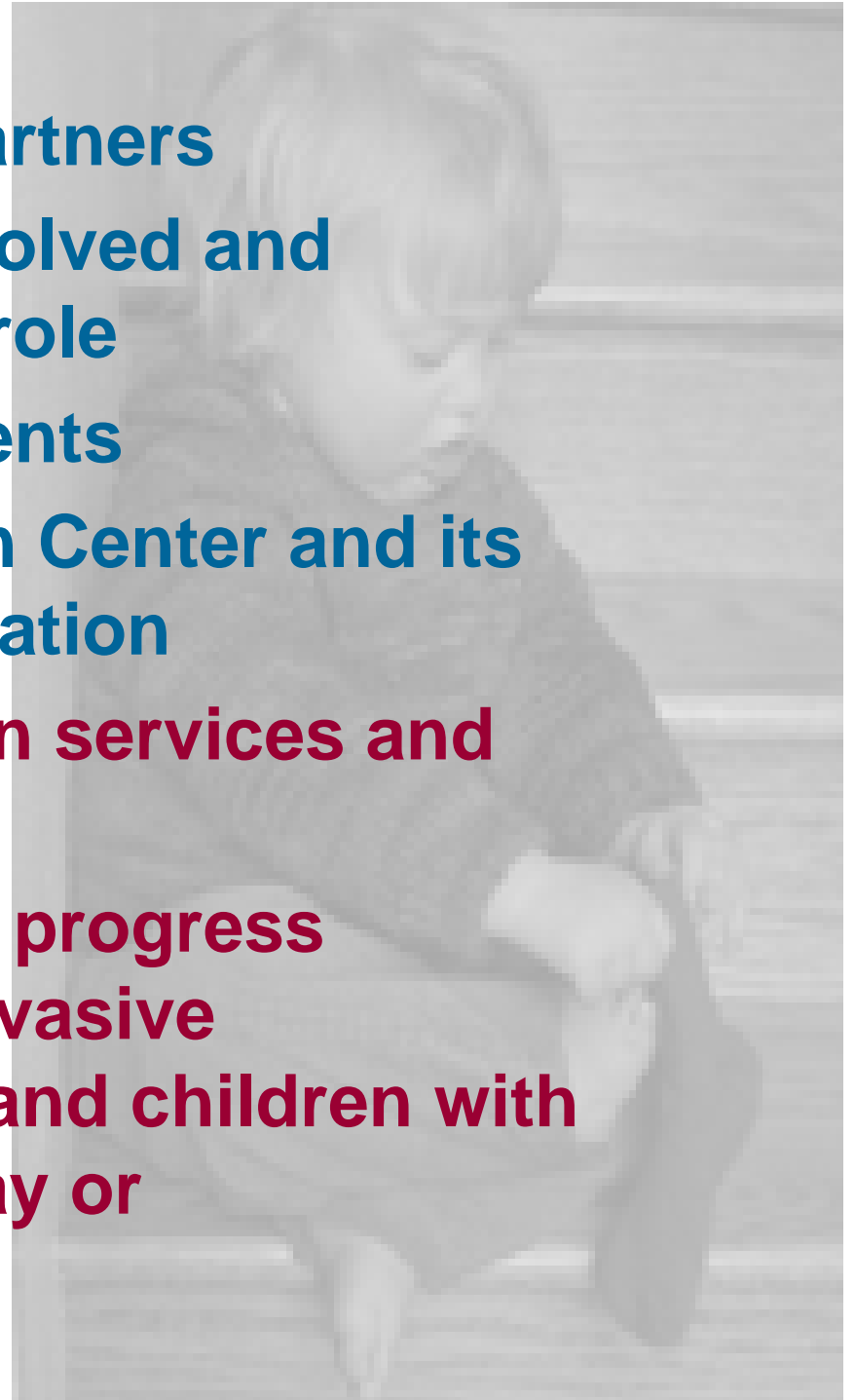
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- **Territory and travelling**
- **Duration of involvement and loss of objectivity**
- **Too much «other» functions and increased workload**
- **Not enough specialized interventions**
- **Lack of professional resources**
- **Educators perceived as miracle workers**



- **Instability with external partners**
- **Multiple professionals involved and definition of each others' role**
- **Lack of resources for parents**
- **Name of the Rehabilitation Center and its reference to mental retardation**
- **Lack of continuity between services and resources**
- **Inequity in the chances of progress between children with pervasive developmental disorders and children with global developmental delay or intellectually disabled**

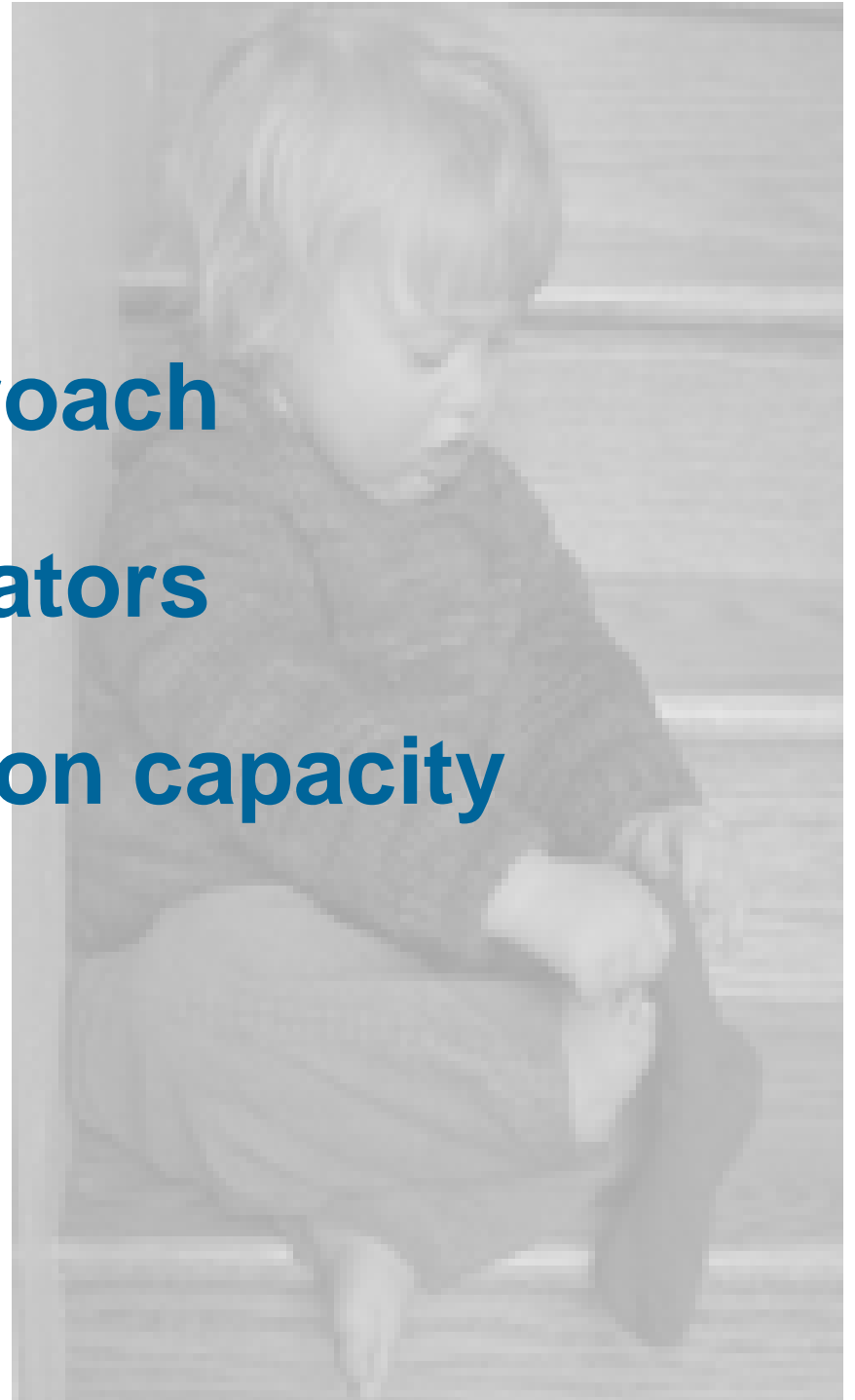


# In conclusion...



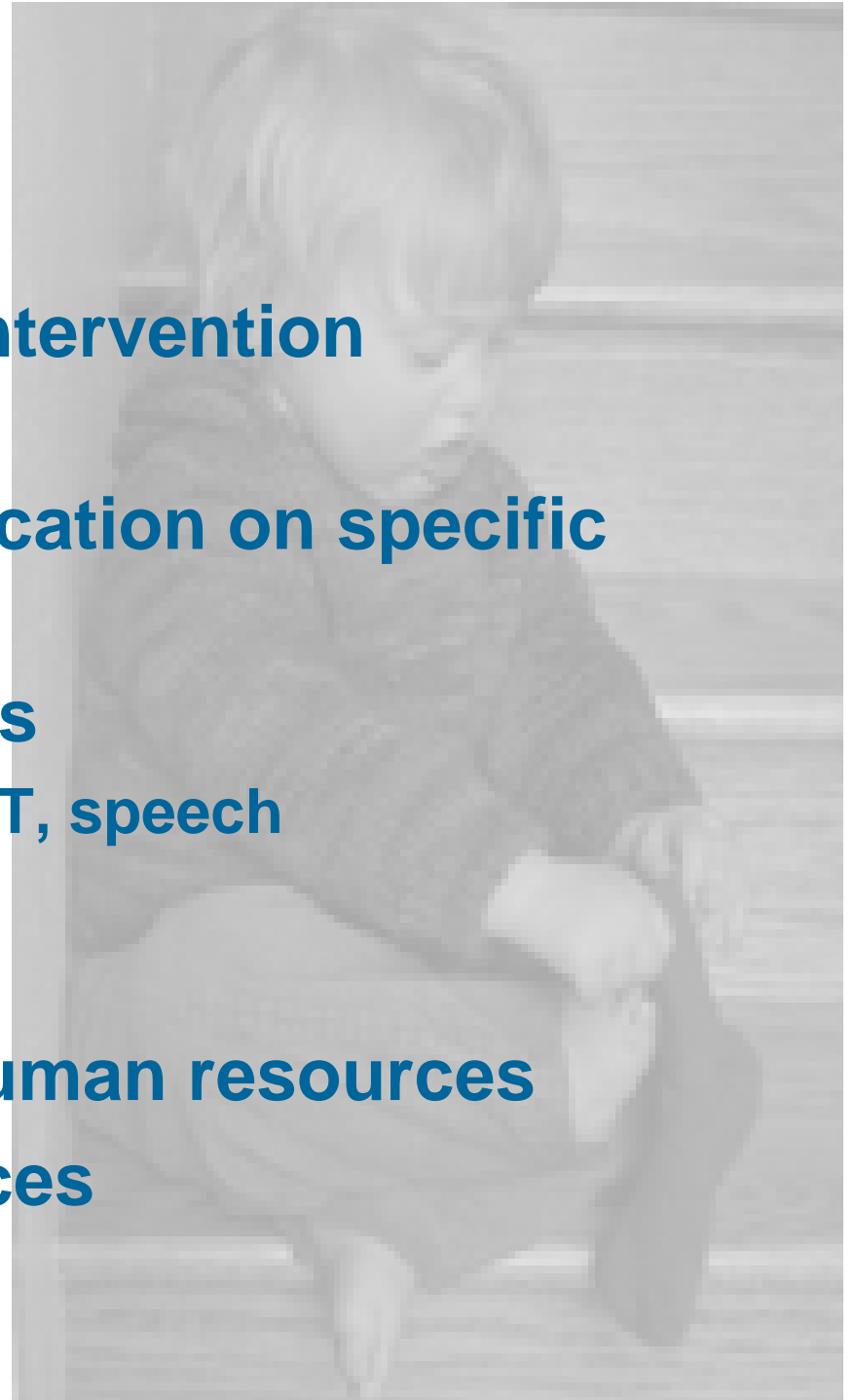
# Strengths

- Individualized approach
- Motivation of educators
- Creativity, adaptation capacity
- Interdisciplinarity
- Support to families

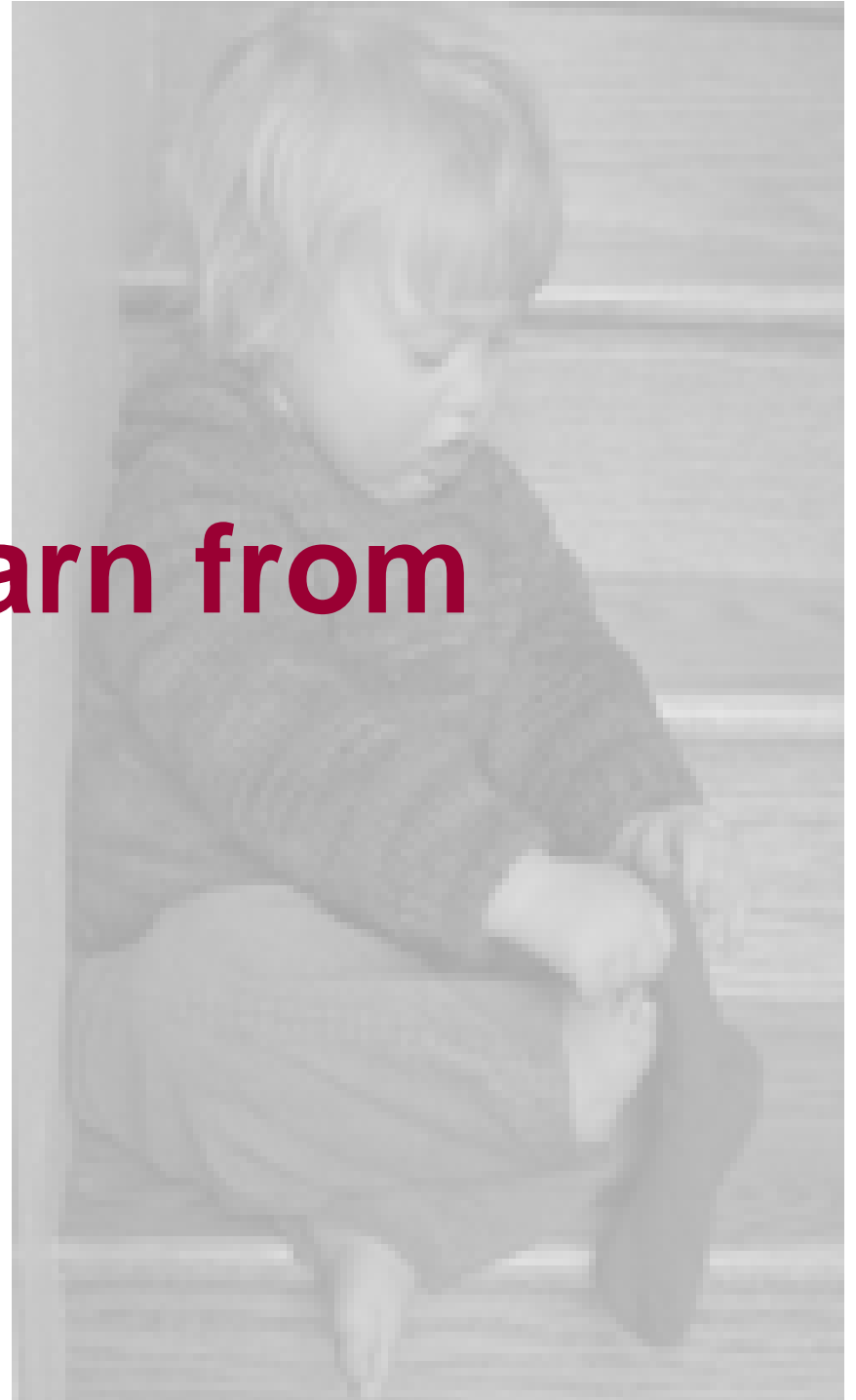


# Limits

- **Absence of structured intervention programmes**
- **Need for continuing education on specific interventions**
- **Lack of human resources**
  - Health care specialists (OT, speech pathologists, etc.)
  - Educators
- **Need for better use of human resources**
- **Lack of financial resources**



# What do we learn from both phases?



# Theory and practice meet

- Major trends are highlighted and found in education

Theory provides limits, structures and guidance in developing programme therefore answering educators' questions

- Interdisciplinary
- Individualized approach
- Absence of one key programme
- Need to organize and specify interventions



# Theory and practice meet

- Major trends are highlighted and found in educators interventions
  - Access
  - Child-focused interventions
  - Family-based practices
  - Transdisciplinarity
  - Individualized approach
  - Natural environment
  - Absence of one key programme



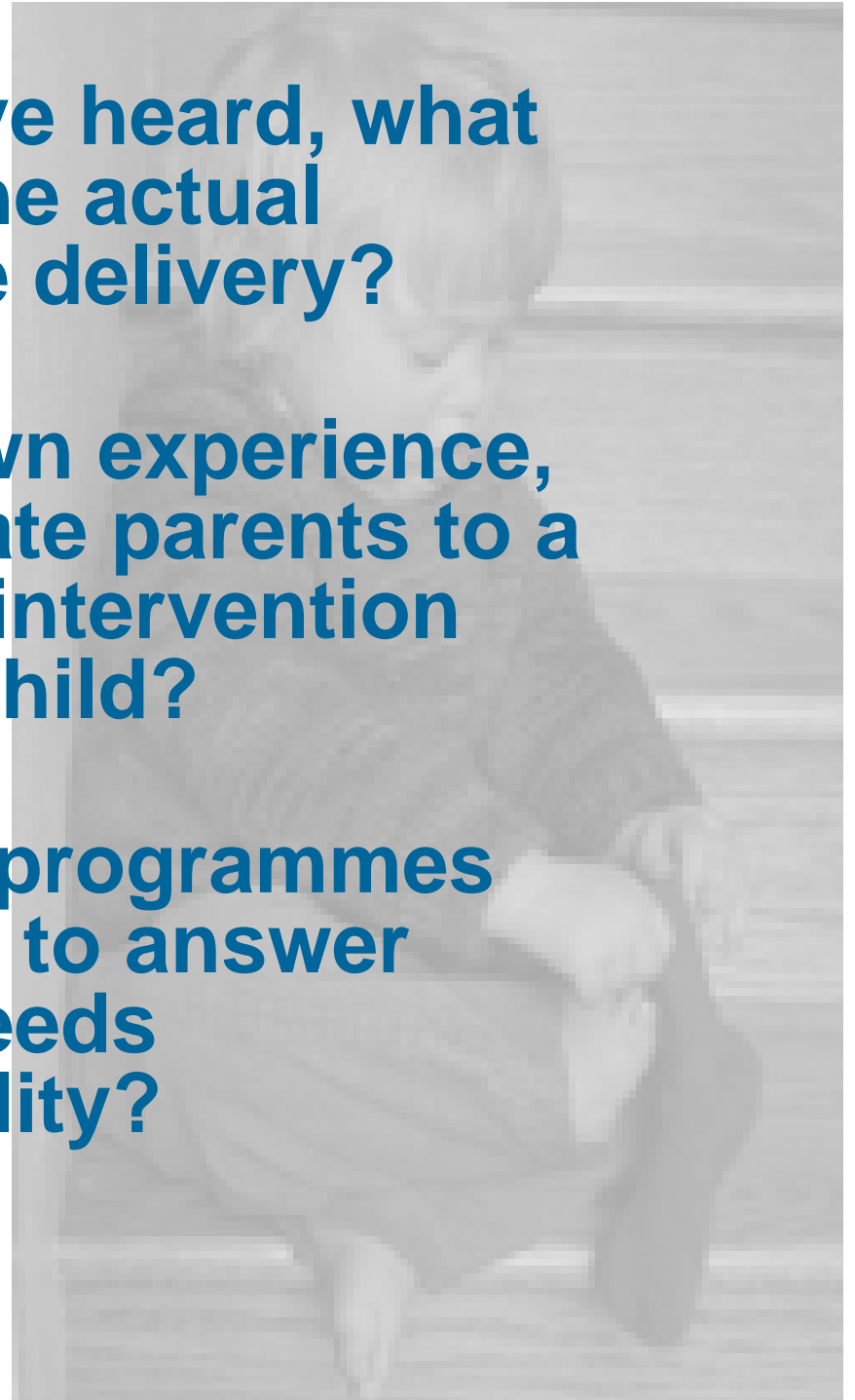
- Need to organize and specify interventions



# Food for thoughts...



- **Following what you've heard, what is your position on the actual orientation of service delivery?**
- **According to your own experience, how could we integrate parents to a greater extent in the intervention programme of their child?**
- **Are there structured programmes that could be applied to answer specific children's needs considering their reality?**



**Thank you for your attention!**



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