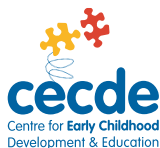


Synergy –
An Exploration of
High Quality Early
Intervention for
Children with Special
Needs in Diverse
Early Childhood
Care and Education
Settings



CECDE Research Series 2006

Synergy – An Exploration of High Quality Early Intervention for Children with Special Needs in Diverse Early Childhood Care and Education Settings

Executive Summary

Kaye Cederman
North Tipperary Early Intervention Service

Synergy: (noun) A mutually advantageous conjunction of distinct elements

Research Commissioned and Funded by the Centre for Early Childhood Development and Education.

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The views expressed in this report are the authors' and do not necessarily reflect those of the Centre for Early Childhood Development and Education.

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A white puzzle piece is centered in the upper half of a solid red background. The puzzle piece has four interlocking tabs and blanks. The text is printed in a dark red, sans-serif font, following the angle of the puzzle piece.

Developing and
co-ordinating
early childhood
education
in Ireland.

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Introduction

This report presents one of the targeted projects developed in 2004 by the Centre for Early Childhood Education and Development (CECDE), and the Department for Education and Science (DES), closely in keeping with their objective to generate interventions on a pilot basis for children under six with special needs. The research project *Synergy* discussed here consisted of a nine-month qualitative and quantitative exploration of quality early intervention for children with special needs in diverse rural settings in North Tipperary. The research tender was taken up by the Health Services Executive (HSE) - West, and guided by a steering committee representing the CECDE, Project Manager HSE - West, the Administrator of the North Tipperary Early Intervention (NTEI) services, the National Council for Special Education and the North Tipperary County Childcare Committee.

The North Tipperary Model of Quality Early Intervention

The first interest of the project was to give children and families the opportunity to experience 'quality' early intervention in their diverse educational settings. Accordingly, the research was carried out in conjunction with the model of early intervention promulgated by the HSE – West. Informed by the principles of the DES White Paper (1999) and the National Children's Strategy (Department of Health and Children, 2000), the model aims to be child centred, equitable, inclusive, action-oriented and integrated. Project Manager Margaret Galvin developed the model which blends social and medical forms of assessment and intervention for children (birth to 18 years) requiring disability services. The establishment of the Limerick Regional Child Development Centre (RCDC) in 2003 provided an outreach Early Intervention Service in North Tipperary. This is one of several outreach services of the RCDC providing assessment and intervention for children from birth to six as close as possible to their own homes. In October 2003, through consultation and agreement, all former Early Intervention providers in North Tipperary decided to assimilate all existing services into one robust service, now known as the North Tipperary Early Intervention Services. The service is based in Nenagh with outreach services in Thurles and Roscrea.

The first interest of the project was to give children and families the opportunity to experience 'quality' early intervention in their diverse educational settings.

Key characteristics of the Early Intervention model fostered by the HSE - West include the following:

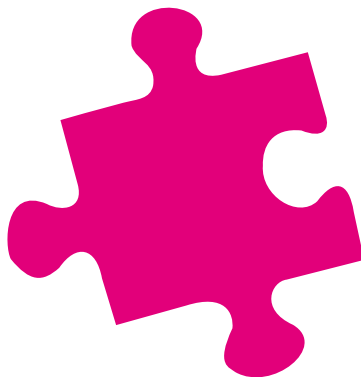
- **A Transdisciplinary Team.** This includes an Administrator, Early Intervention Specialist, Occupational Therapist, Paediatric Physiotherapist, Child Psychologist and Speech & Language Therapist. The term transdisciplinary reflects an integration of assessment, intervention planning, progress evaluation and communication across the professions. It includes the practice of individual professionals working across disciplines.
- **A Key Worker.** In the transdisciplinary team, each professional practices role release and adaptation. This means that, after the transdisciplinary assessment and Individualised Development Plan (IDP) is devised in collaboration with the child's parents, a Key Worker from the team is assigned to each family. Their role is to be the primary contact providing ongoing information from the Team so that the family can focus on one primary professional relationship. The Key Worker also consults with the child's educators, mediates interest-based activities and routines for the child, integrates learning targets for the child across domains, and trains others to embed therapy into the child's daily routines. With the family and with early childhood educators, the Key Worker acts as a consultant, who coaches, models, educates and helps redefine attitudes and beliefs about the child, and about disability. They help plan what comes next for the child in terms of the provision of education and care. Where needed, they provide information or resources linking families to community services.
- **Child and Parent-Centred Practice.** Transdisciplinary practice is child and parent-centred. Together with the child's parents, family and early childhood educators, the NTEI team plans intervention across the range of skill areas in the child's home, school and community. In other words, parents are an integral part of the team, active participants in their child's evaluation and in providing planned intervention. Parents learn to facilitate their child's learning in naturally-occurring daily interactions, while their relationship with professionals concerns close teamwork and advocacy.
- **Play-Based Assessment and Integrated Holistic Intervention.** In keeping with evidence-based best practice, the transdisciplinary model is play-based and holistic. Recent research (Linder, 2005) shows how play best supports the development of the whole child socially, emotionally, physically and intellectually. When an integrated transdisciplinary team engages with the playing child, there is an increased likelihood that each child's unique abilities and needs across the spectrum are taken into account. The child's IDP, with targets for intervention, therefore arises directly from what professionals and parents experience when they follow the child's lead in spontaneous play in a relaxed, friendly environment.
- **Developmentally Appropriate Early Childhood Pedagogy.** Through inclusion, children with special needs are increasingly experiencing education and care in settings alongside other children. When goals are set for a child, they are then clarified in their IDP in a way that utilises the natural environment, and embeds learning targets within play. A key responsibility of the NTEI team is to effectively demonstrate to educators how to embed IDP goals into everyday play activities. Early childhood educators are therefore supported by the child's Key Worker to know how to identify which skills to teach, how to set up an appropriate environment to teach those skills, and how to identify logical antecedents and use logical consequences as teaching tools.

- **Outcomes of Services - Measuring Developmental Progress.** Outcomes are defined as the benefits experienced by children and families as a result of the early intervention services and supports. As Linder (2005) claims, conventionally this has included the child undergoing pre- and post-testing on an assessment instrument or scale. In the NTEI model, the family and team explore the outcomes they would like to see for the child. These are outcomes based on the family's priorities, resources, concerns, culture, together with their knowledge of the child and assessment results. Global outcomes (e.g. "she will learn to talk") are broken down into short-term, realistic and achievable goals (e.g. "she will indicate her choice of milk or juice"). Thus evaluation is circular and ongoing; consisting of assessment – intervention – evaluation (with goals either **emerging** or **achieved**) and then new goals, intervention and re-evaluation.

The Research Project: Synergy

The research objectives established by the CECDE wanted to explore how a diverse range of early childhood settings engaged with a model of quality early intervention to meet the learning of children with special needs, specifically:

- To ascertain **the factors within individual settings** which contribute to quality intervention for children with disabilities, where quality is defined in terms of ability to meet children's learning needs in an appropriate setting;
- To identify and describe the **pedagogic practices** that contribute to children's development in each setting;
- To identify the **strengths** and **weaknesses** of the individual settings in terms of their capacity to meet children's present learning needs;
- To identify the **strengths** and **weaknesses** of the individual settings in terms of their capacity to support children's transition to future appropriate settings, and
- To establish the impact **of individual interventions** on key areas of the children's development through the assessment and recording of children's progress on an ongoing basis.



Methodology

From the researcher's perspective, it was clear from this list that while early childhood settings were at the heart of the research, the experiences of parents, children and early interventionists would shape how knowledge about each of the objectives was generated.

The **research participants** were:

1. Eighteen preschool children with a range of special needs including autism, dyspraxia, learning disability, Down's syndrome, chronic lung disease, seizure disorder and other developmental delay;
2. Their parents from a range of socio-economic backgrounds and;
3. The North Tipperary Early Intervention Team members: the Administrator, Senior Speech & Language Therapist, Early Intervention Specialist, Senior Psychologist, Senior Occupational Therapist and Senior Physiotherapist.

The diverse settings were six early childhood care and education facilities throughout North Tipperary, which varied enormously in their equipment and physical structure. It is noteworthy that there was also no single curriculum or standard of practice flowing across all of the settings. The Early Childhood Educational Settings were called A, B, C, D and E for confidentiality reasons. Descriptions of them were taken from the National Childcare Census Report for the County Tipperary North Riding (1999) and updated where necessary.

- **Setting A:** was a private childcare service providing a sessional service for children.
- **Setting B:** was a private self-employed childcare service providing a sessional Montessori School for 14 children in a rented parochial/church hall. The service especially caters for children with special requirements that might necessitate wide doors.
- **Setting C:** was a community initiative providing a full-day crèche/day care for children in purpose-built facilities. It has a state-of-the-art outdoor area, ramps, accessible toilets, handrails and is well designed for children with special needs.
- **Setting D:** was a community initiative providing a full-day crèche/day care for children in purpose-built facilities.
- **Setting E:** was a community initiative where there is a sessional service for children in a local community hall.
- **Homes 1, 2, 3:** consisted of three of the children's homes, where the child's parents were the sole educators implementing their child's IDP in conjunction with the NTEI team.

Research Design

The research design outlines how qualitative data was generated in the interests of the research objectives; to explore the perceptions of parents, the NTEI team and children, concerning early intervention in diverse early childhood settings in North Tipperary.

Qualitative Data

1. To explore how parents of children with special needs felt about the quality of their child's early intervention service within each of the settings.
2. To explore how the NTEI Team saw the strengths and weaknesses of individual early childhood settings in terms of meeting children's learning needs and a child's transition to future appropriate settings.
 - This was primarily a qualitative research project; a research method which is well-represented in general education research literature, seldom found in special education journals and hardly ever seen in early intervention/early special education. Qualitative information was collected using audio-taped interviews, and following Thomas Csordas (1994), analysed through a cultural phenomenological approach to discourse analysis.
 - Most importantly, qualitative research gave the researchers the opportunity to reflect the views of the various stakeholders in early intervention and early childhood care and education in North Tipperary. This meant paying close attention to the research participants' spoken words, and carefully analysing how they constructed their experiences within their wider socio-cultural context. Accordingly, the methodological approach used here was diverse, and changed and evolved over the duration of the project.
 - The methodologies included discourse analysis and a cultural phenomenology of embodied experience. The notion of discourse analysis is based on Michel Foucault's ideas about discourse; a term that refers to how language shapes how we think and act in relation to the world about us. For example early intervention discourse is about the special language of early intervention, the form of knowledge it produces and the professional institutions and social spaces it occupies. In these terms, 'special needs' is not understood in an innate medical and psychological sense but through rituals such as assessments and measurements of worth, which are supported by artifacts (reports) and institutions (clinics). The discourse analysis was interested in how research participants used language to construct their accounts of the social/educational/medical world of the model of early intervention found in diverse settings in North Tipperary (Foucault, 1972; 1977; 1979).
 - The methodology undertaken gave meaning to the participants' experiences by investigating their words. Cultural phenomenology is the term used to argue that culture and social life can be understood from the position of embodiment as a condition that is based on personal experience. In such analysis, the body is understood as a material, biological entity, while embodiment is defined by perceptual experience and by our presence and engagement in the world (Csordas, 1994).

- The key aspects of the methodology effectively emerged out of the questions themselves. The one key question asked of participants was “Tell me about your experiences of quality early intervention in your child’s educational setting?” The Researcher then meta-modelled each participant’s response, which led the interview further into how the participants understood their experiences of quality early intervention, how children’s learning needs were met and how transition was supported.
3. To explore how the children themselves experienced their early childhood settings.
 - Qualitative data was also generated to get a sense of children’s experiences, interactions and behaviour in each of the diverse settings. In the same way as words were analysed in discourse analysis, each child was videotaped for 5 minutes from a wide perspective and then the camera was placed close to their shoulder to get a sense of how they experienced their environment. Then the information in the videotapes was also subject to discourse analysis in the light of the research questions.
 - The information was written up using an interpretative model based on sensory information.
 4. To explore how the individual settings contributed to quality early intervention, in terms of structure, pedagogy, and meeting children’s specific learning needs.
 - Qualitative data was generated at all of the settings through videotaping each of the children with special needs and their educators, including parents, in their learning environment. The researchers’ analysis of the videotapes included observing social, structural and interactive/pedagogic factors. After developing a deep familiarity with each of the children, their IDP goals and learning environments, and asking about parent centre relationships, the following questions, informed by Linder (2005), were asked of the videotaped material:
 - What resources are available here to meet the child’s physical needs?
 - Is teaching play-based and child-centred? Does the educator follow the child’s interests and internal motivation?
 - Does the child get opportunities to practice skills through play?
 - Is the child enjoying her/his learning opportunities?
 - Are children’s IDP goals being addressed?
 - What other teaching strategies are evident? Scaffolding? Challenge? Imitation? Waiting? Encouraging engagement? Turn-taking? Modelling? Prompting? Providing choices? Comment? Clear directions? Using affect? Matching body position? Establishing boundaries and reactions? Positive attention?
 - Using an interpretative model based on analysing videotaped information stored on DVDs, the information from each of the settings was collated and conclusions made.

Qualitatively, the research also established the impact of the individualised intervention strategies on key areas of the children’s development through ongoing assessment and recording:

- Using a Transdisciplinary Play-Based Assessment, each child was assessed by the NTEI team, which included the child’s parents as key members. Priority learning areas were then set down in an IDP.
- IDP goals were evaluated after nine months to ascertain how well interventions helped each child make developmental progress. The goals were rated emerging, achieved, not achieved and new goals were set, or the old ones reconsidered.
- The information was graphed and is presented later in this document.

Findings - Parents

Despair

The data predominately generated a discourse called **Despair**, where research participants, who were parents of children with special needs, reflected their negative experiences prior to the establishment of the present-day early intervention services. This discourse is highly valued by family-centred practice because it provides vital knowledge about the clients at the heart of service delivery.

The parents' expectations must be situated within the social context of Ireland around 2000, which encouraged high expectations for change in service delivery for their children. For example, the DES White Paper, *Ready to Learn*, specified in 1999 that effective early childhood intervention would provide a high quality, intensive and clearly articulated programme, delivered by highly skilled and carefully trained personnel in contexts of small group and individual instruction, and designed to specifically address individual identified needs (DES, 1999: 84).

This then was the context in which the hopes of this group of parents were regulated and sanctioned. Therefore, it is unsurprising that they experienced such pessimism when high quality programmes did not immediately appear. The Celtic Tiger had generated efficient and effective changes in so many areas of Irish life and these parents found it hard to wait.

Most crucially, their main concern was that their despair be acknowledged by those educators and therapists working with their children. Parents emphasised how it felt to have a child identified as having 'special needs' prior to 2003, before there was an early intervention service in North Tipperary able to meet their children's learning needs appropriately. How they were suddenly thrust into a world of 'difference' where social, psychological, educational and medical structures seemed out of touch with their needs and expectations.



This discourse is highly valued by family-centred practice because it provides vital knowledge about the clients at the heart of service delivery.

Parents' Key Concerns

- **'Headless Chickens'** - The parents firstly stressed the overwhelming sense of panic, responsibility and guilt they felt when their baby or toddler was identified as having special needs. The words, "as a Mum" reminded us that in most contemporary western societies the voice of 'care' in the family has traditionally been, and still remains, the maternal prerogative. Guilt and tension defined these parent's lives:

Well as a Mum, you know, when my child was born and I thought "Oh Jesus, what am I going to do?" You know, and the panic of it all. The enormous panic of it. "Where do I go from here? Where do I turn? What do I do? What does this child need?" I didn't have...I didn't know anybody who had what he had and I thought it was such an overwhelming responsibility and you were kind of lost.

In the beginning I was a bit like a headless chicken. You were saying "I need to do speech, I need to do physio. I need to do, you know fine motor skills. And all of a sudden it was you do nothing because you're running around thinking "Oh I need to do this". And every day was "I need to do five minutes of this, I need to do five minutes of that". But you never do it. And it just built up and built up. And then the guilt set in. And you were guilty because you didn't do it. And you were guilty because every day was passing by. And you were guilty because everybody told you in the first 18 months your child needs to do as much as possible. And you were only coming to terms with everything that was going on. And all of a sudden you were on the road four days a week. In the car. With your child. And you couldn't relax. I can honestly say that in the first 2 years of my child's life I did not relax.

- **Difference** - Secondly, and allied with the panic and guilt, was a sense of unhappiness because the family felt different and perceived themselves and their child as "outcasts":

I've seen times she's been, because of her special needs, she's been, she's been sort of an outcast. (And talking about her husband): He wasn't too happy with the way she was treated in preschool, because he felt, because she had special needs, she was just cast aside.

- **Powerlessness** - The parents next emphasised their feelings of powerlessness, shame and injustice induced by previous experiences of early intervention. They remembered times when they were not present while a professional assessed, or worked with their child in therapy or intervention. They reflected upon their sense of powerlessness when their role was only to observe and listen to whatever professional was authorised to be the 'expert' on their child. The parents felt that professionals did not recognise that they had rights, or that their knowledge of their child was respected:

For example before the present North Tipperary Team was set up, we went into a room to have a psychology assessment. It was probably a room this size, 8' by 8' or 10' by 10', and it was just tick the box...And it was "tick the box", and "does he do this" and if he didn't do it there and then it was an "x". To me that's totally unsatisfactory. And it was half an hour with a stranger and we get a written report back to me and back to the other team members. But again it wasn't all in it. It was totally unacceptable. And I cringe saying that I accepted it. In hindsight I should have said "this is just not acceptable".

Parents also exposed their feelings of ignorance, the immensity of what they did not know, when trying to comprehend the needs of their child in the light of traditional models of 'normal' child development, which generated 'psychological' knowledge about children according to ages and stages. The parents' sense of ignorance reflected how powerfully the discourses of child development, medicine and psychology were regarded as the sole purveyors of 'knowledge' about such children; a powerful position, overriding and discrediting what parents' knew of their child gained during countless daily observations and interactions:

"We first - the enormity of it all was that here was a child that we knew nothing of what his capabilities were. We didn't know what he should be doing at one. We didn't know what he should be doing at two. We didn't know what - all the books we had were of children who had normal ability. And you knew what your child should be doing at one. And you knew what your child should be doing at two. Whereas here was this child and we didn't know what he was going to be capable of doing. A lot of people have said to me "don't push too hard, don't push too hard because your child might stop and then you will get nothing out of your child". And that preyed on me a lot.

- **Human Rights Discourse** - Parents talked about their hope that their child with special needs would eventually become as independent and happy as possible. Keywords echoed human rights discourse, endorsing the child's self-reliance, independence and consumer rights. Such talk reinforced the idea that parents (caregivers) are competent 'knowers', or experts about their own child. The following words by parents challenged the outdated inequities of medical, lay and charity discourses, ignorance and social judgment:

The Irish culture is that people with special needs are historically handicapped children. That they're mentally handicapped. And people still use that word and there are professionals out there who still use that word and I cringe when I hear it.

The other thing is that for some parents - is I suppose time changes everything, so attitudes are changing. But we still have the attitude out there of children with special needs; "Oh the poor creator", "Oh the poor thing", they're still out there, and they're going to be there, for a certain length of time. And that is people's ignorance to conditions versus the child. And even the issue of people saying, "Oh there's the Down syndrome" or "there's the Down's boy", versus "it's the boy with Down syndrome". And I will still correct people when they say that.

- **Continuity of Services** - There was a real concern about losing early intervention services, having inadequate or inconsistent services. Before the North Tipperary Team was fully established, the lack of continuity exasperated parents:

At the start when it first came in, frustrating to the last. It was really...you had something then you didn't have it. Especially where the child was concerned. He was getting it, then it was stopped again. He was getting something then it stopped.

- **Travel** – The problem of travel was another crucial concern that the parents wanted all of those in special settings to be aware of. Families reported the stress caused by long and repeated trips over long distances, especially to Dublin, for medical and special education appointments.

Tales of Delight

Delight

The parents also prioritised their positive experiences of being involved with the model of early intervention put in place by the North Tipperary team since 2003. They highlighted the following factors vital to quality early intervention within early childhood settings (including their own homes):

- **Child’s progress, learning and talking.**

Parents most valued observable changes in their child’s ability to be talkers and learners. This is what they termed **progress**.

- **Parent inclusion, goal setting and team enthusiasm.**

Parents then stressed the quality of the service which had brought them such satisfaction with their child’s progress. This included being recognised as experts on their own child, becoming an important part of the early intervention team (during assessment and intervention), and being trained in the skills to help their child’s learning during daily natural activities such as shopping, bathing and mealtimes. High quality was understood in very active terms related to the values, qualities, behaviours and performances of the personnel involved. Key words included **approachability, openness, helpfulness, thoroughness, interpersonal style, patience, sharing knowledge** and **team-work**.

- **Play**

The parents appreciated how play-based assessment and intervention was used by the NTEI; how professionals played with their child and encouraged the family to join in. The parents valued the emotional thrill and pleasure felt by their child involved in such play. In what follows, we get a sense of how the team performed play with children and families, and how parents recognised the learning and pleasure felt by their child during play:

We have our full team, totally involved, shoes off, on all fours, totally involved with the kids. My child can be clapped on the back by the team and he’s thrilled you know.

They play, there is structured learning for her and its been, they’ve coordinated playtime into fun activities that she has to learn and its helped her great.

I’ve really brilliant time for the North Tipp. Early Intervention team. Dave and all of them get into, you know, they sit down and actually be kids with them, whereas other people, when we were in England, it was like, “I’m the grownup, you’re just a child”, you know. But in the team here it’s a group thing and everybody gets involved. I’ve great respect for them now. I’m quite happy to go there and its great benefit for all my family like, because it shows us what to do like with Rachel. And how to bring her on.

- **Family**

A surprising finding was how many of the participants used the term **family** to reflect their relationship with the NTEI team. The feeling was that the attitudes and values of those working professionally with their child were often more beneficial than what they experienced from their own families, who had little or poor understanding of special needs. The parents’ perceptions about the commitment and approachability of the NTEI team highlights a silence in the discourse as not one of the parents talked about having the same

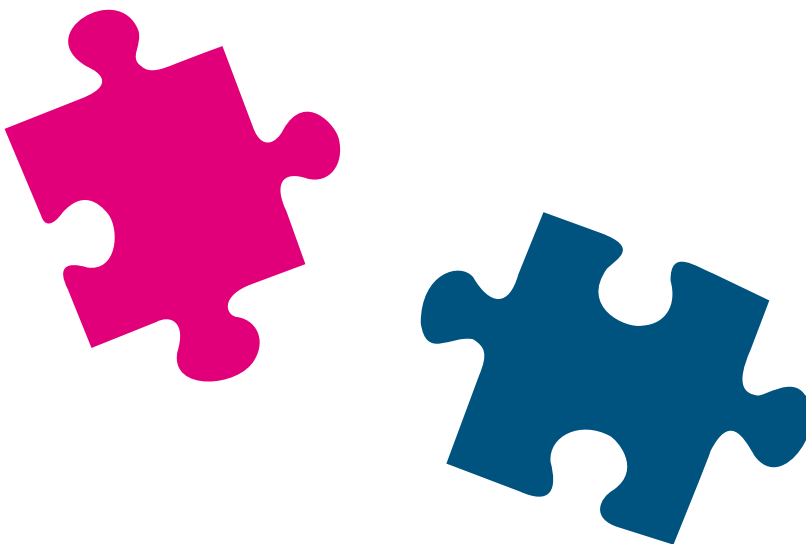
quality of relationship with staff in the early childhood settings. This raises concerns in the light of Linder's recent argument that the role of the professional therapist and educator in most state-of-the-art intervention models, has shifted to be more involved with the adults in the child's life:

The professional is becoming a coach, a consultant, and a collaborative partner in the intervention process...This involves on-going discussion with the important adults in the child's life to examine, reflect upon, and refine their knowledge and skills...There is a major shift in philosophy and practice from most disciplines and many professionals will require additional training and supervision to adequately make the transition to this new role (Linder, 2005: 6-7).

Linder argues that the attainment of quality outcomes demands quality programmes, skilled professionals, coordinated and integrated programmes, as well as the monitoring and support needed to sustain ongoing improvements in the field (Linder, 2005: 11).

- **Collaborative Transition Process**

Parents stressed how important it was that early childhood educators, the early intervention team and primary school together created a new team around their child and the family when transitioning began. Transition, with set goals, then became the beginning of a new process where parents, the NTEI team and early childhood professionals collaborated with teachers in the child's new educational setting to provide continuing support, intervention and monitoring of each child's progress.



Findings - NTEI Team

How did the North Tipperary Early Intervention Team see the strengths and weaknesses of individual early childhood settings in terms of meeting children's learning needs and transition to future appropriate settings?

- **Strengths**

The team placed most importance on the synergy involved when they shared expertise and information with early childhood educators and with each other. This meant sharing across the disciplines, listening to each other, sharing the same physical space, keeping good records, being highly accessible to each other and learning to comment on the "whole child".

- **Weaknesses**

The team stressed concern about some early childhood educators' inability to work towards set goals, and how educators' lack of knowledge about child development led to inappropriate teaching styles and inappropriate reactions to children. Other narrative reflected how some preschools lacked the concepts of inclusion, quality education, skill development and the knowledge needed to implement these.

I don't feel the staff have the right goals, the right standards of child development. They're not very broad on the standard of child development at all... They just stand around looking down. I see goals being worked on that are sort of meaningless and also not appropriate developmentally. Like two-year-olds being asked colours and counting and shapes. Being asked to wait for long periods of time. Being asked to predict what is coming next and to infer from language that they just do not have an understanding of. People getting cross with them when they don't.

- **Preparation**

The NTEI team also felt that some of the early childhood settings were very unprepared for, and unwilling to work with **special children**.

Some settings are not just unprepared but are unwilling to make changes and to make adaptations whether that be through their manner of working with children or whether it be in the physical environment or access to toileting facilities and things like that. That actually has been a huge barrier. One Centre has wonderful facilities. But there are still people within that centre that have never had to change a child's soiled nappy, you know. So and if they happen to be on duty at the time a child soils a nappy, they'll just leave the child until the next person comes because they say its not part of their job. It reflects on their early childhood training. And what has happened is children haven't been excluded from the service but have been kept in the baby room because they're used to changing nappies in the baby room.

- **Structural Concerns**

The NTEI team was also concerned about the more structural elements of early childhood centres: heating, baby changing facilities and the disparity across settings in terms of children being in a physical environment which was appropriate, play-friendly and challenging.

- **Practical Resources and Funding**

A vital concern was how the positive qualities of early childhood settings in North Tipperary were often restricted through lack of funding:

We have some excellent early childhood settings that are doing wonderful work, that are privately owned. And they might not have a changing table. And if they're a small business it's an expensive output really. And often it's not - and even if they can afford the changing table they haven't got the space for it. So our service isn't supported by the provision of practical resources really. So am there's a huge gap I think, that's something that really needs to be addressed.

- **Transitioning**

In juxtaposition to how positive and pleased parents were with their experiences of transitioning their child from preschool to primary school, the NTEI team had concerns about transition. The team singled out the Montessori model of preschool as being well-versed in transition needs. The keywords defining transition processes as **difficult, a struggle, lack of training**, reflected less positive experiences with early childhood settings. New insights from the research included how difficult transitioning was when schools were reluctant to cooperate with preschools. The team also emphasised how transition was affected by a lack of cooperation reflecting disparity between the institutions of health and education.

- **Health & Education**

A key issue was the fact that the greater part of the early intervention team consisted of professionals employed by the HSE. They argued that early intervention would be better served if it was more closely identified with the DES:

We are mainly made up of health professionals. And I think that is a problem in its own right. You know, we are focusing on health issues. We need to focus on education issues as well. And early childhood education should be part of education. And then that would make transition into school, which is education, a lot easier. There tends to possibly be more emphasis on medical models in early childhood centres whereas if education was a part of the institution of early intervention - we would see it as education as well.

How Settings Met Children's Learning Needs

To respond to questions of pedagogy, meeting children's learning needs, and factors which contributed to quality intervention, the research closely analysed the videos of the children taken at the early childhood settings and in their own homes. Analysis identified the sensory basis of children's daily play activities; it categorized these and developed a model of what was occurring in all of the settings. Data was generated by ten minutes of videoing each child in their education environment; 5 minutes from an adult perspective and 5 minutes from the perspective of each of the children.

The data reflected how children with special needs encountered the various people, objects, textures and shapes in their early childhood settings, as they learnt to self-regulate, gain control and understanding. Discourse analysis of their behaviours was the key to looking at how well settings provided chances for a child to experience the whole gamut of learning opportunities. The researchers' analysis of the videotapes combined observations from all of the child research participant's sensory experiences in all of the settings. The words assigned to the children were an attempt to give voice to what a child might be feeling using 'I' statements to indicate that they were from a child's perspective. In other words, the research generated a model which put into words what was observed from ten minutes of videotape of the child participants' specific sensory experiences.

- **Touch and movement (kinaesthetic, proprioceptive and vestibular senses)**

The videos clearly showed how the settings met children's learning needs in terms of touch and movement. Malleable physical items, pictures of objects, blocks, toy dishes, dolls and art experiences were evident in each setting. The senses of touch and movement predominated as various body parts connected with the textures and shapes of people, objects and surfaces of the external environment. For example, for Connor, observable learning occurred with the provision of a sand-tray, teacher-guidance, chair straps, and cradling by the Special Needs Assistant:

I rake my hands through the sand, touch the plastic tray and feel my teacher guiding my hands through the water. The chair is beneath my bottom and back and I can feel the thick straps securing my waist. I put wet hands in my mouth and bang the tray. Then I am cradled in Maria's arms and put my finger in my mouth.

Touch involved movement and was often extremely challenging because of physical difficulties. And when movement (fine and gross motor) learning was understood as part and parcel of communication, self-care and cognitive learning, then movement was another evident pedagogical dimension. It was interesting that the children all took opportunities to move their arms and hands a great deal. Fingers, thumbs and arms wove through the air as an extension of the 'self' who wished to maneuver interaction, objects and sensation. There were specific patterns of movement evident too when children repeated movements, moved slowly and moved with the support of others.

- **Emotions**

For the purposes of the present research, observing the emotions included noting when the face, body and vocalisation of a child with special needs reflected instances of 'feelings': including pleasure, curiosity, anger, closeness, excitement, protest and fear. The settings all stimulated a range of emotional responses. Happily, the emotion most often observed on the videotapes was that of **joy**, indicated by smiling and laughter in response to their educator's interactions. **Curiosity** was the emotion next most often occurring and this was followed by **excitement, frustration**, then **determination, pleasure** and **delight, upset** and **annoyance**. The emotion least shown was that of **fear**, which throws a very positive light on the emotional atmosphere of all of the early childhood settings and homes.

- **Sounds**

A startling research finding was how strongly background sound dominated the early childhood settings. At the communal centres, there was just never any silence where a child might learn through listening, thinking, wondering and reflecting. Instead, a constant background noise, as well as the persistent noise of the teacher voices, was directed at the children. If there was more than one child with a special needs teacher, then the effect was augmented. Although there were times of quieter, more intimate engagement with their teachers, each child was surrounded by loud background noise and voices talking, questioning, and making statements to themselves and others. The children might, of course, have had opportunities to listen at home. It must be noted here that there was little or no background noise heard during the home-based children's learning sessions.

It is salient to mention too that many of these children with developmental delay also had severe problems with auditory processing. They had difficulty listening, attending, or following directions. Others had an extreme aversion to sound:

My daughter has got fierce sound frequencies. She has trouble hearing things. And she hears other things too loud.

- **Taste and Smell**

Children's opportunities to experience the senses of taste (gustatory) and smell (olfactory) were seldom observed. For smell to be so indiscernible signals that not all opportunities for learning are being made available. Below is the combination of all the videos that showed children smelling something. Note that these 'smellings' are all child-generated, incidental, and although none are created by direct adult/child interaction, in some cases adults have left objects for 'smelling' to occur.

All children combined: I smell string, a wooden block, plastic toy, and soap. I sniff my fingers, fingers, fingers, fingers. I smell the water and sand. I sniff my thumb and the bib around my neck.

Summary - how well did settings promote the basis of learning through the senses?

Each of the early childhood settings provided ample opportunities in sensory terms for children's learning needs to be met, but a key finding was the problem of heightened **sound**. It was found that it would be difficult for children to experience learning through the gentler sounds of language in the communal early childhood settings. Significantly, analysis in the areas of **movement** constructed a pattern where the preponderance of sitting, walking, rolling and hand movements mirrored the developmental thrust of typical milestones. The **emotions** were dominated by joy, smiling, laughing, and then excitement and frustration; the rest of the emotions were equally represented. **Touch** showed the heightened sensory-seeking of the oral pleasure of the lips, then hands, fingers and mouth. The **visual** sense was significant in that most looking was directed at people, teachers and other children. The senses of **smell** and **taste** were not noticed very often. Observations of smell, (arguably the most dominant human sense), mainly noted child-initiated smelling of their own fingers, with other 'smellings' equally signified but less often occurring.

In general, there was great variation around each settings' capacity to meet children's present learning needs. As there is no national curriculum, each setting had developed their own set of professional and structural resources. All of the settings worked to a greater or lesser extent with the NTEI team to adapt their resources to fit in with the IDP and goals for the child. There was effective teaching for children with special needs occurring in every early childhood educational setting; but the quality of the interactions varied according to the individual teacher rather than being a feature of any particular centre.

Some effective teaching interactions **being used often** in all of the centres were observed when: educators followed the child's lead, responded to attempts to interact, imitated a child's actions and sounds, waited for the child before they interacted with him/her, encouraged the child to engage with them, took turns with the child, modelled talk or actions, prompted at the child's level, provided choices, commented and discussed.

In some settings however, interactions which would stimulate development were observed **infrequently**. That is not to say they were not practiced, but that they were not observed by the researchers. These included: giving clear directions, modifying affect (voice especially), modifying bodily position with the child, establishing boundaries and rules, anticipating reactions and positive attention. The videos showed the following singular teaching experiences occurring:

Centre A: One teacher was with the child at all times and provided her with a wide range of tactile experiences. She spoke softly to her, placed her hand in a dough mixture and guided her in a gentle, softly spoken manner. Another teacher followed her designated child around, directing his movements through shouting instructions at him.

Centre B: Here, despite being a very caring and stimulating environment, the child was placed at a table with a set of puzzles and the teacher sat beside her, firing questions loudly at her. The child did not move for at least 20 minutes. Another adult sat about 12 feet from the child, watching her, but not talking or engaging with her at all.

Centre C: This centre provided diverse and interactive activities for the children. One teacher stood above the children and asked very short questions to which the child replied "yeah". The other two teachers had close and affirming interaction skills; they really 'entered the child's world' and became their playmates throughout the session. They played on large equipment and allowed the children time on their own, their session was dominated by fun and pleasure for both children and adults.

Centre D: The very structured nature of this setting meant that no physical play was observed but there were excellent attempts to be interactive with the child with special needs. There was too much adult-directed questioning however, and little opportunity for the child to make his own observations and discoveries.

Centre E: The teachers here were concerned to give children a range of sensory experiences. The children with special needs were included in activities and given guidance in helping them cope.

Home 1: Quiet, child-directed play with mother, who asked a few too many questions but otherwise, provided an excellent learning environment for her child.

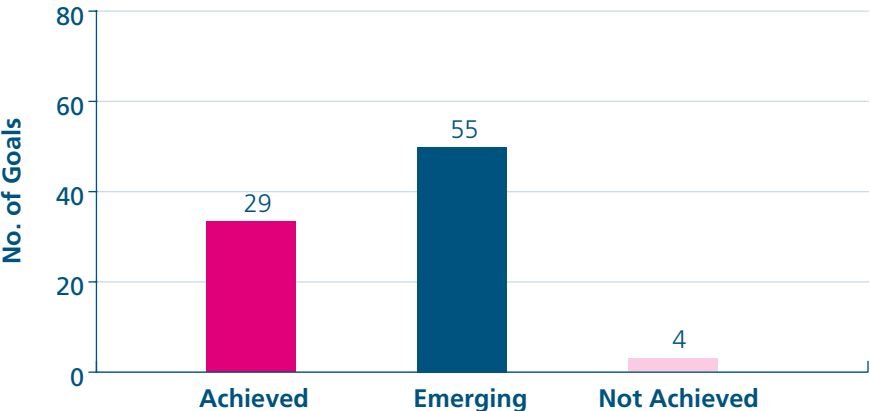
Home 2: The child crawled around going from one toy to another while his parents observed and directed him. There was some cuddling but little learning-type interactive engagement. The child never stayed still long enough to really be able to listen to language or learn to imitate.

Home 3: The child was the centre of play with the whole family; laughter and rough and tumble play characterised this home. There was lots of noise but quiet times too. Dad was making a conscious effort to embed the child's learning goals into play with a toy keyboard. There was repetition and finely geared interaction and turn-taking with the child.

Qualitative Evaluation of Progress towards Developmental Goals

Criterion-referenced measures were traditionally the method of gauging children’s progress. Parents however felt that these were not family-friendly and were hard to follow to gain useful information. They considered that standardised tests were intrusive to the child and family; they privileged and limited knowledge of a child to professionals only, and were expensive. Parents strongly preferred the highly personalised and functional IDP. Not only did they play a crucial part in compiling the IDP, they also gained a sense of ownership and were more likely to understand the information so essential to their child’s progress. The research showed that this method of measuring progress towards developmental goals was sophisticated enough to gauge important learning and evaluate ongoing developmental requirements.

Figure 1:
Progress Towards Developmental Goals



The Figure above provides a graphic representation of the childrens’ areas of developmental need and the progress they made over the nine months. The information was prepared from the account of processes of Assessment and the formulation of Developmental Goals set from the Assessment and clarified in the IDP. Development goals (after nine months) were clearly specified in the IDP and the accomplishment of these was discussed with the full team, including the child’s parents. Progress was shown by the terms **emerging** (meaning the set goal has not been reached but related skills leading to the goal have developed), **achieved** and **not-achieved**. This three-step evaluation of progress enabled parents, teachers and any others involved with the child’s development to be part of the collaborative process. This meant that the ‘whole team’ checked and discussed the child’s rate of progress and goals. Teaching methods were then adapted to facilitate ongoing progress.

The results of the impact of the individual interventions on key area of the children’s development showed that for the 18 children, 79 goals were set and after nine months; 29 were **achieved**, 55 goals were **emerging** and 4 goals were **not achieved**. This demonstrated a high rate of success in progressing each child’s functional skill base. It also showed a high rate of emerging skills which indicates that the goals being set were not specific or realistic enough. The Team needed to consider how to ensure that the goals set were more often achieved for real progress to be made.

Conclusions and Recommendations

The relationship between early intervention and early childhood settings is highly significant for children with special needs in North Tipperary. The conclusions presented below reflect each of the objectives in terms of those factors contributing to quality early intervention, pedagogic practices, strengths and weaknesses of settings in supporting learning needs, transition, and the assessment and recording of children's progress. These foci give rise to the following, equally significant, conclusions:

Research Objective One - The factors within individual settings that contribute to quality early intervention for children with disabilities.

1. **Emotional context:** quality early intervention occurs when educators and other professionals understand the emotional background of each child's family. Parents demand that professionals understand how factors such as panic, guilt, responsibility, difference, powerlessness and travel impact upon the child in the context of their whole family. Professionals also need to be familiar with the importance of human rights issues for families.
2. **Progress:** quality early intervention occurs when a child is seen to make progress, when professional techniques and knowledge are shared with parents, and parents learn to be successful interventionists; have confidence in their own abilities and understand and foster their child's achievements and goals.
3. **Relationships and play:** quality early intervention occurs when the relationship between parents, early childhood educators and early intervention professionals reflects that of a family. This includes play-based assessment and intervention where children and adults play together and where there is a sense of support and collaboration. It is salient that all of the parents talked about the importance of relationships with the NTEI team, but none said their child's early childhood setting was like a family to them.
4. **Knowledge:** quality early intervention occurs when adult educators have an understanding of child development, interactive involvement, meaningful goals and realistic expectations.
5. **Resources:** quality early intervention occurs when early childhood settings have knowledge of practices of inclusion and preparation for a child with special needs. This includes the availability of practical resources such as ramps, adequate space for wheelchair users and nappy-changing facilities.
6. **Transition:** quality early intervention occurs when transition is a collaborative process, where all professionals work together in the child's new educational setting to ensure ongoing progress.

Recommendations

1. Tertiary level professional development courses should prepare practitioners to fully appreciate the social, psychological and cultural issues relating to parenting a child with special needs.
2. Early childhood practitioners must have regular supportive contact with parents and families. This is necessary to:
 - a. Develop shared understandings of children's strengths and abilities, as well as their special needs
 - b. Support consistency and continuity of children's experiences in all early childhood settings
3. Early childhood settings must play a proactive role in supporting parents of children with special needs to:
 - a. Access resources
 - b. Network with others for emotional support
 - c. Advocate for what they need in terms of support and services in their community
4. Early childhood practitioners should collaborate with other early intervention professionals to ensure competent and effective implementation of IDP goals in daily routines with children.
5. Funding must be provided to ensure the early childhood environment is suitably prepared to accommodate children with special educational needs (e.g., specialised seating, ramps, therapy equipment, changing facilities, etc.).

Research Objective Two - The pedagogic practices contributing to children's development in each setting.

1. **Child-based, goal-focused and challenging:** observed progressive pedagogic practices include the use of the 'natural' environment, and playful child-based, interest-based intervention connected to the child's IDP goals. Theories by Linder, Vygotsky, Piaget, Bandura and Bruner are evoked when parents and other educators were seen to provide learning opportunities through a wide variety of sensory play, with just the right level of moderate challenge; when educators understand each child's interests and internal motivation; use active participation and self-direction; and provide opportunities to practice skills meaningfully. Communal settings in particular use social models and peer support to stimulate learning.
2. **Scaffolding:** progressive pedagogic practices are evident too when parents and other educators scaffold a child into higher levels of behaviour, using the 'least support' approach. When parents learn to give their child functional practice in daily activities (e.g. naming body parts while in the bath), early intervention is successful because it involves a fun activity the child really wants to do, which is motivating for them.
3. **Play:** progressive pedagogy in many of the settings using play as a crucial tool reflects theories underpinning Transdisciplinary Play-Based Intervention. This follows the hypothesis that a child is more inclined to learn, to be well-focused and motivated to repeat an activity that stimulates sensations of joy.

Recommendation

- 1 Early childhood care and education training (preservice and in-service training) should include pedagogy promoting child-directed, goal focused and challenging teaching practice. It must build competence in working alongside early intervention teams, using social models, peer support, scaffolding and play-based intervention.

Research Objective Three - The strengths and weaknesses of the individual settings in terms of their capacity to meet children's present learning needs.

Strengths

- **Learning style:** Settings meet children's learning needs well when they use play to embed goals in warm, challenging, child-centred, interest-based intervention. The best progress occurs when educators understand the aspects about the child and family that might make a crucial contribution to their learning. This prepares the groundwork to stimulate self-initiated and directed problem-solving, as well as the child's active participation and engagement. A few settings exhibit the concept of mastery motivation.
- **Skill development:** settings meet children's learning needs well when parents and educators are shown how to engage a child for skill development by the NTEI team. Educators in some settings place toys and arrange opportunities for children with special needs to initiate and direct their own problem solving. Children are then able to actively participate in their own skill development regardless of their level of ability. Getting the child's interest is a crucial strategy, and some teachers and parents are good at doing that.
- **Collaboration:** settings meet children's learning needs best when they successfully collaborate with early interventionists.

Weaknesses

- **Noise:** settings meet children's learning needs poorly when noise-levels replace opportunities to experience the more quietly sensitive facilitation of learning. The auditory bombardment of children who are immobile is a hugely significant finding. Interactions with children through spoken language are vital at times, and periods of quiet are crucial for those children who are developmentally immature and primarily seek sensory-stimulation.
- **Structure:** settings meet some children's learning needs poorly when there are huge differences in standards and accommodation.
- **Fear, detachment and reluctance:** settings meet children's learning needs poorly when staff merely 'does their best' and project their own fear and scepticism around coping with children with special needs. Children's learning needs are hijacked when educators seem detached, lack an understanding of child development, or are unwilling to make the changes and adaptations needed to progress atypical young children. It is a weakness too, when poor organisation and a sense of purpose about meeting development goals occurs because educators are preoccupied with trying to police children's behaviour.

Recommendation

1. Early childhood practitioners should have access to specialist early intervention teams to support their capacity to:
 - a. Include all children
 - b. Meet each child's Individual Development Goals
 - c. Coordinate the programmes and services necessary for children and their families

Research Objective Four - The strengths and weaknesses of the individual settings in terms of their capacity to support children's transition to future appropriate settings.

Strengths

- **Expertise:** successful transitioning is facilitated by the involvement of a quality early intervention team which, together with preschool educators, meet with the appropriate school staff. The meeting then goes through the child's IDP, and parents and professionals work together to establish the child's goals for the following 3 months. The plan is evaluated 6 weeks after school entry. This process works very successfully for parents and gives schools the opportunity to prepare and plan for the child.
- **Networking:** successful transitioning depends upon a cohesive team including parents, early childhood and primary school educators, and early intervention team members. Their role is to generate informational support, and collaborate with each other so that they share current attitudes and beliefs about educating children with special needs. This forms a network for accessing resources and providing any support the child and family might need. Transition from the child's early childhood setting, with set goals, then becomes the beginning of a new process where professionals work together to continue intervention and monitoring of the child's progress throughout their school years.

Weakness

- **Poor training:** transition is poorly done when preschool staff are not trained regarding their roles and responsibilities in this area.
- **Poor cooperation:** traditional divides between formal and informal education settings are a significant barrier to cooperation between preschool and primary school settings. This is problematic in facilitating transitions for children with special needs. Considerable work needs to be done to develop cooperation between settings so that the child with special needs and their family can successfully adjust to the new educational setting.
- **Medical model:** the delivery of quality early intervention services based on a medical model traditionally shouldered the 'burden' of these children's education and care needs. The Department of Education & Science has a complementary role to play which would ensure a smooth process of transition and promote understanding that early childhood education is a vital part of all children's education and care requirements.

Recommendation

1. It is recommended that the Department of Health and Children and the Department of Education and Science administer early childhood intervention collaboratively and develop an interface for the delivery of such services. A joint approach for strategy, policy and financial support for the services is necessary to encourage all staff in early childhood education to embrace transdisciplinary assessment and intervention, and support role release and adaptation.

Research Objective Five - The impact of individual interventions on key areas of the children's development as observed through the assessment and recording of children's progress on an ongoing basis.

- **Progress:** the graphs in Appendix 1 illustrate the significant progress made by the majority of children involved in the research project. For children whose educational environment is their home, progress is made when the early intervention team builds an ongoing relationship with the child's parents and models techniques explained in the IDP. Progress is contingent upon the training provided to staff in early childhood settings by the EI team including modeling techniques, talking through ideas, and otherwise helping educators cope with their roles in early intervention.
- **Embedding goals in daily activities:** most importantly, teaching strategies which successfully progress goals are those where learning occurs throughout the day in the child's play situations. The best kind of play is child-initiated so that children's own interests stimulate their learning. For children at home, parents can use the natural home environment as a place to develop spontaneous learning interactions. One problem here is the difficulties some parents have in playing at their child's level without bombarding them with questions.
- **Involvement:** the assessment and recording of progress clearly highlights the lack of progress made if goals are not well designed or, in one case, by a child whose parent followed none of the ideas advanced by the IDP.

Recommendation

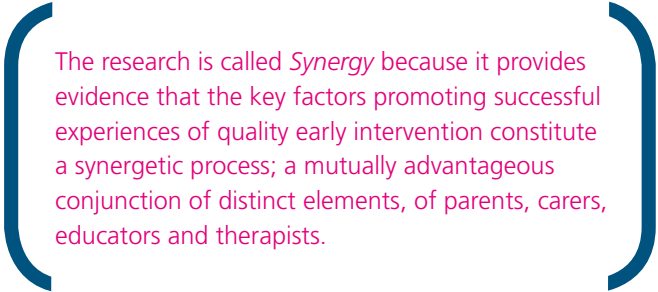
1. It is recommended that early intervention practice includes assessing and recording every child's progress on an ongoing basis to regularly highlight each child's development, the efficacy and accomplishment of individual goals, and the success of the teamwork by parents and professionals.

Conclusion

The research project *Synergy* is extremely grateful to the CECDE and DES, who gave HSE - West the opportunity to pilot one of the targeted interventions exploring the practice of quality early childhood care and education in Ireland. The conclusions and recommendations here arise directly from those who gave meaning to questions about quality early intervention for children with special needs in diverse settings. Much appreciation is due to those educators, parents, children and team members in North Tipperary who participated.

The research is called *Synergy* because it provides evidence that the key factors promoting successful experiences of quality early intervention constitute a synergetic process; a mutually advantageous conjunction of distinct elements, of parents, carers, educators and therapists. There is synergy too, in how young children with special needs in North Tipperary are educated today in increasingly complex patterns of socialisation unheard of in previous generations. Children in childcare and education settings, crèches and day-care arrangements are constantly challenged by a range of competing and complementary values and perspectives. As this project argues, it is vital in these circumstances to have flexible, mobile and effective services that can place the child at the heart of high quality early intervention, regardless of where they experience their early care and education.

The NTEI model of early intervention service and the diversity of early childhood settings, including homes, are the framework for the insights generated here. The HSE - West is pleased that the knowledge shared in *Synergy* adds to that drawn from the other projects commissioned by DES and the CECDE, and contributes to the development of national quality standards in early childhood care and education in Ireland.



The research is called *Synergy* because it provides evidence that the key factors promoting successful experiences of quality early intervention constitute a synergetic process; a mutually advantageous conjunction of distinct elements, of parents, carers, educators and therapists.

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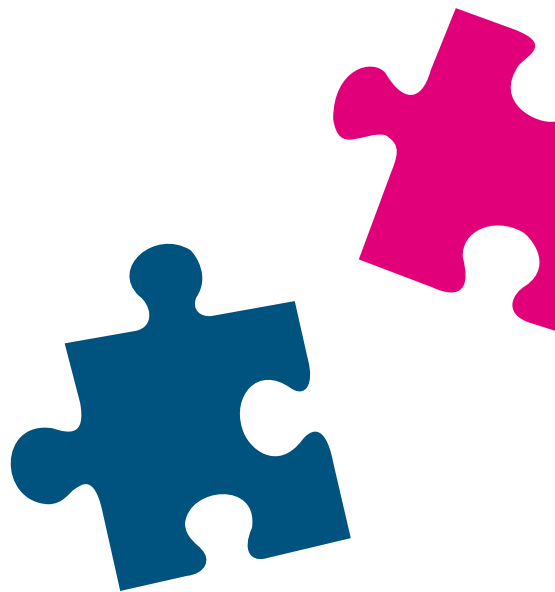
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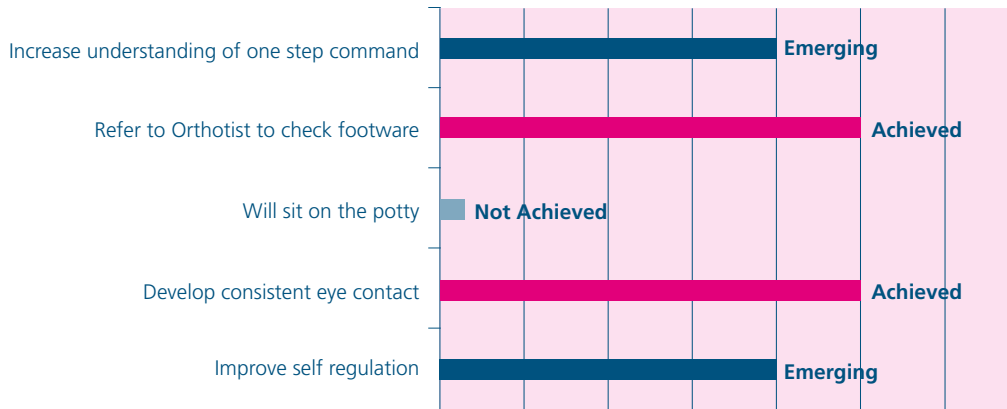
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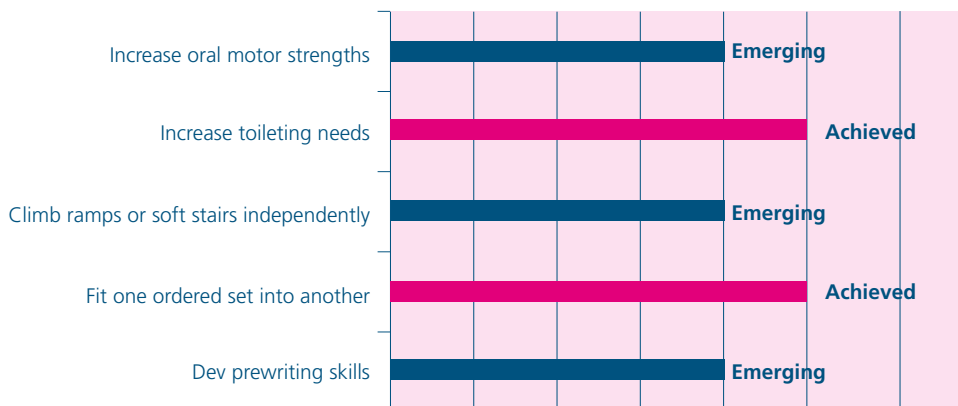
Appendix 1

Progress To Children's Developmental Goals

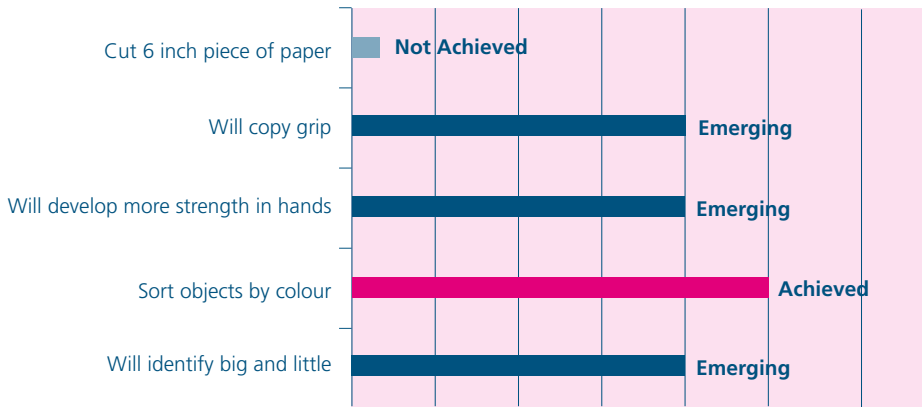
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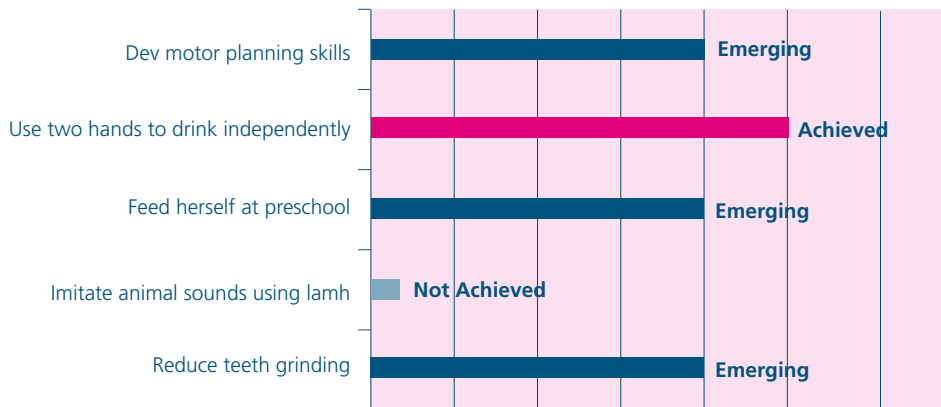
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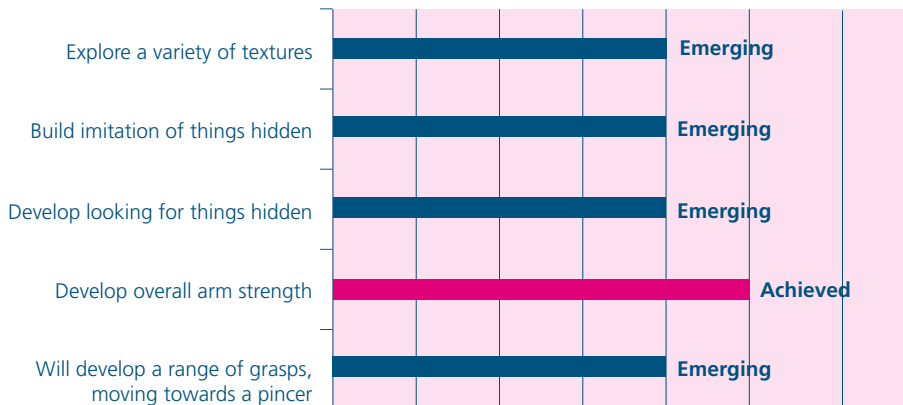
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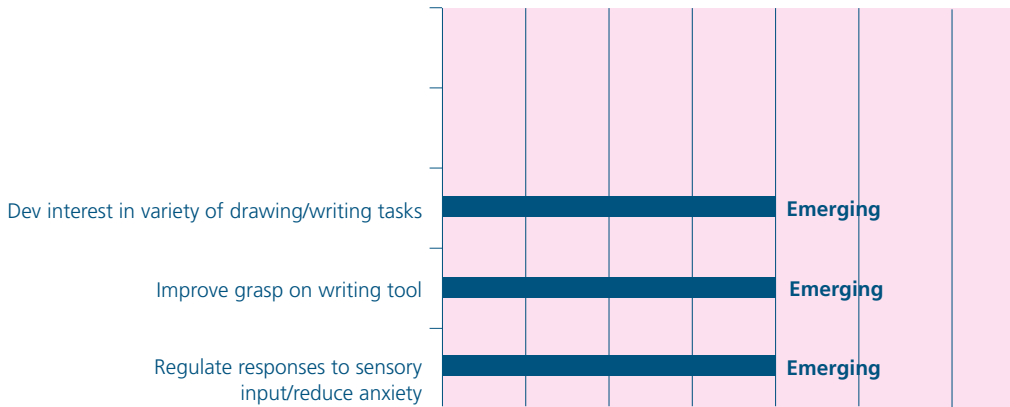
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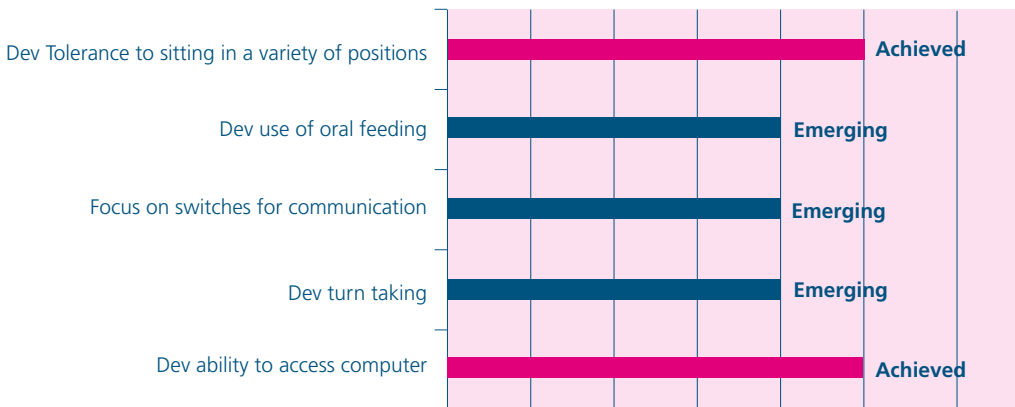
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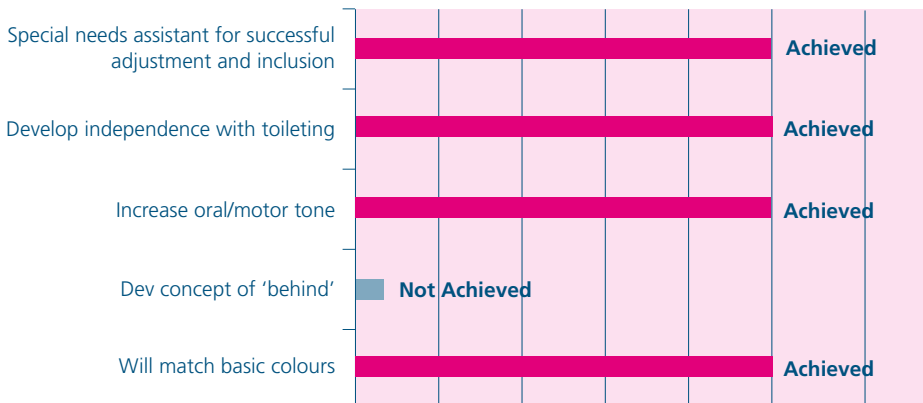
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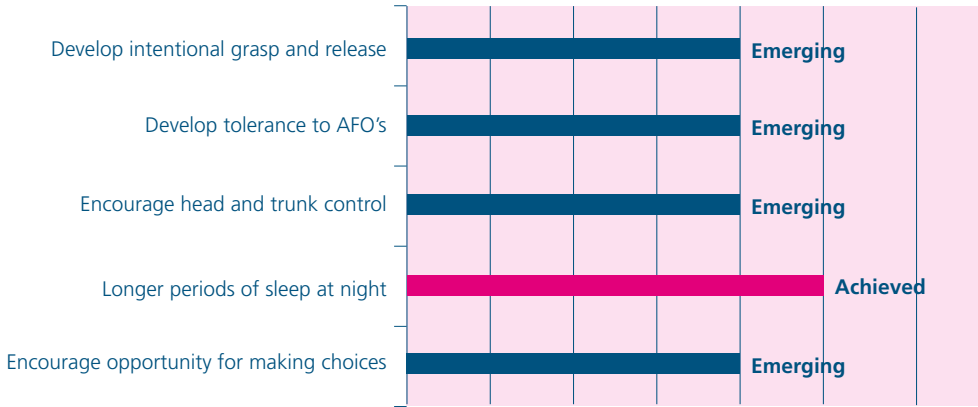
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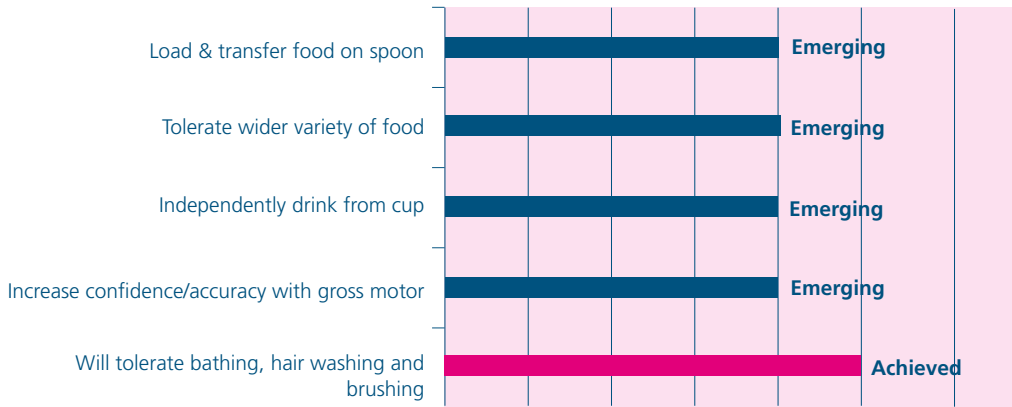
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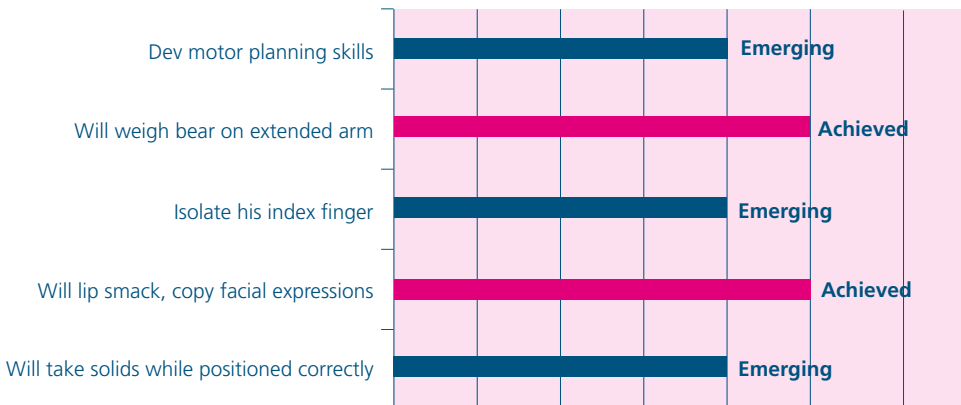
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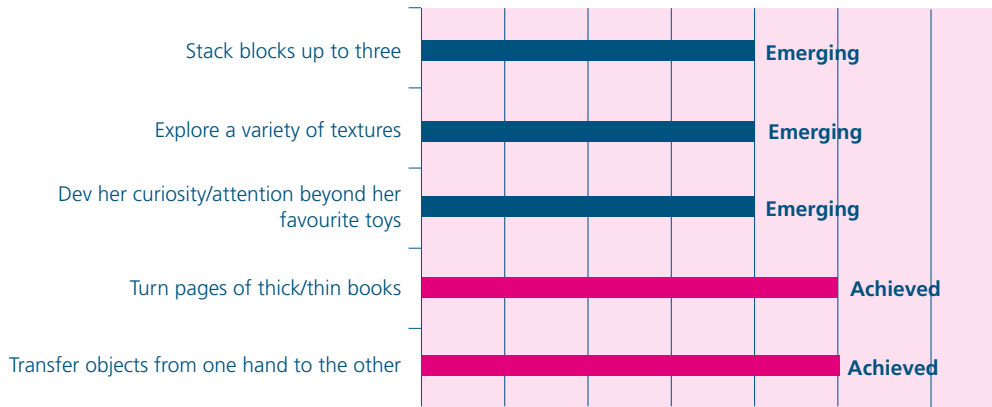
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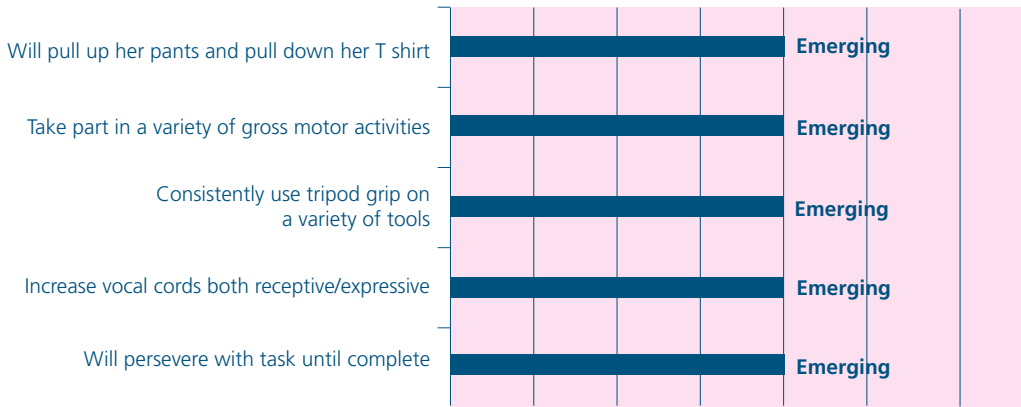
Progress Towards Stephen's Developmental Goals



Progress Towards Thelma's Developmental Goals



Progress Towards Wendy's Developmental Goals



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