
Title	Early intervention programmes for young children with disabilities
Author(s)	Quah May Ling
Source	<i>REACT</i> , 1998(1), 1-7
Published by	National Institute of Education (Singapore)

This document may be used for private study or research purpose only. This document or any part of it may not be duplicated and/or distributed without permission of the copyright owner.

The Singapore Copyright Act applies to the use of this document.

EARLY INTERVENTION PROGRAMMES FOR YOUNG CHILDREN WITH DISABILITIES

Review by Quah May Ling

INTRODUCTION

In Singapore, special education programmes are generally provided outside the mainstream in special schools managed by Voluntary Welfare Organisations (VWOs). From 1990, these special schools were funded on a 50-50 basis by the Ministry of Education and the Community Chest of Singapore. The present feeling is that whenever appropriate and feasible, special education should be provided within the regular educational system. No child should be placed in a special school if he/she can be well educated in a regular school or preschool centre. Special education should be organised as a continuum ranging from total segregation to partial integration to total integration. Placement of a child with a disability at any point on this continuum should be dependent on his/her abilities and needs (Quah, 1993).

At present, there are 16 special schools in Singapore which cater to a wide range of learning difficulties. The special schools generally provide educational programmes for children with disabilities from age six to sixteen. However, a number of these schools also provide preschool programmes for younger children. In the case of the two special schools run by the Rainbow Centre (Margaret Drive Special School and Balestier Special School) and Asian Women's Welfare Association Special School, children for the early intervention programme (EIPIC) can be admitted soon after birth when the disability is diagnosed.

In a macrosurvey conducted by the Ministry of Community Development to ascertain the needs and problems faced by people with disabilities, 3,643 of the respondents (75%) reported that their disability was present by the age of five (1988).



William Oh

Mother and child in the EIPIC Programme.

WHAT IS EARLY INTERVENTION?

According to Smith and Strain (1988), early intervention is discovering that a child between birth and school age has, or is at risk of having a handicapping condition or other special need that may affect his or her development and then providing services to the child and the family to lessen the effects on the children. Early intervention, can be remedial or preventive in nature – remediating existing developmental problems or preventing their occurrence. It may focus on the child alone or on the child with the family's involvement. These programmes can be centre-based, home-based, hospital-based, or in combination. Early intervention can benefit children with mild disabilities presently attending segregated special schools by allowing them to be integrated into mainstream schools as soon as possible.

EFFICACY OF EARLY INTERVENTION PROGRAMMES

Research findings from two types of early intervention programmes were summarised by Bronfenbrenner (1974). These included (i) those conducted in group preschool settings outside the home, and (ii) those conducted in the home with regularly scheduled visits by a trained person who worked with the child or parents, or both. He concluded that all preschool programmes resulted in substantial gains in the children's IQ scores and other cognitive measures and these gains were maintained as long as the programme lasted but gains tended to 'wash out' when the programmes were terminated and there was no 'follow-

through' of services. The home-based programmes showed outcomes similar to preschool interventions. However, children in parent-child interventions (in contrast to group-centre-based programmes) showed gains that maintained longer – some three-four years after the termination of the programme.

Research on the efficacy of early stimulation with 'at-risk' children (Gargiulo & Piao, 1995; Katims and Pierce, 1995; McWilliam, Young and Harville, 1996) showed that early intervention was successful in generating and maintaining high rates of developmental progress in these children. Bruder (1993) also reported that an intervention study involving 30 toddlers and preschoolers with disabilities showed significant gains for all the children.

This paper reviews two early intervention programmes. The first one is '**Stepping Stones**' a home-based early intervention from Australia and the second one, '**Project ASSIST**', which was set up to determine the feasibility of integrating children with mild disabilities into preschool centres in Singapore.

STEPPING STONES

Campbell (1997) reported on an innovative project called 'Stepping Stones' which was established to support the transition of young children from their home-based early intervention programme to a neighbourhood preschool. The project began in early 1995 with five children

attending for two days a week from 9.30 am to 1.00pm. Staff consisted of an early childhood special education teacher who was well-known to the children and parents through her work in the early intervention programme, and two assistants. The programme was located on the same site as a mainstream preschool and the preschool staff were involved with the aim of gradually including the "Stepping Stones" children in the different aspects of the preschool programme.

Sample

The first group of children in the programme were aged three to five. They had little or no speech or sign, one was not walking, and none were independent with toileting. These were children who made great progress through their early intervention programmes, but families and early intervention staff considered that they would gain from the small group, close adult attention and carefully paced introduction to the on-site preschool, which are the unique features of "Stepping Stones".

Programme

The day's programme was designed to meet the children's individual needs within a play-based, developmentally appropriate curriculum. It was important for the families and children that the materials and equipment were typical of those in many preschool settings as this in itself drew attention to continuities within transition processes. The staff-child ratio of three to five ensured individual attention. However, teaching strategies were directed towards fostering the children's ability to explore

and utilise materials independently where possible and to participate in activities that promoted social interaction. All the children spent some part of the morning participating in the on-site preschool programme. Depending on individual needs, this might be in the free activity time, a small group time, or a routine such as morning snack. A member of the Stepping Stones staff accompanied the child at this time, but allowed maximum independence. Weekly meetings between the preschool director and the Stepping Stones teacher ensured consistent expectations and shared goals for the children.

Evaluation

An evaluation of the project was conducted through two interviews with the children's mothers. The first interview was carried out in the second week and the second one was conducted six weeks later. At both interviews, parents considered that they had been well-informed and had easy access to staff for any information. Although at the first interview there was some concern about teaching roles, these were no longer dominant during the second interview. Staff concerns were initially to do with organisations, in-service for new staff and extra demands placed on staff. Six weeks later, when staff became more familiar with the children and routines, these were no longer problems. All parents commented on how much the children enjoyed the programme and had gained from it. Examples of the children's progress that they cited included increased use of speech and sign in all contexts, being able to participate in a group, and being able to interact with other children in the preschool programme as well as within the small Stepping Stones group.

PROJECT ASSIST

Project ASSIST was set up primarily to look into the feasibility of integrating children with mild disabilities into mainstream preschool centres (Quah, 1997). Although a small number of special schools offer preschool programmes, mainstream preschool centres provide a more stimulating environment and quality preschool education programmes which can further the social, intellectual, and emotional development of children with disabilities.

Sample

Project ASSIST involved 40 infants with disabilities aged between two and five years (Quah, 1997). These children were identified using the criteria of age (from 2 to 5 years) and disability (mild disabilities and close to average intelligence). The majority of these children were diagnosed with cerebral palsy and two children had Down Syndrome. As the project was centre-based and family-centred, the sample included the parents, principals and teachers of these children. It was important that the children selected could benefit from an early intervention programme as the main objective was to later integrate them into the mainstream primary schools from age six. The selected children were enrolled in the mainstream preschool centres at various locations as close to their homes as possible. These included private kindergartens or child care centres (39.6%), preschool centres operated by the VWOs (35.4%), preschool centres run by the PAP Community Foundation (PCF) (14.6%), and the National Trades Union Congress (NTUC) (10.4%).

Instrumentation

The cognitive, social and motor skills attained by the children were assessed through ratings on their Individual Education Plans (IEPs). Progress of these skills was monitored periodically by the programme director on a 3-point scale (1=no change, 2=progress, 3=skill achieved). Parents and school teachers were involved in the setting of goals, short-term objectives, and ratings of the specified skills in their IEPs. The children were rated on their achievement of the skills specified in their IEPs which were developed for each child to meet his/her individual needs.

The British Ability Scales (BAS) (Elliot, Murray and Pearson, 1983) was used to assess the cognitive development of the children. Two questionnaires were developed. One questionnaire was used to assess the children's social interactions based on parents' ratings on the extent of communication between them and their peers. The second one on peer acceptance was measured by feedback from parents and teachers.

Objectives

It was expected that after nine months in the project,

- (1) all the children would achieve 50% of the skills specified in the IEPs,
- (2) 80% of the children would achieve higher scores in the psychometric tests, and
- (3) all the children would reach a successful interaction level as demonstrated by their ability to interact with their able-bodied peers in the preschool centres.

Programme

The children followed the regular preschool programmes conducted by the respective centres accompanied by a parent or caregiver five days a week. A special educator and occupational therapist visited the centres to provide consultation and teaching sessions to the teachers involved in teaching the children. They provided suggestions on specific intervention activities based on the children's IEPs and acted as advocates for the children. Support to parents was provided through home visits to assess social history, financial situation, fine and gross motor functioning, language and social abilities. The special educator and occupational therapist held conferencing sessions with teachers on social adjustment, task modification and physical needs. In addition, they also accompanied parents to hospitals for clinical appointments with other therapists and rehabilitative personnel to explain diagnosis and obtain appropriate documentation for subsidies, assessed and provided adaptive equipment for children's needs, and developed IEPs in consultation with parents, other professionals and teachers.

Evaluation

An evaluation was conducted nine months after the implementation of the project. The same instruments were used for both the pre- and posttests. The first objective was only partially achieved as only 77.2% of the children managed to achieve 50% of the skills specified in their IEPs. One reason for the apparent "underachievement" could be attributed to the fact that the focus of the project during the previous months was

on placement of the children, and their immediate needs were addressed, as required without formal recording. Another reason was that although a high proportion of the children (36.4%) was in need of therapy as part of the intervention, they were not attending it for various reasons.

With regard to the second objective, the children's pre- and post IQ scores based on their performance in the BAS were examined using a paired t-test. The t-test revealed that there were no significant differences between the means in the pre- and posttest scores ($t=0.77$, $p.0.1$). The inconclusive results were due to a number of factors. The parents reported that the change of tester during the posttest was the main contributing factor. However, the researchers pointed out that the lack of intellectual and achievement results are real effects as the trajectory of cognitive development might be more difficult to accelerate even though social skills, self-esteem and parental satisfaction may be increased significantly.

Based on parents' feedback regarding the third objective, the children seemed to have achieved satisfactory communication skills to interact with their non-disabled peers. Peer acceptance was monitored through feedback from parents and teachers who reported very positive peer acceptance scores, even better than those projected in the objective.

CONCLUSION

In the studies reviewed, the researchers found that early intervention was critical

in enhancing the development of children with disabilities both socially and academically. The children's increased developmental and educational gains and decreased dependence upon social institutions, as well as the family's increased ability to cope with the children's presence and perhaps their increased ability for employment,

provided economic as well as social benefits. Early education and training could also minimise possibilities that a child would develop secondary disabilities and could increase the chances that developmental skills would be acquired when they otherwise might be delayed or simply not learned.

IMPLICATIONS

1. Young children with mild disabilities benefit from early intervention programmes conducted in mainstream preschool centres.

Most children with mild disabilities requiring early intervention in the early years should be taught in mainstream or inclusive preschool centres as these centres provide better quality early childhood education programmes. The early childhood model is more appropriate for young children with disabilities as it provides more opportunities for play and a teaching style that is more responsive and child-oriented and minimally directive and instructionally oriented.

2. Children with disabilities make good progress from attendance at mainstream early childhood education programmes if these are supplemented by recommended therapy.

Even though children with disabilities appear to make good progress in the preschool education programme, they would need to continue to receive therapy specified in the objectives of the IEPs. The therapy is an essential component of the intervention and plays an important part in the overall progress of the children.

3. Both children with disabilities and their non-disabled peers benefit from being taught in the same environment.

Children with disabilities learn to interact with non-disabled peers by being in the same environment. Being accepted by the rest of the class and the teacher helps to boost their self-esteem and sense of self-worth. Non-disabled peers learn that children with disabilities are not very different from themselves and have many similar needs. This understanding and acceptance will help towards the integration of the disabled into society later.

4. *School personnel in mainstream preschool centres can provide a positive model in accepting children with disabilities into the mainstream.*

Principals and teachers should set a good example by accepting children with disabilities into their preschool centres and demonstrate their acceptance of these children in their every day routines. In this way, they can provide a positive role for changing the attitudes of the peer group – hence the importance of teacher education.

REFERENCES

- Bronfenbrenner, U. (1974). *A report on longitudinal evaluations of preschool programs, Volume II: Is early intervention effective?* (DWEH Publishing No. OHD 7630025). Washington, DC: US Government Printing Office.
- Bruder, M.B. (1993). The provision of early intervention and early childhood special education within community programs: Characteristics of effective service delivery. *Topics in Early Childhood Special Education*, 13, 1, 19-37.
- Campbell, J. (September 1997). The next step: Parent perspectives of transition to preschool of children with disabilities. *Australian Journal of Early Childhood Education*, 22, 3, 30-34.
- Elliot, C.D., Murray, D.J., & Pearson, L.S. (1983). *British Ability Scales: Handbook and Technical Manual*. Windsor: NFER Nelson.
- Garguilo, R.M. & Piao, Y. (1995). Early childhood special education in the People's Republic of China. *Early Childhood Development & Care*, 118, 35-43.
- Katims, D.S. & Pierce, P.L. (1995). Literacy-rich environments and the transition of young children with special needs. *Topics in Early Childhood Special Education*, 15, 2, 219-234.
- McWilliam, R.A., Young, H.J. & Harville, K. (1996). Therapy services in early intervention: Current status, barriers, and recommendations. *Topics in Early Childhood Special Education*, 16, 3, 348-374.
- Quah, M.L. (1993). Special education in Singapore. In Quah, M.L., Gopinathan, S., & Chang, S. C., *A review of practice and research in education for all in Singapore*. Country Report submitted to the Southeast Asian Research, Review & Advisory Group (SEARRAG).
- Quah, M.L. (1997). Family-centred early intervention in Singapore. *International Journal of Disability, Development and Education*, 44, 1, 53-65.
- Report of the Advisory Council for the Disabled: *Opportunities for the Disabled* (1988). Singapore: Ministry of Community Development.
- Smith, B.J. & Strain, P.S. (1988). Does early intervention help? *ERIC Digest*, No. 455.