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FACT SHEET

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Visual Impairment

General Overview

Vision begins at birth and improves with age, with most children by the age of 5 or 6 years achieving adult standards on vision tests. Eyes are fully formed at birth however they are immature and need to be used in order to stimulate development. Typically babies can see and follow a moving target within the first few hours of life. Initially a baby will find it difficult to control and co-ordinate the movements of their eyes. Their eyes may appear to wander or turn and have jerky movements as they try to follow objects. These functions improve quickly and 3-month-olds will have straight eyes that move together in all directions. Medical assessment should be pursued if there are any deviations, one eye turning in, out, up or down, at 6 months of age.

Severe visual impairment can be the result of any number of causes.

Congenital blindness, which is present at birth can result from damage to the brain, maternal disease such as Rubella during early pregnancy, bilateral cataracts, tumors and infantile glaucoma. **Hereditary** blindness is transmitted through the parent's genes, as an inherited condition. **Acquired after birth**, either as a result of an accident, infection, tumors or constitutional disease such as diabetes mellitus. **Degenerative** conditions which are generally associated with aging the most common of which are cataracts, macular degeneration and glaucoma.

Visual impairments can be classified in a variety of ways for various purposes. Professional definition of the terms used to identify impairments is different for educational purposes as opposed to legal or medical definition. However, the actual term used may be the same.

The areas of classification of visual impairments relate to the injury to the physical mechanisms of the eye, problems with visual acuity, impairments to the muscular structure of the eye, and problems in visual perceptions or the message pathway between the eye and the brain. Each of these areas of classification can be further categorised into specific areas. Low Deiner 1993:171

Vision and visual perception provide us with sensory information that enables us to recognise size, colour, shape, direction, and estimate distance, speed and orientation. The ability to use our vision and visual perception develops rapidly in the first 12 months of life and continues to develop throughout the early childhood years.

Visual conditions in children may be present at birth, occur at any time from disease or accident or be part of a medical condition or syndrome.

These conditions may:

- remain stable and relatively unchanged, or
- progressively deteriorate over periods of time

Effects on Developmental Areas

Social and Emotional Development

- Child may lack a certain amount of independence
- Children who use alternative forms of communication may have been exposed to limited social interactions with peers who are not familiar with the alternative communication systems
- May lack interpersonal skills
- Need to develop socially acceptable behaviour
- Lacking in self esteem
- Inappropriate use of language
- Certain aspects of time management may be lacking
- May startle easily

Physical Development

- May experience delayed motor development due to inability to participate in experiences independently
- May have had limited experiences that promote motor development
- Some children may have delayed gross and fine motor co-ordination
- Lack certain aspects of spatial awareness
- May not demonstrate environmental awareness
- Children may not be able to move around independently
- May frequently fall over

Language and Communication Development

- Certain aspects of communication may be delayed
- Forms of communication may be different
- May hold objects close to face or bend head down close to the table surface

Cognitive Development

- Cognitive development may be delayed due to lack of concrete experiences
- Concept development may be lacking if children are unable to visualise experiences
- Child may prefer to stay at one activity centre and avoid trying new tasks
- May avoid textures of tactile activities such as finger painting, goop etc

PSCQ is a project of the Workforce Council, the Australian Government, through the Minister for Education Employment & Workplace Relations, funds the PSC as part of the Inclusion and Professional Support Program. Noah's Ark Resource Library and Advisory Service is a project of the PSCQ.

Visual Impairment **Inclusion Strategies**

Each child diagnosed with **a Visual Impairment** will be different and individual. It is important to gain information from the parents as to what characteristics of **Visual Impairment** their child displays. It is important to work closely with the parents as well as any additional support specialists e.g. therapists who may be involved with the child. It is also important to gain an understanding from the parent as to what is the most important aspect of their child attending your service. What is it that parents hope to gain from using your service? The following inclusion strategies are just some examples which may be applied to support the inclusion process. This list is only the start and it is dependant on a variety of factors such as environment, length of time child is in care, child's interest, likes, dislikes, skills already achieved. The strategies are divided into developmental areas however some strategies overlap and assist in a variety of developmental areas.

Social and Emotional Development

- Encourage peer initiated interactions by other children
- Encourage children with visual impairment to initiate interactions in appropriate ways and explore ways that they can attract other children's attention
- Provide positive reinforcement for children's social attempts
- Promote independence by using strategies and resources to encourage children to complete tasks on their own - a tactile time table may enable a child to select their own activities independently and tactile footsteps or wall marking may assist children to move independently to different activity areas
- Teach specific skills that facilitate access to the environment and develop increased independence
- Adjust the environment to suit the child and be aware of lighting issues
- Be aware of inappropriate mannerisms

Physical development

- Provide tactile stimulus on obstacle courses and other playground resources to encourage children to walk, climb, crawl, jump etc
- Add safety mats to obstacle courses to maintain a safe environment
- Provide materials and equipment that the child can easily manipulate
- Adapt activities as required to include all children i.e. use a variety of paintbrushes for painting with thick handles, short handles etc
- Provide tactile experiences where children can explore space and various forms of movement i.e. finger-painting
- Modify equipment as required and utilise adaptive technology

Language and Communication Development

- Become familiar with child's communication system
- Teach and reinforce listening skills and non-verbal communication
- Observe the child before approaching him and warn the child before touching to avoid unexpected response
- Use a normal volume and tone with a clear voice

Cognitive

- Provide materials in an appropriate format eg concrete, tactile etc
- Teach consistent routines
- Purposefully expose children to a range and variety of experiences with opportunities to engage all senses through interactions with the environment
Education Qld (1988:17)

Reference

Umansky, W. and Hooper, S. (1998) Young Children with Special Needs Third Edition New Jersey, USA:Prentice-Hall

Deiner, P.L. (1993) Resources for Teaching Children with Diverse Abilities - Birth through Eight. Harcourt Brace:

Brannnelly K. "Ideas for Inclusion & Programming Tips" Carata 2000

DISCLAIMER

Noah's Ark Children's Services Resource Unit provides information to Children's Services upon request. The information provided is obtained from a number of sources e.g. library, other services, resource books and Internet. The information provided is not intended to, nor does it, constitute medical or other advice. Persons access this information assume full responsibility for it's usage.

The information and strategies are designed to provide Childcare Workers in children's services with some strategies to assist in planning an inclusive program. A holistic approach is important, including knowledge gained from the child's parents and the knowledge gained through observing and planning for children. Ensure the principals of Early Childhood Care are re-inforced in the programming, focusing upon what the child can do, using positive and supportive interactions that recognises each child's individuality.