

Disability Towards Capability

Quarterly newsletter released by the
Centre for Disability Studies
Poojappura

A Unit under the LBS centre for Science and Technology
Thiruvananthapuram - 695 012, Kerala.

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Message from the Director's Desk

Welcome to the new edition of Centre for Disability Studies (CeDS)'s quarterly newsletter. Our goals with this newsletter are to make "connections" between individuals with disabilities, parents, faculties and professionals dealing with disability. We aim to serve as a vehicle for people with disabilities to share their capabilities and needs. This newsletter gives us the opportunity not only to provide articles of interest on technical topics, but to keep you informed of recent news within the CeDS and in disability area elsewhere.

CeDS continues to work in association with Universities, Colleges, Institutions and community groups to respond to the challenges faced by persons with special needs in areas of education, human service, technology, health, career, and disability rights. These challenges are addressed through interdisciplinary training, research, community outreach, technical assistance, and information dissemination.

Here we are highlighting recently completed projects which are now being wrapped up to ensure their results gaining maximum leverage among the people with disability. The upcoming year of activities promises to bring exciting new challenges and developments. I take this as a medium to appreciate your interest with CeDS and look forward to continue new associations. This will undoubtedly evolve and will only enhance the momentum of our work at CeDS.

Dr. Beela. G. K
Director in Charge

Australian Horticulture Therapy Association Team Visited CeDS March 6th 2014

The Australian Horticulture Therapy Association team Mr. Paul and Mrs Karen de la Motte visited CeDS to gain some insights about horticulture therapy activities in the state of Kerala. They held meetings with the LBS Director, Sri Rashid loPS, Director-in Charge, Dr. Beela G.K. and staff at the Centre. In a presentation as part of sharing knowledge with the guests, Dr. Beela outlined the vision of Horticulture Therapy activities for children with disabilities and special needs in Kerala.

Later Paul and Karen interacted with Dr. Abraham IAS Additional Chief Secretary Higher Education Dept. Govt. of Kerala and discussed the possibilities of collaborative horticulture activities between Victoria (a state of Australia) and Kerala. They shared an action plan for a Horticulture Therapy project. It was a fruitful experience for all engaged in the discussion and it would be a great opportunity to see an Australian perspective on Horticulture Therapy. According to them, "It was a great pleasure to meet you and your colleagues in India and your sincere and earnest efforts for horticulture therapy activities for individuals with disabilities".



Developing a toolkit for Children with ADHD

A Project by CeDS

The ADHD Project initiated by the Centre for Disability Studies focuses on the effectiveness of interventions on children with Attention Deficit Hyperactive Disorder (ADHD). The target population for the project is children of school going age with ADHD characteristics. The major area of intervention will be on improving the attention span, concentration, socialization skills of children as these children are mostly affected in those areas. As a part of this development, the centre will design appropriate technological support for children with ADHD characteristics. This includes Neurofeed back training with an iPad and a headband in which games are developed for improving concentration, attention and mental ability in children.



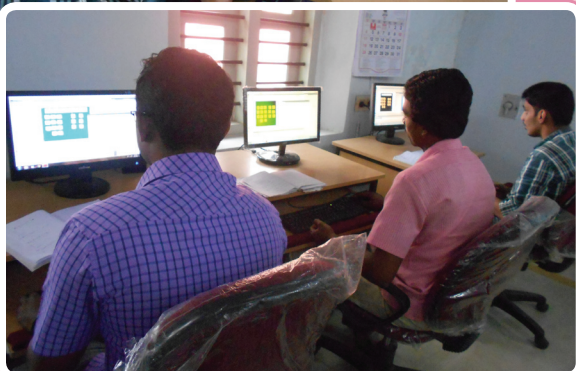
New D Skill Courses for Special Students

29th January and 21st April 2014

On 29th January 2014 and 21st April 2014, the centre commenced two new D-Skill courses; Animation and Data Entry & Office Automation [DEOA]. There are 10 students in each course. The students for the course here are Physically Handicapped, Mentally Challenged or Hearing Impaired.

The aim of the course "Animation" is to physically manipulate real-world objects to create the illusion of movement. At the end of the course, children will be capable of using Animation as a medium of expression or communicating the student's ideas to the world. During the course, they are engaged in working with the animation, interactive, film, visual effects and games industries as animators, effects artists, designers, or illustrators. The students also have opportunities to be employed in freelance commercial animation practice, design practice and advertising.

The focus of the Data Entry & Office Automation [DEOA] course is to prepare individuals to support business information operations by using computer equipment to enter, process, and retrieve data for a wide variety of administrative purposes. At the end of the course, the students will gain improved skills as "knowledge workers". The students will be given the opportunity to acquire necessary basic skills to obtain employment in the office industry.








Multi - Sensory Teaching for Children with Dyslexia

Dr. Johnson Jament, Project Fellow, Centre for Disability Studies

Multi-sensory teaching is the simultaneous use of the eyes (visual), ears (auditory) hands (kinaesthetic), nose (smell) and mouth (taste) to utilise all the pathways to the brain when learning. In other words, it is a way of using two or more senses to enhance memory and learning. Here teachers teach children to link the sounds of the letters with the written symbol. Children also link the sound and symbol with how it feels to form the letter or letters. For example, a teacher who provides lots of hands-on activities, such as building a 3-dimensional map enhances their lesson by allowing the children to touch and see the concepts she is teaching. A teacher who uses mangoes to teach fractions adds sight, smell, touch and taste to an otherwise difficult lesson.

Multi-sensory teaching is considered to be an effective method of teaching for children with dyslexia or reading and speaking difficulties. In traditional teaching, students typically use two senses; hearing and sight. More often this happens with limited interaction with students. Students see the words when reading and they hear the teacher speaking, it is visual (see it on the board) and auditory (hear what teacher say). Children's kinaesthetic sense, which gives children a lasting tactile memory, is not well used in traditional classrooms. There are clearly no opportunities for developing other senses and other aspects of the brain. However, this traditional approach in teaching may not benefit children with dyslexia who have problems processing visual and auditory information. They may have weak phonemic awareness, meaning they are unaware of the role sounds play in words. They have difficulty rhyming words, blending sounds to make words, or segmenting words into sounds. They may also have difficulty acquiring a sight vocabulary. That is, children with dyslexia do not learn the sight words expected in the primary levels. In general, they do not pick up the alphabetic code or system. It is therefore important to make use of more of the senses by incorporating touch, smell and taste into their lessons. This will enable the teachers to reach more students and help those with dyslexia learn and retain information.



Sensory channel	Perception
• Visual 	• shape of number, letter, word, sentence
• Auditory 	• sound of number, letter, word, sentence
• Oral 	• saying number, letter, word, sentence
• Tactile 	• touching number, letter, word, sentence
• Kinaesthetic 	• writing number, letter, word, sentence

Research Programmes

The recently sanctioned research projects by CeDS include alternative mouse for differentially abled persons, learning enhancement package for children with intellectual disability, smart walking stick for individuals with physical disabilities and blind assisting technology.

Several other ongoing research projects are:

- Development of kite Audio-visual tool kit, a computer based Psycho-Education programme for prevention of mental health disability in children
- Development of communication skills-A socio-cognitive –linguistic model of early intervention for children with Autism Spectrum disorder
- Early Auditory stimulation for pre-term infants- Facilitated through an audio-visual aid
- The effect of Software Visualization for Teaching Computer Science among Deaf Students: An intervention study
- Development of Teaching Aids and Training Materials to enhance the Language ability through stimulating the cognitive skills of children with learning disability and related language disorder.

- Development of Computer based language therapy software (Malayalam version) for post stroke patient with Aphasia and finding its efficacy compared to conventional speech therapy

The recently completed research projects include:

- Effectiveness of e-learning on the achievements of the students with reading and writing disorders in English
- Design development of a recreation Centre & formulation of Special play & recreation materials for the mobility impaired.
- Development of a computerized Self-study package in enhancing the listening comprehension Skills of visually challenged students in English at secondary School level
- Conservative management of Flexion Deformity of the knee joint in Hemophilic using polypropylene splint

Shangreela – A Holiday Gift for the Differently Abled

Shangreela is an annual event organized by Centre for Disability Studies, Poojapura to bring about awareness and sensitize people to the creative potential of “Differently Abled Children” and also to provide a platform for them to explore their talents.

Shangreela has received a good response from different sections of the society in Thiruvanthapuram. Around 35 differently abled students have registered for Shangreela. CeDS plans to organize a ten day fine arts camp as part of Shangreela at the centre from 22nd May to 31st May 2014.

About Shangreela

- Creativity Exploring
- Training on Jewel Making, Bag Making, Flower arrangements, Free painting & Collage
- A two day exhibition displaying products made by differently abled children
- Cultural show by differently abled children
- Workshop for Parents

Shangreela is often used in a similar context to “Garden of Eden”, to represent a paradise hidden from modern man. It is sometimes used as an analogy for a lifelong quest or something elusive that is much sought. For a man who spends his life obsessively looking for a cure to a disease, such a cure could be said to be that man’s “Shangreela”. The CeDS organizes Shangreela for the differently abled as art therapy. Previously the centre had organized drama therapy with the help of the faculties from School of Drama, Thrissur, which was very effective for the children.



Upcoming News at CeDS

Building Parent Network in June 2014

- Bringing parents of children with disabilities and mental health issues together
- Opportunities for the parents to share ideas, experiences and expertise to have an effective dialogue

Horticulture Therapy Project launch in July 2014

- Developing social intelligence and motor skills of children with Mental Retardation, Autism and Attention Deficit Hyperactivity Disorder (ADHD) through Horticulture Therapy
- Inviting interest from schools in Trivandrum for participation in the project

Paper Bag Making Unit in August 2014

- Vocational course for students with disabilities
- Interested students are invited

ADHD Toolkit Development Workshop in August 2014

- A training and development workshop for designing an ADHD Toolkit for schools
- Resource teachers are invited to participate in the development