## NIEPID, SECUNDERABAD

## Outcome of NIEPID Completed Research Projects

## (1984 to 2024-25)

| S.NO. | PROJECT TITLE  | OUTCOME  |
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| 1.    | A model of services for pre-school handicapped<br>children in rural areas – US Funded – 1993-96  | <ul> <li>Screening tool for screening of<br/>developmentally delayed children.</li> <li>Intervention package known as<br/>Activity Checklist for Preschool<br/>Children - Development Delays<br/>(ACPC-DD) for providing<br/>comprehensive care to pre-school<br/>children with developmental delays<br/>in the rural area.</li> </ul> |
| 2.    | Early Intervention to IUGR children at-risk for developmental delay – US Funded – 1993-98  | <ul> <li>Fourteen different folders for<br/>parents.</li> <li>Early Intervention Guide.</li> </ul>   |
| 3.    | Development of material for creation of<br>awareness in the parents of mentally<br>handicapped and in the community – UNICEF<br>funded – 1985-88 | <ul> <li>Two films for parents and general public.</li> <li>One slide-cum-synchronized commentary.</li> <li>Eleven Radio spots.</li> <li>Ten awareness posters.</li> </ul>   |
| 4.    | Development of training materials for workers in rural areas – UNICEF funded – 1985-88.  | Four manuals for village rehabilitation<br>workers, multipurpose rehabilitation<br>workers, psychologists and guidance<br>counsellors.   |
| 5.    | Screening of pre-school children for early<br>identification of mentally handicapped –<br>UNICEF funded – 1985-88.                               | Tools for<br>Screening.<br>Assessment.   |
| 6.    | Development of materials for skill training in the mentally retarded persons – UNICEF funded – 1987-90.  | <ul> <li>Nine booklets on self-help skills.</li> <li>Nine pamphlets in simple language for parents.</li> </ul>   |
| 7.    | Strategies for extending services to persons with mental retardation – UNICEF funded – 1990-92.  | Development of urban slum model.   |
| 8.    | Application of behaviour modification<br>techniques in children with mental retardation –<br>UNICEF funded – 1989-92.                            | <ul> <li>A manual for teachers.</li> <li>An Assessment checklist.</li> </ul>   |
| 9.    | Development of communication skills in children with mental retardation – UNICEF funded – 1989-92.   | A manual on communication skills.  |
| 10.   | Development of language assessment Tool – 1987-88.   | A language assessment tool.  |
| 11.   | Prevalence of mental retardation in urban slum in collaboration with NGOs –1993-94.  | Development of model CBR.  |

| 12. | Play activities for the handicapped persons – 1988-90.  | A booklet on play activities for children with mental retardation.   |
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| 13. | Development of services through itinerant<br>service model in collaboration with NGOs –<br>1993-94.   | Development of Service Model in rural area .   |
| 14. | Development of resource material for<br>individuals with mental retardation –<br>1993-95.   | Teaching learning material.<br>Functional literacy series - workbooks<br>and flip books.<br>Functional numeracy series - workbooks<br>and flip books.<br>A manual on functional academics for<br>teachers. |
| 15. | Strengthening families having children with mental retardation – 1993-95.   | <ul> <li>Information guide for parents and<br/>translated to various Indian<br/>languages.</li> <li>Tool: Family needs assessment.</li> </ul>  |
| 16. | Development of computer assisted instruction<br>for teaching arithmetic and reading skills for<br>children with mental retardation – 1993-96. | Developed Four Software's on reading and writing and numbers.  |
| 17. | Multi centered project on early<br>intervention in collaboration with<br>NGOs – 1993-94.  | Early intervention Development of Model<br>on services standardized assessment<br>and intervention procedures.   |
| 18. | Multi centered project on vocational training-<br>cum-production centers – in collaboration with<br>NGOs1993- 95.                             | Development of Model on vocational training.   |
| 19. | Development of grade level assessment<br>device for children with learning problems in<br>schools – ICSSR funded – 1992 – 94.                 | Assessment tool.   |
| 20. | Development of materials for transition from school to work – 1999-2001   | A guide and a curriculum on transition from school to work.  |
| 21. | Training in communication in persons with mental retardation - 1999-2001.   | A utility guide for parents.   |
| 22. | Preparation of training packages for early<br>childhood special education – UNICEF – 1999-<br>2000  | <ul> <li>A calendar and activity cards.</li> <li>A manual for teachers.</li> </ul>   |
| 23. | Functional academics through computer<br>technology for persons with mental<br>retardation – S&T Mission Mode – 1999-<br>2001                 | Six software on "My country, living and<br>non-living, health and safety, numaracy,<br>community utilization and literacy".  |
| 24. | Development of Modules for grass root level<br>functionaries on prevention, early detection<br>of childhood disabilities –2001-02             | <ul> <li>Curriculum for training of<br/>grassroot level functionaries.</li> <li>Manual for training the trainers.</li> </ul>   |
| 25. | Project on "Awareness on Childhood disabilities,<br>prevention, early detection and referral" –<br>2001-02                                    | A visual flip chart in Hindi and Telugu.   |

| 26. | Family intervention and support<br>programmes for persons with mental<br>retardation US – India   | <ul> <li>Assessment tools.</li> <li>Models of services.</li> <li>Manuals/guides for parents.</li> </ul>   |
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| 27. | Independent dressing for persons with mental retardation - 2000–03  | <ul> <li>Adaptation/modification in the<br/>clothes for use by the persons with<br/>mental retardation.</li> <li>Audio-visual media.</li> </ul> |
| 28. | A study of human resource development in<br>north east region in the field of mental<br>retardation - Current status and future<br>perspectives - 2002-03 | Report on the Status of trained special<br>teachers in north east region and the<br>needs in terms of professional<br>competencies.             |
| 29. | Preparation of stimulation material for the<br>overall development of rural infants and toddlers<br>– 2001-03   | Stimulation material for training the infants and toddlers of rural areas.  |
| 30. | Adaptation in Gait Training - 2002 - 03   | Adaptation in parallel bar for gait training.   |
| 31. | Preparation of training packages on sexuality<br>development in mentally retarded persons -<br>2001 – 03  | Training package on sexuality development.  |
| 32. | Development of adaptations for daily living for<br>the mentally retarded persons - 2001 – 03  | Adapted material for daily living for use by the persons with mental retardation.   |
| 33. | Development of teaching and training material on physiotherapy - 2001–03  | A book on teaching and training<br>techniques.<br>Audio-visual material.  |
| 34. | Awareness materials on employment of persons with mental retardation - 2002 – 03  | Awareness Development of posters on<br>Employment.  |
| 35. | Positioning and stimulating activities for infants and young children - 2001 – 03   | Booklet on activities for training of young children with developmental delays.   |
| 36. | Development of stimulation activities for visually impaired infants and toddlers - 2002   | Stimulation package for infants and toddlers with visual impairment.  |
| 37. | Development of resource education program for<br>students with learning problems in academics -<br>2003   | Remedial package for educating children with learning problems in primary schools.  |
| 38. | Service models for children with multisensory impairments and mental retardation – 2002   | Training package for teaching children<br>with multi-sensory impairments and<br>mental retardation.   |

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| 39. | Degree of visual activity detection in persons<br>with mental retardation-A pilot study - 2002-<br>03                  | <ul> <li>Tool to measure the degree of visual disability in persons with mental retardation.</li> <li>Development of service model.</li> </ul>  |
| 40. | Study of indigenous practices in north eastern<br>regional for children of 0-3 years of age for<br>intervention - 2002 | Module for intervention of children of 0-3 years.   |
| 41. | Development of training packages on sexuality<br>development in mentally retarded persons -<br>2001 – 03               | Training package on sexuality development.  |
| 42. | Support to children with disabilities – 2004-05  | Models of education to all children with disabilities   |
| 43. | Functional communication patterns of the adults<br>with mental retardation in the work setup<br>2004-05                | A manual on functional communication<br>patterns there assessment and<br>intervention strategies for improving<br>communication skills in the work setup<br>will be developed. This manual will be<br>useful for the professional working with<br>adults with mental retardation and<br>parents of the adults with mental<br>retardation. |
| 44. | Study of effect of adaptive devices in the<br>improvement of Anthropometric skills for<br>physical functions-2004-05   | To design/ manufacture adaptations/<br>aids and appliances for persons with<br>mental retardation   |
| 45. | Drool control and tongue thrust therapy-<br>2004-05  | To provide training on drooling, corrective posture and feeding.  |
| 46. | Educational Programming for students with<br>profound mental retardation. Funded by<br>(India – US S&T Forum)- 2005    | Curriculum and intervention strategies to teach persons with profound mental retardation.   |
| 47. | Service models for children with autism and mental retardation   | Package for teachers for training children with autism and mental retardation.  |
| 48. | Development of Manual on Vocational<br>Training  | Self Instructional Material, Brochures,<br>Posters and Activity manual  |
| 49. | Research in Mental Retardation in India - A study- 2003  | A book on status of research in mental retardation in India   |
| 50. | Early intervention to infants and toddlers with disabilities in rural areas – 2002                                     | <ul> <li>Intervention package for infants and<br/>toddlers with specific disabilities in<br/>rural areas.</li> <li>Training manual for master trainers.</li> </ul>  |
| 51. | Effective cognitive behavioural intervention<br>among parents of persons with mental<br>retardation-2003               | To provide cognitive behaviour therapy for the parents  |
| 52. | Development of an Assessment tool for persons with Autism-2008   | Assessment tool for Autism  |

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| 53. | Orthopedic problems in persons with mental<br>retardation and their physiotherapy<br>management including surgical intervention                  | Training package for children with<br>orthopedic problems with mental<br>retardation and their physiotherapy<br>management   |
| 54. | Development of vocational training programs for persons with mental retardation – 2002   | Vocational training programme for persons with mental retardation  |
| 55. | A study of parents perception on quality of special education services in NGOs-2003  | Parents opinion on quality of services in NGOs   |
| 56  | Community based rehabilitation services for persons with intellectual disability – A Guide   | Documented the direct study of services<br>for persons with intellectual disability in<br>India. It has further developed a guide<br>for establishment of a model<br>rehabilitation service programme for<br>persons with intellectual disability  |
| 57  | Development of tool for assessing the<br>functioning of organizations in the area of<br>disability and their utilization of funds.               | Reviewed the functioning of 176<br>organizations in the area of disability<br>rehabilitation spreading across the<br>country. Based on this review, a<br>qualitative analysis checklist was<br>developed to document the human<br>resource development facilities, service<br>activities, receipts and payments.   |
| 58  | Emotion recognition training for persons with mental retardation   | Emotion recognition training found to be effective for persons with mental retardation.  |
| 59  | Cognitive training for children with mental retardation  | Children who were exposed to Cognitive<br>Training Program showed significant<br>improvement in post assessment on<br>Cognitive Assessment System. Children<br>with Mild mental retardation did very well<br>in cognitive areas like attention, memory<br>and perception. Children with Moderate<br>level of mental retardation performed<br>significantly well in the area of<br>Successive processing. |
| 60  | Development of a simple tool for intellectual assessment of persons with mental retardation  | 'Test of Intelligence' a tool comprised of<br>6 factors comprising of 121 items in its<br>item pool which is easy to administer in<br>camp mode of assessment.   |
| 61  | Identification of mental health problems in persons with mental retardation: Implication for service models and policies                         | A Report on the associated mental<br>health problems among persons with<br>mental retardation  |
| 62  | Trends in intelligence testing of persons with<br>mental retardation and its implication for<br>certificate of disability and service provisions | A Report on the use of different<br>intelligence assessment and other<br>disability tools by the different<br>professionals.   |
| 63  | Development of Glossary in the field of Mental<br>Retardation -2012  | Glossary has been developed in<br>alphabetical order which covers terms<br>and its meanings directly/ indirectly<br>related to mental retardation.   |

| 64 | A study on dental problems in persons with mental retardation-(2013-14)  | Enabled to document the frequency of<br>different dental problems seen in our<br>clientele and plan to provide better<br>dental services to them  |
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| 65 | Molecular genetic study of beta amyloid<br>precursor protein (APP) in different neurological<br>disorders including autism-(2013-14) | Highlighted the role of Amyloid<br>Precursor Protein (APP) and DNA repair<br>in the pathogenesis of Autism  |
| 66 | Adaptable e–Learning Accessibility model for the disabled-(2014-15)  | 'e-saadhya' is adaptable and accessible<br>e-learning platform, which helps the<br>rehabilitation professionals to assess<br>and plan various training programmes<br>for students with Mental Retardation<br>having Autism.                           |
| 67 | School Readiness Package for Early Childhood<br>Inclusive Education – UNICEF funded-(2016-17)  | Reviewed existing inclusive school<br>readiness package Aarambh-1 (pre-<br>school) package. Developed inclusive<br>academic readiness package in English,<br>Maths and EVS for preschool children.<br>Completed project was handed over to<br>UNICEF. |
| 68 | Development of toolkits for assessing work<br>competencies among post secondary and pre<br>vocational students-(2016-17)             | Prepared work competency assessment<br>checklist and tool kit for assessing work<br>competencies among post secondary<br>and pre vocational students for children<br>with Intellectual Disability.  |

| 69  | Cluster-based placement<br>service (2017)   | Parents from 15 clusters registered<br>and formed into parents groups to<br>provide vocational training to their<br>wards with intellectual Disability.<br>Total 7 parent groups have<br>registered under societies act to<br>provide vocational rehabilitation<br>and contributed towards empowerment<br>of persons with Intellectual Disability by<br>placing them in semi-skilled jobs within<br>their own community. |
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| 70a | Development of an Indian Test<br>of Intelligence - Phase -1 (2017-18)   | Develop an Indian Test of Intelligence.<br>The test so developed which is used for<br>assessment of intellectual level of<br>persons with Intellectual Disability.<br>Phase-1 (Test Development & pilot<br>testing is completed). Data Collection for<br>standardising the tool will be taken up in<br>Phase-2.  |
| 71  | Usage pattern of Social Capital by Service<br>Seekers on Neighbourhood Support System<br>Respond towards Service Seekers (2019) | The study is undertaken to equip<br>the service providers to deal<br>with the needs of service seekers<br>for optimum utilization of social<br>capital. The project team developeda<br>checklist to assess the social capital<br>and supports available in the<br>community. A handbook for<br>rehabilitation professionals for  |

|     |   | effective use of social capital wasalso  |
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|     |   | developed.   |
| 72  | Sexuality Education for Persons with ID-<br>An instructional Manual for Parents, Care<br>Giversand Individuals with ID (2019)   | Two assessment checklists for assessing the<br>needs pertaining to sexuality education<br>were developed. Instructional<br>manuals were developed to be used by<br>Educators/Parents for imparting<br>basic sexuality education in both home and<br>classroom settings.  |
| 73  | Preparation of Digital Teaching Learning<br>Material for Adults with Intellectual<br>Disabilities(2020)   | 10 Self Instructional videos were developed<br>for the following Vocational activities:<br>Gardening, Hand embroidery, Typing<br>master, Paper bag making, Lamination,<br>Photo frameassembling, Pillow cover making,<br>Screen printing, Scribbling pad making and<br>Spiral binding  |
| 74  | Comprehensive Assessment Tool for Adults withIntellectual Disabilities (2020-21)  | Developed a comprehensive vocational<br>assessment tool for Indian adult persons with<br>Intellectual Disabilities for the purpose of<br>vocational assessment, programme planning,<br>placement and rehabilitation.   |
| 75  | Development of Animated Films for Creating<br>Awareness about Intellectual and<br>Developmental Disabilities (2020-21)  | <ul> <li>Project completed 5 animated films developed which will create awareness on</li> <li>1. Causes of disabilities;</li> <li>2. Prevention of disabilities;</li> <li>3. Early identification and intervention;</li> <li>4. Inclusive education and</li> <li>5. Vocational training &amp; employability.</li> <li>The videos are having Sign Language interpretation and captioning which make them accessible for diverse range of users.</li> </ul>  |
| 76  | DISAAA: Development of an Integrated Solution<br>for Automatic Assessment of Autism using<br>Visual Attention, Facial Expression and Vocal<br>Emotion Cues ( in collaboration with CDAC<br>Kolkata) (2022-23) | <ul> <li>Project team developed Mobile screening app titled<br/>Autism Screening Questionnaire (ASQ) in 5 Indian<br/>languages (Bengali, Hindi, Marathi, Telugu, and<br/>English).</li> <li>Automated systems for autism assessment<br/>following ISAA tool.</li> <li>Audio-visual stimuli in Hindi, Bengali, and English<br/>languages were developed to capture the facial<br/>expression, eye gaze, eye movement as well as the<br/>speech or vocal responses of the child.</li> <li>After annotation and analysis of the data, it is<br/>processed using AI-ML based algorithm to identify the<br/>facial expression, eye gaze, eye movement, and<br/>vocal response.</li> </ul> |
| 70b | Development of an Indian Test of Intelligence -<br>Phase – II (2023-24)   | <ul> <li>a.A Standardized NIEPID Indian Test of Intelligence tool has been developed which was inaugurated by Dr. Virendra Kumar, Honorable Cabinet minister of Social Justice &amp; Empowerment, Govt. of India as the make of India Initiative on 10<sup>th</sup> December, 2023.</li> <li>b.It has been notified in the Gazette of India on 12<sup>th</sup> March, 2024 to assess the IQ.</li> <li>c.As per the guidelines by ministry, NIEPID is training all the RCI Registered Rehabilitation /</li> </ul>   |

|    |  | Clinical Psychologist in this tool. As per now, ten<br>CRE workshops have been conducted and approx.<br>500 professionals have already been trained all<br>over India in using this test.   |
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| 77 | Promoting Self- Determination for independent<br>living (2023-24)  | <ul> <li>a.Determine effect of SDIEP in developing self-<br/>determination for independent living in adults with<br/>Intellectual Disability.</li> <li>b.Manual for promoting self-determination skills in<br/>adults with Intellectual Disability.</li> <li>c.Assessment Tool for Independent Living.</li> </ul>                         |
| 78 | Impact of early intervention on infants and<br>toddlers with global developmental delays<br>(2023-24)                              | a.Early intervention in Infants & toddlers through<br>planned home based programme has given<br>service providers like parents a better<br>understanding of importance of early intervention<br>therapies in children with Global Developmental<br>Delay in Down syndrome and Cerebral palsy.   |
|    |  | b.Children with Down syndrome have higher<br>improvement than children with Cerebral palsy in<br>home based programmes.   |
|    |  | c. Severity of Cerebral palsy along with seizures and<br>antenatal risk factors might have hampered the<br>outcome in Down syndrome also.   |
| 79 | A study on association between visual, motor,<br>perception and cognitive abilities of children<br>with disabilities.<br>(2024-25) | <ul> <li>a. To find out the relationship between visual-motor perception as a basic psychological process and cognitive function of children with LD.</li> <li>b. To find out the relationship between errors in visual-motor perception sub-scales of Gestalt test and cognitive functions with MISIC among children with LD.</li> </ul> |