



## INCLUSIVE EARLY CHILDHOOD EDUCATION (IECE) PROJECT

### EXAMPLE OF IECE PROVISION: CROATIA

#### 1. Abstract

SUVAG Polyclinic for Hearing and Speech Rehabilitation is a health institution specialising in all hearing, auditory, speech and language disorders. The verbotonal method is used for speech and hearing rehabilitation. The Polyclinic's activities include specialist consultative health protection for people with hearing and/or speech impairments, the education of hearing- and speech-impaired children using the verbotonal method and research activities relating to the principles of the verbotonal system. SUVAG Polyclinic is a precursor to inclusive education in Croatia, and the first hearing-impaired learners were included in mainstream education in 1964. Preparation for inclusion is carried out in several departments. In the Centre for Cochlear Implant and New Technologies, audio-rehabilitators perform speech processor adjustments, as well as pre- and post-operative rehabilitation of cochlear implant users of all ages. Since its foundation, 135 children with isolated hearing impairment between the ages of three and seven have been rehabilitated in the Centre. Of those children, 69% were included in mainstream education after rehabilitation and 31% were included in educational programmes within SUVAG Polyclinic's Education Department.

The Centre for Early Rehabilitation and Community Support employs speech therapists and carries out counselling programmes and early interventions for children with speech and language difficulties aged up to four years. Upon completion of the programme, some children are referred to individual therapy in the Section for Speech Disorder Therapy: Speech Pathology, and some children are referred to complex rehabilitation programmes in SUVAG Polyclinic's kindergarten. All children receiving care in the Section for Speech Disorder Therapy are in mainstream education.

The Department for the Medical Rehabilitation of Pre-primary Age Children carries out early rehabilitation of hearing-impaired children, parent counselling, complex rehabilitation of children included in the Polyclinic's educational programmes and individual outpatient rehabilitation of children with hearing and/or speech difficulties in mainstream education. The department employs speech therapists, audio-rehabilitators and physical therapists.

SUVAG Polyclinic's Education Department consists of kindergarten and primary school. Here there are suitable educational programmes for children with difficulties in speech communication, alongside everyday complex rehabilitation. The aim of



these programmes is to prepare children for successful educational and social inclusion or inclusion in mainstream education when the child is psychologically and physically ready. The kindergarten programme was approved by the Republic of Croatia's Ministry of Science, Education and Sports in 2005. The education, rehabilitation and care programme is carried out according to unique educational goals. Achievements are based on both the national curriculum for pre-primary education and the kindergarten's own curriculum. The everyday complex educational programmes are five, six or ten hours in duration, depending on need, and are intended for children from three years old to the start of primary school. The department employs educators, rehabilitators, speech therapists, phonetic musicians, phonetic rhythmicians and psychologists with verbotonal experience. The complex rehabilitation programme also includes a special verbotonal phonetic rhythm procedure that consists of body movement and music stimulations. Of the children that left SUVAG Polyclinic's kindergarten in 2014, 63% are enrolled in mainstream education (kindergarten or school) and 31% attend SUVAG Polyclinic's primary school. Continuous tracking of the Polyclinic's rehabilitants shows that 85% of hearing- and speech-impaired children that have completed the rehabilitation and education programme move on to education in mainstream schools (primary and secondary) and 11% continue on to universities and higher education.

## **2. Inclusive features**

Cochlear implant is a type of hearing aid that replaces sensory cells and sends processed sound messages to the endings of the hearing nerves. This enables hearing which would not be possible using other hearing aids. The Centre for Cochlear Implant and New Technologies teaches about cochlear implants and carries out pre-operational diagnostics and assessments, post-operative monitoring, hearing and speech rehabilitation and speech processor adjustment. Post-operative diagnostics and monitoring are carried out to assist rehabilitation. Rehabilitation can be group or individual and is based on the verbotonal method. Upon completion of rehabilitation, children are included in mainstream education or in the SUVAG Polyclinic's educational programmes.

The Centre for Early Rehabilitation and Community Support carries out several programmes. The parent counselling and stimulation of communication and speech/language development programme gives advice on methods of encouragement for all areas of a child's development. The Centre also gives counselling for children with speech rhythm and tempo disorders. Rhythmical stimulations are special verbotonal procedures which stimulate sensory, communicational, motor and speech/language development using speech-motor activities and games. Musical stimulations are verbotonal procedures which



stimulate communicational and speech/language development using rhyme, songs, counting rhymes, music, instruments and percussion. Individual speech therapy is also carried out in the Centre.

The Department for the Medical Rehabilitation of Pre-primary Age Children carries out early rehabilitation of hearing-impaired children and parent counselling. One goal is to help the parents of hearing-impaired children accept that their child has difficulties and, as much as possible, to make them competent rehabilitators. Outpatient rehabilitation of children with hearing and/or speech difficulties is based on hearing, phonetic and linguistic progression, but includes elements of all verbotonal procedures that contribute to a child's development, and especially speech/language development. In 2014, 66% of all outpatients were children aged from four to six years.

Children who attend the SUVAG Polyclinic kindergarten can be divided into those with hearing impairments and those with speech and language difficulties.

The everyday complex educational programmes are five, six or ten hours in duration (depending on need), and include kindergarten and health programmes within the same institution. Along with group rehabilitation, children are included in individual rehabilitation conducted by audio-rehabilitators or speech therapists, and children with motor difficulties also attend medical gymnastics. Education and rehabilitation are central to all activities, and the positive environment enables the development of hearing, speech and language, cognitive abilities, creativity, imagination and communication. All educational programmes are appropriate to each child's intellectual and chronological age and rehabilitation is appropriate to each child's hearing, speech and other psycho-physical abilities. As constant movement and environment familiarisation are essential to childhood, all activities use games and the choice of didactic material is suited to each child's abilities.

Education is carried out in small groups. In the first semester of the academic year 2014/2015, the average number of children in the hearing impairment group was eight, and twelve in the speech and language difficulties group. Verbotonal theory and practice are apparent throughout the curriculum, which is centred on the child as a whole being and the child's active participation in their hearing, speech and language rehabilitation. Each child has individual developmental and other needs and a flexible environment favours learning and ensures quality of attendance in the educational institution.

In each age group of children there are specific learning objectives. The practical/personal objectives include basic physical and health needs and the social/emotional objectives include basic emotional and social needs and parent collaboration. In all age groups, the social/cognitive objectives include



environmental familiarisation and hearing and speech development. In the middle and older age groups they also include mathematical concepts, and pre-primary objectives. All age groups also have physical/health, leisure time/creative, and work/production objectives.

The curriculum also includes a special verbotonal phonetic rhythm procedure that consists of body movement and music stimulations. The basic purpose of the body movement stimulations programme is to encourage sensory-psycho-motor foundation which enables speech/language communication. There are two body movement stimulation programmes, body harmony and body movement, carried out through the use of games. The aim of the musical stimulations is to develop the basic structural elements of speech, or speech values (rhythm, intonation, time, intensity, tension) in children with hearing and/or speech/language difficulties through basic musical elements or musical values (rhythm, melody, tempo, pause, and dynamics). This encourages correct perception and pronunciation and the development of speech as the optimal mode of communication. Since rhythm, intonation, tension, intensity, pause (active) and time are the basic structural elements of even the smallest pronunciation unit, music and body movement stimulations provide a valuable foundation for the development and rehabilitation of hearing-impaired people.

SUVAG Polyclinic kindergarten also puts a great emphasis on parent collaboration, and all educational and rehabilitation activities are conducted in collaboration with and with advice from parents. Methods of working with parents include individual counselling, parent meetings, workshops and parental participation in activities with children.

### **3. Inclusive highlight**

The verbotonal method is the original scientific approach to hearing, speech and language, and is the result of theoretical and empirical research in the field of hearing and speech pathology. It was developed in the 1950s by academic Petar Guberina, who is the founder of SUVAG Polyclinic. Hearing can be developed in hearing-impaired people by using the verbotonal method if body conductivity and hearing residuals are also used, since every organism is sensitive to low frequencies. SUVAG Polyclinic uses special electro-acoustic equipment constructed according to verbotonal principles which enables the optimal transmission of auditory characteristics of speech and good speech acquisition. The basic methodological procedures are based on perception and speech development (understanding and speaking) by way of hearing.

The large majority of the clinic's users (more than 80%) are children with hearing



and/or speech impairments and children with difficulties in speech and language development. The basic aim of verbotonal rehabilitation is to develop speech and to overcome hearing and speech disabilities, which are significant factors in children's development. For these children inclusion through speech is the best route to a full and equal life, and SUVAG Polyclinic has been seeing significant results for five decades.

SUVAG Polyclinic is a precursor to inclusive education in Croatia, practicing and promoting it even before the introduction of legal regulations. The Polyclinic's rehabilitants are monitored after inclusion in mainstream education and supported by extended expert procedures which not only include collaboration with the educational institution, but also individual and/or group rehabilitation of children if needed. In addition, SUVAG Polyclinic's employees collaborate with the Education Agency and provide a mobile support service. Mobile teams carry out expert lectures on working with children with hearing and/or language difficulties at the request of the Agency or educational institution. In 2014, the mobile team carried out 33 presentations for educators in ten locations across Croatia.

#### **4. Other evidence of quality IECE**

SUVAG Polyclinic is a unique health institution in the Republic of Croatia, and also a world centre for the improvement, interpretation and promotion of the verbotonal theory and its application. The verbotonal method is used in education on every continent, and verbotonal training for experts from around the world is carried out here.

Since 1997, after a decision by the Ministry of Science and Technology, SUVAG Polyclinic has been a member of the Croatian Academic and Research Network [CARNet](#). Since March 2012 it has been included in the re-accreditation procedures for other legal subjects in the register of scientific organisations. Based on the report by the Agency for Science and High Education's Accreditation Council, the clinic has fulfilled the conditions for re-accreditation.

SUVAG Polyclinic was accredited on 22 April 2013 under ISO 9001:2008, quality management systems. The introduction of the quality management system ISO 9001 means that SUVAG Polyclinic has proved its ability to provide services which fulfil the demands and expectations of service users and other interested parties. The documented management system enables a systematic application of laws and regulations and regular maintenance and improvements of the system.

In SUVAG Polyclinic special attention is given to the professional training and scientific educational activities of employees which is accomplished through professional and scientific projects, participation in domestic and international



conferences, scientific publishing activity, education in colleges and universities, mentorships and work with graduate students. Currently six doctors of science work at SUVAG Polyclinic and it is expected that nine more employees will achieve that academic degree during the next year. Scientific activity is also promoted through a special organisational unit for science which has existed since the institution was founded. It was created as a result of commitment to development based on scientific research. In SUVAG Polyclinic regular undergraduate, graduate and postgraduate lectures are also held (lectures, seminars, exercises and professional visits) for students in the Education and Rehabilitation Faculty, the Faculty of Humanities and Social Sciences, Croatian Studies, the Medical Faculty, the Catholic Faculty of Theology and the Academy of Fine Arts of the University of Zagreb. As SUVAG Polyclinic is a workshop for students from various faculties that are educating staff in health protection and the education of people with hearing and speech impairments, exercise and attendance lectures for students of speech therapy, phonetics, psychology and pedagogy are held, professional visits are organised for students of medicine, seminars, graduate, Master and Doctoral theses are created, and expert exams are organised.

In all departments of the Polyclinic, including kindergarten, an interdisciplinary approach is nourished and additional training on inclusive education is available to all employees. Inclusive education is also supported through collaboration with the Education Agency which includes the mobile support service. SUVAG Polyclinic collaborates not only with parents, but also with kindergartens, ministries and faculties, and it organises various preventive programmes.