

Research portfolio

Semmelweis University András Pető Faculty

Academic year 2020/2021

Introduction

An internationally renowned knowledge centre, Semmelweis University pursues its activities organised as a specialised university. Within the professional portfolio of the University, research, development and innovation are prioritised activities. A university committed to research, it actively contributes to the work of international scientific bodies, the organisation of international congresses and the education of the upcoming generations of scientists. It is a priority for us to participate effectively in the preparation and active implementation of the University's training, academic and innovation strategy as an equal partner of the other faculties.

Providing a professional practice basis for the student conductors' practical training is an organic part of our Faculty's training programme. Unique both in Hungary and internationally, this practice basis presents the whole spectrum of cerebral palsy in terms of age groups and symptoms on the same site, making the implementation of measurements and empirical research regarding conductor training and conductive education and for the advancement of conductive education possible. Quality management, sustainability, support and advancement of conductive education is guaranteed by the continuous improvement of the standard of conductor training, the development and updating of professional protocols of conductive education and the obligatory testing introduced by the Faculty. The scientific, innovation and development concept assigned to the activities of the András Pető Faculty of Semmelweis University will become expedient if it leads to the achievement of strategic concepts assigned to the Faculty's mission.

The laying of the foundations of conductor training itself and the development of the training programme have been realised gradually since the launch of the training; meanwhile the demand has risen for providing a scientific basis for conductive education, changing attitudes and implementing the training and education activity from practical training to an academic, university environment at a high standard. It is our basic. It is our essential task to make the András Pető Faculty an organisational unit of our also internationally high-ranking University which presents equally high values and performances in every respect.

Our priority aims include supporting the visibility and the professional recognition of conductive education system, amplifying the scientific establishment of conductive education and conductor training, verifying and propagating the effectiveness of our activities in a wide range of scientific and professional forums.

Our essential tasks include the scientific underpinning of conductive education through empirical research as well as accomplishing situation analyses making the exploration of the professional, academic and social environment surrounding conductive education and conductor training possible. Further priorities are talent support among researchers, promotion of new research projects and research cooperation between faculties, support of scientific and research activities of students of our Faculty, improvement of the scientific standard of their research and support of new generations of scientists.

The research portfolio offers an overview of research workshops, fields of research, main topics and aims pursued at the András Pető Faculty of Semmelweis University.

Research topics:

1. Historical studies, with special regard to András Pető's life, the philosophical, ideological and education historical aspects of the foundation of conductive pedagogy, Mária Hári's work, the theoretical grounds of conductive education, the history of the institutional system and conductor training. The research activity includes continuation of the processing of the Pető legacy and the digitalising, specifically studying and analysing Pető's manuscripts, task series and other archival and photo documents and continuous improvement of the KONDPEDITA database.
2. Theoretical and practical methods to measure the efficiency, effectiveness and the efficiency level of conductive education processes. Methods of measuring efficiency using standardised measurement tools (ICF, GMFM, YE, rhythm and intention). Study of standardised and adapted measurements. Development of internal standardised measurement tools. Examination of changes in and formation of demands and expectations towards conductive education and conductor training, study of the development of challenges and expectations formulated by parents, mainstream institutions, supporters, education policy and related professions. Tendencies in the breakdown of the population participating in conductive education according to diagnoses and associated symptoms. Surgical procedures, special aids etc. Consideration of age-specific changes, outcome studies of screening and conductive education at early age, independent research in the area of child and adult rehabilitation, research organised in cooperation with other institutions and services of the University. Research into the development of the changing framework and environment surrounding CP. Result-oriented tests of life quality, with special regard to adapted CPQL tests; studies of life years lived at acceptable standards and without

invalidity, cost effectiveness studies, research into adapted life quality supporting programmes and improvement of tools. Analysis of neuroanatomical changes in respect of impairments of central nervous system origin as a result of conductive education, using imaging diagnostic procedures.

3. Testing of preventive and preparatory programmes supporting integration and mental hygiene. Programmes preparing for integration, sensitisation, impact assessments of the realisation of the education of professionals in mainstream institutions. Research measuring the long-term effects of conductive education (economic, social effectiveness, labour market, integration opportunities). Measuring the efficiency and the effectiveness of conductive education. Research into the effectiveness of education and development using objective measures applied by other disciplines. Studies of the socialisation and the social skills of children with motor disabilities, complex analysis of their psychosocial and familial background, analysis of life paths.
4. Research into the connection between conductive education and art therapy, art education. Musical education, fine art and applied art activities in conductive education. Impact assessment of musical tools and programmes providing musical education applied for children and youths with motor disabilities.
5. Studies on the connections between conductive education and health research, sport and life quality support programmes. Process analysis of conductive pedagogical interventions. Analysis of therapeutic and alternative development procedures.

Tendencies of orthopaedic procedures and surgeries, monitoring of special aid developments, study of new innovations. Analysis of sport movements, detection and measurement of adaptive sport opportunities, preventive and intervention programmes supporting life quality, preparation and assessment of new innovations. Epidemiological analysis of diseases that are relevant from conductive education's point of view, planning of experimental epidemiological studies, health economic analysis and quality management of evidence based conductive pedagogical processes.

6. Tests supporting the communication and language education of children, youths and young adults, research into the development of alternative communication procedures and solutions.

7. Research into the teacher profession and the education of teachers. Studies into the factors affecting the career orientation, the choice of career of conductive education professionals and student conductors, the development of conductors' image of their career as a conductor and of their career identity. Research of attitudes and beliefs. Factors influencing the efficiency and effectiveness of conductor competences and cross-border activities. Phases of the development of conductor training, legal, social and other factors determining the particular phases. Studies into training development, tendencies of social and economic expectations affecting the training of conductors employed in helping professions, the cross-border nature of conductor training, challenges imposed on the training.

Research workshops

Research workshop of standardised tests

Members participate in measurement tasks, testing of new measures, analysis, evaluation and publication of findings. The workshop maintains close connections with conductors in the practice, informing them of assessment and research outcomes and supporting the utilisation of findings in the practice. The workshop aims to assess the success of standardised measurement tools applied in the practice bases of the Faculty and to find and test new measurement tools. For the time being appropriate measurement tools and scales have been found for testing gross motor movements, hand and arm movements, basic learning skills and subjective life quality, these are used regularly in the practice area. Finding and testing measurement tools for assessing social skills which can be applied in children and adults with CP is in process. An important aim is follow-up of the development of children and adults with CP, the development of various skills and typical or atypical development patterns.

Workshop for historical studies

The workshop's aim is to explore, understand and reinterpret the history of conductive education. Integrating new aspects and new sources members wish to nuance and enhance knowledge concerning the roots of the method. Historical knowledge transfer should take place by linking the past with the future and preserving the legacy. The personal recollections of conductor generations and the documents of old times keep professional knowledge, from assessing and understanding these we can gain additional data. Learning more about the past helps interpret and analyse current processes and plan future actions as well as acquire research methodology. Members of the workshop

created the digital archive Kondpedita, digitalising and arranging historic sources, building a database is a priority, students involved in the workshop can gather experience with this work.

Art research workshop

The workshop comprises the areas of music, visual art and handicraft education.

The music research workshop aims to find alternative possibilities of musical pedagogy that may be applied for realising the musical education and development of children with central nervous system disorders (primarily with multiple disabilities). New musical instruments and tools, non-traditional solutions assisting musical reading and writing are applied primarily in pre-school groups of 3-6-year-old children. Adopting the Kodály concept and keeping its basic elements but emphasising the therapeutic character of music, the workshop seeks for authentic solutions for groups taking care of children with severe disabilities.

In the visual art and handicraft research workshop special opportunities of applying creative activities with children with disabilities of central nervous system origin are examined. Determinant topics are the additional effect of creative art work and handicraft sessions to conductive development and their role in the lives and career orientation of students with disabilities of central nervous system origin, using new materials and procedures in everyday practice, the place of photographic art in school instruction. Differences in the development of drawing skills in students with motor disabilities as compared to the typical development. A database of drawings by children with CP is created and the characteristics explored.

Workshop for research regarding the teacher profession and teacher training

Through research related to the teacher profession the workshop aims to identify career orientation and career choice, support taking up a career as a pedagogue and the development of self image and professional image, interpret teacher identity, underpin impact assessments. In the scope of studies related to beliefs and attitudes the questions concerning conductors' choice of career and career orientation, the interpretation of conductors' role and activity as well as conductors' competences and sphere of authority are treated. Within the topic of training research changes in teacher training and in the narrower sense helping professions, specifically conductor training (regulations, review of contents of the training, accreditation processes etc.) are monitored, formal and substantial characteristics of the particular training programmes are compared including the development of training output and changes in professional competences.

Workshop of studies promoting social integration and employment

Topics of research include the promotion of successful social integration (sensitisation programmes, impact assessments), exploring the possibilities of integration concerning education, society and the labour market, supporting social integration: family support, mental hygiene programmes, life path analyses, mentoring programmes. More specifically: sensitisation in the pedagogical practice, assessment of the cooperation between conductive education and the families, individuals with reduced capacity to work in the world of labour.

Workshop supporting education in the mother tongue and communication

Topics include speech expression and comprehension, basics of learning reading, text interpretation and orthography, neurological-physiological conditions of handwriting,

cognitive, affective and social conditions of creating written text. The workshop aims to explore international and Hungarian technical literature and to lay the grounds for evidence based practice. In this framework case analyses as communication genre are prepared, interventions applied in the practice are systematically recorded for analysis and discussion, emphasising accuracy, reproducibility and comparability, studies on interventions regarding language skills are reviewed and examined.

Workshop supporting health research, sport and life quality

The workshop aims to explore studies into the shaping of a healthy lifestyle, the analysis of the components of health and the effects of sport on life quality. Topics include the opportunities and effects of active leisure programmes in able bodied and motor disabled individuals, the role of peer helpers in the shaping of a healthy lifestyle and e-sport.