

ANNEXURE 19
Ramakrishna Mission Vivekananda University
Belur Math, Howrah

UNESCO Chair in Inclusive Adapted Physical Education and Yoga (1004)
A report on the activities of the Chair 2013-2016

1. Concept and establishment of the Chair

The Off-Campus centre of the University at Coimbatore is involved academic development and rehabilitation activities for the disabled persons since 2005. To enhance the existing service towards disabled persons support from the UNESCO was sought.

UNESCO Chair in the area of 'Inclusive Adapted Physical Education and Yoga' (1004), was established in December 2012 at Ramakrishna Mission Vivekananda University for activities in the field of inclusive adapted physical education and yoga. This Chair is first of its kind in the field of 'Inclusive Education' in Asia. Establishment of the chair during the 150th Birth Anniversary of Swami Vivekananda is a significant step towards realization of his vision of education for life-building, man-making and character building by combining best elements of the East and the West.

The UNESCO Chair was officially inaugurated on 26th December, 2013. The occasion was graced by the following renowned personalities from Ramakrishna Mission and eminent scholars like Rev. Swami Suhitanandaji Maharaj, General Secretary, Ramakrishna Math and Mission, and Chancellor, Ramakrishna Mission Vivekananda University; Rev. Swami Atmapriyananda, Vice Chancellor, Ramakrishna Mission Vivekananda University; Rev. Swami Abhiramananda, Secretary, Ramakrishna Mission Vidyalaya, Coimbatore; Dr. Kaushik Basu, Senior Vice President and Chief Economist, World Bank and Prof. of Economics and C Marks Prof., Cornell University; Dr. Bikash Sanyal, Former Special Advisor to Director General of UNESCO.



UNESCO Chair inauguration programme

The concept of 'Inclusive adapted physical education and Yoga' is a holistic approach that would attempt to serve people with various impairments from early age to the elderly. It is to be remembered that holistic development does not end in promotion of physical activity.

Objectives of the Chair

The chair was established to accomplish several objectives as given below:

- to carry out research in the field of Inclusive Physical Education in collaboration with partners, and disseminate research results widely;
- to design an orientation programme in inclusive adapted physical education, and provide training to staff working in schools and colleges;
- to organize seminars and conferences to facilitate networking and the sharing of knowledge and good practices; and,
- to Strengthen links and cooperation with local and international institutions active in the field of inclusive adapted physical education, to achieve the above objectives.

Inclusive Adapted Physical Education and Yoga

'Education is the manifestation of the perfection already in man' - Swami Vivekananda

Inclusive education is a concept that recognizes a child's right to participate in all types of school activities equally with the students without impairments. Inclusive education is of two sub-types: regular inclusion (or partial inclusion) and full inclusion. The types exist because of a variety of possible impairments that may hinder equal participation in many ways. Physical education is a component of

education that helps in building a healthy body and mind through participation in physical activity, yoga and sports activity.

Adapted physical education imparts the skills necessary for rich experiences in leisure, recreation, and sporting to persons with unique needs and is aimed to enhance physical fitness and wellness. In combination to other physical activities, Yoga can bring holistic development and removal of misery among the disabled persons. Adapted physical education includes individuals from infants to elderly. Generally, impairments present in an individual disabled person are unique. The nature of the unique need may vary widely and thus the degree of alteration desired in physical education programme is also vast. Similarly the set of yogic practice suitable for healthy individual may not be good for disabled persons. Adapted physical activity programs, yoga programmes or adapted sports include similar characteristics of the original sport but modified to suit the absence of capabilities due to impairment.

Some examples of adapted physical education are the following.

1. Basketball converted to Wheelchair basketball
2. Running replaced by wheelchair racing
3. Cricket rules modified to include sound producing large size balls.

Yoga is a distinctly different kind of activity. It is one of the six orthodox systems of Indian philosophy. The great saint Patanjali has specified different stages of yogic practices as: Yama, Niyama, Asana, Prānāyāma, Pratyāhāra, Dhāraṇa, Dhyāna, Samādhi. First four of these are the beginner's level through which human body is prepared for higher levels of yoga. It is known that only a sound body can hold a mind that can perform at a higher level and accept spiritual thoughts. Yoga has been applied for various purposes to alleviate the sufferings of the common man and promote all-round wellness. Application of yoga to promote wellness and improve the conditions of people with disability is a unique proposition and needs to be explored in a scientific manner.

2. Activities of the UNESCO Chair till April 2016.

(a) Education /Training courses

Belur Campus:

A course "PG Diploma in Yoga" was started for the academic session 2015-2017. This is two year course aimed at preparing persons for imparting Yoga classes for health and wellbeing.

An outreach programme of Yoga for Health and Wellbeing was also initiated. In this programme persons of different age group participate in yoga classes for physical and mental health and wellbeing.

Coimbatore campus:

The Chair encompasses two Faculties and one Department of the University under the School of Rehabilitation Science and Physical Education: a) General and Adapted Physical Education and Yoga; b) Faculty of Disability Management & Special Education (both are at Coimbatore Campus); and c) Department of Sports Science (at Belur Campus).

The following courses are being conducted by the Faculty of General and Adapted Physical Education and Yoga (FGAPEY), on regular basis.

Ph.D. in Physical Education and Yoga

Master of Philosophy Master of Physical Education

Bachelor of Physical Education

Bachelor of Science in Physical Education

Diploma in Physical Education

In addition, a short term (Six weeks) course is also being organized on Special Olympics (SO) in collaboration with Special Olympics Bharat, India. This course is being offered by the RKMVU- GAPEY every summer since 2007. The entire program is sponsored by Special Olympics Bharat and Special Olympics Asia Pacific. There is a tripod agreement between RKMVU-GAPEY, Special Olympics Bharat and Special Olympics Asia Pacific to this effect. Special Olympics Bharat deputed 30 trainees a year from different parts of India to undergo this course.

Faculty of Disability Management and Special Education (FDMSE) conduct the following courses:

Ph.D in Special Education (VI/HI/MR)

M.Phil in Special Education (VI/HI/MR)

Courses Recognized by Rehabilitation Council of India (RCI)

M.Ed in Special Education (VI/HI/MR)

B.ED in Special Education (VI/HI/MR)

D.ED in Special Education (VI/HI/MR)

DSLII - Diploma in Sign Language Interpretation

Diploma in Theatre Arts for Holistic Development

(VI-Visual Impairment, HI-Hearing Impairment, MR-Mental Retardation)

Training (short term)

1. A capacity building workshop was held during 28th-29th November, 2014 for the internal faculty members of GAPEY and FDMSE. Several new research ideas were identified and discussed. This programme was conducted by Dr. Asis Goswami.

(b) Research

Dr. Asis Goswami has started guiding research students in the field of Adapted Physical Activity. One student has joined under him and had enrolled in the Ph.D. programme in the session 2014-15. This student is working on the mobility and physical activity needs of visually impaired persons. Title of the project is "On Mobility Pattern of Visually Impaired in Sporting Activities".

Various research projects were prepared and submitted to different departments of Government of India. However, grant for these projects are awaited.

a) "Investigation on indoor and outdoor mobility pattern of visually impaired persons and development of mobility support system" - Principal Investigator Dr. Asis Goswami,

Chairholder and Co-Principal Investigator Dr. S. Ghosh, Dept. of Physics, St. Xavier's College, Kolkata.

b) "Climate Change: Development of model of human susceptibility to extreme hot environment in the context of Eastern India" - Principal investigator - Dr. P.K. Nag, Prof. RKMVU and Co-Principal Investigators - Dr. Asis Goswami, Chairholder and Dr. S. Chakraborti, Asst. Prof. RKMVU.

c) "Executive Functions in preschool-aged Indian children" a post doctoral fellowship project - Principle investigator Dr. M. Ramprasad, and Co- Principle Investigator is Dr. Srinivasan.

d) "Climate Change: Population heat exposure risk profile" - Principal investigator - Dr. P.K. Nag, Prof. RKMVU and Co-Principal Investigators - Dr. Asis Goswami, Chairholder.

e) A proposal was submitted to University Grants Commission for funding under the scheme "Centre of Excellence for Development of Sports (CEDS)".

f) Application for financial support was submitted to University Grants Commission under the scheme "Development of Sports Infrastructure and Equipment". This proposal was approved. Sports Science laboratory will be developed. Fund for this scheme was granted by UGC. Construction of the building and playground under this scheme is in progress. Some of the equipment for sports and sports science has already been purchased.

g) "Investigation on veering and spatial orientation issues in sighted and visually impaired persons" - submitted to DST, GOI. Investigator(s)- Dr. Asis Goswami, Dr. Abhijit Bandyopadhyay, and Ashik Iqbal.

(c) Lectures delivered by Dr Asis Goswami, the UNESCO Chairholder:

1) Delivered an invited lecture at HWWE 2013 “Using heart rate as a measure of work load / work stress - merits and demerits in view of the present day knowledge” held at Vidyasagar University, Midnapore during December ,2013.

2) Delivered two lectures at one Day conference on “Injury Free Sportsmen” organized by Rotary Club Ahmedabad Metro at Ahmedabad on 1st February, 2014.

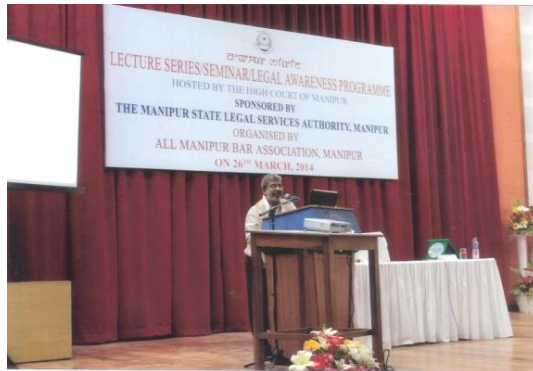
Titles of the lectures were

“How much fluid and what diet? When and When not!”
and “WADA rules and its impact on Sportsmen’s life”.

3) Two lectures were delivered by Dr. Asis Goswami during the conference on "Challenges and Rehabilitation Practices for the Differently Abled" held at Off Campus Faculty Centre, Coimbatore. Title of lectures:

- “Origin of research ethics and present ethical guideline”
- “Principles of best practice in research publication”

4) A Lecture on “Disability and Rehabilitation - Social and Legal Issues (Role of Educational Institutions)” was delivered on 26th March, 2014 in the seminar in the occasion of 1st Anniversary Celebration of High Court of Manipur at Imphal.



5) Attended Academic Committee meeting at AJJNIIHH, Mumbai on 12.09.2014 meeting to evaluate research proposals submitted for funding.

6) Participated in “11th Meeting of Programme Advisory & Monitoring Committee (PAMC - TIDE)” at organized by KSCST, Bangalore on 26-27 Nov.2014.

7) Delivered a lecture on “ICT, Adapted Physical Activity and Ergonomics - design perspective” in HWWE 2014 conference at IIT Guwahati. Dec.1-5, 2014. He had also chaired a session.

8) Attended workshop on "Kinanthropometry, Strength, Conditioning, Nutrition and Rehabilitation" held during 9-10 February, 2015 at Department of Sports Science, Punjabi University, Patiala and delivered a lecture on 'Rehabilitation'.

(e) Key conferences and workshops hosted by the Chair

1) "Challenges and Rehabilitation Practices for the Differently Abled" held at Off Campus Faculty Centre, Coimbatore, Tamil Nadu, during 04.02.2014 to 06.02.2014. National conference on "Challenges and Rehabilitation Practices for Persons with Disabilities" was organized on 4-6 February 2014 at FDMSE, Coimbatore. This conference was considered as Continuing Rehabilitation Education Programme (CRE) by RCI.



Chief Disability Commissioner,
Govt. of India, addressing the audience.



Mr. D.R. Voerman, Netherlands,
demonstrating Adapted Basketball to
the participants²⁾

The Ramakrishna Mission Vivekananda University was Organizing Partner for Special Olympics International Seminar on "Training for Sports Performance" held in Chennai during 24th to 27th August 2014. Seminar was a joint effort of the Special Olympics International and Sports Development Authority of Tamil Nadu.

The three day Seminar deliberations covered the following topics.

1. Pool and Open Water Swimming
2. Volley Ball and Beach Volley Ball
3. Cricket

Experts from the Special Olympic International team conducted the seminar. Dr. A. Goswami had delivered key note address in this seminar.

(f) Interuniversity Exchanges/Partnerships

(principal exchanges/partnerships between the Chair and other institutions including UNESCO Chairs/UNITWIN Networks)

1. At present participating in a National Mission on Education through Information and Communication Technology (MNE ICT) project "e-PG Pathshala" to develop e-content in the field of "Physical Education, Sports and Health Education". The content is being developed for Post-Graduate level of Physical Education. These contents will be uploaded in INFLIBNET website. Total 36 modules were attempted for production till date; Exercise Physiology - 8; Officiating and coaching - 13; Athlete care and rehabilitation - 15. Four lecture modules are already uploaded.

2. Dr. Goswami is now an External Expert for Development of the Draft State Sports Policy of the Government of Meghalaya being prepared by Indian Institute of Management, Shillong, Meghalaya. He has already attended several meeting with the Core group members at Shillong and also in Kolkata.

(e) Cooperation with UNESCO Headquarters, Field Offices

Attended the UNESCO organized international conference "Form Exclusion to Empowerment: The Role of ICTs for Persons with Disabilities" at New Delhi on November 24th 2014 and Delivered lecture on "Adapted Physical Activity programme for the disabled -the role of ICT".

(f) Ongoing activities of the Chair:

Academic:

Regular academic courses as mentioned earlier (item no. (a)) are continuing. In addition a course "PG Diploma in Yoga" was started for the academic session 2015-2017. This is two year course aimed at preparing persons for imparting Yoga classes for health and wellbeing. An outreach programme Yoga for Health and Wellbeing has also been launched.



A Yoga practice session of the PG Diploma students with Swami.Hariharananda.

Research:

A number of equipment for the purpose of research are being purchased utilizing the fund received from UGC. Equipment like 'Body composition analyzer', 'Heart rate monitor with HRV facility' and precision weighing scale are already installed. New research projects are planned on Effect of Yoga practices are being prepared and are expected to begin in near future.

Significant amount of data were collected in the research project "On Mobility Pattern of Visually Impaired in Sporting Activities". first stage of experiments involving control volunteers has been completed. In this stage the degree of veering of healthy individuals, while walking with vision and in blindfolded state, were recorded. Veering data on blind volunteers is in progress. Some pictures of the data collection are given below:



Starting position
Blind person walking in the measurement area



End position



Side view of the blind person walking

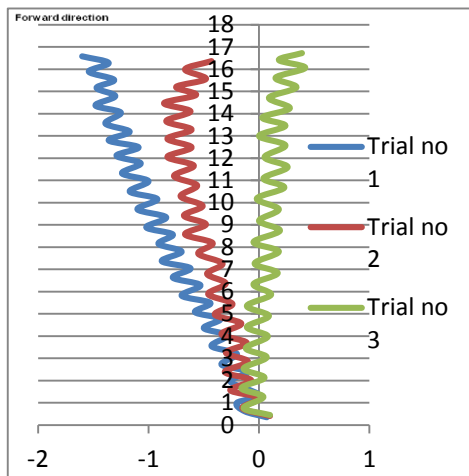


Starting position



End position

Healthy person walking in the measurement area.



Foot placement pattern in a healthy person during walking in the measurement area

g) Future Plans and Development Prospects

The following activities have been planned to be carried out in future.

1. Starting of Sports Science and Yoga Course

From the session 2016-17 the University has decided to conduct one year full time PG Diploma in Yoga course. Also a new course, Certificate course in Yoga (1 year), will be introduced. The duration of support of the Outreach Programme of Yoga for Health and Wellbeing will be increased.

2. Establishment of Sports Science and Yoga research laboratory:

Fresh impetus will be placed on establishing advanced research laboratory for Yoga and Sports Sciences. Purchase of equipment is in progress. This will require fund for research fellowship and technical manpower. A proposal for funding has been prepared for submission to suitable Govt. organization.

3. Participation in MOOCs project:

Dr. Goswami has been invited to attend an workshop for repurposing of the e-content developed for e-PG Pathshala project into MOOCs format. The workshop is scheduled on 24th May, 2016. It is expected that two courses would be delivered by the university: Exercise physiology and Officiating and Coaching in Football.

4. Sensory Park: Deficit in one or more human senses like sight, hearing, touch, smell and taste are affected by disability. Sometimes movement

and communication ability is also affected. Multisensory teaching techniques enable the children to use all their senses (vision, hearing, touch, smell and taste) in learning. Sensory Park can influence improvement in skills like fine & gross motor functions, communication ability, sensory awareness, creativity and responsibility among children with disabilities. To assist children with disabilities FDMSE has decided to set up a sensory park with play areas, pond, tactile floor, sand pit, sound instruments, including drums and bells, mini bridge, variety of plants with smells, taste and textures.

A plan for this project is ready. Possible funding sources are being identified.

5. **Assistive Technology Cell:** Assistive technology enables the persons with disabilities to accomplish the different tasks independently. Accessible assistive technology improves functional capabilities of individual with disabilities. FDMSE would set up well equipped assistive technology cell that would work on development of screen reading hardware and software, speech recognition, hearing aids, cognitive assistance devices, mobility aids, pencil grips, light weight high performance wheelchair for sports, automatic door openers, alternative and augmentative communication.
6. **Play Area for Disabled Children:** Co-curricular activities enhance physical and mental growth of children with disabilities. Irrespective of their disabilities all children have right to participate to physical activity. Physical activity improves muscle strength, co ordination, and balance in motor skills, body awareness, cardiovascular efficiency, self-confidence, attention span and academic achievement. To promote physical, mental and social benefits, FDMSE has embarked on setting up of play grounds like adapted volley ball, cricket, hockey, base ball, Bocce, basket ball and table tennis for children with disabilities.

Multipurpose Playing field facility is planned to be developed at the Belur Campus also.