



# UNIVERSITAT DE BARCELONA

## *MIELES.*

### *Modernizing and Enhancing Indian eLearning Educational Strategies*

#### **Background**

Education in the 21st century is generally targeted towards enabling people to participate in knowledge-based economies. The significance of higher education in particular is highlighted in the 10 year European Union growth and competitiveness strategy (EU-2020). In order to achieve knowledge-based economies, providing students with digital skills and facilitating education through technology is seen as a top priority (EU Digital Agenda). According to the 2013 EU Communication on 'Opening up Education' and the 2014 report "Modernisation of Higher Education", higher education institutions (HEI) need to invest heavily in modernizing their teaching and learning practices, with the strong support of technology and elearning. This has indeed been happening on the ground, as the 2015 'TRENDS in European Higher Education' report of the European University Association (EUA) attests: more than two thirds of European universities have e-learning and ICT strategies in place and a large majority of the others are in the process of developing them. Beyond Europe, it is estimated that the worldwide demand for higher education is expected to grow exponentially from 100 million students currently to 250+ million by 2025. This growth will be particularly driven by Asian emerging economies like China and India. In this sense, the EU has also underlined the critical need to support higher education development cooperation, one prominent feature of the strategy 'EU Higher Education in the World'. ICT and e-learning are priorities for global cooperation under this strategy, and deemed a means to provide greater access to higher education. India has one of the largest education systems in the world with over 600 Universities, 35,500 colleges, and 4 million schools. The projected compound annual growth rate of the academic sector is about 17.4% from 2013 to 2018. In 2014, the education market revolved around \$92.28 billion, while in 2012 the public spending accounted up to 11.3% (3.4% of the GDP). In spite of a rather high investment rate, Indian education system suffers from various inadequacies such as poor infrastructure, high drop-out rate, imbalanced student teacher ratio (27:1) and poor gross enrolment ratio (15% in higher education) etc. More than 50 percent of India's population is less than 25 years of age, yet the country faces huge shortage of skilled workers across many sectors primarily because of the shortcomings of the higher education system. Only one out of four university graduates is considered skilled enough to be employed in the formal sector. It is predicted that India will face a shortage of 250 million skilled workers across different sectors. One of the key identified reasons behind this issue is the lack of appropriate educational infrastructure and access. Information technologies can transform the higher education landscape and redefining the way HEI operate and engage with the student community. E-learning - learning enhanced through technology - offers solutions not only to the problem of access, but also can be a means to

internationalise the curricula, and open up educational content. Realising the opportunities in India, many e-learning organisations (domestic and international) have been offering their services in India. India's online education market size is set to grow to \$40 billion by 2017 from the current \$20 billion. Given the size of the sector and the population of the country, there is a need to enable HEI to exploit e-learning partnerships and opportunities. The Indian government's Digital India initiative, aimed at enhancing the digital infrastructure of the country, is one important step forward. The objectives of the Digital India campaign include the provisions of broad band internet access to quarter of a million of villages by 2019 and Wi-Fi connections to schools. The high speed network planned under the Digital India infrastructure plan can provide the adequate infrastructure for online education platforms like Massive Open Online Courses. The Indian government has also allotted INR 1 billion for building virtual class rooms and online courses.

In order to capitalise on this investment, Indian HEIs need to develop strategies for e-learning and ICT in general. This can help them to take advantage of internet penetration, modernise the current educational infrastructure and multiply access in urban and rural India. Focus on educational quality in e-learning is essential, which is another reason that e-learning institutional strategies are pertinent. It is for these reasons that one of the main objectives of MIELES will be to support a network of Indian HEI to develop and implement institutional strategies for e-learning. This is also a novel component of the project: many development cooperation interventions are related directly to ICT infrastructure (Digital India, for example) or to the provision of online course content. Few projects have addressed the need to support HEI to utilise ICT infrastructure and online course content, and to enable leadership and staff to do so, in a cross-institutional way (one of the purpose of the strategies). Working on this issue in an international consortium of partners, in the context of Erasmus+, will help in shaping quality standards for Indian online course content and e-learning approaches, innovate teaching and learning practices/pedagogy via e-learning and build capacity of teachers across partner institutions to use e-learning and ICT tools. MIELES is thus designed to provide a collaborative platform to address a relevant issue for the development, reform and modernization of the higher education system in India and to reinforce Indian-EU higher education collaboration.

### **Consortium**

Consortium members were selected following a multi-pronged strategy: on one hand, MIELES involves Indian partners that do not necessary have a long standing experience in EU cooperation and that are not in favoured economic areas of the country (UOM in Mysore, MEAC, KUWC in Kerala). The consortium includes AMRITA, a very dynamic university with links and some experience in EU funded proeject that counts with different campuses spread across the South of India. For these institutions, e-learning tools are a clear opportunity to better serve the community by offering access to academic programmes to a broader number of citizens who would not have the same possibility otherwise. This implies in itself a challenge, but also demonstrates the commitment of MIELES to contribute to the development of the Indian Higher Education Sector more equitably, and to involve more remote regions in international cooperation. On the other hand, the MIELES consortium consists of two of the most prestigious HEI in the country - IIT Madras

and IISc Bangalore. Both of them have experience in managing EU research cooperation projects and both also have well-established web and e-tools for teaching and research purposes. Both also have a few e-learning programmes that they would like to improve and upscale. By selecting these partners, the consortium aimed to establish a clear network for transfer of knowledge inside India, between Indian HEIs, as well as to reinforce partnerships with Europe. In addition, EDULINK, is an institution that promotes VET in India, and will add to the project an experience that would be very useful for universities and colleges located in Kerala, that have a VET focus. On the European side, the MIELES partnership combines different types of universities and research institutes with different experience in developing e-learning strategies, strong cooperation links among each other and, most importantly, a long standing experience in managing Tempus, Erasmus, H2020 and E+ projects. This includes technical universities such as TUB and KTH. Both of them have vast e-infrastructure, effective e-learning strategies, and a long standing cooperation tradition in developing joint courses in Europe. Both institutions have been working together with the UB in the preparation of a new joint master programmes on Smart Cities in cooperation with Indian institutions, for example. Sapienza and the University of Peloponnese are comprehensive universities that have been implementing e-learning strategies during the past years and both share with the UB a long standing tradition of cooperation agreements in the frame of the Erasmus Programme. CARDET is a well-known research center on e-learning with experts in the field that contribute to European debates regarding e-learning institutional strategies. In particular, CARDET's experts have participated in several of UB's activities organised in the framework of the 'Higher Education Reform Experts' (HERE) Initiative, regarding the development of E-Learning strategies in the former Tempus countries, particularly in Jordan, Kazakhstan and Georgia. Lastly, ENQA will provide the project with the state of the art on QA in e-learning, in the European and international policy contexts. ENQA has been involved in projects regarding QA standards in e-learning internationally and within Europe, with the QA agencies it represents. ENQA also collaborates extensively with UB on development cooperation projects. The consortium thus includes partners with significant and relevant expertise, geographical and regional diversity, and a record of successful collaboration.

## **Objectives**

The General Objective of MIELES is to modernise and enhance access to the Indian Higher Education system by supporting the development of diverse institutional e-Learning strategies. The specific objectives are to:

- S01. - To support Indian Institutional management to assess their interests and needs with regards to e-learning
- S02. - To build the capacity of Indian institutions to develop a clear, realistic, and tailored strategic approaches to e-learning
- S03. - To enhance the capacity of Indian institutions to implement their institutional e-learning strategies, both through staff training and collaborative pilot projects
- S04. - To enable transfer of knowledge within India regarding e-learning strategy and capacity

•S05. To enhance Indian-European collaboration in e-learning

It is believed that this approach will be a concrete and innovative way of addressing the most pressing needs in the development of the Indian Higher Education sector at present, namely expanding access to higher education, and more specifically, exploiting the potential of the Indian Governments' (and private sectors') investments in digital infrastructure, internet access, and online courses. The project departs from the premise that all Indian HEI need support to upscale their e-learning offer. A short needs assessment survey conducted with the Indian partners prior to submitting this proposal suggested as such. This has to do not just with ICT infrastructure, but also with the training of staff to use e-tools. This is a particular need in more remote regions, such as Kerala, Karnataka, and Tamil-Nandu, where the HEIs have hardly any present activity regarding e-learning, yet are trying to expand access dramatically to the local population. The focus on training university management, and supporting universities to develop strategies, is a concrete way to ensure that Indian HEI understand the potential of e-learning and identify clear ways to invest in it and utilise it, across the institution, in all subject areas. E-learning strategies may be different for each institution, depending on their context, which is another reason why this project is important. In addition, through the pilots and staff training phases, the project also encourage institutions to address quality assurance in e-learning, a transversal element of university strategies and a general concern of governments and employers. Finally, the project encourages the sustainable implementation of e-learning strategies beyond the project lifetime, in that it supports the Indian partners to disseminate results both internally in their institutions, at the local level, via multiplier events, and in the EU, where other inter-institutional cooperations and spin offs may develop.