Training the e-teachers; A Case Study of Introducing Tailor-Made e-Learning for Vocational Education in Costa Rica

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In 2006 Radio Netherlands Training Centre (RNTC) and the Instituto Nacional de Aprendizaje (INA – National Training Institute) signed a partnership agreement on the introduction of e-Learning. The new partnership was, in fact, a continuation of an already rich and fruitful collaboration between the two organizations, which was focused upon the use of the 'traditional' media (especially radio) to provide access to vocational learning opportunities in Costa Rica.

INSTITUTO NACIONAL DE APRENDIZAJE

INA is the result of an alliance between the Costa Rican government and the local business community. INA's mission is to make a contribution to the economic and social development of the country and to improve the life and work conditions of the Costa Rican people. It tries to do so through providing vocational training to the men and women working, or planning to work, in all the productive sectors of the economy. Entirely funded by taxes paid by local business community, INA offers vocational training in such diverse subjects such as tourism, financial administration, forestry, aquaculture, computer science, occupational health, management, mechanics, industrial cheese production, textile production, English and many more.

Since its establishment in 1965 and especially after the reforms of 1983, INA has opened its doors to everybody looking for vocational training. The close ties between INA and the local business community ensure that the training programmes are tailor-made to the needs of the industry and regularly updated. An intricate web of internships and other combinations of studying and working only adds to the future 'employability' of and career opportunities for INA's graduates. So, it is no surprise that INA is very popular.

INA opens its door to thousands of new students every year. There are currently around 80.000 students. The student population is rather diverse: secondary education graduates, professionals, farmers, fishers, workers, the currently unemployed, women to re-enter the work force, older people looking for 'second chance' education, etc. INA students come from all walks of life (although the majority has a working class background) and all parts of the country. This last point, however, has presented INA with a major problem since its inception.

GETTING THE TRAINING TO THE PEOPLE

INA is based in San Jose, the capital of Costa Rica. San Jose lies in the Central Valley, where roughly half the Costa Rican population lives. The Central Valley is surrounded by high mountains and travel to the other regions of the country is arduous, to say the least. Although a small country, Costa Rica has an amazing geographical diversity. It is bordered by two different oceans. The country is cut in two by high mountain ranges. The North east is mangrove country, home to the fishing communities. The South East, on the other hand is flat and inhabited, on the shores of the Atlantic Ocean, by the descendants of the former slaves, and in the river valleys land inwards by the original indigenous people. The North is flat, cattle country and the main entrance for (illegal) Nicaraguan immigrants. The South West, lastly, consists mainly of white beaches and impenetrable rainforests. Given the poor infrastructure in the country (even in the Central Valley itself), it is next to impossible to commute regularly to San Jose.

All the regions outside the Central Valley are thinly populated. There are few urban centers. In general, the regions, especially in the Eastern part of the country, are left behind in terms of economic development. In Costa Rica, this coincides with the fact that many vulnerable groups in society are living there: farmers, indigenous people, the descendants of the former slaves, fishers, etc. It is a paradox often found in developing countries: those most in need of educational opportunities do not have access to it. It order to realize it mission, INA has looked for ways to overcome this problem.

One way of addressing this problem, is the use of educational media, especially print and radio, which can be easily distributed. INA turned for help and support to RNTC, an international centre of expertise in the use of media for education and development. RNTC had developed an instructional framework for the use of media, especially radio, in formal and non-formal education, and had, for over 20 years, collaborated with universities, training institutions, International Organizations and civil society organizations, in developing a large body of instructional media materials.

THE COLLABORATION BETWEEN INA AND RNTC

The collaboration between INA and RNTC resulted in the steady production of instructional 'multimedia' materials and courses, mostly aimed at the staff of local radio stations and the written press. Special attention was given to how media could contribute to the political, social and economic development of Costa Rica, for example through promoting issues such as tolerance, equality, human rights, etc. The transfer of the necessary knowledge and skills to produce instructional media to the teachers at INA was included from the beginning.

In 1999, RNTC started to explore the potential of the 'new media', as the networked digital technologies were then called, for educational and developmental purposes. RNTC had learned, from its extensive work with educational media in the preceding decade, that it is very tempting to focus upon the technological possibilities of a medium and to overlook the pedagogical issues. But technology, however sophisticated, is always secondary and supportive to the primary process, i.e. teaching and learning. Armed with this knowledge, RNTC began to develop new theory and practice in this innovative field and shared this with INA.

In 2003, INA and RNTC started to incorporate e-Learning in their joint production efforts. Costa Rica has, statistically, one of the highest Internet access rate in Latin America, but, as usual, these figures only tell half of the story. The Central valley is best served by local landlines. Broadband access is widely available, and wireless connections are booming. However, the liberalization of the telecommunication sector, to which the Costa Rican government has agreed, is fraught with political problems, which leads to the continuation of existing monopolies. As of yet, there is no competition. The general service level is poor. Crucially, there are no (commercial or public) incentives to extend the benefits of high speed Internet to the more remote areas. Again, the periphery is lagging behind. Recently, there have been encouraging signs that the government is developing policies to get high speed Internet access to all regions.

However, INA and RNTC have developed innovative practice, based on the needs and circumstances of the students, by incorporating e-Learning in a broader strategy to get learning opportunities to the disadvantaged students. For example, the partners made the e-Learning courses also available on CD-ROMs and in printed books, offering the students the choice between different mediums. They encouraged groups of learners to meet at regular intervals in Internet cafes and help each other out. Crucially, INA and RNTC made sure that the e-Learning technology used did not ran ahead of the technological possibilities (and literacy!) of the students; they made sure that the e-Learning courses could run on simple computers with Internet access ('design for the lowest denominator'). Again, the technology played a supportive role.

NOT JUST ANY E-LEARNING

Until 2006, RNTC, because of its experience and knowledge, took the lead in designing, developing and implementing e-Learning courses for INA. By then, RNTC had developed its own, tailor-made e-Learning software. It had developed a pedagogical model for e-Learning. It had designed, developed and implemented numerous e-Learning courses for a multitude of students (media professionals, members of civil society organizations, children, etc.) in collaboration with organizations such as UNESCO, UNICEF, Plan International, the Trust of the Americas, etc. Moreover, it has started to share this theory and practice with other educational institutes, in the form of consultancies and Training the e-teacher workshops.

The main focus of this transfer was on instructional issues. In the eyes of RNTC, e-Learning was obsessed with the technology used and had become a playground for 'information technicians'. Moreover, what was dubbed e-Learning was often nothing more than the neurotic distribution of large pieces of texts, books, manual etc. This had led, worldwide, to a tremendous waste of time, energy and effort and to a general dissatisfaction with the results. Technology dictated what was possible, instead of the students determining what was needed. Technicians told teachers how to teach and students how to learn. A massive overload of raw information obscured the real e-Learning.

RNTC tried to redress this situation with focusing squarely upon the educational possibilities of the Internet. E-Learning was about learning, not about the technology used. Pushing large pieces of information down somebody's throat does not equal learning, as anybody involved in education can tell you. Learning is about the learning needs of students, not about the wildest dreams of technicians. And last but not least, e-Learning is the territory of teachers. It is at this level where the rubber hits the road, so to speak. The success or failure of e-Learning is determined at the level of the teachers. The key question is; will they use it or not?

In addition, RNTC had found out that there is not one type of e-Learning that suits all. e-Learning is not the latest, high-tech reincarnation of distance education and critically, it should avoid being seen as such. e-Learning is, in reality, any possible combination between face-to-face and online learning. The specific 'blend' chosen is decided by the needs, circumstances and interests of the students and is therefore different for every educational institute. Last but not least, e-Learning is not about any instruction; it is about *effective* instruction.

THE PROGRAMME

Armed with these findings, INA and RNTC decided that it was time to take the next step. In 2006 they agreed to train the teachers of INA in the design and development and to coach them in the implementation of e-Learning activities. They would start with the department RNTC has been working with for the last 15 years, the Nucleo Comercio y Servicios (Department of Commerce and Services).

The outline of the programme is as follows: every half year, around 15 teachers of a department would be trained. The training consists of a three day face-to-face workshop, in which the principles of e-Learning are introduced and the teachers come up with a vision of e-Learning (a blend of face-to-face and online learning activities) that would suit their and their students needs and circumstances best. The aim of the workshop is to create a positive attitude towards e-Learning, by taking away undue worries and by identifying advantages.

The face-to-face workshop is followed by a six-week online course on designing and developing e-Learning activities. In this way, the INA teachers will gain firsthand experience in learning online. As part of the online course, INA teachers will chose one of their courses for which they will, during the course, design and develop e-Learning activities. By the end of the course, the INA teachers will have developed an e-Learning course, consisting of face-to-face and online learning activities.

The INA teachers will then implement and evaluate their course, coached by RNTC. After successfully completing this cycle, they will introduce their colleagues at their department to e-Learning and encourage them to start developing e-Learning activities for their own courses. They, in turn, will

coach their colleagues, supervised by RNTC. RNTC, in the meantime, will start with a new cycle of training and coaching with around 15 teachers from another department, continuously adjusting the programme according to the lessons learned.

The programme started off in February 2007 with a presentation given by RNTC to a high-level delegation of the government, the local business community and INA. The main focus of the presentation was on using e-Learning to provide access to vocational learning opportunities and on focusing on the individual teachers at INA as the key level of change. The presentation was well received and led to the commitment and support of the key decision makers to the programme. Immediatedly afterwards the first cycle kicked-off with the first face-to-face workshop. Currently, INA and RNTC are preparing for the third cycle of the programme.

THE RESULTS

The programme has produced some interesting results. More and more e-Learning activities are incorporated in the training programmes of INA. Individual teachers work very hard to make e-Learning a reality and to deliver training opportunities at the doorstep of their students. They succeed in convincing their colleagues of the advantages of e-Learning. The students, in the meantime, welcome the new technology to get (flexible) access to learning opportunities. Training courses are now more easily updated. The groundwork for further expansion has been laid. E-Learning has arrived at INA, and is there to stay.

However, institutional structures keep throwing up new barriers to e-Learning at INA. Although the method has proven successful, and is increasingly accepted by the teachers (no mean feat in the case of educational innovation), the organizational structures are ill prepared for the new situation. Notwithstanding the support of higher management, structural adjustments have to be made to accommodate the integration of e-Learning at all levels of the organization. In addition, vested interests have to be broken down in order to make room for new ones. The introduction of the networked digital technologies is not only revolutionizing access to education or teaching practice; it will also turn upside down old, traditional organizational structures.