

This is a peer-reviewed, pre-copyedited manuscript of an article published by Taylor and Francis on June 2015

*Educational Technology for the Global Village: Worldwide Innovation and Best Practices* maps the projects of 12 educators as they attempted to use instructional technology to enhance student and global learning. The purpose of this book is to serve as a framework which other educators can follow, adapt and use in their own global education efforts. It comes as no surprise that developed countries have incredible access to technology while those in parts of Asia, Africa, Latin-America and the Caribbean are not so lucky. These educators attempted to bridge the gap using mainstream technology such as Skype and Facebook and devices such as iPads. What emerges in this book is a set of best practices for the use of educational technology applications to increase the internationalization of education. In the process, the authors outline different types of course-based service learning projects, increased student retention of course materials, and promoted increased civic duty awareness.

In Gabriel Barrenche's case study service learning was tied to higher education course requirements. Students at Tollins College designed, developed, and implemented curriculum which was used by the students to teach English to middle school students in Central Mexico.

Brian Shmaefsky focused on melding use of Facebook and Second Life with Lone Star College's biology and environmental geology student to work with villagers in Batabgas, The Phillipines and partners at the University of the Phillipines to design a program to be used by residents which resulted in conservation of water, use of wastewater and sewage to generate methane fuel and in the process reducing mosquito born diseases.

Patricia Davis-Wiley taught a graduate ESL teaching methods class for University of Tennessee-Knoxville and ESL/EFL teachers in South Korea using Skype, Blackboard, and PBWorks which resulted in a thriving virtual collaborative experience for both groups.

Lina Lee discusses the use of use blogging, tweeting, and podcasting to foster learning among second language learners from the University of Leon in Spain and the University of New Hampshire.

Kathryn Mendez focused on the use of iPads in conjunction with apps such as Evernote, Google Docs, Nearpod, Quizlet, and Screenshot. Mendez noted that many of the apps used would also work with other types of tablets.

In their case study, Bernardo Ramirez, Maysoun Dimachie Masri, and Cherie Lynn Ramirez focused on the impact of technology on health management and policy education. Ultimately, they felt that MOOC's would best meet the needs of the learners and potentially reach the biggest audience.

Eunice Meredith and Peggy Seinbronn examined the use of e-portfolios as communication tools with teacher education students to gather and store information with the ultimate goal of building an individualized portfolio which would showcase each student's work.

Carrie Schulz described the creation and development of a project in Abaco, The Bahamas which was designed to bring educational technology to students with learning disabilities. Their goal was a sustainable program which continue to thrive after the college students who taught the students and teachers returned to the States.

Mariana Amatullo, Dan Gottlieb, and Penny Herscovitch described the creation of a project in which two teams would find solutions resulting in potable water for residents of Funtto San Jose, in Santiago, Chile, and Cerro Verde, in Lima, Peru. Project success was dependent on working directly with residents to develop solutions which would facilitate the transport, storage, and use of clean water.

The case study by J. Scott Hewit and Abigail Bragg New focused on delivering educational technology to the Duha Complex School in a poor rural area of Rwanda. Through a series of projects including creation of a computer lab, training teachers and then students to use software programs to enhance learning, and training teachers to care for the laptops used by the students. The children of the school now have educational opportunities they would most likely never have experienced.

The case study by Denise Cummings describes an experiential learning project with Rollins College students at the Galapagos, Ecuador. The purpose of the project was to teach secondary school students English and computer skills. The language classes focused on conservation and preservation of the Galapagos ecosystem with idea that the children will be the caretakers of the Galapagos in the future. Feedback from the school administrators four years after the project was very positive.

The final case study by LesLloyd involved a project in San Miguel de Allende, Mexico in which Lloyd brought old computers from his college and set up a computer lab to two middle schools. The project evolved into providing English/Spanish instruction. Ten years later, the project proved so successful that it has been replicated in three locations in Ecuador.

The results of these case studies is a list of best practices which are summarized below. During the planning phase of the project

- Find people/companies to donate equipment such as cameras, ipads, tablets, computers, and other technology. Depending on the location, the cost of purchasing these resources as well software licenses could be cost prohibitive for students.
- Allow for hours of pre-start of class preparation, revision, and logistical planning.
- Factor in a backup system, for example Davis-Wiley's Korean students were not able to access Blackboard since they were not UT-Knoxville students, instead the students used PBworks as a work around.
- A variety of technology tools can be used to support global education. Look at various course management systems, tools for web-based sharing, synchronous versus asynchronous discussion, collaborative editing tools, simulations Mooc's. Will they enhance the learning experience? Will they foster communication? Will they foster openness and sharing? Which tool(s) when combined together optimize the learning experience?
- Choose tools which will develop student skills in conjunction with those which demonstrate mastery of a skill or skills.
- Plan for sustainability, is this technology something which can be sustained over time? Ideally it is one which will continue to be used after the educator has left. Language barriers can be a huge stumbling block, plan for them upfront. You may need interpreters and/or for members of the program team to be bilingual. When planning the program find out what kind of involvement the other country's government will have to have.
- If you are travelling to another country factor in the cost of room and board while you are in country.

- Be aware of the different types of training which may need to be given before students can actually use a technology or tool.
- Ensure that problems and solutions can be addressed in what which is measurable and shows impact.
- Evaluate the infrastructure at the project site. Is electricity readily available? Are there alternative power sources to charge and recharge devices?
- How will they be devices/tools stored and secured?
- Collaborate, collaborate, collaborate. Involve local teachers, administrators, parents, and children in the creation and running of the programs. In order to succeed, you need to get buy in by all involved parties.

Once the project is underway, there are several things to keep in mind.

- Factor time differences in when planning meetings between remote sites.
- Reliable high-speed internet connectivity is crucial.
- Use technology which is readily available and free.
- Use content which leads to active learning and participation on exchange of ideas and which fosters cross-cultural awareness.
- Whatever the platform you choose, be sure that you have integrated pedagogical design into task the learner will complete.
- Be sure that instructions for education activities are clear not only for the use of the technological tools, but for the purpose and goals of required tasks.
- To maximize learning build in natural discourse and authentic learning activities.
- Use devices such as tablets and ipads to complement and build on tried and true education methods.
- Learning should be inclusive, flexible, and proactive.
- Be aware of cultural differences which can affect communication.
- If you are building a product (such as in the Amutollo case study) design, make, and test prototypes, get input from the people who will benefit from it and incorporate those ideas. Evaluate the infrastructure at the project site. Is there power to charge and recharge devices? How will they be stored and secured?
- Collaborate, collaborate, collaborate. Continue to involve local teachers, administrators, parents, and children in the running of the program. In order to succeed, you need continued buy in from all involved parties.
- Be aware they project may take on a life of its own including completely changing and/or integration of additional educational activities.

I strongly recommend this book. It provides a wealth of information on planning and implementing educational technology projects on a global level. The authors are experts in educational partnerships, educational design, and all possess a desire to make the world a better place. The book is a fast read. It is entertaining and provides a multitude of suggestions and tips which will facilitate launching programs of one's own.