

iPodia, and the iPodia Alliance

Learning Together for a Better World

Stephen Lu
Viterbi School of Engineering
University of Southern California

What is iPodia?

iPodia, where "i" stands for *in*verted, *in*teractive, and *in*ternational, is a new pedagogy developed in 2009 by Professor Stephen Lu of the Viterbi School of Engineering at University of Southern California. The iPodia pedagogy enables students around the world to directly engage in collaborative and interactive learning across physical, institutional, and cultural boundaries. Using modern online learning technologies enhanced by telepresence capability over the Internet, iPodia students from multiple universities attend the same class in person in multiple iPodia classrooms on their home campuses to learn with their classmates around the globe. They all study under the same teacher(s) with identical course syllabi and content materials, and must follow identical academic requirements. Such direct and active peer-to-peer learning affords iPodia students the opportunity of co-constructing contextual knowledge of important socio-technical subjects as well as developing true mutual understanding of each other's indigenous cultures. iPodia enhances the next generation of students' ability and skills to explore cultural diversity as an inspiration for global innovation, while simultaneously enlarging their personal networks to become future global leaders.

iPodia is not the same as the popular MOOC (massively open online courseware) movement in the online education world. MOOC is a scale-up of the existing distance education model that puts course *contents* online openly for students to learn from cyberspace. iPodia, in comparison, is a new no-distance education model that provides borderless interactive learning opportunities for students to learn subject *contexts* with each other via the cyberspace. While notably different in their pedagogical foundations, MOOC and iPodia are actually complementary to each other in practice as the flipped classroom (or inverted learning) approach becomes more accepted nowadays. When taking an iPodia class, students can study the online course "contents" offered by MOOC at home *before* coming to the iPodia classroom on campus to collaboratively engage in various interactive exercises as global learning cohorts to co-construct contextual understandings. Together with MOOC, iPodia provides students with the best combination in education, allowing them to learn the best subject content from the best teachers and develop the best contextual understanding with the best classmates. As MOOC will gradually, but surely, replace traditional classroom lectures, iPodia will become a new value proposition of campus education for universities in the 21st century.

iPodia creates a virtual "world classroom" and demonstrates a new paradigm of 21st century global universities by transforming today's physical campus, where global students and scholars come to study, into a future borderless learning hub, where all students can learn with global peers anytime, anywhere. Based on the belief that "togetherness" is a new frontier of global higher-education in the 21st century, iPodia uses education diplomacy strategically to achieve its vision of "*learning together for a better world*".

What is the pedagogical foundation of iPodia?

The iPodia pedagogy is based on three basic hypotheses, that (1) contextual understanding is best achieved via direct engagements, hence the "inverted" learning, (2) what you learn depends on with whom you learn, hence the "interactive" learning, and (3) diversity increases learning opportunity for everyone, hence the "international" learning.

In regards to the first hypothesis, context is what one uses to make sense of subject content while learning and practicing. Unlike content, which can be taught by teachers with lectures, contextual understanding can only be co-constructed when learners engage with each other. In the conventional learning process, students are first being lectured on using subject content in school, and are then asked to exercise problem solving at home to develop contextual knowledge by themselves. iPodia inverts the traditional schoolwork and homework process by having students first watch online lectures at home to learn subject content before attending class to engage in guided collaborative activities with their classmates to develop contextual understanding. This is why the "i" in iPodia stands for inverted learning.

The second hypothesis is a corollary of the first one, and states that subject content can be learned "from" teachers (or textbooks) but contextual understanding is best developed "with" peers. Thus, the kind of context students can learn from depends on, to a large degree, the peers with whom they are studying. The inverted process explained above transforms the learning paradigm from passive (i.e., be lectured on) into active (i.e., to participate in.) By turning the "learning-from" pedagogy into a "learning-with" pedagogy, iPodia takes the active learning approach one step further, emphasizing interactive learning. Unlike traditional distance education that uses IT to expand the delivery distance between teachers and students, iPodia is a "no-distance" learning approach in which IT is used to eliminate the physical distance that hinders interaction between remote learners. Therefore, the "i" in iPodia stands for interactive learning.

The third hypothesis is built upon the second one, because if what we learn depends on the people with whom we learn, then our learning opportunity is increased when we study with a diverse group of learners from different social and cultural backgrounds. Beyond the traditional inter-disciplinary focus, iPodia focuses on inter-cultural learning, by linking together classrooms on multiple campuses in different countries and culture regions around the world. This international dimension expands learning opportunities for all iPodia students, enabling them to interact with, and learn from, global classmates right on their home campuses. Students are more comfortable interacting openly and freely with their foreign peers in iPodia classes because they all feel (and in fact are) at home! This is why the "i" in iPodia also stands for international learning.

What is the iPodia Alliance?

Based on the iPodia pedagogy, USC initiated the iPodia Alliance in 2012 as an independent, not-for-profit, global consortium among leading universities to promote a new "classrooms-without-borders" paradigm for 21st century higher education. All collaborating iPodia institutions retain their independent identities, degree programs, and curriculum requirements; and work together strategically to develop new courseware and deliver joint classes via the Internet-based iPodia platform to address important socio-technical subjects and significant global challenges.

As of spring 2013, the current membership of the iPodia Alliance is as follow. The first seven institutions are members of the Executive Board of the Alliance.

1. University of Southern California (USC) in Los Angeles, USA
2. Peking University (PKU) in Beijing, China
3. National Taiwan University (NTU) in Taipei, Taiwan
4. Korea Advanced Institute of Science and Technology (KAIST) in Daejeon, South Korea
5. Israel Institute of Technology (Technion) in Haifa, Israel
6. RWTH Aachen University (AACHEN) in Aachen, Germany
7. India Institute of Technology - Bombay (IITB) in Mumbai, India
8. Escola Politécnica da Universidade de São Paulo (EPUSP) in São Paulo, Brazil
9. Birla Institute of Technology and Science (BITS) Pilani, in Hyderabad, India

USC, through its Viterbi iPodia (ViP) Program Office, serves as the Alliance' current administrator to coordinate academic and administrative affairs among members. A few more elite institutions in other major world cultural regions, such as the Middle East, Africa, Russia, etc., are being invited to join the Alliance to enrich transcultural learning opportunities for all.

There are three principles that govern the operations of the iPodia Alliance. First, the "equal-reciprocity" principle encourages members to strive for balance between iPodia courses offered to and received from the Alliance within a certain period. This ensures that the benefits of equal contribution can be shared among all participating members. Second, the "revenue-neutral" principle holds that members are responsible for the costs incurred by their participation in all activities, and no money (e.g., tuitions, etc.) will change hands between any Alliance members. This promotes a not-for-profit culture, which will allow Alliance members to focus on collaborative win-win contributions. Finally, the "not-joint-degree" principle states that the Alliance's main goal is to share courseware development and collaborate on course delivery, rather than to create joint degrees among its member universities. This enables all Alliance members to maintain the independence and uniqueness of their curricula, which form the basis for their valuable contributions to the Alliance.

Why institutions should join the iPodia Alliance?

There are several strategic reasons why a university seeking to attain global prominence in the 21st century should join the iPodia Alliance.

First, the university of the 21st century will have a vastly different shape and form than it does today. In the past, students paid tuition to receive classroom instruction and academic certification. The recent MOOC movement, however, has made high-quality courseware available to everyone free of charge, and the current economic recession has rendered well-paid employment unattainable for many college graduates. Now that classroom lectures are becoming free and many university degrees are "underwater," *is it still possible for higher education to continue attracting students to pay for campus education in the future?*

Second, elite universities in the developed world have been a key driver of globalization in the 20th century. As the world becomes flatter, these institutions have begun experimenting with different

strategies to retain, enhance, and expand their global influence. Some promote the value of indigenous tradition, and continue to recruit international students to study on their main campuses. Others seek more direct means to expand their overseas reach, and thus build new campuses in foreign countries. In today's highly connected world, *is there a more effective strategy for leading universities to leverage global presence with local virtue?*

Third, high-quality global education should lead to a mutually deepened understanding of global culture. International students who pursue degrees on foreign campuses are often overwhelmed by the local culture, and can therefore be ineffective in engaging in balanced cultural exchanges that benefit their local classmates. On the other hand, it is difficult to develop meaningful cultural insights through short-term overseas studies, and time away presents challenges for returning students reentering their regular curriculum. In light of the widely held belief that global travel is necessary for globalization, *is there a better model for future students to enjoy quality global education without traveling aboard?*

These are the key challenges that all leading universities in the 21st century must face: what is the new value proposition for on-campus learning, how to overcome the paradox posed by the tension between global presence and local virtue, and can we deliver quality global education right from our local campus?

We believe that iPodia offers some possible solutions to address these challenges. First, iPodia employs the inverted learning process to turn away from content-based lectures and towards nurturing context for more effective education, thereby creating a new value proposition for campus education in the future. Next, iPodia enables interactive peer-to-peer learning across geographical, institutional, and cultural boundaries to promote borderless learning, thereby overcoming the strategic paradox of global presence versus local virtue for elite universities. Lastly, iPodia implements the no-distance education model to demonstrate that, in the age of pervasive information technology and the increasingly flattened world, high-quality global education can be effectively delivered at home.

How to join the iPodia Alliance?

A revolutionary pedagogy, together with advanced technology, provides the answer to global education in the future. The world will not be truly flat until the landscape of education becomes flat! The iPodia Alliance is fully committed to shape the landscape of 21st century global education. If you and/or your organization are interested in learning more about iPodia and possibly joining the iPodia Alliance, please contact:

Professor Stephen Lu
Director, the Viterbi iPodia Office
University of Southern California
Los Angeles, CA 90089-1453 USA
Tel: 1-213-740-9616
Email: sclu@usc.edu
Web: <http://ipodia.usc.edu>