

9 Multimedia Training and E-Learning Initiative

MP3IC is a global multimedia training and e-learning initiative spearheaded by the World Bank Institute (WBI), the Asian Development Bank Institute (ADBI), and the Multilateral Investment Fund of the Inter-American Development Bank (IADB). Its goal is to promote capacity building and knowledge sharing among practitioners, researchers, and development agencies around the world in the area of private-public partnership (PPP) infrastructure projects. The program's ambition is to use cutting-edge pedagogy and multimedia technology to transform existing research findings and practice into user-friendly messages that developing country public sector professionals can use in their day-to-day problem solving.

Considering the global scope of the learning initiative, the MP3IC core organizing team represents an international consortium representing WBI, ADBI, and IADB. The team is extended through core partners, involving leading national public sector training institutions in governmental capacity building around the world. The target audiences of the program are public sector leaders and senior officials from all levels of government, as well as other leaders who represent the private sector and civil society from all over the world. This rather selective choice of learning actors allows maximal reach and impact on efforts to achieve effective and efficient public service delivery in a short period.

To develop the specific training and e-learning considerations that need to be taken into account when designing the program's concept and its different core learning components (CLCs), ADBI—in close collaboration with WBI and the Development Academy of the Philippines (host)—organized a symposium, “Strengthening Governance for Infrastructure Service Delivery: The Role of Public Private Partnerships.” It was held March 9–11, 2009, at ADB headquarters in Manila. The symposium brought together important stakeholders for governance capacity building—more than 40 leading global and regional

governance experts and senior-level managers of leading public sector training institutes from 13 countries across the Asia-Pacific region.

The objective of the event was to profile and share pragmatic governance learning materials and didactic concepts that facilitate designing of CLCs and to enable the participating training institutions to strengthen their learning on governance capacity building. In this context, the Learning Spiral was introduced and discussed as the foundation on which the MP3IC program, as well as its global multimedia training and learning segment, the CLCs, would be structured.¹ The following description of the eight stages of the Spiral presents the outcome of this dialogue and describes in detail how the Learning Spiral should be applied to ensure the program's effectiveness.

The MP3IC Program considered this 2009 event as the basis for planning the design and use of CLCs. As of publication, this planning is still in development.

9.1 Core Learning Components— Conceptualization Stage

The training and learning content of the MP3IC initiative consists of a comprehensive set of 54 topics representing the major themes in PPPs in infrastructure capacity building. They were selected by the MP3IC team in consultation with the partner organizations. It is foreseen that each of the topics will be broadly covered in a CLC module, which consists—among other things—of two main parts:

1. The concrete and measurable training and e-learning objectives, which are based on generic content goals (accountability goals). This helps the learning actors retain the basic knowledge and objectives to be measured, which in turn allows them to apply the acquired knowledge to their individual political environments (learning goals).
2. The content of the CLCs, which is processed and edited by leading experts in the field and subsequently reviewed by focus groups and

1. The Learning Spiral was presented by the author in a keynote speech: <http://www.adbi.org/speeches/2009/07/13/3173.keynote.speech.blindenbacher.pppi.governance/>.

expert panels in regard to their relevance for the target audience. This measure is essential because the understanding of PPPs in infrastructure and related topics is globally very controversial; a common understanding of the subject has first to be established.

To make the CLCs accessible and attractive to a global audience, the collected knowledge has to be packed into a set of various data carriers, including print products and self-sustaining media presentations such as audio and video clips. It further has to be complemented by a glossary that explains the specific terminology used in the CLCs. In addition, it should be translated into as many languages as the target audience needs. For this purpose, an Internet portal designed particularly for the MP3IC initiative can be established that will allow the storage of a great deal of data and knowledge as well as their exchange among a specified target audience. It will be important to keep resources and information on the portal up to date to stay relevant for its users and to create incentives for them to return to the portal periodically. The portal needs to integrate user-friendly features from existing networks and platforms to make it intuitive and attractive to site visitors.

9.2 Global Target Audience—Triangulation Stage

To increase the attractiveness and relevance of the material for a broad target audience, the program partners must identify the major existing perspectives in regard to the content of the CLCs. In the case of PPPs in infrastructure, the perspectives are exceptionally diverse. On the public sector side they include politicians and members of Parliament from all different levels of government, judges from national and subnational courts, representatives of political parties, the civil service, and members of state-owned entities. On the private sector side, there are business leaders, investors, lenders, members of business associations and consortia, and lobbying organizations. And finally on the civil society side, there are the stakeholders representing not-for-profit organizations, the media, think tanks, scholars of different academic disciplines, and members of organized communities and networks that communicate through blogs and other information technology-supported means.

For each perspective, a representative stakeholder has to be chosen to describe his or her personal viewpoint concerning the issue at stake. This should preferably be done in the form of short narratives illustrated by concrete cases based on the authors' real-world experiences; the learning actors should be able to easily relate to them. Each story can be captured both in a traditional paper-based format and in a more interactive video format. This supplement essentially mirrors the content of the CLCs by putting the key takeaways of the learning material into multiple perspectives. This exhaustive set of material includes the state-of-the-art knowledge on each topic as well as the narrative supplements.

The combination of the range of topics, their broad treatment, and their nonhierarchical organization in modules and submodules with different content focus and depth is designed to get the attention and curiosity of the target audience and to serve their diverse needs and expectations. It will allow the learning actors to navigate through the wide range of modules and to choose specific CLCs according to their personal needs and interests.

9.3 Users' Manual—Accommodation Stage

Crucial for such a multimedia training and e-learning initiative are personal contacts among the learning actors and the organizing MP3IC team—at the earliest possible stage in the process. Ideally, the inauguration of the program would be a face-to-face event involving all potential participants. If such an event were not possible, a number of regional or national events, a multiscreen videoconference, or a combination of them could substitute. The purpose of such an event is to ensure that the participants get to know each other and have an opportunity to build trust and confidentiality among themselves and the organizers. These newly established personal relationships also ease future written communication as well as individual phone or video encounters.

At the same time, the MP3IC portal needs to foster networking opportunities among the participants by providing sophisticated but simple-to-use spaces to build user profiles and connect with each other. These profiles would include a user's picture, professional affiliation, interests and hobbies, and organizational affiliation. It will be important for users

to be able to send each other private messages through such platforms and to be able update other participants about their latest work, initiatives they joined or support, and causes they promote. Such a space would combine the philosophies used by social media such as Facebook® and LinkedIn® to connect people with similar interests and professional affiliations, while making the platform very easy to use.

Preceding these first contacts, the organizers have to ensure that the participants are fully aware of the philosophy and the structure of the learning process, its objectives, and the communication and privacy rules. This last element determines how the participants are supposed to communicate with each other. Furthermore, it suggests how to handle cultural and regional differences. All this program-related information has to be summarized in a sourcebook or a user's manual, which would be made available to all potential learning actors in a printed publication; it can also be posted on the MP3IC portal.

Because many of the interpersonal and group interactions will be made through the electronic MP3IC portal, technical support and security systems play a crucial role. Appropriate protection programs and firewalls have to be installed and a helpdesk set in place to deliver technical support to all participants at any time.

9.4 Online Questionnaire—Internalization Stage

In a first didactical step, the participants get an opportunity to reflect on their own practices in light of the knowledge to be learned in the content of the 54 recorded CLCs. This intrapersonal activity can be encouraged by posting a set of targeted questions about the subject that make people think about and reveal their personal experiences; this triggers the intended self-reflection process. To ensure that the learning actors understand the content of the CLCs, it may be further envisaged that an assessment instrument could be installed at the MP3IC portal, such as a readiness scorecard that would allow the participants to self-assess their understanding of the knowledge to be learned.

Additionally, the MP3IC portal needs to include an elaborate library of resources—not already part of the CLC content—so the participants can find materials on the subject matter. Such materials could include a

broad spectrum of resources such as books, articles, case studies, reports, white papers, video clips, etc. Compilation of resources in a library will allow easy and organized access to critical knowledge and can provide a strong and common reference point.

The MP3IC portal may also include a private online account, in which the learning actors are asked to store notes about their individual learning experiences. This private account could only be accessed by its designated owner and would be secured with a personal password. However, if the account owner wished to do so, he or she should have the freedom to give access to other individuals. This measure protects the account holder's privacy, prevents any loss of written materials, and regulates the process of sharing these personal notes with peers.

9.5 Online Dialogue Exchange—Externalization

In the second didactical step, the learning actors are encouraged to engage with the other participants in an active dialogue to share their individual reflections. This dialogue can be held in blogs or discussion forums installed at the MP3IC portal or through social networking platforms such as Facebook®, Ning®, and WordPress®, where selected individuals are invited to communicate in groups in a protected and private online environment.

This highly sensitive and confidential online dialogue exchange has to be well facilitated and closely supervised by members of the MP3IC team. It is their responsibility to enforce the given communication rules, to structure the dialogue, and to ensure that all participants have the same chance to get involved. The MP3IC team will predetermine questions and topics for discussions and ensure the flow of discussions. It will need to send out email invitations to the participants to join the discussions, prepare initial comments to kick-start the discussion, respond to some questions from the participants, and, when needed, redirect the conversation to the relevant topic. It further will have to observe the discussions and ensure that all the questions and comments receive appropriate responses, as well as summarizing the discussions into a document that can be circulated among the participants and, if they agree, among wider audiences of interested practitioners. The preparatory stage may also require the MP3IC team to find and collaborate with a group of seasoned experts on a subject in advance to ensure that they

can help create initial comments in the discussions and provide their expert responses along the way.²

At the same time, the MP3IC portal can provide a platform for participants to share their documents with each other. Such sharing can help participants get input from their colleagues on their work in progress, such as research papers or studies, and bring a new perspective to the ongoing research. To enable such document sharing, the portal can utilize Google Documents or any other document collaboration technology.

The MP3IC portal will include several features that allow participants to stay updated on the latest activities in the network and recent postings. Along with email updates, it will be important to have an option for a weekly digest and rich site summary (RSS) feeds. The blog and resources on the MP3IC platform can have an option for an RSS feed or instantaneous email update. The RSS feed allows participants to easily track newly posted resources and use them quickly.

Over time these online dialogue exchanges could be transformed into long-lasting communities of practice. These self-organized and theme-oriented peer-to-peer learning groups give participants the opportunity to continuously share their reflections in an institutionalized frame to improve their skills on a given subject, to share information and knowledge with each other, and to create documents that include a wide range of perspectives (see subsection 2.2.3). It will be critical to ensure that members of the community benefit from being part of it. Some incentives to join include substantive knowledge gain and learning opportunities, the ability to showcase expertise for networking purposes, the ability to find peer reviewers and research collaborators, as well as the ability to tap into local knowledge.

To sustain and strengthen a community of practice, it will be important to have face-to-face meetings with the participants. Such meetings both serve as an incentive for more active participation in the externalization of knowledge and can be a catalyst for innovative ideas. It is an established practice that when a group of people are given an appropriate

2. This usually requires cultivating long-lasting relationships with various experts and involving them in other types of network activities as a reward for their time. Such activities could be access to training and knowledge, consulting opportunities, publishing their works online, etc.

time and space to brainstorm and find solutions, they are more inclined to think innovatively and suggest different approaches. For this to happen, the MP3IC team needs to ensure the participants that the provided forum is safe for any kind of discussion and suggestion and that everyone is open to new ideas.

9.6 Process Monitoring—Reconceptualization Stage

A major task of the MP3IC team is to watch systematically the ongoing group-reflection process and to monitor the relevance of the CLCs for the current practice in PPP infrastructure projects. If the collective reflections consistently deviate in form and substance from the state-of-the-art knowledge as presented in the CLCs, it is the team members' responsibility, in collaboration with their core partners, to update and if necessary to fully replace their content accordingly. This measure ensures that the content in the MP3IC program always represents the latest knowledge, and it further conveys to the participants a sense that the knowledge they are learning represents the best practices available to date.

One way of encouraging continuous feedback and suggestions from participants on the shared knowledge resources would be to enable the rating of resources. Many Web platforms allow users to rate their content, which provides the site managers with data on user preferences and most used types of materials.

It will also be important to use social networking tools on resources such as Digg®, StumbleUpon®, or de.li.cio.us®. These online tools allow users worldwide not only to bookmark their favorite resources and postings, but also to share them with other users interested in the same subject matter and to share their bookmarks. These tools can be used both to promote resources and knowledge outside the selected group of people and to measure the popularity of resources most bookmarked.

9.7 Scenario Exercises and Rapid Results Approach—Transformation Stage

To get used to the CLC content and to learn how to employ it, the program offers in a third didactical step a guided role-play or scenario

exercises. These integrated games allow the learning actors to simulate their individual work situations in light of the new knowledge. The participants are placed in a project situation in which they have to make appropriate decisions that require an in-depth understanding of the CLC substance. In this way the participants become familiar with the knowledge and automatically prepare themselves to apply it into their real work context.

Based on the experiences in the simulation games, in the fourth step the learning actors are asked to develop concrete plans for how they want to integrate the newly acquired knowledge into their own practical field of action. This process can be facilitated by the application of the Rapid Results Approach, which is a management tool that empowers teams to develop 100-day plans that build capacity for large-scale change.³ With this methodology the learning actors are in a position to develop realistic plans for how to implement the CLC content; they set short-term goals to solidify and accelerate the overall implementation process in a given infrastructure project.

To ensure the success of such a planning process, the regional help desks must work with the local core partner organizations, which are familiar with the specific circumstances the learning actors face. These help desks are expected to give instant assistance whenever the participants request it. An electronic blackboard installed at the MP3IC portal may further support this effort, where participants post questions about the planning process and others respond according to their own experiences. It is important that the participants continuously document and reflect on this process in their electronic journals. Another possibility to gather feedback from the participants is to use surveys on specific issues and quick polls to identify interest in discussion topics, CLC events, etc.

The experience of seeking input from colleagues in the region or around the world can be further maximized when the MP3IC team gathers the responses on the posted questions from various participants or, if needed, even personally contacts selected participants to solicit

3. The Rapid Results Approach is a modified version of General Electric's work-out process, first developed in the late 1980s to reduce bureaucracy and redundancy. Over time, its application has broadened to address business processes and to accelerate organizational change (Schaffer and Ashkenas 2005).

responses. Once the responses are collected, supplemental research and literature review on the subject matter could be combined with the participant responses in a consolidated response.

9.8 Revision of CLCs—Configuration Stage

By conducting the multimedia training and e-learning initiative as described so far, a considerable amount of new knowledge related to PPPs in infrastructure capacity building will be developed and electronically loaded at the MP3IC portal. All these data have to be configured to update the CLCs; they also will be summarized in a form that allows their availability for a global audience. For that purpose the learning actors first screen their electronic journals to decide which parts they want to open to the public. The gathered knowledge, complemented by the reviewed and updated CLCs, forms the basis of the most updated and practice-relevant knowledge that exists on the subject.

Second, the core team and partner organizations must integrate this newly developed knowledge into the existing CLCs and summarize it in various media to make it attractive and easily accessible. The purpose of the latter effort is to attract a broad international audience to the MP3IC program and by doing so to expand and strengthen the emerging global network that derives from this initiative. The dissemination of the knowledge is done through the MP3IC portal as well as by all other existing means of communication transfer.

9.9 Final Comments and Evaluation

Multimedia training or e-learning has become one of the major means of supporting learning in governments in recent years, and it is expected that this trend will further accelerate with any forthcoming technological innovation. Also conference Web sites, online discussion forums, etc. were didactical elements used in Learning Spiral–based events in the past.

The MP3IC multimedia training and e-learning initiative is the first program that was systematically geared around social media technologies. It represents a new area of using such instruments to improve the Learning Spiral's impact. Thanks to the targeted application of social media, the dynamism and the intensity of the learning process over time and

space can be significantly increased. However, it is important to give high attention to issues such as privacy protection and property rights to avoid jeopardizing the learning actors' confidence in the learning activity as a whole.

It is not fully clear yet how the MP3IC initiative will further develop. Its progress was discussed in a follow-up symposium.⁴ Testimony by a leading member of the MP3IC core team describes the relevance of the Learning Spiral concept not only for designing the program but also for its impact on the program development process itself, which is very much organized as a learning activity in its own right (see Box 6).

Box 6 Reflections from the Lead Economist, Public-Private Partnerships, World Bank Institute

A symposium entitled *Strengthening Governance for Infrastructure Service Delivery: The Role of Public Private Partnerships*, held in Manila in March 2009, presented pragmatic governance learning materials to staff from participating training institutions. The symposium's ultimate goal was to help strengthen these institutions' learning programs to better address the governance capacity-building requirements of the public sector in their respective countries. Its interactive format allowed participants from across the Asia-Pacific region to apply the principles of the Learning Spiral to assess the strategic design of the MP3IC learning materials, and determine the effectiveness of the symposium in engaging educators and academics from across the Asia Pacific region in the MP3IC design process.

The Learning Spiral was introduced at the symposium's outset. Its framework helped focus the delegates' discussion on the challenges of government training and e-learning processes, and helped them consider the role of learning materials in this context. The framework has helped guide the design of learning delivery strategies for public sector officials with its emphasis on cutting-edge pedagogy and multimedia technology to transform research findings and practice into messages that developing-country public sector professionals can use in their day-to-day problem solving.

(Box continues on the following page.)

4. The event had the title *MP3IC Knowledge Sharing Symposium—PPP's for Infrastructure in the Asia Pacific: Global Challenges and Constraints* and was held December 16–17, 2009.

Box 6 (continued)

The eight stages of the Learning Spiral provided a structured approach to develop the MP3IC global training and e-learning initiative, while also improving its strategic direction. Each stage provided a checklist of consideration points; these included the need to understand the learning requirements of the target audience. The eight stages also include reference to the need to identify effective learning access and delivery options, as well as the need to select content whose relevance is tested by target audiences. Finally, the stages include references to the steps needed to guarantee that knowledge transformation is achieved, and to make a reassessment to appropriately configure the next spin of the Learning Spiral.

The Learning Spiral concept served as a constructive platform for exploring critical pedagogy challenges and evaluating and strengthening the strategic design of the MP3IC global learning program.

Prior to the symposium, MP3IC had already begun to engage with the target audience through surveys, focus group discussions, and workshops held across the Asia-Pacific region. This allowed for pilot testing of the learning materials at different stages of development among diverse audience groups, including senior infrastructure policy makers, infrastructure program and project managers, and a broad range of technical practitioners. It also involved technical and pedagogy specialists in design and development, as well as an exhaustive quality review of all learning materials. The symposium was an important part of the consultation process, as it enabled in-depth discussion with potential partners on learning content and delivery, to explore areas of synergy and pragmatic business models for collaboration.

Govindan G. Nair, Washington, DC, USA, March 27, 2010