### STRAIGHT TALK

# Knowledge as a Public Good

The IMF is using technology to boost understanding of economic policy issues



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OU may be surprised to learn that the IMF is in the business of delivering massive open online courses, also known as MOOCs. In fact, you may not even be aware that it is in the business of teaching at all.

Our lending operations and monitoring of member countries' economies certainly grab more headlines. But over a quarter of the IMF's work involves capacity development that is, helping member countries build strong economic institutions and boost skills to implement sound macroeconomic and financial policies. The IMF provides quite a lot training and technical assistance behind the scenes to help countries better withstand shocks and avert crises—precisely so they *won't* be in the news.

My department, the IMF Institute for Capacity Development, runs a training program for country officials on applied macroeconomics, financial issues, and related statistical and legal frameworks. Our courses use the same rigorous analytical approach as macroeconomics and finance courses taught at universities, but they differ in that they are short and policy oriented, drawing lessons from the experiences of our 189 member countries. They try to bridge the gap between economic theory and practical policy implementation using case studies and workshops based on actual country data.

#### **Expanded potential**

I first heard about MOOCs through a TED talk by Daphne Koller, founder of Coursera, a pioneer of the concept of free online courses for the public. I was fascinated by the possibilities MOOCs presented. Our traditional classroom training—on topics such as economic forecasting and debt sustainability analysis—was reaching 30 government officials at a time. Although we were delivering courses at several training centers across the globe and training 7,000–8,000 officials a year, it wasn't enough to meet the demand from our member countries. With online learning, not only would we be able to reach more people, we could also deliver training at a much lower cost, unconstrained by the need for physical facilities and complex logistical arrangements.

So we joined forces in 2013 with edX, a consortium that provides MOOCs started by Harvard University and the Massachusetts Institute of Technology, and produced our first MOOC. It was on Financial Programming and Policies, our flagship course for policymakers in finance ministries and central banks all over the world, a version of which is also our "boot camp" course for new IMF economists. We've since developed five other MOOCs, with some available not only in English, but also in French, Spanish, Russian, and Arabic.

Has this joint venture worked out the way we thought it would? I would say it has been better than expected—not that we knew precisely what to expect at the time. One felicitous surprise is that low Internet connectivity and power interruptions have not been a major obstacle to reaching people in poor countries. Some 28 percent of officials earning online certificates have been from sub-Saharan Africa and 38 percent from low-income countries. The top countries where our participants are located, besides Brazil and India, are Cameroon, Uganda, and Zimbabwe.

And online training has taken off in an impressive way; it now accounts for about a third of all IMF training for officials. Since the launch of our first MOOC in late 2013, online courses have attracted 21,000 active participants. Of those, 6,300 government officials and 6,000 members of the general public from 183 countries have successfully completed a course—a sign of good progress toward our dual goal of scaling up training for policymakers and sharing knowledge with the general public. Although it's difficult to gauge just how much participants absorb, retain, and later apply that knowledge, we do see evidence of learning—on average participants score 16 percentage points higher on end-of-course tests compared with pre-course tests.

Another revelation was that the design of the MOOCs which include video lectures that can be paused and replayed, Excel spreadsheets, discussion forums with other students, and opportunities for online interactions with an instructor—makes for a remarkably personalized experience. It is almost like working with a tutor, some online students tell us, even though the number of participants in a given course has jumped from about 30 to some 3,000 at times.

Finally, we've learned that online training is also a complement to face-to-face training. It is more effective than classroom training in transmitting information and building focused skills. However, it is less effective when it comes to delving into the nuances and complexities of real-life policymaking and allowing peer-to-peer interactions. We need to do both so that the relative strengths of technology and human interaction can be deployed to maximize the impact on learning while making our training available to as many people as possible. So we are moving to make some online courses and modules prerequisites for classroom training and are adapting our classroom material to complement our online offerings.

#### The IMF as a knowledge hub

Training is just one aspect of our capacity development work. If we can bring about such dramatic change with online learning, can we not leverage technology to increase the impact of the IMF's capacity building work more generally?

Here are some quick ideas, although no doubt practitioners will have many more:

• Build a searchable repository of technical assistance reports available to all officials. The IMF's vast pool of technical knowledge is the lifeblood of the institution. We could create a database of technical assistance reports that other countries could draw on when considering reforms or implementing specific policy initiatives. Technical assistance reports may need to be written differently, particularly to separate out confidential material into annexes that are not included in the database. There may be some transitional costs, but these are likely to be well worth the benefit. A searchable repository will not only increase the knowledge available to governments, but also make technical assistance more effective by better focusing country requests and better preparing officials to receive technical advice.

• Arrange peer-to-peer learning via video chats. The IMF doesn't always have to be the purveyor of technical knowledge and policy experience—we could also serve as a broker to match officials who have the relevant knowledge and experience with those who are seeking it. If you're a policymaker in a low-income country, what an advanced economy does is less interesting than what policymakers who are going through—or who have just been through—your experience did. Using video chat software that allows people around the world to communicate with each other at no cost, we could arrange conversations between, say, a policymaker in Samoa and his or her counterpart in Mauritius, much like we do in the peer-to-peer workshops the IMF organizes from time to time—but with fewer logistical complications and resource costs. These arrangements would allow for an informal dis-

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cussion of not just the nuts and bolts of a particular economic reform, but also the "softer" aspects of implementing it—such as how to overcome political obstacles or how best to communicate with the public.

• Form "communities of practice." Serving as a convener, the IMF could facilitate the formation of online groups on social media for purposes of professional development and information sharing. Officials come together from time to time for conferences, workshops, and courses, but may never see each other again. Or they may be receiving technical assistance on similar topics and never meet each other. IMF experts could "curate" online communities that link up officials working in a particular area—for example, economic modelers in central banks-using various social media platforms. Members could disseminate the latest professional materials, compare experiences, and share solutions to problems they encounter in their day-to-day work. Such cross-country communities could be particularly useful for developing economies with few highly specialized staff, who may not have many colleagues in their organization to consult and may thus be somewhat isolated.

#### **Continuous learning**

All of these ideas are feasible; we have the technology. It's not the technology that is an obstacle; it's the adoption of new work practices that presents the more formidable challenge. There is a natural reluctance to take risks to try new things, and people may even feel that freely disseminating their knowledge could diminish the value of their individual expertise. But we shouldn't see it as a zero sum game.

Leveraging technology to transfer knowledge in innovative ways would not eliminate traditional ways of developing capacity in countries any more than online learning has rendered our face-to-face courses obsolete. These complementary methods will allow us to be more effective. We need to keep adapting our methods to exploit the full potential of changing technology.

Everyone stands to benefit if we are able collectively to raise the caliber of economic policymaking. There will always be more to learn, because the global economy—and thus our policymaking challenges—is continuously evolving. This is all the more reason to use every tool we have at our disposal to help policymakers grow in sophistication and knowledge. As an international organization, we have an obligation to do so.