

A final program summary of Anudip  
Foundation for Social Welfare's virtual  
MAST program expansion, conducted by  
Global Social Benefit Fellow, Kathryn  
Hackett.

# vMAST Program Development

Kathryn Hackett-2014

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## Executive Summary

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Anudip Foundation for Social Welfare is expanding the reach of its Market Aligned Skills Training (MAST) program through the integration of technology in remote locations. The new model, virtual MAST (vMAST) will help students access Anudip training beyond the regions where traditional centers operate, and overcome the shortage of available highly-skilled trainers in these regions. This type of e-learning model is becoming increasingly prevalent in the developing world to provide same-quality education to students, regardless of location. vMAST was founded by Anudip Foundation for Social Welfare and Zaya, Anudip's partner social enterprise, to develop a program that provides Anudip's MAST curriculum to students in a virtual platform. The original platform was piloted between January and June of 2014 with strong indications of success.

Global Social Benefit Fellow Kathryn Hackett spent the summer of 2014 working with Anudip's Curriculum Team on the advancement of vMAST as it expands to other regions of India. The vMAST provides a virtual platform for Anudip students that will be comparable to the traditional, face-to-face learning of the current MAST training sites. The created assessment tools to accompany each of the virtual lessons. Kathryn created exercises tied with each instructional lesson. These exercises are intended to serve as self-assessment for the Anudip students but will also be accessible to the trainers who can use these scores to gauge student comprehension, and determine which students needs additional instruction or support.

## Anudip Background

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The Business Process Outsourcing (BPO) industry has become a major economic driver in India, projecting expansion by 2020 to account for 10-percent of India's GDP<sup>1</sup>. The rise of this economic sector presents opportunities to educate the poor in skills that meet the needs of potential employers. Anudip Foundation for Social Welfare is a not-for-profit agency based in Kolkata, India that strives to address the livelihood needs of the poor and marginalized communities in India through skills development courses. Since its foundation in 2006, Anudip has placed over 75% of its 25,000 graduates in viable employment. Roughly 40% of Anudip graduates are placed in the BPO sector and the rest are placed in various other formal sectors of employment. Anudip uses the American India Foundation's (AIF) program, MAST, or Market Aligned Skills Training, to educate and train its students with skills for entry into and advancement within the BPO and other industries. The MAST educational methodology was created in response to the shortcomings in government-run and traditional education systems in training students in specific job skills development. Anudip has tailored this training methodology to reflect the job skills in Workplace English, Workplace Readiness, and Information Technology. These skills help graduates to communicate with the rest of the world, work in a professional office setting, and succeed within the BPO and other professional industries.

Graduates of Anudip receive a certification of completion after three months in this program through any of its training centers. These centers are hosted by local NGOs in each placement community, where students and Anudip trainers come to have a safe and stable location to pursue their studies. The

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<sup>1</sup> "Impact of IT-BPO industry on the Indian economy and society," NASSCOM, <http://www.nasscom.in/impact-itbpo-industry-indian-economy-and-society?fg=71038>

partner NGOs are often small office spaces in poor rural or urban settings that are willing to work with Anudip to serve as local resources and hosts while Anudip commences its training program in each community. Anudip sets up the necessary equipment in these buildings and offers the training courses for as long as it sees demand for MAST training in the community. There are over 150 Anudip centers.

## Creation of vMAST

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Since its formation, Anudip training has been structured to have a trainer teaching a classroom of students using these three different modules of MAST learning: Workplace English, Workplace Readiness, and Information Technology. As it expands, Anudip has developed a virtual educational platform where students can access consistent and reliable training material in their local communities. The virtual Market Aligned Skills Training (vMAST) was developed in partnership between Anudip Foundation and Zaya, a social enterprise that implements technological solutions to reach schools in under-served areas. Zaya worked with Anudip to develop a model for the vMAST program that allows students to work and study on the virtual platform, with or without internet connectivity and electrical power. The unpredictability of power and internet services in India has been an impediment to programs like MAST education. When a vMAST center is created, Anudip staff sets up a local area network with of a server and several connected workstations. The workstations access the entire curriculum of virtual lessons and store the records of students' progress on those lessons through the learning management system (BeagleBone) that is run on the

local server. If the power is lost, the local server and one or more of the workstations can still be powered by a generator in the classroom. Because the learning management system (LMS) is housed on the local server, it can operate in the absence of an internet connection. When this happens, the Anudip staff member who set up the vMAST center is the only one available to answer students' questions during training. These trainers are not necessarily a highly-skilled trainer, and this can pose problems for quality program delivery.

A videoconferencing line connects students to an expert trainer in their home location who can work with up to four vMAST centers to answer questions and provide guidance -- so long as an internet connection is present. Each center has a portable, battery-powered projector connected to the server so that all students can see and hear the remote trainer. The internet connection also allows the local vMAST center to send data on students' progress to Anudip's Monitoring and Evaluation team. In theory, the connection could be used to update local servers to the latest versions of Anudip's curriculum, although at the moment, Anudip relies on returning the servers to the main headquarters every six months to be updated.

vMAST underwent a pilot from January to June of 2014 and Anudip is intending to expand vMAST to 32 centers in 2015. With the e-learning platform, students can access the virtual lessons to enjoy learning at their own speed and with the capability to review or move ahead. The flexibility of updating curriculum allows Anudip to tailor its training to meet the needs of employers as the market adapts and grows. With virtual MAST, Anudip can scale without stress on the

scarcity of qualified trainers while maintaining the same quality of education across all centers with less supervision by Anudip central offices.

## Program Development

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The Anudip Curriculum Team worked with Global Social Benefit Fellow, Kathryn Hackett, in the summer of 2014 to enhance the e-learning program. Kathryn conducted a primary analysis of the quality of vMAST. The platform that ran through the pilot stages contained little student interaction and primarily focused on the delivery of abstract concepts through basic PowerPoint slides and voice-over instruction. After discussing this concern with Anudip's Curriculum Team and agreeing that this was an area of the vMAST program that needed to be enhanced, they determined that Kathryn's initial contribution to the vMAST development would be to create exercises for each individual lesson to serve as an evaluation of student understanding of material. Assessment is arguably central in teaching and instruction because it determines whether the learning goals are being met.<sup>2</sup>

The questions developed between July and August of 2014 were a provisional first step for the enhancement of Anudip's new training model. They were requested by Anudip staff and affirmed by study of the vMAST program and advice from existing trainers. It is recommended that these exercises be critically evaluated in 6-12 months to determine which diagnostic questions should be improved upon, changed, or discarded. These questions are intended to serve, in

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<sup>2</sup> "Why is Assessment Important?" *Edutopia*. The George Lucas Educational Foundation, 15 July 2008. Web.

part, as a feedback mechanism for students enrolled in vMAST. Listed below are representative samples of lessons in the three modules for which exercises, serving to further enrich the vMAST program:

- English Language
  - Sample Unit: Etiquette
    - Sample Lesson: How do you congratulate, appreciate, and encourage people?
- Workplace Readiness
  - Sample Unit: Providing Equal Opportunities for Women
    - Sample Lesson: Benefits of Providing Equal Opportunities.
- Information Technology
  - Sample Unit: Windows and File Management
    - Sample Lesson: Introduction of Windows.

Five to six evaluative questions were formulated to follow every lesson and are intended to measure students' retention and comprehension of the material addressed in each lesson. These exercises were created after going through each individual lesson, determining the learning objectives, and forming culturally-relevant scenarios that show students' ability to apply these objectives, or specific definition questions discussed in the curriculum. The exercises aim to improve the program quality by helping students apply lessons to concrete settings.

Students and trainers can use these exercises to gauge quality of learning in the vMAST program. They serve as a self-assessment for students to determine their comprehension of each unit, but student scores are also tracked and accessible by trainers to determine how well the students understand the materials and where they need extra practice or support. Practice questions add a critical element to the e-learning format, creating a more comprehensive and engaging platform that both trains students and provides feedback on the success

of their learning. Students are more likely to pay attention to the course material knowing that there will be engaging questions to check their retention of key ideas after they complete the virtual lessons. These scores are intended to provide evaluation to the students, trainers, and the curriculum development team at Anudip to assess the validity and strength of each lesson plan.

The creation of these exercises is a strong first step towards a comprehensive assessment tool to measure student success in learning. These exercises also provide quantifiable analysis of the student performance, which can also help measure social impact on Anudip participants. This enhancement is a preliminary attempt at assessing student learning, recognizing that full assessment will be needed at a later time to support ongoing expansion. These exercises can be used for Anudip statistics and to help employers build confidence in Anudip graduates as potential employees. Assessments of this sort can also be used to build a competence-based certification to replace Anudip's current attendance-based certification. For Anudip, this will take the form of a standardized government test and certificate.

As Anudip moves forward with its intended expansion of the virtual MAST program, it is now better equipped with quantifiable records of student learning and comprehension for impact measurement and future growth.