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UNEVOC International Centre for Technical and Vocational Education and Training

UNESCO-UNEVOC Promising Practices

MATA AMRITANANDAMAYI MATH

श्रद्धावान् लभते ज्ञानम्

AMRITA VISHWA VIDYAPEETHAM UNIVERSITY

UNESCO-UNEVOC PROMISING PRACTICES

Ammachi Labs

Empowering rural women through ICT in TVET

2017

Ammachi Labs

Context

In India, fewer than 10 per cent of the population has received formal vocational training. 70 per cent of the population lives in rural communities (World Bank, 2015) that are often geographically distant from formal training institutions. Accessing TVET is inconvenient and practically impossible, especially for women whose mobility is often limited due to societal norms. According to a national survey in 2010, a woman is 20 percent less likely to enrol in formal TVET than a man her age. Women make up more than two thirds of the illiterate population (Tognatta, 2014), and are less likely to have the basic literacy skills required for formal education. Furthermore, women face the obstacle of social expectations and cultural norms, which confine them to the role of caretaker of children and the household. Thefemale participation rate in the Indian labour market is only 29 percent, the second lowest female labour force participation (FLFP) rate in South Asia (Andres et al., 2017).

To achieve the Government of India's goal to educate 400 million workers by 2020, it is necessary to improve women's access to training and employment. AMMACHI Labs – a research centre within Amrita University – offers a successful example of using innovative approaches and technology to overcome traditional obstacles to women's access to training and employment

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Overview

Implemented by:	AMMACHI Labs, Amrita University
Where:	India, since 2012
Theme:	Gender equity and equality ICT in TVET
Funding:	Donor-based (funded in part by United Nations Democracy Fund (UNDEF) and in part by Amrita University
Status:	As of June 2017, the model is running in 29 villages across 21 states of India

In India, women from rural communities often have little say in family and community decision-making. Skill development is a recognized medium of empowerment . However, access to technical vocational education and training (TVET) remains a challenge to a majority of those living in rural India.

With the goal of empowering women, AMMACHI Labs offers a programme that uses innovative approaches and modern technology to overcome the obstacles rural women face in terms of access to TVET. The programme has provided thousands of women with practical skills that have enhanced their earning potential and increased their capacity to participate in decision-making at the individual, family and community levels.

The initiative and its impact

Since 2012, AMMACHI Labs has provided TVET to women in rural communities. In addition to developing technical skills that are in demand in the labour market (such as plumbing and fabric painting), a life skills courses called Life Enrichment Education (LEE) are integrated into the training, which provides awareness on personal, family and community issues and also stimulates critical thinking and problem solving.

Most of the training takes place in classrooms that are enabled with various forms of modern information and communication technology (ICT), including tablets, laptops, robotics and advanced simulation technologies.

To address the issue of lack of access to education in remote villages, AMMACHI Labs also deploys a Mobile Vocational Education (MoVe) van, which is equipped with ICT tools for education.

Data collected on the first batch of trainees indicated a drop-out rate of only 17.3 per cent, which is below the national average for vocational training. Three months after graduation, more than half (57 per cent) of the graduates reported that they were earning an income and had the confidence to use their learned skills to earn an income. Beyond economic gains, post-training surveys showed a rise in self-confidence among graduates and greater awareness among them of their rights and opportunities. Furthermore, with increased earnings and better knowledge, trainees found themselves increasingly willing and able to participate in family decision-making processes.

Since 2014, the initiative has expanded to 21 states across India and has reached over 5,000 rural women.

Insights

Adapting to the local needs and context

Although ICT removes some barriers to education, it also creates its own, including the need for a power supply and the requirement that students be ICT-literate. To overcome the issue of insufficient power in remote locations, the laptops and tablets in the MoVe van are solar-powered. To ensure that nobody is left behind because of the literacy and technological skills gap, the programme's computerized vocational training (cVET) and life enrichment education (LEE) are specially designed for women who have rudimentary literacy and no previous exposure to ICT.

Furthermore, to palliate the lack of hands-on experience, or costly heavy machinery, AMMACHI Labs uses haptic technology. More commonly used in the medical field as simulation tool, haptics provides sensory feedback, such as vibrations, allowing students to gain experience in close to real working conditions and to develop the required motor skills safely, even in the absence of instructors.

Catering to diverse needs of learners

While standardized courses facilitate quality control and delivery, they are often not adaptable to individual learners' needs and learning patterns. AMMACHI Labs uses ICT to overcome this issue. The courses use diverse forms of media, including videos, games and simulations, to enable the learners to gain skills in accordance with their preferred learning styles. Moreover, thanks to the flexibility brought by the use of ICT, each trainee can learn at their own pace. As a majority of those living in the rural Indian context are dependent on a daily wage to manage expenses, training courses must consider and adapt to the learner's time frame. The duration of course varies between 1 to 3 months, depending on the course and individual requirements.


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Breaking the language barrier

India has more than 23 official languages, which can limit the potential outreach of every new course. However, by creating courses for dissemination through ICT, AMMACHI Labs is able offer their courses in several languages. At the programme's conception in 2012, courses were available in three languages: Tamil, Hindi and Malayalam. Two years later, the courses were available in 11 Indian languages.

Using peer-support to ease learning

Data compiled by AMMACHI Labs indicated that communities that did not have strong support systems for women and a lack of local employment opportunities saw a drop in graduates' self-confidence levels three months post training. For that reason, AMMACHI Labs decided to group trainees into micro-enterprise self-help groups. These groups receive extensive training during the courses and for nine months after completion, and the members participate in post-training activities that maintain the momentum generated through the course. The self-help groups are supported by the local staff

to apply their new skills, and AMMACHI Labs helps organize opportunities for the groups to participate in trade fairs, and connects artisans to domestic and international industries. AMMACHI Labs found that this peer-based and group learning approach eases the learning curve for trainees who are not familiar with formal skills training. Furthermore, group activities foster camaraderie, which help women to retain the skills they learn after the conclusion of the programme, and to further develop them.

Reducing disease in rural communities

In India, 60 percent of the population practice open defecation, which spreads disease (World Health Organization 2014). This practice is largely due to the lack of sanitation facilities in many rural communities.

AMMACHI Labs decided to address this issue through training women in masonry and plumbing, providing them with the skills to build sanitation facilities in their villages, as well as with the sanitary practices to efficiently use them.

Looking forward

As of 2017, the programme is active in 27 villages in 21 states. It is anticipated that by the end of 2018 the programme will be operational in 101 villages across the country.

References

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Learn more about Ammachi Labs

Prof. Rao R. Bhavani (Director) and her team helped us compile this document. She may answer your questions at bhavani@ammachilabs.org

You will also find more references on the initiative in our website at: http://www.unevoc.unesco.org/go.php?q=PP_Ammachi

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