SWISS
FOUNDATION
FOR TECHNICAL
COOPERATION

swisscontact

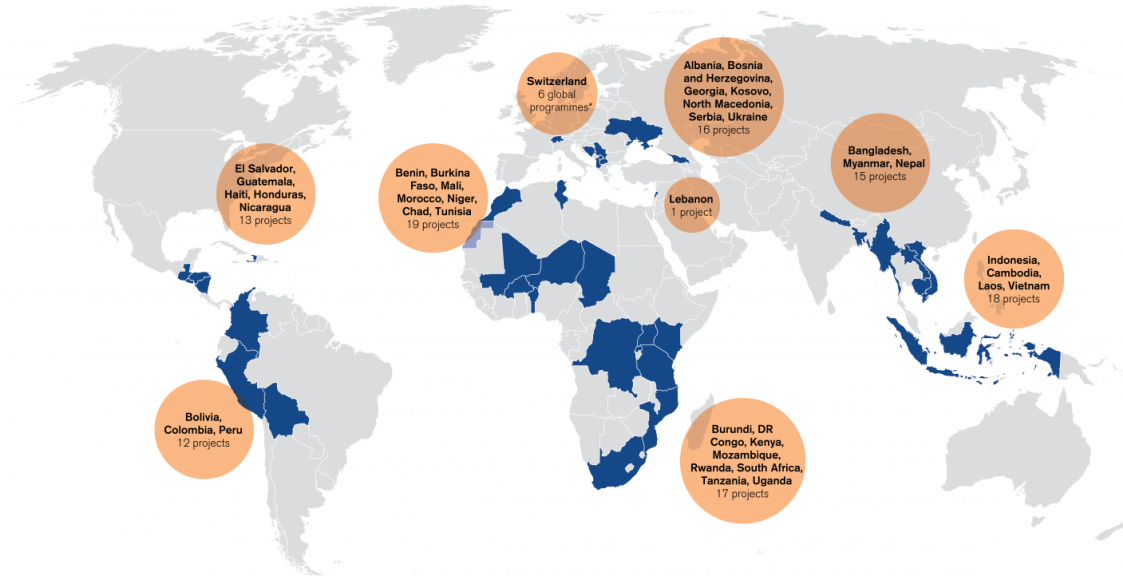**Enhancing training quality with 3D and Virtual Reality: ASTHA's experience of working with Community Paramedics**

Swisscontact at a glance

Swiss independent non-profit organization founded in **1959**

1000+ employees worldwide

117 projects

in **39** countries

El Salvador, Guatemala, Haiti, Honduras, Nicaragua
13 projects

Switzerland
6 global programmes*

Albania, Bosnia and Herzegovina, Georgia, Kosovo, North Macedonia, Serbia, Ukraine
16 projects

Bangladesh, Myanmar, Nepal
15 projects

Benin, Burkina Faso, Mali, Morocco, Niger, Chad, Tunisia
19 projects

Lebanon
1 project

Indonesia, Cambodia, Laos, Vietnam
18 projects

Bolivia, Colombia, Peru
12 projects

Burundi, DR Congo, Kenya, Mozambique, Rwanda, South Africa, Tanzania, Uganda
17 projects

Global programmes managed from Switzerland

Working areas

INITIAL VOCATIONAL EDUCATION AND TRAINING	LABOUR MARKET INSERTION	UPSKILLING AND RESKILLING	SUSTAINABLE AGRICULTURE
SUSTAINABLE TOURISM	GREEN CITIES	TRADE PROMOTION	ENTREPRENEURIAL ECOSYSTEM

![swisscontact]

About the project

Project Location in

7 Districts

- **ASTHA (phase II: 2019-22)** aims to increase youth employment through a national community paramedic training programme and to ensure high-quality primary healthcare services for rural communities all over Bangladesh

- Achieving Sustainability Towards Healthcare Access (ASTHA) is a project of Swisscontact Bangladesh, funded by SDC, Novartis Global et al.

Nilphamari
Lalmonirhat
Rangpur
Patuakhali
Sunamganj
Sylhet
Barguna

Why using VR and 3D in the training program?

- Content modernization

- An intense and wider exposure to practical learning

- More accuracy of the training

- Decline in teaching time

- More interactive learning method

- High rate in learning retention

# Why using VR and 3D in the training program? (Contd..)

Integration of technology and the training content

Accuracy in training through simulating real-life scenario

Interactive and practical learning

Increased Student engagement

High rate of learning retention

Improved training quality

More skilled CPs at the community
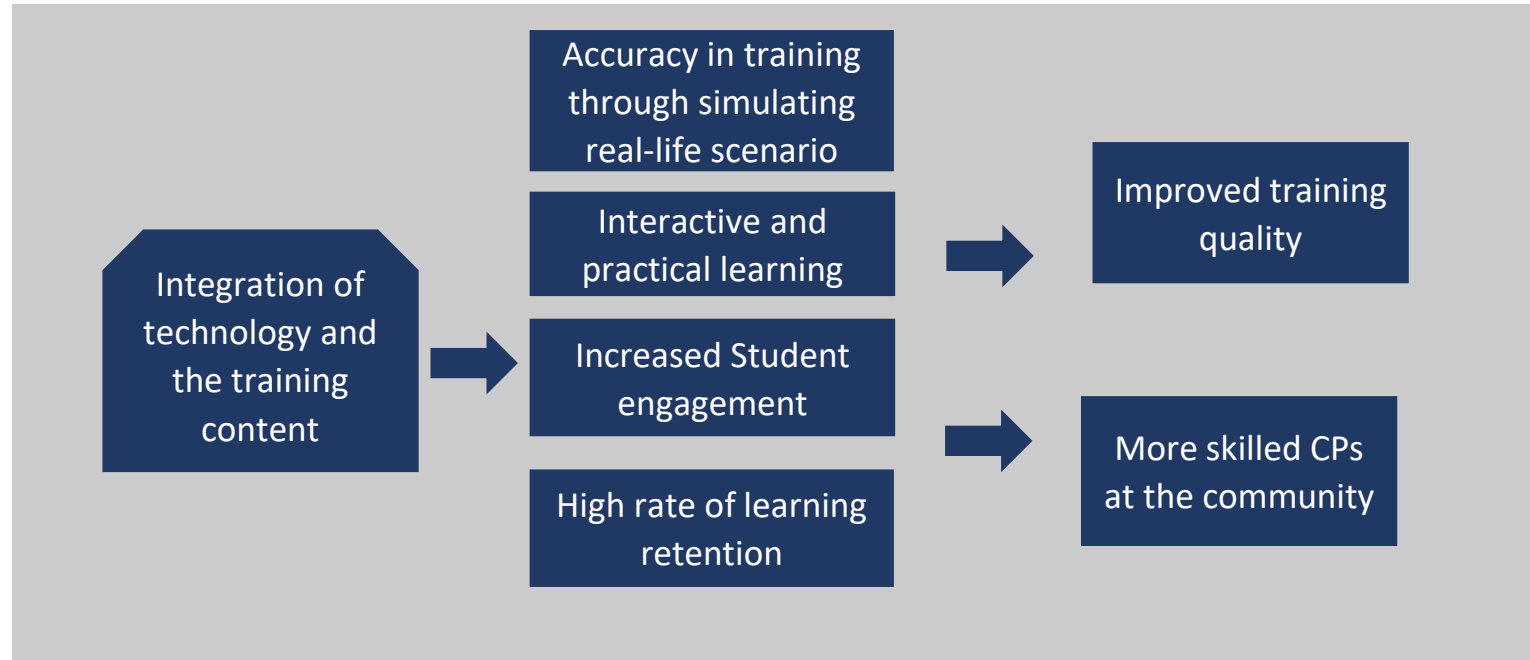
About the VR and 3D Application

- Developed using Unity 3D engine and 3D Studio Max

- Oculus GO. Oculus Rift devices were used as the VR headsets

- Easily replicable to a desktop application

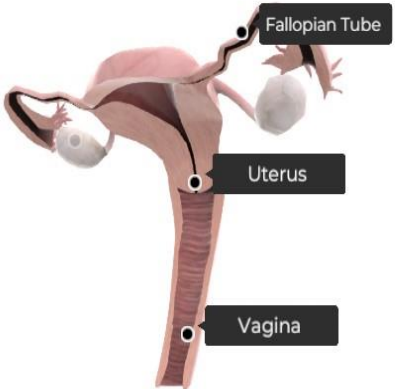# How VR and 3D modelling made a difference
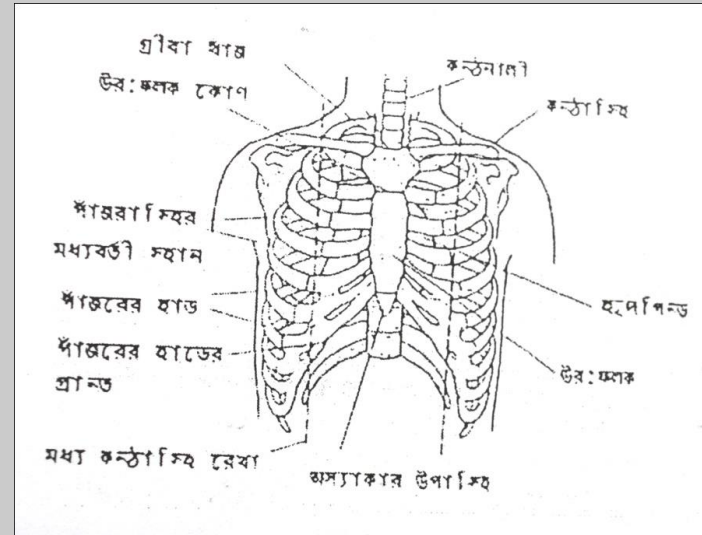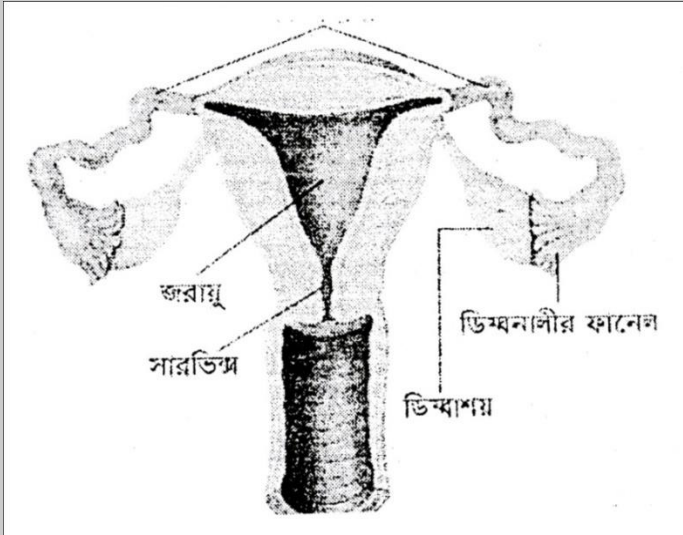
Visual in the book

How VR and 3D modelling made a difference

Using VR and 3D modelling in the classroom

- Teachers were trained on using the VR headset

- Teachers conducted the class using the desktop application through multimedia

- After the class, each student got 5/6 minutes to see the organs on VR headset

Results

80% Of the participants in two training institutes found learning through VR effective

100% Of the participants wanted the technology to be integrated in the training program

25% Improvement in learning for users compared to non-users

Teachers' Feedback

- The new training approach is very useful to deliver content.

- Easily demonstratable from different angles using 3D module; which otherwise was difficult

- 3D modules and VR –

  o Add value to visual aid & practically demonstrating the content
  o Raise students' interest
  o Improve the learning curve
  o Ensure interactive learning

**"This was beyond my imagination. The clear and detail view of the organ helped me learn faster today"**
-- Salma Akter,
First year student of CP course

Cost of developing VR and 3D contents

- VR Headset cost: 250 CHF – 500 CHF

- Application development cost: 3500 CHF

- 3D module development cost: 2400 CHF – 3000 CHF

- Implementation & administration cost: 5000 CHF

Way forward

- Why do we need an e-Learning platform?

- How to develop one?

- How to implement it?

- Roadmap for the next 1 to 3 years
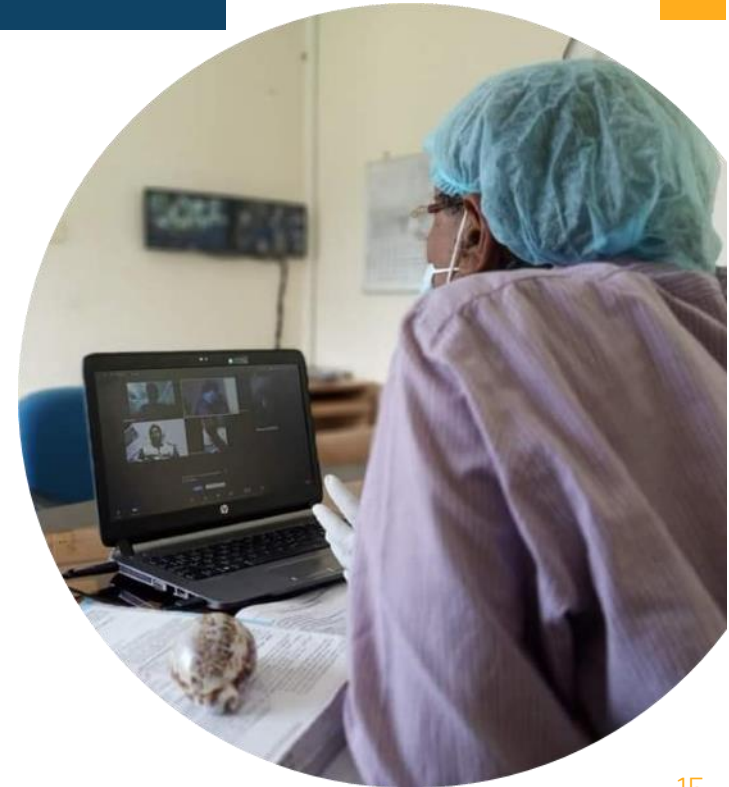
How VR and 3D modelling made a difference

- Desktop application tour
- VR tour

Thank You!