

# Visually presenting facts in online courses

## Maternity





## Client Details

**Industry:** Healthcare Equipment Manufacturer

**Audience:** Sales Force



## Project Details

The course was heavily fact based



## Course Requirements

**Tool:** Lectora

**Number of modules:** 1

**Quiz:** Yes

**Interactivity level:** Medium (Level 2)

**Audio:** Yes

**Translation:** No

**Course duration:** 45 minutes

**Compliance:** SCORM 1.2

It included the evolving process of child birth, worldwide birthing trends, and facts about birth and mortality rates of mothers and babies



Content Details

<b>Source content</b>	PPT with audio notes
<b>Content clarity</b>	Average
<b>Content Type</b>	Facts
<b>Images</b>	Yes
<b>SME assistance</b>	Yes

Birth process

Labor is the process of giving birth;

- First Stage
- Second Stage
- Third Stage



Statistics - mortality rates child

- Worldwide, the stillbirth rate has declined by 14%, from 22.1 stillbirths per 1000 births in 1995 to 18.9 stillbirths per 1000 births in 2009.
- Most stillbirths are avoidable, as evidenced by the low stillbirth rate for developed countries of 3 per 1000 births in contrast to the stillbirth rate of 28 per 1000 births in sub-Saharan Africa
- Two thirds of all stillbirths occur in just two regions: South-East Asia and Africa.
- The greatest reductions in stillbirth occurred in the Western Pacific Region, with a 3.8% annual decline between 1995 and 2009, but in the African Region there was only an annual decline of less than 1% (0.7%).

Screen-shots of the source content showing factual information



## Challenge

### 1. Inputs – fact-based, not in order and disconnected

The inputs that we received from the client were mainly fact-based and were disconnected. The challenge here was to analyze the disconnected content, sequence it and make it learner-friendly.



## CommLab Solution

### 1. Inputs sorted and arranged for better learning

The inputs received were sorted out and arranged in such a way that learners would be able to grasp the factual information with ease and remember it as well. We also applied sound visual design strategies to help in this.





## Challenge

### 2. Presentation of factual information such as statistics and trends

The inputs mostly included a huge number of facts on birth and mortality rates of mothers and babies and worldwide birthing trends. The challenge here was to present all this information using visuals, so that the learners could remember details after the course completion.



## CommLab Solution

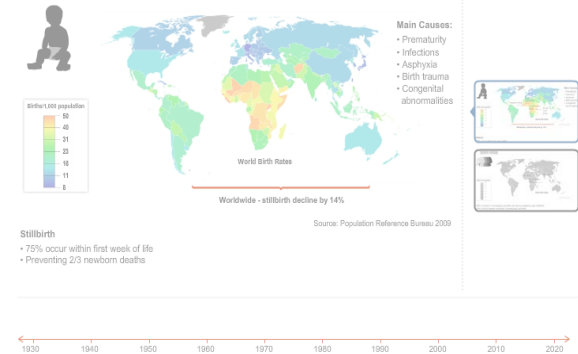
### 2. Usage of animated infographics to present factual information

As the content was fact-based, our instructional designers decided to use animated infographics to represent facts. They created graphs, color-coded maps, timelines and icons to represent the concepts.

#### Statistics - mortality rates child

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Click the images on the right to navigate through the screens

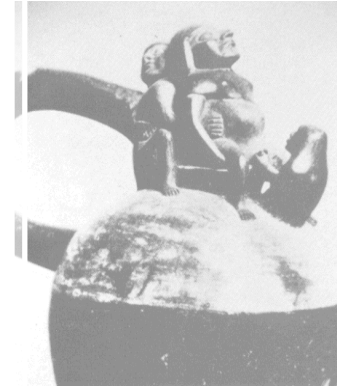




## Challenge

### 3. Images provided were very few and true to life

The images that we received in the course content were very few and mainly photographs. The client needed the course to be graphically rich and engaging. The course being heavily fact-based, the challenge for us was to present this factual information in a visually engaging and easy-to-recall form.

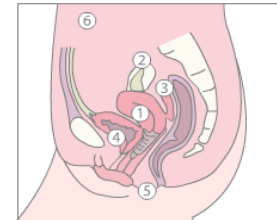


## CommLab Solution

### 3. Silhouettes and vector graphics were created to make the course graphically rich and engaging

To present the factual information appropriately, our visual designers created silhouettes and vector graphics which made the course highly engaging and easy for learners to connect the information with reality.

Examples for silhouette and vector graphics from the course



- |                  |                   |
|------------------|-------------------|
| ① Uterus         | ④ Bladder         |
| ② Fallopian tube | ⑤ Episiotomy site |
| ③ Pelvic abscess | ⑥ Breast          |



## Instructional

### 1. Presentation of historical data:

In the inputs provided, the historical data that we received contained only images and a voice over which explained the evolving process of child birth.

As the voiceover contained some key points to remember, we decided to present the birthing process with images. We also listed some key points so that the learners could relate the on-screen text with the images provided.



## Visual

### Evolution of childbirth

#### Artifact show:

- ▶ Pregnant women receive support in an upright position as given by other women
- ▶ Upright position facilitates the birth process and helps manage the pain

#### Role of Colonial women:

- ▶ Midwife sits or kneels to accommodate the mother's need to be in a sitting position
- ▶ Husband supports his wife who is in an upright position
- ▶ Midwife and other women attend to the mother while she delivers the baby



Urn, Peru



Wall carving, Egypt



Colonial Women

Screen-shot of the course showing the historical data with some on-screen text and their relevant images



## Instructional

### 2. Click on Tabs to present a process:

The birthing process consisted of three stages. In the source content, only the names of the stages were listed and an explanation of each stage was made in the voiceover.

In our treatment of this content, to present the process, images were provided for each stage and a click on images strategy was applied which made the learning interactive.



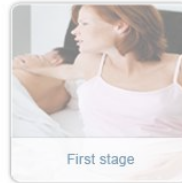
## Visual

### Stages of birthing process

#### Labor

The process of giving birth  
Lasts from the onset of true labour pains until completion of delivery

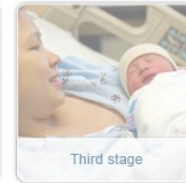
Divided into three stages:



First stage



Second stage



Third stage

Click each of the images to learn more.

Screenshot of course showing the definition of a term and an explanation of a related process using a Click on Tabs approach.



## Instructional

### 3. Icons were used to present facts:

Instead of presenting facts only in the form of text, relevant icons were created for each fact. This gave a completely new look and feel to the screen and made the course engaging.



## Visual

Here are some icons which were created by our visual designers to present facts



See [Example](#)



Instructional

4. Trends and Statistics:

The disjointed information related to trends and statistics was sorted out and presented in one slide. The strategy we used to present factual information was to use a graph, a table, and a map. The learner had to click on each of these to learn more.

See [Example](#)



Visual

A combination of a map, a table and a graph was created in Flash to present factual information

Birth Rates

Click the images on the right to navigate through the screens

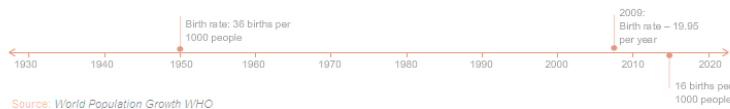
$$CBR = \frac{\text{births in a period}}{\text{population of person-years over that period}}$$

Highest birth rate: Niger 51.26 births per 1000 people

Lowest birth rate: Japan 7.64 births per 1000 people (Hong Kong 7.42 births per 1000 people)

World historical and predicted crude birth rates (1950-2050)  
UN, medium variant, 2009 rev.

Years	CBR	Years	CBR
1950-1955	37.2	2000-2005	21.2
1955-1960	35.3	2005-2010	20.3
1960-1965	34.9	2010-2015	19.4
1965-1970	33.4	2015-2020	18.2
1970-1975	30.8	2020-2025	16.9
1975-1980	28.4	2025-2030	15.8
1980-1985	27.9	2030-2035	15.0
1985-1990	27.3	2035-2040	14.5
1990-1995	24.7	2040-2045	14.0
1995-2000	22.5	2045-2050	13.4

Screen-shot of the visual elements used in the course.



## Instructional

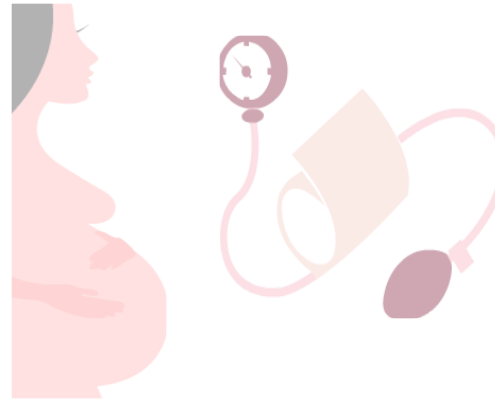
**5. Silhouettes and vector graphics to present content related to factual information:**

In the source, content related to a topic on complications was presented purely in textual form. In the course, this factual information was made visually rich and engaging.

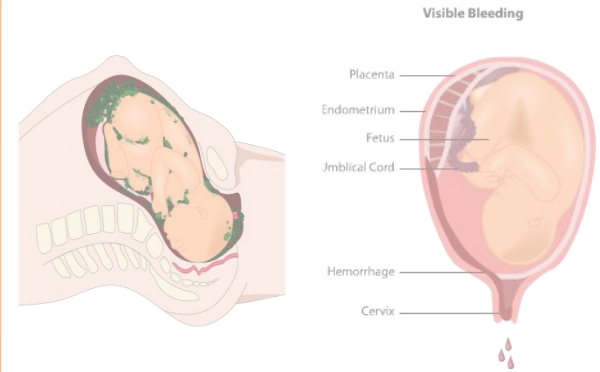


## Visual

Here are some Silhouettes and vector graphics created to present factual information



Silhouettes



Vector Graphics

See [Example](#)

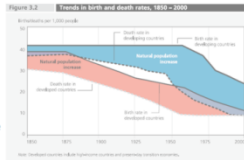


## Instructional

These are the screen shots of source content out of which we created a map, table and graph to present this factual information visually.

### Birth and market trends

- 132.5 Millions of people were born on 2008
- 34% of deliveries occurred at home without assistance of skilled health personnel
- Birth rates are very low and stable in developed countries whereas decrease rapidly in developing countries.



Source: World Population Growth WHO

### Statistics - birth rate

World historical and predicted crude birth rates (1950–2050)  
UN, medium variant, 2008 rev.<sup>12</sup>

Years	CBR	Years	CBR
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- The birth rate is constantly declining since the 1950's
- This decline is more evident in developing countries. The developed countries keep a low or very low constant rate.

Screenshot from the course presenting a map, a table and a graph. In this we used color-coding to present the birthing trends in various countries, for different years and percentages.

### Birth Rates

Click the images on the right to navigate through the screens

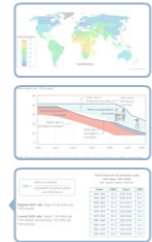
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[Back](#)



Visual

### Screenshot of the source content showing factual information in textual form

#### Caeserean section

A caeserean section is a surgical procedure in which one or more incisions are made through a mother's abdomen and uterus to deliver a baby

#### Today:

- Rising rate of caeserean section
- Older mothers
- Rising prevalence of obesity
- The rate of C-Section births has direct relationship with the country development status and also with established medical practises.
- Mothers decision

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11

### Screenshot of the course content presenting factual information using icons

#### Caeserean Section

##### Caeserean section

Caeserean section is a surgical procedure in which one or more incisions are made through a mother's abdomen and uterus to deliver a baby.

#### Facts related to current C-section trends



Rising rate of caeserean sections



Older mothers



Rising prevalence of obesity



Country status and medical practice



Mother's decision



Click the icon to view the sources.

[Back](#)



Visual

## Screenshot of source content

### Possible complications

- Haemorrhage
- Hypertensive disorders
- Embolism
- Abortion
- Ectopic pregnancy
- Sepsis/infection
- HIV/AIDS



Source: Khan et al. WHO analysis of causes of maternal death: a systematic review. Lancet, 2006, 367:1066-1074

23

## Screenshot from the course showing how silhouettes and vector graphics can be used to present facts and make the learners connect them to reality

### Complications

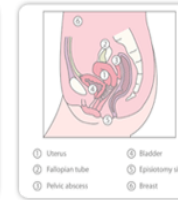
- Maternal deaths in developing countries: Haemorrhage and hypertensive disorders
- Maternal deaths in developed countries: C-section and anaesthesia



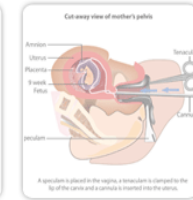
Haemorrhage



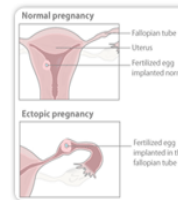
Hypertensive disorders



Embolism



Abortion



Ectopic pregnancy



Sepsis/Infection



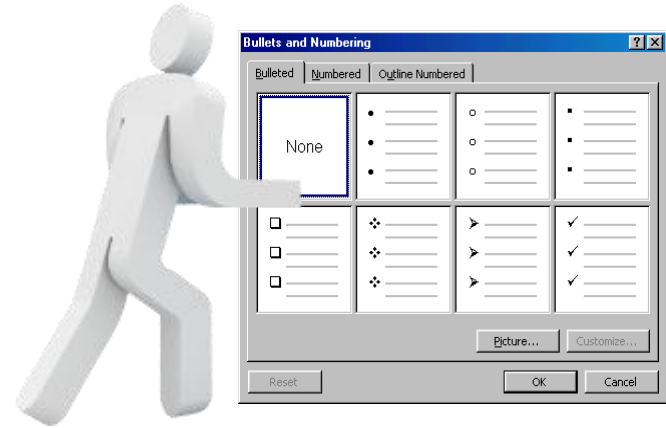
HIV/AIDS

[Back](#)

## Internal Success

### Presenting facts visually:

We achieved success in terms of creating a fact-based course that was visually engaging and learner-friendly.



### Getting away from bulleted lists:

We learned how to get away from bulleted lists and present factual information in an interesting manner using graphics.