Design of MOOCs for Health Education
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Presentation outline

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Participation and stakeholders

- Region Zealand
- University College Zealand
- High Schools
  - Center Zealand High School
  - Vordingborg High School
  - Kalundborg High School
- Middle schools
  - Haslev privat schools
  - Vigersted Puplic School
  - Eskildstrup Puplic School
  - Kalundborg Puplic School
Objective of the Course

• A picture of career options;

• A connection between middle and-high school education and Health profession;

• A new perspective on educational guidance counseling.
Themes and MOOC

- Malaria and International Healthcare
- Chemistry and molecular gastronomy
- Health care and treatment
- Biological methodology (CSI)
## General MOOC course description

<table>
<thead>
<tr>
<th>Start up</th>
<th>Theme day</th>
<th>Post processing</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOOC course, duration 2-8 weeks</td>
<td>duration 1-2 days</td>
<td>MOOC course duration, 1-2 weeks</td>
<td>3 months after finish</td>
</tr>
<tr>
<td>Introduction to MOOC and work with curriculum</td>
<td>Work with MOOC elements both practical and theoretical</td>
<td>Work with E-learnings objects from the MOOC</td>
<td>Focus group interview with students and pupils, and teachers of all 3 levels in the educational systems</td>
</tr>
<tr>
<td>Mandatory assignments</td>
<td>Participation of pupils from middle schools and high schools and students from University College</td>
<td>F2F/ virtual meeting with health occupation and health education</td>
<td>Questionnaire surveys with students and pupils</td>
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<tr>
<td>Virtual meeting, between high schools and middle schools</td>
<td>Participation from the health profession</td>
<td>Post processing of mandatory assignments in MOOC</td>
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<tr>
<td>F2F meeting: High schools and middle schools or/and UCSJ and High schools</td>
<td>Participation from career counselors</td>
<td>Meeting with career counselors</td>
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<tr>
<td>Co-creation of E-learning objects to the MOOC</td>
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Exemplary course description Start up - Malaria and international Healthcare

• Introduction to MOOC and use of MOOC (F2F)
• Introduction to mandatory assignment (F2F)
• Co-creation of MOOC elements (UCSJ lectures and students)
• Virtual meeting between High and middle schools
• Work with normal curriculum and MOOC elements
Exemplary course description F2F Theme days

Presentation by nurse Inge Boss about career choice in nursing

Presentation: Career counseling to the higher educations by Ove B. Nielsen

Workshops

----Classically diagnostic of the malaria parasite
----Gaming malaria
----The life cycle of a malaria parasite
----Treatment of malaria patient
----Geography and prevalence of malaria mosquito

Presentation: Diagnosis and treatment of malaria in Kenya by Charlotte Birk Olsen.
Exemplary course description Post processing

- Mandatory assignment
- ----career choice
- ----questions regarding malaria diagnostics and healthcare
- Contact to mentor network
- ----Mentor network: Clinical Practice, Students from UCSJ
- ----represented from other professions
- ----Skype meeting with representative from mentor network
- ----Mail correspondence with mentor network
Used of MOOC Content

• Video & video presentations
• Video instructions
• Podcast
• Audio files
• Quiz
• Multiple-choice
• Gaming
• ----Memory card
• ----Computer games
• PowerPoint /Speak
• Text documents
• ----Literature
• ----Mandatory assignments
• ----Small assignment
A practical focus: Healthcare and treatment

The mandatory task prepared to the high school pupils.

Part 1: The pupils has to work out the following task on the MOOC.

1. Follow the curriculum in the MOOC in either biology / physical education or biology / social studies and solve the related mandatory questions in the MOOC.

2. Record a video on the theme day of the dissection of hearts that will be uploaded to the MOOC.

3. Record a video on the theme day, that illustrate the cardiovascular system dramatically or develop a health and exercise plan related to the case, which is then uploaded to the MOOC.
Litterature and E-learnings objects in relation to the first mandatory task

Examples from the MOOC:

-- Literature: Heart and cardio circulatory system
-- Literature: Structure of the Heart
-- Video: Instructions video in dissection of heart
  - https://www.youtube.com/watch?v=okjX1ibHvqI
  - https://www.youtube.com/watch?v=YtPnlb6tVoM
  - https://www.youtube.com/watch?v=YtPnlb6tVoM
-- Text documents: Study questions and instructions
Themeday

Application oriented learning

-- Dissection of heart
-- Video of the circulatory system
-- Echocardiography

The students from UCSJ instruct high school pupils in dissection of hearts
The pupils from high school record a video of the dissection to the MOOC
The students from UCSJ instruct and explain the high school student about the use of Echocardiography and interpretation of ECG diagnostic
Bradykarde

<table>
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06-AUG-2015 14:04:34
THE FIRST SITE-SLAKBA RUTINEHENTNIN

Udvolt sinusbradykarde med AV-blok grad I
Kom fører udadlægge Anterocor Infarkt. Alder ubekræftet
Almennt EKG
Ingen tidligere EKG'er tilgængelige

Henvist af:  
Ubekræftet

Efod: ED: BESTILLING:
Side 1:
Mandatory test part 2

Part 2 Assignment related to the mentor network, carried out after the themes days: How to become a nurse and how nurses work with observation of patient with heart diseases.

1. Go to the educational guide (https://www.ug.dk/flereomraader/inspiration) and examine which requirement there is to be admitted to nursing education.

2. Contact the student counseling unit (Students Choices Zealand) and examine other educational options from other health professions.

3. Examine the place in Denmark (closest to your home town) to educate to be a nurse.

4. Find a good link that explain the education for nurses.
Part 3: In this exercise you contact a nurse, or nurse students and ask them at least 5 questions you think are interesting in relation to the work with heart diseases patients. Below are examples of questions you can imagine to ask.

1. What was your motivation to educate to be a nurse?
2. What career paths and job opportunities do you see in the work as a nurse?
3. How does your knowledge from middle school and high school applied in your daily job as a nurse?
Thank you for your attention