Moderne pedagogiske prinsipper i akuttmedisin og AHLR
"The Anatomy lecture of Dr. Nicolaes Tulp" av Rembrandt van Rijn, 1632
Hva er Læring?
Hva er kunnskap?
The Utstein Formula of Survival

Medical Science × Educational Efficiency × Local Implementation = Survival
LÆRING uten undervisning?

Undervisning uten LÆRING?
"Learning is by many seen as the other partner in that ritualised dance called Teaching"

Birdwhistell 1972
”Jeg ønsker å lære”

”Jeg liker å undervise”
Number of successes

Max motivation

Difficulty of task as perceived by learner

Max anxiety

Number of failures
Lærer

“Objekt”
Fasilitator  "Subjekt"
Fasilitator

“Subjekter”
Samme tid

Samme sted

Forskjellig sted

Forskjellig tid
“The need is more time-efficient solutions, as paid working hours today account for 80% of costs of training and re-training”

Wik et.al. (2001) *Resuscitation*
Team
(SPECIALISTS)

Individual
(MEDICAL PERSONNEL)

Individual/groups
(ALL PERSONNEL)

Efficient use of Instructors
Læringsmål

+ Simulator

= Simulering

+ Debriefing

= Utdanning
Læresirkelen som didaktisk redskap

Demonstrerer å ha forstått sammenhengen mellom kontinuerlige brystkompresjoner og vellykket sjokk fra hjertetaster

Demonstrerer korrekt bruk av hjertetaster ved hjertestans

Demonstrerer "Closed loop" kommunikasjon

Demonstrerer ledelse av stans-team iht. lokale prosedyrer

Utøver HLR i henhold til G2005

Demonstrerer korrekt plassering av elektroder ved hjertestans

Demonstrerer korrekt handlingsalgoritmene ved brystsmørter

Demonstrerer korrekt behandling av overdose
Læring
handler mest om
RELEVANS

Men også om
REALISME
The Utstein Formula of Survival

Medical Science × Educational Efficiency × Local Implementation = Survival

REALISME RELEVANS
Hva skaper RELEVANS?
1. Læringsmål

2. Debriefing
vs.
Poor quality teaching in lay person CPR courses

Melinda M. Parnell, Peter D. Larsen

Department of Surgery and Anaesthetics, Wellington School of Medicine, Wellington, New Zealand
“(…) the current style of teaching is unlikely to result in students being able to perform adequate CPR if required in the community.”

Parnell & Larsen 2007
Neither model is optimal
Students at Oslo Paramedic School

Wik, L. et.al. (2001)
"Demonstrerer kontroll av livstegn hos nyfødt baby"
Resuscitation With Bag and Mask and Oxygen

**SCENARIO OVERVIEW**

**Estimated scenario time:** 10-15 minutes  
**Estimated debriefing time:** 15-20 minutes

**Target groups:** Nurses, Physicians, Respiratory Therapists, Paramedics, Midwives

**Brief summary**
This case presents a complicated pregnancy (pregnancy-induced hypertension) with fetal heart rate decelerations. The focus of this case is specifically on the ventilation component of newborn resuscitation. Learners are expected to be familiar with the setup and proper use of the type of ventilation device used locally.

**Learning objectives**
- Executes equipment safety check
- Summarizes the 4 initial assessment questions to determine need for newborn resuscitation
- Explains the initial steps in newborn resuscitation
- Evaluates respiration, heart rate, and color
- Provides effective communication with resuscitation team members
- Applies therapeutic communication with family members
- Identifies appropriate level of post-resuscitation care

**Scenario-focused objectives**
- Summarizes apnea or heart rate <100 beats per minute as indicators for providing positive-pressure ventilation
- Provides effective positive-pressure ventilation
- Evaluates the effectiveness of positive-pressure ventilation
- Explains when to discontinue positive-pressure ventilation
LEARNING OBJECTIVES

This is a skills station designed to teach the steps for defibrillation.

Specific for defibrillation:
- Confirms lack of pulse and shockable rhythm
- Recalls that defibrillation is first and foremost in treating VF/pulseless VT
- Demonstrates correct placement of pads or paddles
- Remembers to always give a clear warning for safety of providers before defibrillation
- Remembers recommended shock-dose regimens
Observerbart
Målbart
Handlingsorientert
Studentfokuset
The Circle of Learning
in emergency medicine and healthcare education

By: Michael Sautter
Harald Eikeland

Laerdal
Helping save lives
Kognitiv vs. taktil læring

Circle of Learning

- Knowledge acquisition
- Skills proficiency
- Simulation in teams
- Computer simulation
- Clinical experience
Synkron vs. asynkron læring
Just-in-case vs. just-in-time
- Recalls the CPR-D algorithm
- Demonstrates where to find extended information about drugs

- Performs CPR according to 2005
- Demonstrates correct procedure for manual blood-pressure measurement

- Demonstrates closed-loop communication
- Applies CRM principles

- Decides correct treatment of cardiac arrest
- Demonstrates the correct algorithm for ACLS
Takk for oppmerksomheten!

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