



FORSVARSAKADEMIET

# USING 3D SIMULATIONS AND GAMES FOR LEARNING



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# USING 3D SIMULATIONS AND GAMES FOR LEARNING



- In this demo/workshop, I will talk about games in education and training of soldiers.
- Present the EH-101 programme.
- Play the game.
- Connect external power to an EH-101 helicopter.
- Present the RECCE battle position programme.
- Play the game.
- Evaluate your performance via. xApi.
- I'll ask questions and you will give the answers.
- Q & A.

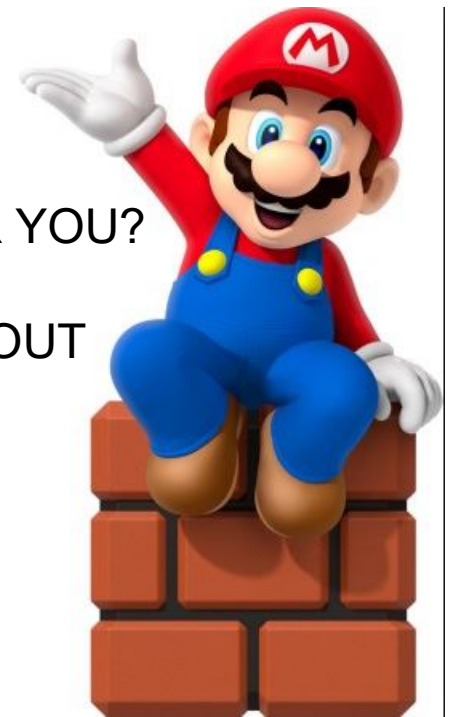


# USING 3D SIMULATIONS AND GAMES FOR LEARNING



VIDEO GAMES ARE BAD FOR YOU?  
THAT'S WHAT THEY SAID ABOUT  
ROCK-N-ROLL.

– SHIGERU MIYAMOTO





# GAMES AND SIMULATIONS IN EDUCATION; WHY?



- Multisensory
- Highly motivating & engaging.
- Allow choice & freedom.
- Student tailored pacing.
- Immediate feedback.
- Rewards based.
- Failure motivates to try again.



## EH-101 HELICOPTER FAMILIARIZATION PROGRAMME.



### Challenges

- No helicopters available for Logistic Material Training section (LMT)
- Distance between LMT and the hangar (600m)
- Increasing need for training at LMT

### Solutions

- Buy an extra helicopter for training
- Build 3D simulation for the daily training of the tecs.
- Build 3D training courses in order to save instructor time at LMT

### Benefits

- The tecs are available at their units longer time
- Instructors are available for more courses
- Before 5 days 4 instructors
- Now 2 days 4 instructors



## EH-101 HELICOPTER FAMILIARIZATION PROGRAMME.



### My challenge for you

- Connect external power to an EH-101 helicopter
  1. Open the Ims
  2. Go to 3.1 “Gennemgang af EH-101 udvendigt”
  3. Start simulation
  4. AC/DC tilslutning
  5. Watch the video
  6. Go to 7.1 “Øv dig i det du har lært”
  7. Start simulation
  8. Luk Info
  9. Select “Extern strøm”
  10. Luk info
  11. Play the game!



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# RECCE BATTLE POSITION PROGRAMME, DANISH ARMY NCO ACADEMY

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## Challenges

- Large amount of students.
- Limited time.
- Limited feedback in the terrain.

## Solutions

- Extend the course.
- Integrate 3d games in the training.
- Integrate xAPI.

## Benefits

- All students get to do RECCE and get feedback from the instructor at least 10 times.
- Very detailed knowledge of the students movements and progress.
- The time spend in the terrain is more effective.
- One day less in the terrain



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# RECCE BATTLE POSITION PROGRAMME, DANISH ARMY NCO ACADEMY

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## My challenge for you



- Perform a RECCE of a battle position and PASS
  1. Click the shortcut
  2. Type Ma.nr
  3. Select level 1 or 2
  4. Play the game until you pass a level or I say stop.





# MY QUESTIONS FOR YOU!!

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- Can games be used by people of all ages?
- Are they easy or difficult to implement in your training?
- Do games provide learning?
- Are you willing to try it back home?
- Give an example on where you can use it in your organization.
- Give an example on why can't use it in your organization.