

# Development of online induction courses for workshops and studios of art and design university.



Aalto University  
School of Arts, Design  
and Architecture

Antti Huittinen

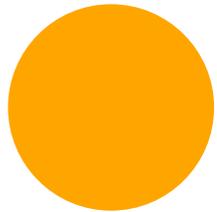
5.4.2019

# Antti Huittinen

Application designer  
"IT and Digital Imaging Support"

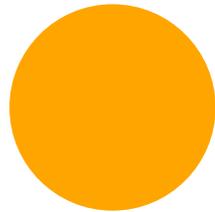
Digital learning systems and devices team  
ARTS Infra

# Development of online induction courses



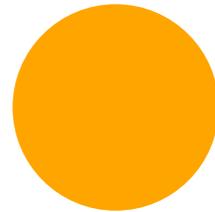
## Background of the project

- Challenges
- Aims
- Means



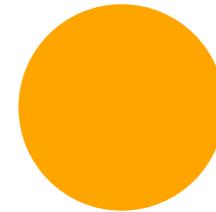
## Process and solutions

- Whereabouts of the project
- What are the solutions used for the implementation

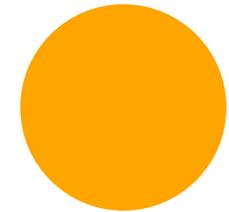


## Lessons learned

- Mishmash of observations



## Further ideas



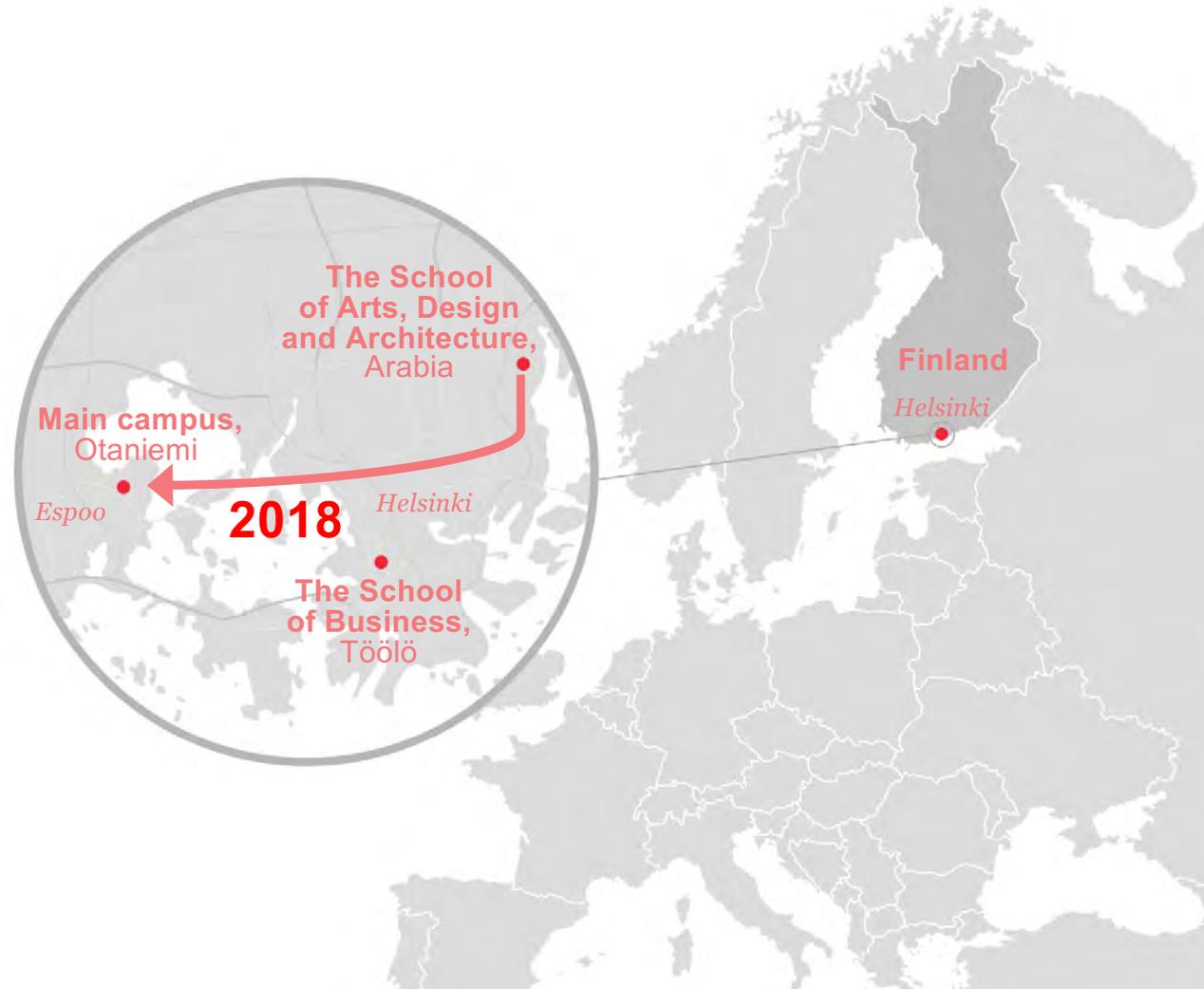
## Q&A

Comments

# From three Campuses into one

Aalto University focuses its operations on the main campus

- School of Arts, Design and Architecture moved in 7/2018
- School of Economics moved 3/2019



# Other changes and developments

- **Former change in organization of the technical services. Departmental > common shared service**
- **Change in departmental working culture in a new school building Less space = more shared resources**
- **University wide strategic definition for multidisciplinary**

# Potential amount of users

- Departmental era: 100–250 students
- Arabia campus ARTS Infra: 1500 students
- Otaniemi campus ARTS Infra: 12 000 students

Possible flexible co-operation with 3rd parties (Startups, research groups, etc.)

# Challenges

- All workshops require induction before using the facilities for his/her learning project.
- Today induction is given F2F by workshop masters.
- Workshop masters are responsible for workplace safety, providing guidance, maintenance of equipment, etc.
- The current model of induction is not feasible while number of users of technical services is increasing.



# Web based Aalto ARTS Workshop inductions



**Over 20 specialized learning environments**

**55 professional staff members**

**Students learning by doing**

**Open, Flexible and Safe Access**



**Media rich induction courses online**

**Blended / flipped learning on site**



**Augmented assistance on site**



# Aims

- **Increased user volume**
  - User has a good understanding of the workshop already when contacting staff
  - Ability to work independently in some cases without staff engaging in.
- **Improved user safety**
  - Possibility to see details up close on videos. Not possible F2F in large groups
  - Possibility to refresh one's memory of working methods after a elongated break.
- **Enable new pedagogical methods for F2F teaching**
  - Flipped classroom
  - Blended learning
  - etc.
- **Improved quality of learned skills**
  - Better skills
  - F2F teaching can get into more advanced techniques faster

# Means

- **Mediation of information**
  - What is available and is it for me?
  - What can be done and where?
  - Who can help me?
- **Workshop clinics**
  - Theme related “open doors” days.
  - Come and learn about
  - Come and ask
  - *Blogs / Vlogs / Podcasts*
- **Online induction courses**
  - Flipped classroom
  - Blended learning
  - etc.
- **Use of “new” technologies**
  - AR / VR / XR
  - *Projection mapping*

# Online learning

# Online learning

# Where to start?

## Expanding field

- Pedagogical research field
- Education as a business  
(LMS platforms, content subscriptions, etc.)
- Ideological phenomenon  
(Wikipedia, OpenSource LMS platforms, etc.)

# Pedagogy

“In short, Pedagogy means the way in which teaching is organized. It also always includes visionary educational principles.”

“Takes a stand on the learning conception, didactics, ie what is good teaching, the role and function of the tutor or teacher and the student, the learning materials, the assessment and the target group.”

“The learning conception is the different learning of people based on the concept of man. Traditionally, the concept of learning is divided into four categories in the field of pedagogical research: behavioral, cognitive, constructivist and contextual learning.”



**ATutor**

**moodle**

**Sakai**

**DOKEOS**  
eLearning made easy

**forma.lms**

**LATITUDELEARNING**

**docebo**

**schoolology**

**skilljar**

**kannu**

**Coggno**

**talentlms**

**Blackboard**  
COURSESITES

**A?** Aalto University  
School of Arts, Design  
and Architecture

The Open University

**Future Learn**

**in LEARNING**

**Udemy**

**UDACITY**

**PLURALSIGHT**

**SKILLSHARE**

**coursera**

**AnswerGarden**

**EdVisto**

**seppo**

**OJO**

**Panopto**

**Prezi**

**thinglink..**

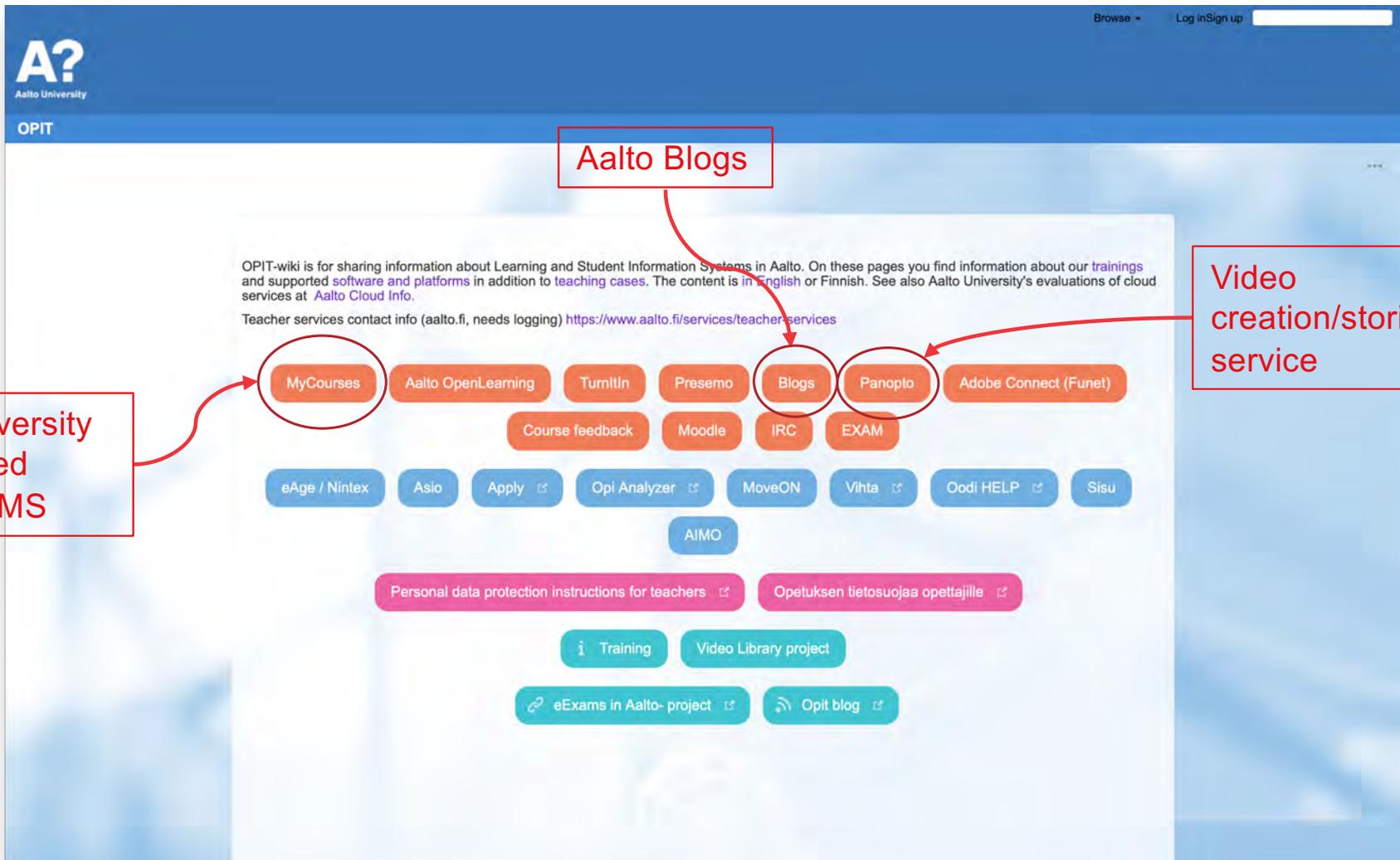
**celtx**  
VIDEO & GAME PRODUCTION

**padlet**

**Quizlet**

**Kahoot!**

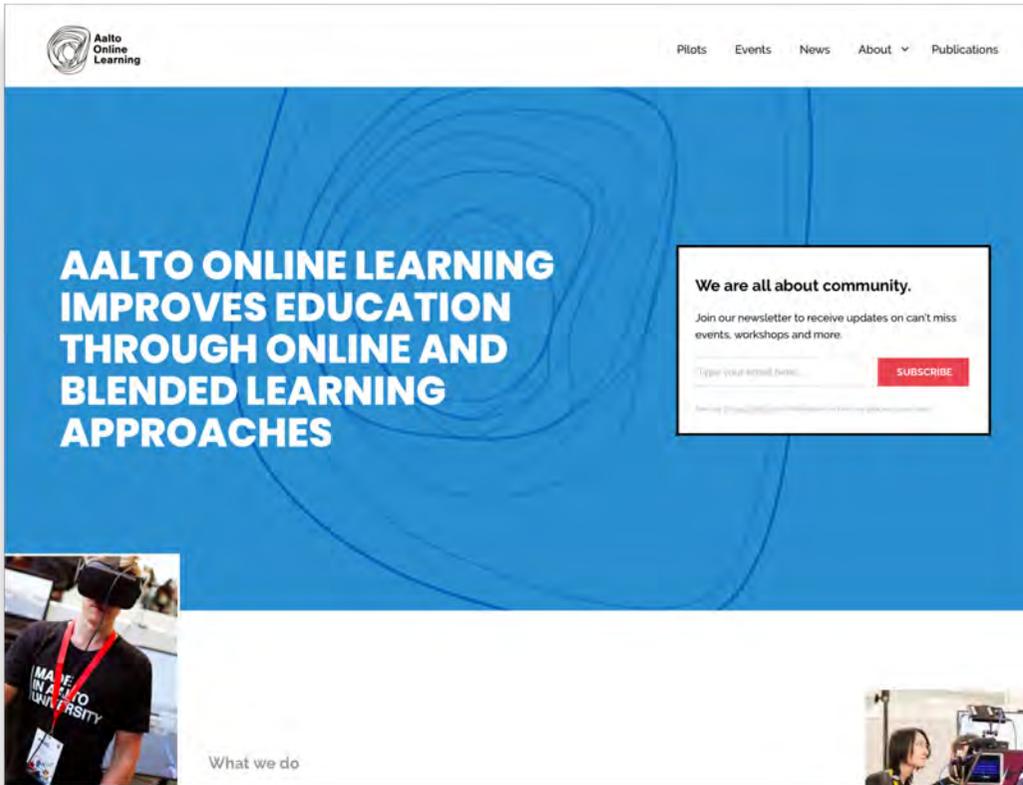
**popplet**



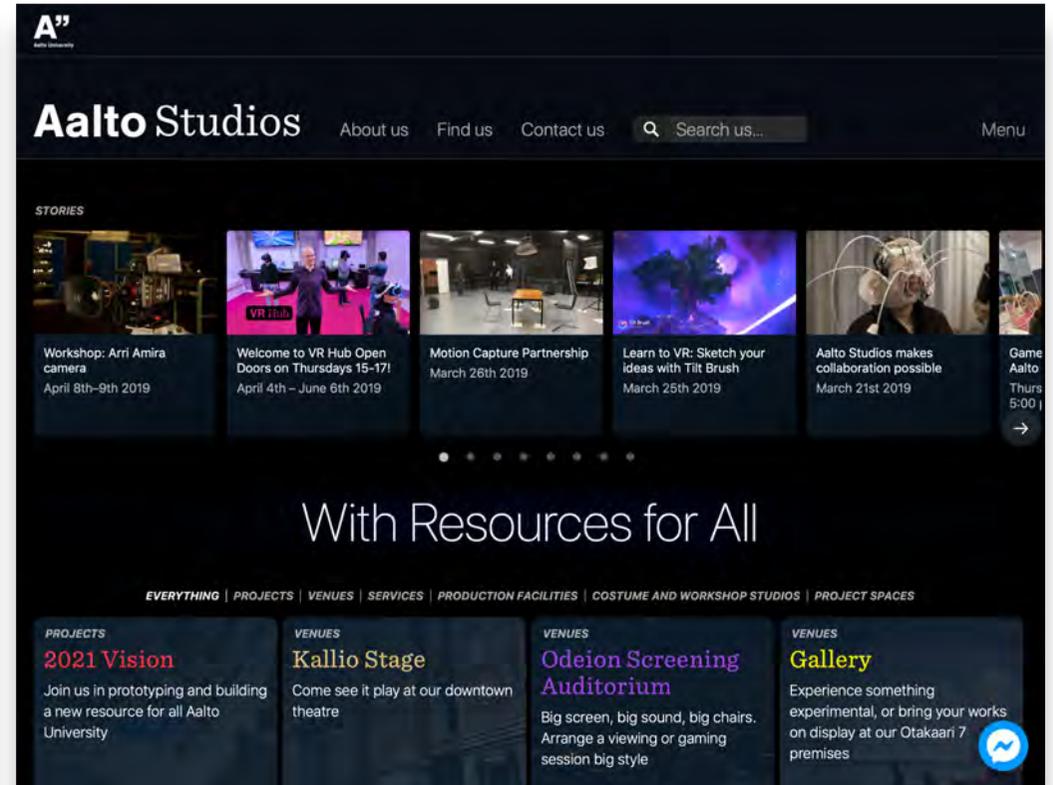
Aalto Blogs

Video creation/storing/sharing service

Aalto University customized Moodle LMS



[onlinelearning.aalto.fi](http://onlinelearning.aalto.fi)



[studios.aalto.fi](http://studios.aalto.fi)

# Online learning – Some benefits

- **Flexibility (time, place)**
- **Minimizes travelling and non-attendance**
- **Tools for learning management and analytics**
- **Cost per student affordable**
- **Flipped / blended learning enabling**
- **Timely learning**
- **Interactive materials. Illustrations, videos and animations.**
- **Consideration of different learners**
- **”Easy” updating of teaching content**
- **Consistent content every time**
- **Revising is easy, learning does not end when course ends**

Eoppiva.fi

# Online learning – Some cons

- Time consuming to start with
- Can be costly
- Needs constant updating (Content and technology)
- Legality issues can be hairy (copyrights, publishing rights, agreements with models, etc.)
- How to keep good parts of F2F inductions with us (peer learning, tactility, social collaboration, etc.)

# Online learning – What do you need?

Simple way to think of it

- **Content**
- **Platform(s) for distribution**
- **Method for assessment / evaluation**
- **Feedback for development**

# Online learning – Our take on content

Let's do this by the book approach...



## 1. Synopsis - What, when, why, to whom?

Context / Konteksti

☰ 1

Learning outcomes / Osaamisen tavoitteet

☰

Target group / Kohderyhmä

☰

Main subject matter of the course / Kurssin sisällön pääpuitteet

☰

Implementation methods / Toteutuksen pääpuitteet

☰

Added value of the web / Verkon lisäarvo

☰

Schedule (Course) / Aikataulu (Kurssin)

☰

+ Add another card

## 2. Pedagogical script - Let's get into details

Learning conception / Oppimiskäsitys

☰

Special features of target group / Kohderyhmän erityispiirteet

☰

Functional structure ("the story of learning") / Toiminnallinen rakenne ("oppimisen tarina")

☰

Learning materials and content / Oppimateriaalit ja sisällöt

☰

Forms and environments of learning / Opiskelun muodot ja ympäristöt

☰

Guidance and peer support given by educator / Opettajan antama ohjaus ja vertaistuki

☰

Assessment / Arviointi

☰

Feedback / Palautteen kerääminen

☰

+ Add another card

## 3. Technical script

Technical structures / Tekniset rakenteet

☰ 1/1

Social structures / Sosiaaliset rakenteet

☰

Cognitive structures / Kognitiiviset rakenteet

☰

Knowledge structures / Tiedolliset rakenteet

☰

+ Add another card

## Online - Checklist

Virtual Tour 360

☰ 0/4

MyCourses pages

Third party resources / Kolmannen osapuolen tarjoamat materiaalit

+ Add another card

## Onsite - Checklist

QRCodes

Bluetooth beacons

Info posters

Materials for hands on assessments

AR Targets

+ Add another card

## Reflect against aims! / Reflektoi tavoitteisiin!

More open and flexible access to workshop / Ketterämpi pääsy työpajoille.

☰

More safe working in the workshop / Yhä turvallisempi työskentely työpajalla

☰

More skillful user of the workshop / Osaavampi työpajan käyttäjä

☰

+ Add another card

Workshop induction development v.2 ☆ Personal Private AH AL EH RM SK Invite Show Menu

**Blueprint of your existing induction course / Nykyisen perehdytyskurssin rakenne ja sisältö.**

What is displayed / shown on site (Sights+demostrations)? / Paikan päällä tapahtuva kiertokäynti ja/tai menetelmän demonstrointi.

What is lectured on site using presentation? / Luento, jossa käytetään apuna esitystekniikkaa.

What literature / texts are given for reading? / Mitä kirjallista materiaalia jaetaan luettavaksi?

What group works are exercised? / Millaisia ryhmitöitä suoritetaan?

What literal assessments are exercised? / Millaisia kirjallisia harjoitustehtäviä teetetään?

What hands on assessments are exercised? / Millaisia käytännön harjoitustehtäviä tehdään?

What other hand out learning materials are shared? / Mitä muuta oppimateriaalia kurssilla jaetaan?

+ Add another card

**In what format you could see it applied as a independently exercised online material? / Missä muodossa näkiit nykyisen kurssin osien parhaiten siirtyvän itsenäisesti opiskeltavaksi verkkoon?**

Video

Text on webpage / Tekstina verkkosivulla

Illustration on webpage / Kuvitus verkkosivulla

Text and illustrations on webpage / Tekstin ja kuvituksen muodostama kokonaisuus verkkosivulla.

Text and illustrations on downloadable/printable PDF / Graafisesti suunniteltu teksti ja kuvituksen kokonaisuus jonka voi ladata omalle laitteelle ja halutessaan tulostaa.

Digital assessment / Digitaalinen tentti tai kyseely.

Collaborative knowledge building / Yhteisöllinen tiedonkeruu.

Virtual reality / Virtuaalitodellisuus.

Augmented reality / Lisätty todellisuus.

Online group work / Verkossa tapahtuva ryhmätö.

Online or mobile game / Peli verkossa tai mobiililaitteella

+ Add another card

**My plan for web based induction course / Suunnitelmani verkkopohjaiseksi perehdytyskurssiksi.**

+ Add a card

**Working safety / Työturvallisuus**

+ Add a card

**Working environment rules (code of conduct) / työskentely-ympäristö (käyttäytymissäännöt)**

+ Add a card

**Equipment / Laitteet**

+ Add a card

**Professional skills / Työskentelytaidot**

+ Add a card

**Communicating results and making work visible / Työn ja tulosten näkyväksi tekeminen**

+ Add a card

**Accessibility / Esteettömyys**

Guides for disabled / Ohjeet vajaakykyisille

+ Add another card

INTRODUCTION	ABOUT the COURSE	ABOUT the WORKSHOP	
SPACES AND EQUIPMENT	VR TOUR	EQUIPMENT SPECS	
WORKING SAFETY	FIRST AID	WORKSHOP DEPENDENT HAZARDS	ALARMS AND SECURITY
RULES AND INSTRUCTIONS	CODE OF CONDUCT	WORKSHOP DEPENDENT INSTRUCTIONS	
ADDITIONAL COURSE MEDIA AND FILES	DOWNLOADABLE MANUALS, FORMS, INSTRUCTIONS, ETC.		
FEEDBACK SURVEY	FEEDBACK SURVEY		

- Main sections
- Workshop dependent content
- Common content

## Video production

1. Write voice over text
2. Time it
3. Plan images.  
2-5s per image
4. Shoot images

## Post production

1. Translate voice overs
2. Record voice overs
3. Edit videos
4. Add subtitles /  
close captions  
(language versions)

# Accessibility requirements

# Accessibility Statement

EN 301 549 V1.1.2 (2015-04)



**Accessibility requirements suitable for public procurement  
of ICT products and services in Europe**

# Media rich online induction courses



360°Virtual tours



Tutorial videos



Hypertext, images, illustrations

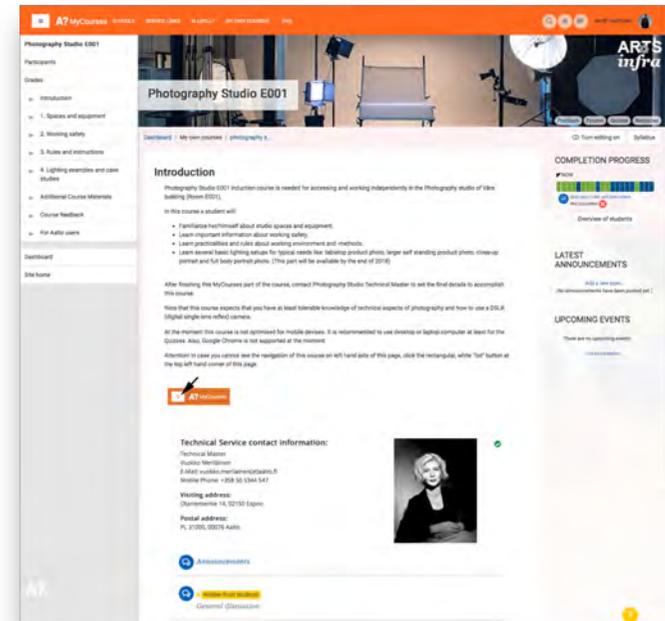


Quizzes

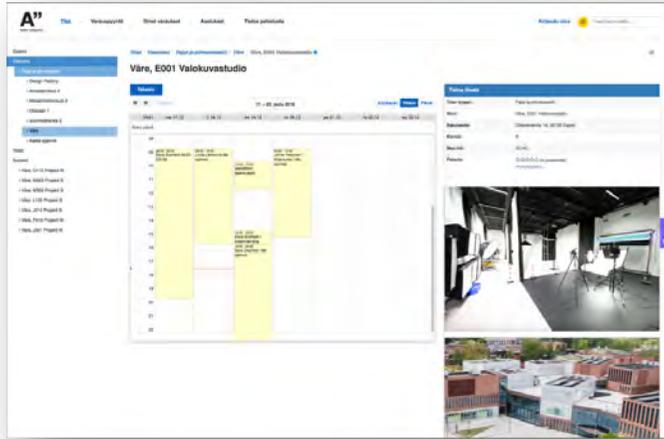


On-site integration

## Example of one ongoing course



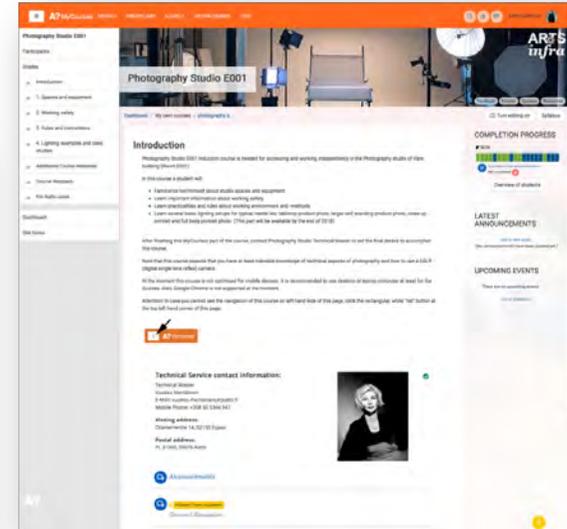
# Integration of infrastructure systems



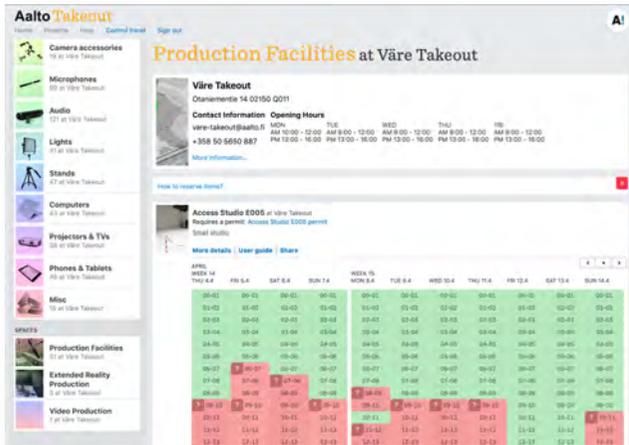
booking.aalto.fi



idcard.aalto.fi



mycourses.aalto.fi



takeout.aalto.fi

# Use of augmented reality



**Virtual 3D workshop floor of Väre for introduction and navigation**



**Instructions on-site**  
(Visualization)



**Instructions off-site**

**Thank you!**

