

# Welcome to ADD Basics!

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We'll start at 15:15

# A''

Aalto-yliopisto  
Aalto-universitetet  
Aalto University



# Today's agenda

**15:15** Ideation, homework review

**15:30** Applications of additive manufacturing

**17:30** Forming teams, team charter

**Meri**

“How do new innovations come about. Where does the idea come from?”

**Aaro**

“How to ideate effectively as a group”

**Meri**

“More about 3D printing”

“Additive manufacturing and it's basics.”

“Group work”

Add Basics: what would you like to learn on this course?

Write down 3 separate learning objectives for yourself. What topics or skills would you like to learn about during this course? We'll do our best to incorporate your preferences into the course plan.

1. During this course, I would like to learn...

Enter your answer

# Next week, we'll have a split class with 3 tracks

<b>Tutorial:</b> Printing in practise	Väre Printshop	Hector
<b>Lecture:</b> Design for AM: Materials	Väre Q203	Aaro
<b>Teamwork:</b> Critically evaluating your ideas	Väre Q202	Sonja

Due to space limitations, we'll start the class at 15:00 and rotate through the stops at 15:00, 16:00 & 17:00 in small groups.



Hector Velasquez  
Reynoso  
Väre 3D printshop



Aaro Packalén  
Aalto Design Factory



Sonja Hilavuo  
Aalto Ventures Program



# Ideation & teamwork

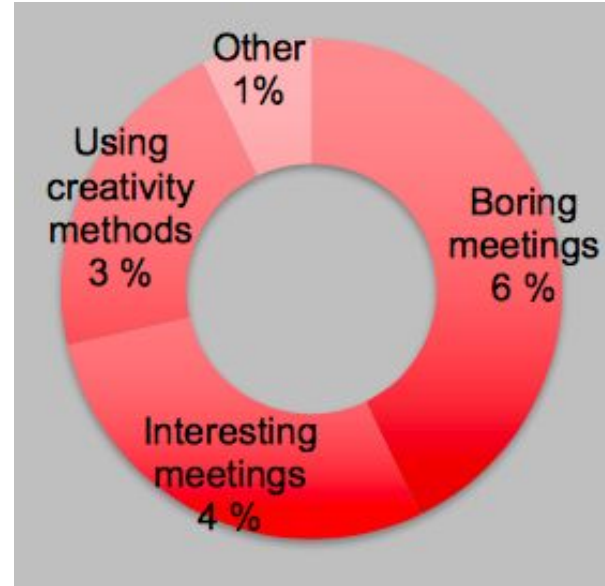
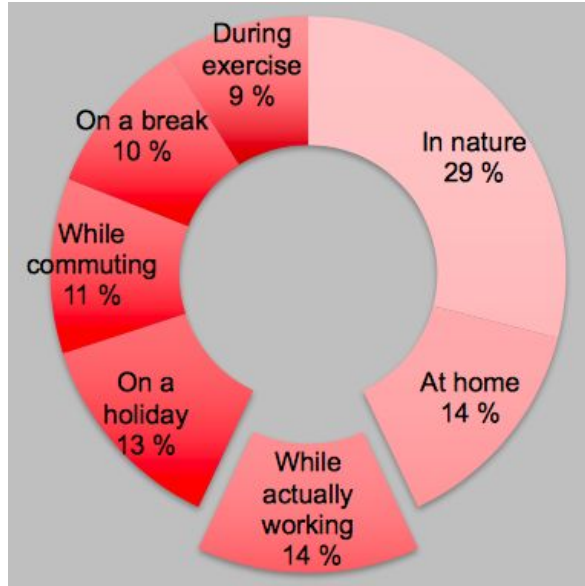
# How did the ideation assignment go?

Was it easy? Hard?

Where did you get your ideas?



# Where do we get ideas?



Berth, 1993

# Where do we get our ideas?

**“The method I use is going out for a cigarette. That’s where the problem crystallizes and the solution appears. Sometimes I go alone, but if I bump into any of the other smokers on the way, I ask for them to join me.”**

Laakso & Liikkanen (2012)





# Exercise: draw an imaginary alien

- 89% have eyes
- 78% have feet
- 59% have a nose



Very similar outcomes  
Borrowing from sci-fi etc.

Ward (1994, 1995)





# For the homework exercise, how many of you came up with the following?

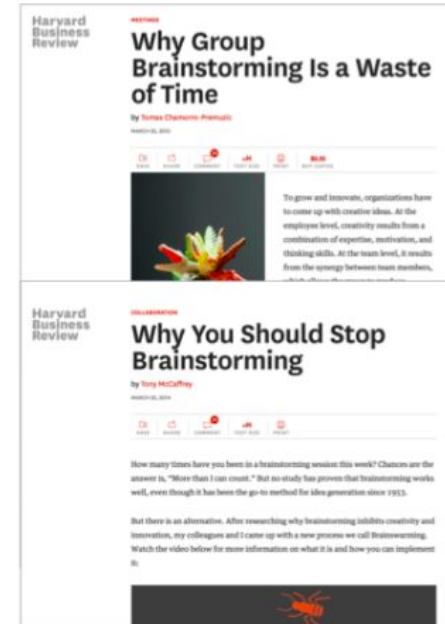


# Group ideation might not increase the amount or quality of ideas

...but it has other positive effects

- Use and distribution of knowledge
- Gathering and displaying ideas is efficient
- Strengthening social bonds
- Motivation
- Supports the creative process

The creative process is complicated: one ideation session is rarely enough



# Teamwork

# Let's team up!

I've got some  
project  
management  
experience

I've used  
CAD  
software

I've done  
prototyping  
before

- **Pick a color that most accurately describes the skills you can bring to a team**
- **Sit down at a table where all three are represented (max 6 people)**

# Share your homework assignment ideas with your team

Don't go through all of them: share only your craziest, easiest and best ideas



# Assignment 2: Team agreement

- Get together with your team to discuss your project idea and working standards
- Decide on the different elements of your team charter (outline on MyCourses)
- Due before class next week
  
- If you missed the team formation, contact [meri.kuikka \(a\) aalto.fi](mailto:meri.kuikka@aalto.fi)

## ADD Basics teamwork agreement

Group name:

Group member names:

Group picture (if you're meeting remotely, use a screenshot of your call):

### Project idea

What project idea would you like to pursue together as a team for the course project? If the first idea doesn't work out, what is your second or third choice?

### Team skillset

What skills do your team members already have within the team that will help you with the project? Course assignments will include at least the following: project management, CAD modelling, prototyping and pitching your idea. Are there any skills that specific group members don't yet have but would like to practise during this course?

### Roles and responsibilities

Describe and assign the roles and responsibilities of individual project team members. How will you divide the work? How will decisions be made? How will you share the workload? Who wants to do what tasks? What will you do if work is not completed as agreed? How will you make sure that everybody's expertise is used in the project?

# Assignment 3: Väre Workshop access (due 21.3.)

Complete the introductory course for the 3D printing workshop at Väre (linked on MyCourses).

Completing the course will give you the skills needed to operate the workshop's printers and access to the reservation calendar, so you can book time to print your course project.





# Reference list

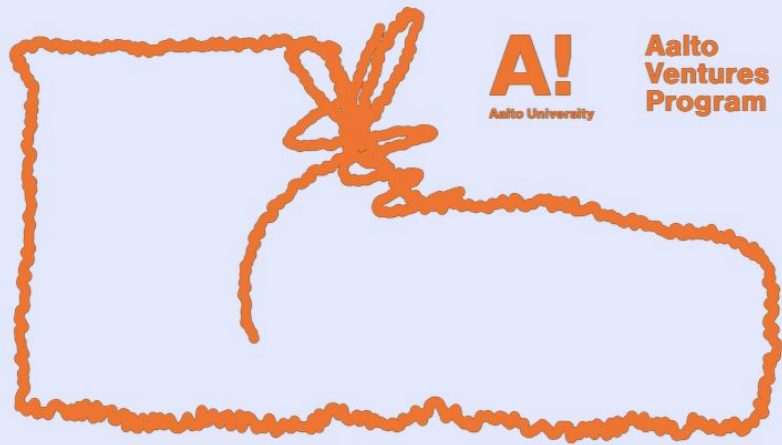
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Tuckman, B. W., & Jensen, M. A. C. (1977). Stages of small-group development revisited. *Group & organization studies*, 2(4), 419-427.

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13.03. 17:00 @Puumiehenkuja 5 *running (almost) weekly*



**BIGGER  
SHOES!**

**How to build MVP  
with customers** *with*  
Ali Khalid Rana *and*  
Tuomo Riekki

Register here →  
[avp.aalto.fi/bigger-shoes](http://avp.aalto.fi/bigger-shoes)

