



Learning Community Communication and Organization Workshop Materials

Context:

In the Studium Individuale, the individualized study major at Leuphana University, we implemented classroom LCs in the upper-level course “Collaborative Research Project.” Students complete a small-scale research project in teams during the semester. You can read more about the course as a whole in the Research-based Learning page in this toolkit.

The Classroom LC:

Students **formed their own teams** of 3 to 6 students in the first two weeks of the semester through identifying common areas and topics of interest. The teams then worked closely with a faculty ‘supervisor’ on their research. A student tutor, with previous management experience, gave **the following workshop to help support the teams** (or LCs) on group communication and organization of group work. The student tutor also meets with each team at least once throughout the semester to discuss how the group work is going and address any issues.

Note:

These workshop materials are included in the CREATES Toolkit for Co-creative Learning as an example for how to support students working in LCs. For more information and additional educational tools, visit: <http://europe-creates.eu>

THE GANTT CHART

QUICK SUMMARY OF THE INPUT ON GANTT CHARTS

Macro Perspective

- Whatever project we are facing we try to order it in somehow
 - For example, if we go shopping (make a list), or if we choose our courses
- If projects need more time, if more people are involved, if you are depending on external persons, deadlines, or a budget → plan!
- We start off with a way to illustrate the general periods / phases of a process → Gantt Chart

Historical background

- GANTT chart is named after its inventor US-American **Henry Gantt**
- Management consultant / co-developer of **scientific management**
- Gantt worked some years with Frederick Taylor (**Taylorism**)
- Around 15 years later (around **1910-1915**) he designed the charts now known as Gantt charts.
- **By 2000** Gantt charts were identified as "**one of the most widely used management tools for project scheduling and control**". [Klein, 1999, see [Wikipedia](#)]
- Gantt charts were employed on major infrastructure projects including the [Hoover Dam](#) in the US
- Still used today, as software solutions

Principles

- **tasks to be performed shown on the vertical axis**
- **time intervals shown on the horizontal axis**
- The width of the horizontal bars in the graph shows the **duration** of each activity/period
- Additionally, use of **predecessors** (dependencies) should be implemented

Example – building a house

- **Periods:**
 - building foundation, build a roof, build walls, Paint , build windows / doors, Electricity...
- Sorting, assigning durations (X months) and Predecessors

Example – building a house

1	Foundation (1)											
2	Walls (2)	1										
3	Roof (3)	2										
4	Paint (1)	2,3										
5	windows/doors (1)	2										
6	Electricity (2)	3,5										

Collecting periods in research projects

- -> Defining Research Question
- -> Choice of Methods
- -> Literature review
- -> Data Collection
- -> Data Analysis
- -> Writing (Assignments)
- -> holidays / unavailability

KANBAN

QUICK SUMMARY OF THE INPUT ON KANBAN

Micro Perspective

It seems like we got a lot of things to do. We know now when to do it (Gantt).

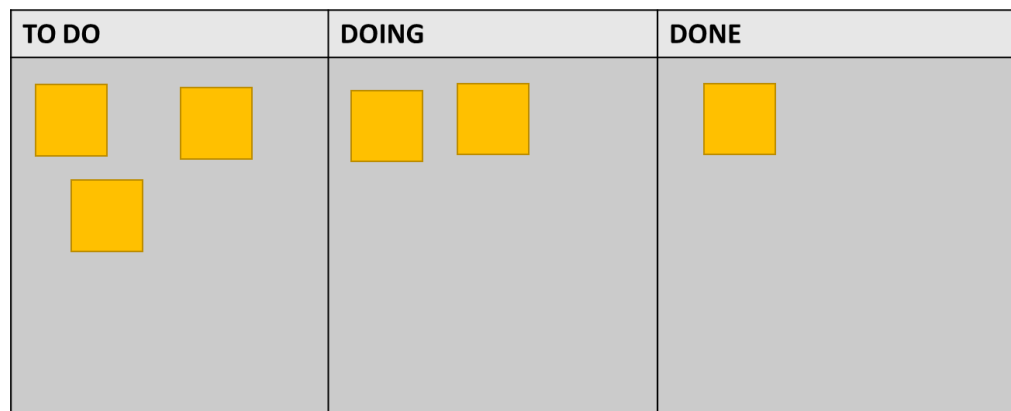
So let's get it done

Historical Background

- In 1947 Taiichi Ohno, invented @Toyota Motor Corp, Japan a production system called KANBAN
- Kan = signal ban = card
- We do not look at the original method but at how it was adapted for **software developmont**
- Arranging and ordering the **work in progress**
- Lean management / agile management
- Similar to scrum and other methods

Principals

- A Board with columns
- Breakdown to Easiest Version = 3 columns TO DO DOING DONE
- Tasks on Cards / Post-Its move to done
- Tasks assigned to team members or picked by single persons or subgroups
- **Visualize the work flow**
- **Limit the tasks done at a time**
- **Define Rules and Meanings of work progress (what is “done”)**



- Daily/weekly stand up meetings
- Optimizing flows and so on...
- the periods we collected before (Gantt) can be split in single doable tasks

Online versions

- wekan.leuphana.de (open source version run by Leuphana. more info: MIZ)
- [Trello](https://trello.com/) (up to 10 team boards for free)
- ...
- Possibility to use multiple boards (e.g. for each research period etc.)