“Project Relays”
Online hands-on learning with peer feedback and peer appraisal

Pieter Bots and Els van Daalen
Overview

• Background
• Project Relay concept
• Experiences
• Current developments

(advertisement)

Project Relay workshop:
Thursday, 13:15 in room Commissie 1
Background

- Curriculum change $\Rightarrow$ new course
- Theory and application $\Rightarrow$ students must develop skills through practice
- Open-ended course assignments $\Rightarrow$ assessment requires interpretation and judgement $\Rightarrow$ teacher-intensive!
- Budget constraints $\Rightarrow$ no TA's

**dilemma:** intensive practice vs. manageable teaching load

**innovation:** project relay
The project relay concept

• Open-ended assignment
e.g., writing, design, programming

• Divisible into 2 or more consecutive steps
  incremental development of final document

• Learners add a step and then pass on their work
  after improving the work they received

• Learners review & appraise the work they receive
  double-blind review following clear guidelines

• Checks and balances to ensure fair play
  incentives for critical review; learners can appeal to the instructor
Systems modelling project relay

- System & question definition
  - Reflection
- Research question
  - Conceptualisation
  - Operationalisation
- Conceptual model
  - Operationalized model
  - Implementation
- Operationalized model
  - Application
- Model results
  - Interpretation
- Conclusions
Six modeling steps:

1. Research question
2. Conceptual model
3. Operationalized model
4. Computational model
5. Model results
6. Conclusions

Six or more different cases:

A B C D E F G H
Experiences (since 2013)

• Applied in two courses
  • TPM undergraduate course on modelling (250+ students, 15 relays)
  • TPM graduate course on policy analysis (40+ students, 2 relays)

• Learner experience: instructive but stressful
  • good practice (albeit a lot of work)
  • difficult to appraise quality
  • uncertainty about final grade
  • students either love it or hate it:
    • “You really have to think about the methods”
    • “I learnt a lot from my predecessors’ work”
    • “You’re mainly correcting the mistakes of others”
    • “The system turns students against each other”
Progress chart first-year undergraduates

2013-2014
(100% = 283)

2014-2015
(100% = 321)

2015-2016
(100% = 310)
Progress chart first-year MSc Policy Analysis

(N = 43)

Day 0 1 2 3 4 5 6 7 steps completed
Current developments

- Application in MOOCs
- Referee exams
  learners can qualify to decide on appeal cases
- Motivational video clips
- Alternative scoring systems and deadline
  e.g., 3 stars on average \(\rightarrow\) pass
- Incentives
  badges, letters of acknowledgement
- Community development
  sharing of relay templates and cases
  open source software
Experience it for yourself

**Project Relay workshop:**
Thursday, **13:15** in room *Commissie 1*

- **13:15** Briefing by Els van Daalen
- **13:20** 5-minute Presto instruction video
- **13:25** Hands-on demonstration relay
- **14:00** Instructor view (how to manage an estafette)
- **14:15** Discussion