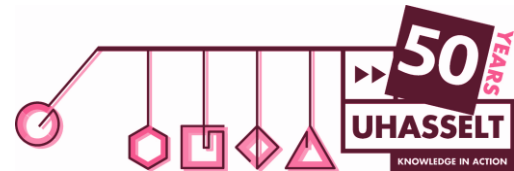


# Unleashing Potential

## Exploring Pathways to Inclusive Higher Education

Chairs/discussants: prof. dr. Elke Emmers & Prof. dr. Katrien Struyven  
Presenters: Liesbet Saenen, Sarah Doumen, Maristela do Nascimento Rocha



# Discussion paper

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## Block by block

Is a shorter, intensive block system the higher education of the future? A critical reflection based on recent literature

Sarah Doumen

Elke Emmers

Maristela do Nascimento Rocha

Katrien Struyven

Hasselt University, UHasselt Research on Innovative and Society-Engaged Education (U-RISE)

# Background

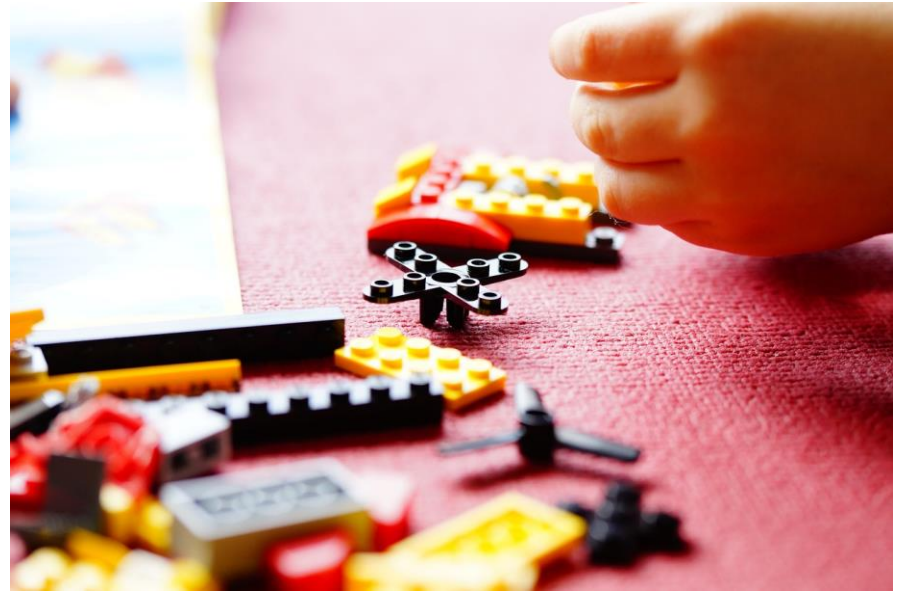
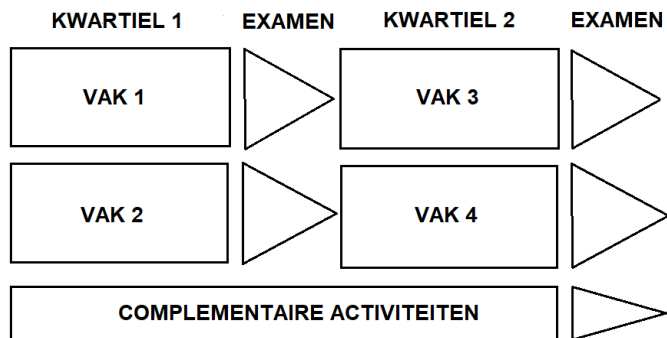
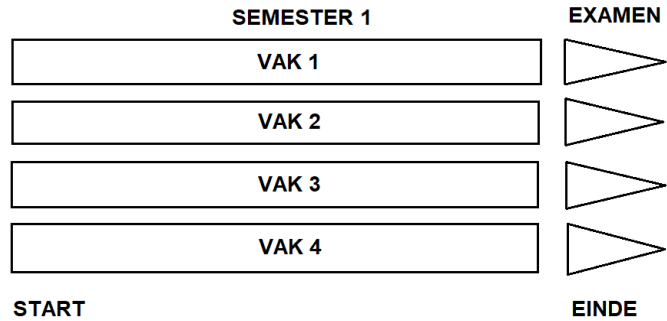
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- **Curriculum-related factors play a role in the learning process and study success of students** (Jansen, 2004; Torenbeek, Jansen, & Suhre, 2013; Van den Berg & Hofman, 2005)
- **Students adjust their study behavior, such as the way and timing of studying, invested study time,... to:**
  - the way the academic year is organized (Crombag et al., 1985; Jansen, 1996, 2004; Van der Drift & Vos, 1987; Torenbeek et al., 2013)
  - the difficulty level of a specific subject (Masui et al., 2014)
  - the way subjects are taught (Peeters & Lievens, 2012; Roksa, Trolian, Blaich, & Wise, 2017)
- **To respond to this and better tailor the curriculum to students' needs, the length of the teaching period can also be adjusted**
- **Traditionally: semester system, where courses are programmed in parallel over long periods of time VS. short, intensive courses that are often offered sequentially (block teaching)**

# Traditional vs. Block

Klein, Kelly, Sinnayah, & Winchester, 2019, p. 50

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# Block teaching, immersive/intensive courses,...

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- **Innovative system deployed around the world**
  - United States (e.g., Kucsera & Zimmaro, 2010)
  - United Kingdom (e.g., Suffolk University, cf. Buck & Tyrell, 2022;
  - Liverpool John Moores University, cf. Dixon & O'Gorman, 2020; Swain, 2016; the University of Bedfordshire, cf. Kofinas, Bentley, Minett-Smith, & Cao, 2017; Manchester Metropolitan University, cf. Nerantzi & Chatzidamianos, 2020; University of Plymouth, cf. Turner et al. 2021)
  - Ethiopia (e.g., Dejene, 2019)
  - Australia (e.g., VU Block Model at Victoria University; McClusky et al., 2020)
- **In varying forms: 4 weeks, 8 weeks, ...**
- **Not only structure of curriculum changes, also different teaching approach needed** *requires active engagement of students in the process of knowledge construction; student-centered instead of teacher centered approach; continuous assessment*

# Reasons for introducing block teaching?

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## Reasons for introducing it instead of the traditional semester system?

- reduce the gap SE-HE
- improve study progress
- reduce dropout
- **better meet needs of the (changing) student population, mainly non-traditional students, at risk students who do not enter higher education fully prepared**
- make rapid progress in specific knowledge or skills
- strive for higher student satisfaction, more engagement
- COVID-19 pandemic

(Buck & Tyrell, 2022; Klein et al., 2019; Mitchell & Brodmerkel, 2020; Nerantzi & Chatzidamianos, 2020)

## Reasons @UHasselt for general introduction 10-week system 2018-2019

- make academic calendar more uniform and flexible
- fast feedback which makes faster reorientation possible
- **spread workload for students**
- more room for internationalization of students and teachers

# Discussion questions

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1. Is block teaching an effective training technique in higher education?
2. Are there potential negative effects of block teaching?
3. Can block teaching have positive effects for non-traditional or at-risk students?

# 1. Is block teaching an effective training technique in higher education?

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- Some studies suggest that block teaching **can increase student success, retention and engagement** (e.g., Buck & Tyrell, 2022; Karaksa et al., 2013; McCluskey et al., 2019; Samarawickrema & Cleary, 2021)

Curriculum organization -> how much time students spend

Lower cognitive load: 1 course at a time

Shorter retention period, quick/early feedback,....

! Cannot be separated from teaching approach; peer and teacher interactions (smaller groups)

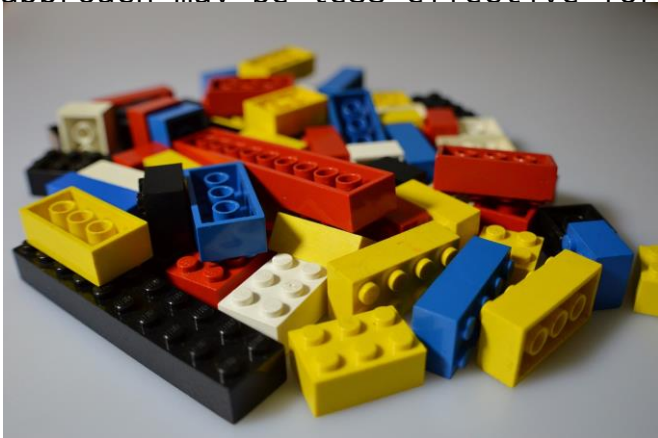
- Others find **no difference** in academic performance between students with block vs. traditional schedules (e.g., Kucsera & Zimmaro, 2010)



## 2. Are there potential negative effects of block teaching?

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- increased student and teacher stress and tiredness
- difficulty organizing schedules between classes
- the approach may be less effective for students with attention or focus problems



(Kucsera & Zimmaro, 2010; Scott, 2003)

### 3. Can block teaching have positive effects for non-traditional or at-risk students?

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#### At-risk and non-at-risk students benefit equally from the introduction of block teaching

Turner et al., 2021

- University of Plymouth: first-year students
- Since 2015, students have studied one module intensively for the first four weeks of their first and second semesters and courses side-by-side for the rest of the semester (11 weeks)
- 95 different immersive and 373 traditional modules were included in the analyses (N>3000 students)
- In 14 departments, the average grade for the immersive model in the first semester was 67 percent - nearly four percentage points higher than for traditionally taught modules among the same students (63.5 percent). Similar results were found in the second semester.
- These differences were not explained by differences in evaluation methods between the two formats and were **consistent for British versus non-British students, students with and without disabilities and students from all social classes, meaning that these groups were not disadvantaged with an immersive system.**
- In addition, the performance advantage was **more pronounced for male students, narrowing the performance gap with female students for this group**

### 3. Can block teaching have positive effects for non-traditional or at-risk students?

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**Some studies even showed that the gap in study performance for at risk versus not at risk students narrowed**

Winchester et al., 2021

- Sample of more than 9,000 students; students study 1 course at a time for 4 weeks
- The introduction of the Block Teaching Model at Victoria University (Australia) decreased the failure rate of first-year students **more** for students from
  - non-English speaking backgrounds versus students from English speaking backgrounds
  - for students from low versus high socioeconomic status
  - low versus higher Australian Tertiary Admission Rank (ATAR)
  - for male more than for female students
  - only for the group of pioneer students was the decrease in the number of unsuccessful students not significantly greater than for non-pioneer students.

These largely positive results were very important for Victoria University as many non-traditional and underprepared students enter this particular university.

# Discussion/conclusion

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- Hopeful results
- More research is needed, e.g., what mechanisms are actually into play
- Especially: closing the gap
- Enrich quantitative results with qualitative research



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