

## **TITEL SYMPOSIUM: Unleashing Potential: Exploring Pathways to Inclusive Higher Education**

### **Inclusion and inclusive higher education**

According to van Houten (2008), inclusion refers to the unrestricted participation of all individuals with diverse characteristics in various aspects of society in a manner that is unique to them. Following scholarly literature, the social model of inclusion posits that the elimination of societal, institutional, and organisational impediments can effectively mitigate the occurrence of social exclusion and discrimination against individuals with diverse characteristics (Bunbury, 2020; van Houten, 2008), as is also true for higher education (HE). According to van Houten (2008), the term "diversity characteristic" refers to traits like age, culture, disability, ethnicity, family status, gender, and socioeconomic background.

### **Addressing the Disparity in Diversity within Higher Education**

In Flanders, inclusive HE has recently been prioritised and politicised (boost since 2017), which has resulted in efforts for the inclusion of students with diverse characteristics such as LGBTQI+, gender, migration background, and language, as noted by Andries et al. (2011) and Emmers (2016). Still, the underrepresentation of students with migration backgrounds and disabilities in HE is a cause for concern, particularly in light of the significant role that HE plays in promoting emancipation and social mobility. Numerous studies have highlighted this issue, including those by De Vroey (2016), Nicaise et al. (2021), Tops et al. (2021), and Vanwynsberghe et al. (2019).

**Comprehending the complex mechanisms that impact the placement of students and lead to their discontinuation from academic pursuits is a crucial undertaking** (Consuegra & Cincinnato, 2020; Moriña, 2017), which is the common undertone of the three papers contained in this symposium.

### **The Role of Optimal Learning Environments in Promoting Inclusivity**

Negative attitudes, restrictions, class size, physical accessibility, a lack of resources, and collaboration are just a few aspects of the learning environment that have an impact on inclusivity at (all levels of) education (Hassanein, 2015). Next to that, according to Hurtado et al. (2015), the establishment of a direct and meaningful interaction between professors and students is of utmost importance in fostering a sense of affiliation within the academic community. According to Thomas (2016), the establishment of inclusive learning environments fosters student engagement, a sense of belonging, academic achievement, and persistence. So, in order to foster inclusion, it is crucial to investigate mechanisms and remedies across individual, systemic, and interpersonal domains (Consuegra & Cincinnato, 2020; Moriña, 2017).

This trio of papers provides valuable perspectives on these diverse facets of inclusive HE, in line with the ecological framework of a learning environment that is both inclusive and accessible, thereby facilitating inclusive HE. These papers can be classified into three foci: the student focus, a curriculum focus and a policy focus.

Paper 1 centers on **the experiences and academic performance of first-generation students in HE**. This study focuses on evaluating the efficacy of online self-assessments in mitigating the academic disparity between first-generation and second-generation students, while also facilitating self-directed learning. The present study focuses on the individual level of students and their approaches towards achieving academic integration and success.

Paper 2 investigates **curriculum-related factors and organisational techniques in HE**. The study investigates the impact of reduced instructional periods and alternative pedagogical methods, such as block scheduling, on students' academic advancement and contentment. The present study investigates the impact of curriculum design and implementation at the institutional level on students' overall learning experiences. This literature study includes student interviews. The study integrates block-teaching with mentoring, study skills, self-study, and technology. Students from different years and disciplines discuss the block-system. Students often like the block-system, especially in the first year of any bachelor's degree because it helps them transition from secondary school to university and build study skills and discipline. The model's future use is disputed.

The study suggests that the UHasselt should use creative teaching methods and technology to improve the block-teaching system since students' education is still teacher-centered. Since different students don't feel comfortable asking for help and think instructors and other students don't understand them, an open and welcoming environment should be created. This research aids educational policymakers.

Paper 3 underscores **the significance of the learning environment in facilitating student learning and attaining inclusive HE at an institutional level**. The study underscores the obstacles encountered by underserved students and emphasises the necessity of implementing efficacious approaches to guarantee equitable opportunities and achievements for all (following the UDL principles). The primary objective is to gather the viewpoints and firsthand encounters of both students and educators in order to guide the development and execution of inclusive educational settings. The present study centres on the systemic dimension of HE policies, practices, and stakeholders implicated in the development of learning environments.

The proposed symposium titled "Unleashing Potential: Exploring Pathways to Inclusive HE" will offer a significant opportunity to examine the obstacles and possibilities of inclusive HE. **The scholarly articles presented have enriched our comprehension of inclusion across micro, meso, and**

**macro levels, and have furnished insightful viewpoints on diverse facets of establishing an inclusive educational environment.**

The three papers combined provided us with significant revelations. The different studies highlight the significance of acknowledging the distinct requirements of first-generation students and executing support tactics to foster their scholastic achievements. Furthermore, we obtained valuable understandings regarding the influence of curriculum-related variables and organizational strategies on student academic achievement and contentment. Furthermore, we have underscored the significance of a comprehensive learning environment that facilitates face-to-face communication between educators and learners and fosters active participation and attainment among students.

The aforementioned results hold **significant importance in formulating efficacious policies and methodologies that foster inclusivity in HE**. The guidelines aim to facilitate the provision of equal opportunities and promote academic achievement for students with diverse characteristics.

#### **Impact statement**

The trio of contributions on HE in this symposium have a profound impact on the field by addressing different foci (cf. student focus, curriculum focus and policy focus) and offering valuable insights into inclusive education. The first paper focuses on first-generation students, evaluating online self-assessments' effectiveness in reducing disparities and promoting self-directed learning. The second paper examines curriculum-related factors at the institutional level, studying the impact of truncated teaching periods and alternative pedagogical methods. The third paper emphasises the policy level, exploring the significance of the learning environment and gathering perspectives from learners and educators. **Together, these contributions inform, confront, and contribute to a more inclusive and equitable HE landscape.**

#### References

- Andries, C., Heurckmans, N., & Van Den Brande, J. (2011). Inclusief hoger onderwijs vanuit een internationaal, Vlaams en praktisch perspectief. In *Studievoormiddag ikv de provinciale contactdagen van de Vrije Universiteit Brussel 2011*.

- Bunbury, S. (2020). Disability in higher education—do reasonable adjustments contribute to an inclusive curriculum? *International Journal of Inclusive Education*, 24(9), 964-979.
- Consuegra, E., & Cincinnato, S. (2020). Omgaan met diversiteit in het hoger onderwijs. *Inleiding op themanummer Omgaan met diversiteit in het hoger onderwijs [“Dealing with diversity in higher education”, Introduction to the special issue Dealing with diversity in higher education]*, *Tijdschrift voor Hoger Onderwijs*, 37(4), 2-11.
- De Vroey, A. (2016). *Inclusive practices and co-support in Flemish secondary schools. Qualitative study on inclusive school development.*  
<https://lirias.kuleuven.be/handle/123456789/556123>
- Emmers, E. (2016). Inclusief hoger onderwijs. *Forum*, 47(2), 11-15.
- Hassanein, E. E. A. (2015a). Changing teachers’ negative attitudes toward persons with intellectual disabilities. *Behavior modification*, 39(3), 367-389.
- Hassanein, E. E. A. (2015b). *Inclusion, Disability and Culture*. SensePublishers : Imprint: SensePublishers.
- Hurtado, S., Alvarado, A. R., & Guillermo-Wann, C. (2015). Creating Inclusive Environments. *Journal Committed to Social Change on Race and Ethnicity (JCSCORE)*, 1(1), 60-81.
- Moriña, A. (2017). Inclusive education in higher education: Challenges and opportunities. *European Journal of Special Needs Education*, 32(1), 3-17.

- Nicaise, I., Franck, E., & Cincinnato, S. (2021). *Dertig jaar sleutelen aan gelijke onderwijskansen: Een B-attest?*
- Thomas, L. (2016). Developing inclusive learning to improve the engagement, belonging, retention, and success of students from diverse groups. In *Widening higher education participation* (pp. 135-159). Elsevier.
- Tops, W., Callens, M., & Brysbaert, M. (2021). Slagen met dyslexie in het hoger onderwijs. *Stem-, Spraak-en Taalpathologie*, 26.
- van Houten, D. (2008). Werken aan inclusie. *Journal of Social Intervention: Theory and Practice*, 17(3).
- Vanwynsberghe, G., Van Helleputte, B., & Thoen, S. (2019). Diverse leraarskamer. *Diverse leraarskamer*.

## **PAPER 1: Exploring the Potential of Online Self-Testing for first-generation students in higher education**

*Keywords: formative assessment - first-generation students - online self-testing - academic achievement*

First-generation students face challenges that may lead to lower academic achievements. Our research explores whether online self-testing can improve self-regulated learning and academic achievement for first-generation students in higher education. Surveys assessed students' self-regulated strategies at the course's start and end. Additionally, final exam scores and learning analytics were collected, and a focus group interview provided further insights into their experiences with online self-tests.

### **Extended summary**

First-generation students in higher education face challenges, resulting in potential setbacks such as lower academic achievements and an increased likelihood of dropping out (Cataldi et al., 2018; Eveland, 2019). Tinto (2012) emphasised the importance of providing classroom support to first-generation students, given their limited availability for campus activities due to other commitments. Extensive literature already exists, demonstrating the positive impact of self-assessment methods on self-regulated learning (SRL) and academic performances (Karaman, 2021; Panadero et al., 2017). Although self-assessment methods seem powerful in enhancing SRL and students' achievements, it remains unclear whether such tools could also contribute to more equality in academic achievements between first- and continuing generation students. Consequently, our study addresses the following research questions: (a) To what extent does online self-testing about the course content contribute to first-generation students' self-regulated learning and academic achievements? (b) Does implementing online self-testing into a course reduce the achievement gap between first-generation and continuous-generation students?

This research involved the participation of students enrolled in the first bachelor of Business Administration program during the academic year of 2022-2023. During a selected six-week course, all students were provided with a weekly online self-test related to the content covered in the course. To assess the impact of online self-tests on self-regulated learning (SRL), a single-group design with pre-test and post-test measurements was implemented. Self-regulated learning (SRL) was evaluated at the beginning and after the course examination using the Motivated Strategies for Learning Questionnaire (MSLQ) (Pintrich et al., 1993). Furthermore, the summative grade for the course and the learning analytics, encompassing metrics such as test duration, attempts per test, and scores on the online self-tests were collected. Based on the learning analytics and status of the student as either first- or continuing-generation, a subset of students was selected to participate in a focus group to explore their experiences with online self-tests.

In this presentation, we will share and discuss the results of differences between first- and continuing-generation students on the level of SRL and academic achievements. Simultaneously, we consider learning analytics to thoroughly examine the outcomes of SRL and academic achievements. Additionally, the focus group interviews provide a more profound understanding of students' interactions with the online self-test and their perspectives on the matter. By exploring the potential

of online self-testing to reduce the achievement gap between first- and continuing-generation students, our research sheds light on effective strategies to foster a more equitable and inclusive learning environment within higher education institutions.

Refs:

Cataldi, E. F., Bennett, C. T., & Chen, X. (2018). First-generation students: College access, persistence, and postbachelor's outcomes (NCES 2018-421). U.S. Department of Education, Washington, DC: National Center for Education Statistics

Eveland, T.J. (2019). Supporting first-generation college students: analyzing academic and social support's effects on academic performance. *Journal of Further and Higher education*, 44(8) 1039-1051.

Karaman, P. (2021). The impact of self-assessment on academic performance: A meta-analysis study. *International Journal of Research in Education Sciences*, 7(4), 1151-1166.

Panadero, E., Jonsson, A., & Botella, J. (2017). Effects of self-assessment on self-regulated learning and self-efficacy: Four meta-analyses. *Educational Research Review*, 22, 74-98.

Pintrich, P. R., Smith, D. A. R., Garcia, T., & McKeachie, W. J. (1993). Reliability and predictive validity of the motivated strategies for learning questionnaire (MSLQ). *Educational and Psychological Measurement*, 53(3), 801–813.

Tinto, V. (2012). *Completing College: Rethinking institutional action*. (1<sup>st</sup> edition). The University of Chicago Press.

## **PAPER 2 Towards Inclusive Higher Education: the Hasselt University Experience with Block Teaching**

*Keywords: block teaching - quartile system - inclusive learning environment - at-risk students*

### **Short abstract**

In this paper, we first discuss by means of a literature review whether block teaching (e.g., a quartile system) is an effective organisational technique in HE and what its advantages and disadvantages are, especially for students at risk. Next, the results of in-depth interviews regarding block teaching at Hasselt University with students from various faculties are presented.

### **Extended summary**

Curriculum-related factors play a role in students' learning processes and study success (Jansen, 2004; Torenbeek, Jansen, & Suhre, 2013; Van den Berg & Hofman, 2005). Students adapt their study behaviour (the way and timing of studying, invested study time,...) to different factors, such as the way the academic year is organised (Crombag et al., 1985; Jansen, 2004; Van der Drift & Vos, 1987), the difficulty level of a specific subject (Masui et al., 2014) and the way specific subjects are taught (Peeters & Lievens, 2012).

One way to adapt and improve the curriculum is to shorten the length of the teaching period. Traditionally, HE has used a semester system, where subjects are programmed in parallel over longer periods. Recently, however, innovative systems came into the spotlight where short, intensive course units are worked with, often offered sequentially (e.g., Belgium: Hasselt University's quartile system, Doumen et al., 2023; Australië: VU Block Model at Victoria University, McClusky et al., 2019). However, rigorous research on the effect of shorter teaching periods on students' academic progress and satisfaction in HE is scarce. Scientific research is needed to better understand its potential advantages and disadvantages, which starts with critically questioning this organizational method.

In this paper, the following questions are evaluated based on a literature review:

- Is a quartile system (or a similar approach like block teaching) an effective organizational technique in HE?
- Are there potential negative effects?
- Can a quartile system have positive effects for non-traditional or at-risk students?

We hereby specifically evaluate its role for first year, at-risk students.



Next, this literature review is complemented with in-depth interviews with students from various faculties. The study examines the integration of block-teaching with other aspects such as guidance, study skills, self-study, and technology. The opinions of students regarding the block-system in different years and disciplines are explored. Findings indicate that students generally perceive the block-system positively, especially for the first year of every bachelor's degree, since it supports the transition from secondary school to university and the development of study skills and discipline. However, opinions vary about the application of the model in subsequent years. The study highlights the need for the UHasselt to incorporate innovative teaching methods and technology to enhance the effectiveness of the block-teaching system, since the education experience of students is still very traditional and teacher-centred instead of student-centred. Furthermore, efforts should be made to foster an inclusive and welcoming environment for students from diverse backgrounds, since they do not feel comfortable asking for the available help and feel that professors and other students do not understand their particular experiences and concerns. This research provides valuable insights for educational policymakers.

## References

Crombag, H.F.M., van der Drift, K.D.J.M., Vos, P. (1985). De inrichting van curricula en het werkgedrag van studenten. *Universiteit en Hogeschool* 31, pp. 234–247.

Doumen, S., Emmers, E., Verhaert, G., do Nascimento Rocha, M., & Struyven, K. (april 2023). *Uitschrijving en heroriëntering in het eerste bachelorjaar aan UHasselt: een kwantitatieve analyse vanuit het perspectief van het kwartielsysteem*. UHasselt, School voor Educatieve Studies: Intern onderzoeksrapport.

Janssen, E. (2004). The influence of the curriculum organization on study progress in higher education. *Higher Education* 47, 411–435 (2004). <https://doi.org/10.1023/B:HIGH.0000020868.39084.21>

Masui, C., Broeckmans, J., Doumen, S., Groenen, A., & Molenberghs, G. (2014). Do diligent students perform better? Complex relations between student and course characteristics, study time, and academic performance in higher education, *Studies in Higher Education*, 39(4), 621-643, DOI: [10.1080/03075079.2012.721350](https://doi.org/10.1080/03075079.2012.721350)

McCluskey, T., Weldon, J., & Smallridge, A. (2019). Re-building the first year experience, one block at a time. *Student Success*, 10(1), 1-15. <https://doi.org/10.5204/ssj.v10i1.1148>

Peeters, I., & Lievens, P. (Maart 2012). *The ultimate curriculum design for the ultimate learning experience in higher education?* Proceedings van INTED2012 Conference, Valencia, Spanje.

Torenbeek, M., Jansen, E., & Suhre, C. (2013). Predicting undergraduates' academic achievement: the role of the curriculum, time investment and self-regulated learning, *Studies in Higher Education*, 38(9), 1393-1406, DOI: [10.1080/03075079.2011.640996](https://doi.org/10.1080/03075079.2011.640996)

Van Den Berg, M.N. & Hofman, W.H.A. (2005). Student success in university education: A multi-measurement study of the impact of student and faculty factors on study progress. *Higher Education*, 50, 413–46. <https://doi.org/10.1007/s10734-004-6361-1>

Van der Drift, K. D. J., Vos, P. (1987). *Anatomie van een leeromgeving, een onderwijseconomische analyse van universitair onderwijs*. Lisse: Swets & Zeitlinger.

## **PAPER 3: Lecture hall makeover: Students and teachers shaping inclusive learning environments**

*Keywords: Educational Effectiveness - Equality / Education for All - Higher education - Inclusivity*

### **Abstract**

Inclusive HE needs targeted actions to overcome persistent barriers for students. Research often neglects student and teacher voices, making it vital to define inclusion due to varying interpretations. This study at Hasselt University explored student and teacher perspectives through focus groups. Thematic analysis revealed recurring patterns, leading to suggested measures: enhancing professionalism, optimising online aspects, and promoting awareness for an inclusive and continuous discourse.

### **Extended summary**

Aligned with SDG 4 targets for equal access and lifelong learning, HE institutions must regulate their policies and actions with this human right. However, more purposeful and coordinated efforts are required to achieve inclusive HE (Ferguson & Rooft, 2020). The learning environment plays a vital role in supporting students' learning processes. While the challenges faced by underserved students and unequal outcomes are known (Emmers et al., 2015; OECD, 2017), practitioners and policymakers continue to seek effective strategies to ensure all students can thrive and succeed in HE.

The learning environment is vital for supporting students, but challenges faced by underserved students and unequal outcomes persist. It is striking that the voices, experiences and perspectives of students and teachers are often overlooked in research on the learning environment, however their input is essential for effective design and implementation of online/offline widely accessible learning environments (European Education and Culture Executive Agency, 2022; Fullan, 2015). It is also crucial to define and clarify the meaning of (digital) inclusion from different stakeholders to ensure effective changes.

To address (digital) inequality and to shape future actions, it therefore remains important for university policy to monitor how learning environments adapt to current challenges by entering into the discussion with students and teachers. Therefore, the following research question was addressed: How do students and teachers at Hasselt University describe their ideal, widely accessible online and offline learning environment? What characterises this learning environment according to teachers and students? Who are teachers and students talking about in this learning environment?

This qualitative research wanted to capture the valuable experiences and insights of two key stakeholders, namely students and teachers from different faculties at Hasselt University. A stratified sampling was used to ensure the gender balance and faculty balance of the university's population. The study utilised five dynamic focus groups (FG) and one member-check FG to comprehend and amplify the perspectives of individuals who possess the capacity to facilitate constructive transformation towards inclusive higher education (HE). The methodology employed for data analysis involved the utilisation of a thematic analysis approach, which entailed the identification of themes and patterns through the process of coding and clustering of the statements provided by the respondents.

The results show some sensitive areas of tension, such as the share of hybrid learning and broader basic care for every student. The outcomes highlight the importance of accommodating different learning styles, promoting inclusivity and diversity in content and atmosphere, and optimising the online component to address challenges such as limited internet access and enhance interactivity. Moreover, more attention could be paid to raising awareness among students and professionalising teachers.

The findings of the study provide specific suggestions for enhancing the inclusivity and accessibility of the educational setting for all students, as well as promoting comprehension and ongoing communication among higher education stakeholders.

## References

- Emmers, E., Mattys, L., Petry, K., & Baeyens, P. (2015). *Eindrapport Inclusief hoger onderwijs: Multi-actoren, multi-methode onderzoek naar het aanbod en het gebruik van ondersteuning voor studenten met een functiebeperking* (OBPWO INCLUS-HO; p. 268). Expertisecentrum voor Ontwikkeling en Leren.
- Fullan, M. (2015). *The New Meaning of Educational Change* (5th edition). Teachers College Press.
- Ferguson, T., & Roofe, C. G. (2020). SDG 4 in higher education: Challenges and opportunities. *International Journal of Sustainability in Higher Education*, 21(5), 959–975. <https://doi.org/10.1108/IJSHE-12-2019-0353>

OECD. (2017). *Education at a Glance 2017: OECD Indicators*. Organisation for Economic Co-operation and Development.  
[https://www.oecd-ilibrary.org/education/education-at-a-glance-2017\\_eag-2017-en](https://www.oecd-ilibrary.org/education/education-at-a-glance-2017_eag-2017-en)

The European Agency for Special Needs and Inclusive Education. (2022). *Inclusive Digital Education* (No. 978-87-7110-998-6 (; p. 163). European Agency for Special Needs and Inclusive Education.