INSPIRED TO CHANGE

A KALEIDOSCOPE OF TRANSITIONS IN HIGHER EDUCATION

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THE HAGUE
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Introduction

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"To develop your talents is to believe in tomorrow"

Technological developments have a major impact on how we live, work and learn together. Several authors refer to a fourth revolution in which robots and other intelligent systems take over an increasing number of the current (routine) tasks carried out by humans (Brynjolfsson & McAfee, 2014; Est et al., 2015; Ford, 2016; Helbing, 2014; Ross, 2017; Schwab, 2016). The relationship between man and machine will change fundamentally as a result. We are already noticing this shift, most specifically in the workplace. E.g., in the field of health care, digitalisation and robotisation can empower patients and their families. Hospitals are primarily intended for clients with complex care needs. This has consequences for the tasks carried out by nurses, who become more of a 'care director' or 'research nurse'. Hospitals approach this in different ways, resulting in considerable diversity as to how these roles are fulfilled. These changes, albeit diverse, can also be seen in the roles of accountants, police officers and financial advisers at banks (Biemans, Sjoer, Brouwer and Potting, 2017). The traditional occupational profiles no longer exist and the essence of these professions is shifting. This does not make such occupations less attractive, but requires different qualities. The demand for more highly educated professionals who can carry out complex tasks in a creative and interdisciplinary manner will increase (McKinsey, 2017). Also, other social developments, such as migration and greenification, prompt us to ask new questions, resulting in new paths towards identifying solutions.

To deal with these challenges as a professional requires various 21st century skills or competences, such as greater flexibility, a better ability to learn and adapt, and responsiveness (Onderwijsraad, 2014; Van Water and Weggeman, 2017; Voogt and Pareja Roblin, 2010). However, our energy should not be focused on what does or does not belong in the list of 21st century skills, but more concretely on the knowledge, skills, attitudes, self-images and motivations that support learning and development, as described in various contexts (Walma van der Molen and Kirschner, 2017). Moreover, successful innovation for the goals mentioned entails not only personal factors, but also the context of the organisational culture and how the work is organised and assigned (West and Farr 1989; Kanter, 1986). One of the PhD students of the Sustainable Talent Development research group at The Hague University of Applied

Sciences (THUAS) and Strategic HRM research group at Radboud University is studying the behaviour of experts who have succeeded in learning new areas of expertise, applying expertise in a different context or linking it to other areas of expertise in order to ultimately create value (Frie, Potting, Sjoer, Van der Heijden and Korzilius, submitted for publication in 2018). These 'flexperts' are triggered by a new idea, which they then develop further, experiment with on a limited scale and attempt to have it implemented. Identifying opportunities and cashing in on those opportunities is a great example of future-oriented learning.

Seeing opportunities and learning to take advantage of them may very well be one of the most important goals of higher education, one that takes on the challenge of preparing students for lifelong learning in a society that is undergoing transition. Considered more closely, this is not really a matter of 'preparation' since students are part of a society of 'do-it-yourself' citizens (Long live (and learn) the Network Society!, 2018) in which boundaries are blurring (Sjoer, De Hei, & Van Helvoort, Eds., 2015). These boundaries between learning as a student of a university and as a professional in practice, as well as between disciplines and between countries are becoming increasingly fluid. Students use technology to start up a business, convince others of their ideas, whether in person or remotely, and help children with their homework. Various authors, policymakers and politicians appear to agree that this vision of the future of higher education requires a different structure and approach. The 'learning factories' should not be transformed 'slowly but surely' but 'fast and surely' into 'flexibly structured breeding grounds' for sustainable talent development, where innovation is stimulated and facilitated (WRR, 2013). In our opinion, there are various paths that lead towards this transition, from complete overhauls of curricula to small-scale experimentation with new forms of collaborative learning, such as in neighbourhood Innolabs (Long live (and learn) the Network Society!, 2018) and hospital learning communities (Baronner & Wallner, 2016).

In this book, we present a kaleidoscope of educational innovation at THUAS, as chronicled by the research team of the Sustainable Talent Development research group. According to Collins dictionary, a kaleidoscope can be described as "(…) something that is made up of a lot of different and frequently changing colours or elements." [1] A kaleidoscope is colourful and therefore cheerful. We are curious about the relationship between people and technology and want to learn how technology can be our friend. Klaus Schwab, Chairman of the WEF, rightfully says the following about the fourth revolution: "It will not only change what we do, but who we are." (Schwab, 2016). This book is also about just that, the talent development and identity of people, especially our students and lecturers. It is about who they want to be, and what they

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1   https://www.collinsdictionary.com/dictionary/english/kaleidoscope

want to accomplish jointly, about going beyond programme and department frontiers and institutions of higher education. For every talent to count we embrace the concept of a growth mind-set in which challenges help people to grow.

Since students and lecturers are not guinea pigs and 'people work' research must be ethically justifiable, the evidence-based development of learning environments that support this is essential. Have research show what works. We are fully aware that going from a 'first' and fixed, to a 'second' and new story does not happen overnight (see Lengelle, Chapter3), whether this concerns a student, lecturer or degree programme, but must be accomplished in steps.

The essence of adding value to (higher) education is found on the micro level of the interaction between primarily the lecturer and student, but also among students and the interaction of students in work situations. Learning together is crucial (see De Hei, Chapter 7). This is where the change is taking place, as many have experienced. The Danish professor and pedagogical expert Knud Illeris (2017) discovered that dozens of educational theories contain three key elements that, according to Illeris, should be present in all learning environments: content, incentive and interaction. 'Content' can be perceived broadly and also refers to skills, insights and attitudes, while 'incentive' means that the motives of learners are essential for their interest and efforts. Finally, he refers to the necessity of interaction. Ryan & Deci (Eds., 2017) and dozens of other researchers in the tradition of the Self-Determination Theory point to three key elements a person needs to be intrinsically motivated: a sense of being competent, autonomous and related. A didactical message can also be derived here: abstract 'transmission' is not particularly successful, but having students work concretely, meaningfully and in a worthwhile manner (together) is most effective. Based on these crucial insights, we can address such implicit and explicit student questions as:

- Do I see the usefulness of what is being asked of me?
- Do I feel inspired? Does this make me enthusiastic?
- Can I envision a future based on this study programme?
- Can I gain a bird's-eye view on the meaning of my learning activities?
- Do I feel at home here? And connected?
- Am I understood? And accepted?

Directly or indirectly, the various chapters contain a call to action to address these questions. They offer insights and recommendation for change in practice. In other words, the added value of higher education is also the desire and possibility to be meaningful for society.

This book consists of thirteen chapters with elaborations on several perspectives of the Universities kaleidoscope. The aim of our book is not meant as a purely scientific endeavour, but as a contribution to the future development of universities. The style is popular science, primarily targeted at our lecturers as one of the most important social capitals we have[2]. As the book is addressed to them, all chapters discuss their role, directly or indirectly. The focus is always on the ability to offer students the best possible learning environment. This requires first and foremost a dialogue on the professional diversity of lecturers. Innovative behaviour appears to be crucial for all of them. In addition to these abilities of lecturers, the design of the curriculum is essential for all parties involved. A curriculum largely determines the themes and contents addressed, how work-related, engaging and stimulating learning activities are developed and how lecturers design these on the micro level based on their expertise.

Rainer Hensel and Ronald Visser investigate the personal traits that inspire others in Chapter 1. In new perspectives on leadership, the capability to inspire other team members is the gateway to innovation performance and is much sought in this knowledge era. As many of our students are tomorrow's leaders, it is important to know which personal characteristics indicate the ability to inspire others in self-directed teams Students can be assisted with understanding and developing it.

In Chapter 2, Reinekke Lengelle writes about another important goal of our university: the development of 'global citizens', people who can work and relate across borders and boundaries. Preparing students for this can be achieved by creative, expressive and reflective writing. This is a form of identity learning that involves both an internal as well as external dialogue. However, teachers are not necessarily equipped to foster this. The author argues that higher education must begin to develop and offer learning opportunities for teachers and students that address deep underlying concerns.

Max Aangenendt, Geert Neelen, Piet Willemse, and Ilona Lavèn address several questions concerning the roles and identities of lecturers in Chapter 3. While Reinekke Lengelle focuses on the 'internal' dialogue, Max Aangenendt cs. explores the explicit, 'external' dialogue. A tool was developed with possible professional identifications to help create a common ground and shared perspective for the systematic engagement of staff in a dialogue about themselves as professionals in universities.

Of course, the call for all these changes and the dialogue about their new roles has an impact on lecturers. Bart Lamboo describes in Chapter 4 the insights from the lecturers' perspective of their new roles according to blended learning. Blended learning plays a vital role in a newly introduced educational framework of our university.

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2   The designations lecturers, teachers and tutors are used alternately in the book.

He wonders what makes lecturers use these new possibilities and what drives them to either pick up the blended learning perspective or leave it. As a psychologist, he gained insights from in-depth interviews with lecturers. He addressed these five topics: feelings, beliefs, values, needs, and actions.

The innovative behaviour of teachers and the way they experience a curriculum change is the subject of Chapter 5 from Karin Potting, Lonneke Frie, and Frans Jacobs. To anticipate changes in societal and organisational needs, the HRM degree programme wants to put educational processes in place that can be changed rapidly without excessive costs. In multi-disciplinary teams, teachers developed 'learning landscapes' for students in which they approach complex problems by interdisciplinary learning activities. For this, teachers should have access to three types of so-called markets: knowledge, resources, and political support. This new way of working increases their job satisfaction, however, teachers experience difficulties in implementing their ideas.

In universities every student should count. In Chapter 6, Hester Brauer writes about the design group of long-term student coordinators at THUAS that was established to create learning environments for delayed and long-term students. In her research on the 'Power House', she discovered the characteristics of a community-led approach, such as high structure and high support, and has introduced these characteristics into the design group. Together they arrived at a number of building blocks for a learning environment for long-term students. These building blocks enable any degree programme to support its long-term students and help them progress.

Community formation and collaborative learning are also the research topic of Miranda de Hei Following on PhD research, in Chapter 7 she writes about the growth of initiatives for learning communities and professional networks to support professional development. In higher education, collaborative learning offers a chance to prepare students for learning and working in teams in their future work. It is also implemented in curricula to contribute to deep learning, motivation, shared knowledge construction, the development of higher order thinking skills, metacognitive skills, and prosocial behaviour. She constructed a comprehensive framework of eight components that can be used by teachers as a tool for the design of group assignments.

Jos van Helvoort explores information problem solving in Chapter 8. It is an essential set of skills for today's knowledge society in which people are confronted with an abundance of information on the internet and many other media forms. In his PhD research, he constructed a 'scoring rubric' to measure and promote these skills in an educational setting. He engaged his colleagues to make the assessment of information literacy skills even more explicit. He asked lecturers in the Bachelor of ICT which information problem skills they thought were important for their students.

In Chapter 9, Karijn Nijhoff describes the response to refugees and permit holders. Their integration on the labour market is not easy. One of the reasons is the well-known 'unknown means unloved' principle. Group behaviour, ethnocentrism, discrimination and bias are all closely intertwined with our thinking, but this does not mean that change is impossible. Teachers, students and managers can highlight the importance of diversity and put serious effort into ensuring that people are judged for their talents. We therefore all need to examine our own judgements and biases first.

The remaining chapters show examples of curriculum (re)development of innovative programmes at THUAS. In Chapter 10, Suzanne Hallenga-Brink writes about the transition to a continuously improving, flexible and future-proof curriculum for the Programme of Industrial Design Engineering. Because of growing complexity and the increasing speed of changes in the professional field, flexibility is required in order to adjust to changes. This affects the curriculum as well as the students who need to tailor their learning path autonomously to suit their talents and interests. The curriculum was designed together with teaching staff, students, alumni, prospective students, and industry and educational advisors. The author shows where the curriculum follows the CDIO standards (Conceive Design Implement Operate), a framework for engineering education, and where it goes above and beyond these standards.

In Chapter 11, Frans Jacobs, Janine Haenen, and Hester Lentz describe the cooperation of the five programmes of the Department of Business, Finance & Marketing (BFM). This is a response to the digitalisation and robotisation of work in the financial-economic sector, which makes the future for students uncertain but challenging. Teachers build joint modules in a project called Network Curriculum (NWC). By doing so, a great deal of energy is created and unexpected innovative ideas and initiatives are being developed. A document analysis of the exit qualifications and the programme and job profiles of the five degree programmes shows shared challenges and descriptions of competences within the business area. Based on this, diverse (joint) faculty-wide modules and initiatives can be deployed.

In Chapter 12, Rainer Hensel, Frans Jacobs, and Tiffany de Jong describe the main outcome of research in one of our departments on increasing students' motivation. This reveals a very strong effect from goal commitment on intrinsic motivation. Increasing the goal commitment is likely to have a very high impact on motivation. This depends on teachers' qualities to communicate the importance of the learning possibilities offered for the prospective work environment.

In Chapter 13, Frans Jacobs, Dennis Bleeker, and Henk Schaaphok explore systematics for permanent renewal in higher education. Because it is difficult to be up-to-date and

future-oriented with educational programmes, 40 colleagues were asked to give their opinion and insights. There they discovered a fundamental difference in their approach, which was described into two systematics. Systematics A is about the intermittent renewal of educational modules based on future research and module development with the professional field. Systematics B involves permanent innovation with the professional field within theme areas. In addition, they describe distinct types of change with its own renewal frequency.

Our research group comprises passionate colleagues who are highly committed to the future of students and major issues facing society. We are inspired to change in order to optimally equip all those involved for these challenges. We are eager to share and elaborate on the findings in this book, which serves as an invitation for further dialogue, development and collaboration. Finally, we would like to thank all managers, lecturers, students and other partners for the opportunity and inspiration to arrive at our conclusions and insights. We hope that you enjoy reading the results of our work!

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