

Facilitating the education-to-work transition

Citation for published version (APA):

van der Baan, N. A. (2024). *Facilitating the education-to-work transition: coaching for employability unravelled*. [Doctoral Thesis, Maastricht University]. Maastricht University.
<https://doi.org/10.26481/dis.20240129nb>

Document status and date:

Published: 01/01/2024

DOI:

[10.26481/dis.20240129nb](https://doi.org/10.26481/dis.20240129nb)

Document Version:

Publisher's PDF, also known as Version of record

Please check the document version of this publication:

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Facilitating the education-to-work transition

Coaching for employability unravelled

Niels van der Baan

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About the cover: The education-to-work transition is often metaphorically depicted as a bridge; a bridge students must cross to enter the world of work. Sometimes, this bridge can be wobbly, like a rope bridge, and students have difficulties making the transition to the workplace. Sometimes this bridge can be more stable, like a suspension bridge, and students feel better prepared to make the transition to the world of work. For the cover of this dissertation, I chose the more stable suspension bridge because I hope to contribute to a more seamless and well-prepared journey for students entering the workplace. By emphasizing the stability of the bridge, I hope to convey the importance of a strong support system (i.e., coaching) to facilitate a successful education-to-work transition. In addition, I chose this bridge as I crossed it myself almost every day during my research visit in Jyväskylä, Finland.



Cover design: Proefschrift AIO | Guntra Laivacuma

Layout design: Proefschrift AIO | Annelies Lips

Printing: Proefschrift AIO

ISBN: 978-94-93353-41-1

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Facilitating the education-to-work transition

Coaching for employability unravelled

DISSERTATION

to obtain the degree of Doctor at Maastricht University,
on the authority of the Rector Magnificus, Prof. dr. Pamela Habibović
in accordance with the decision of the Board of Deans,
to be defended in public
on Monday January 29, 2024, at 10:00 hours

by

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*"Als je mij vraagt zijn er drie belangrijke stadia in de geschiedenis van de mens. In het eerste kende hij zijn eigen spiegelbeeld niet, evenmin als een dier dat kent. Laat een kat in een spiegel kijken en hij denkt dat het een raam is waarachter een andere kat staat. Blaast ertegen, loopt er omheen. Op den duur is hij niet meer geïnteresseerd; sommige katten tonen zelfs nooit enige belangstelling voor hun spiegelbeeld. Zo zijn de eerste mensen ook geweest. Honderd procent subjectief. Een 'ik' dat zich vragen kon stellen over een 'zelf' bestond niet. Tweede stadium: Narcissus ontdekt het spiegelbeeld. Niet Prometheus die het vuur ontdekte is de grootste geleerde van de Oudheid, maar Narcissus. Voor het eerst ziet 'ik' zich 'zelf'. Psychologie was in dit stadium een overbodige wetenschap, want de mens was voor zichzelf wat hij was, namelijk zijn spiegelbeeld. Hij kon ervan houden of niet, maar hij werd niet door zichzelf verraden. Ik en zelf waren symmetrisch, elkaars spiegelbeeld, meer niet. Wij liegen en het spiegelbeeld liegt met ons mee. Pas in het derde stadium hebben wij de genadeslag van de waarheid gekregen. Het derde stadium begint met de uitvinding van de fotografie. Hoe dikwijls gebeurt het dat er een pasfoto van ons gemaakt wordt waarvan wij evenveel houden als van ons spiegelbeeld? Hoogst zelden! Voordien, als iemand zijn portret liet schilderen en het beviel hem niet, kon hij de schuld aan de schilder geven. Maar de camera, weten wij, kan niet liegen. En zo kom je in de loop van de jaren, via talloze foto's, erachter dat je meestal niet jezelf bent, niet symmetrisch met jezelf, maar dat je het grootste deel van je leven in een aantal vreemde incarnaties bestaat voor welke je alle verantwoordelijkheid van de hand zou wijzen als je kon. De angst dat andere mensen hem zien zoals hij is op die foto's die hij niet kan endosseren, dat ze hem misschien nooit zien zoals het spiegelbeeld waarvan hij houdt, heeft de menselijke individu versplinterd tot een groep die uit een generaal plus een bende muitende soldaten bestaat. Een Ik dat iets wil zijn - en een aantal schijn gestalten die het Ik onophoudelijk afvallen. Dat is het derde stadium: het voordien vrij zeldzame twijfelen aan zichzelf, laait op tot radeloosheid. De psychologie komt tot bloei."*¹

¹ Hermans, W. F. (1966). *Nooit meer slapen*. Uitgeverij de bezige bij, Amsterdam.

About the quote: This quote originates from the Dutch book 'Nooit meer slapen' ('Beyond sleep' in English). The book is about a scientific expedition of a young doctoral student to Lapland. This quote describes the evolution of human self-reflection. The quote illustrates three levels of self-reflection. The first level represents limited self-awareness, where individuals lack self-recognition. The second level refers to superficial self-reflection. Only in the third stage critical self-reflection is reached, which will foster personal and professional growth. Based on the results of this dissertation, coaching can act as a catalyst for individuals to move from the first stage of limited self-awareness to the third stage of critical self-reflection and plays a vital role in facilitating transformative self-reflection. By recognizing the importance of coaching as a catalyst for meaningful self-reflection, individuals can develop critical self-awareness and embrace the opportunities for the development of their employability.

Table of Contents

Chapter 1 General introduction	13
1.1 The education-to-work transition	15
1.2 Employability	16
1.3 Preparing students for their education-to-work transition	18
1.4 Coaching in higher education	20
1.5 This dissertation	21
Chapter 2 Education-to-work transition: a systematic analysis of pedagogical interventions in the setting of higher education	31
2.1 Introduction	33
2.2 Theoretical frameworks	35
2.3 Method	38
2.4 Results	41
2.5 Discussion	49
Chapter 3 Coaching to prepare students for their school-to-work transition: conceptualizing core coaching competences	65
3.1 Introduction	67
3.2 Theoretical framework	69
3.3 Method	73
3.4 Results	78
3.5 Discussion	83
3.6 Conclusion	88
Chapter 4 Developing employability competences through coaching in higher education: supporting students' learning process	93
4.1 Introduction	95
4.2 Theoretical framework	96
4.3 Study 1: quantitative	99
4.4 Study 2: qualitative	104
4.5 Discussion	113

Chapter 5 Coaching in higher education. Does it help graduates to adapt to the workplace?	125
5.1 Introduction	127
5.2 Theoretical framework	128
5.3 Method	131
5.4 Results	137
5.5 Discussion	142
 Chapter 6 General discussion and conclusion	 151
6.1 How does higher education contribute to students' education-to-work transition?	153
6.2 How does coaching facilitate students' education-to-work transition?	154
6.3 Theoretical contributions	157
6.4 Limitations and recommendations for future research	160
6.5 Practical implications	162
6.6 Concluding remarks: reflection is key!	167
 Chapter 7 Impact paragraph	 173
7.1 Societal relevance	174
7.2 Dissemination activities: spreading the word	177
7.3 Co-authoring a book: Coaching at the boundary between education and work: this is how you guide students	179
7.4 Concluding remarks	180
 Appendices	
1. Summary	187
2. Samenvatting	189
3. About the author	191
4. Curriculum vitae and list of publications	192
5. Acknowledgements	197
6. ICO Dissertation Series	200

Table of Tables

Table 1.1	Overview of the studies included in this dissertation, including their research question(s), design, data sources, and method of analysis.	25
Table 2.1	Results of initial literature search	38
Table 2.2	Quality criteria (adopted from Gast et al., 2017)	39
Table 2.3	Pedagogical interventions based on alignment.	42
Table 2.4	Pedagogical interventions based on incorporation.	44
Table 2.5	Connectivity & boundary crossing	46
Table 3.1	An integrative overview of coaching in higher education and coaching at the workplace.	73
Table 3.2	Coding matrix	75
Table 4.1	Sample distribution	100
Table 4.2	Sample items and Cronbach's alphas	101
Table 4.3	Means (M), standard deviations (SD), composite reliability (CR), average variance extracted (AVE), square root of the AVE (the diagonal, in bold), and bivariate correlations for the variables under study (off-diagonal).	103
Table 4.4	Coding matrix	106
Table 4.5	Frequency table for the codes.	110
Table 4.6	Co-occurrence table for the types of coaching support and aspects of students' learning process.	112
Table 5.1	Coding matrix	133
Table 5.2	Frequency table	136
Table 6.1	Summary of theoretical contributions.	159
Table 6.2	Coaching support types and their behaviours.	166

Table of Figures

Figure 1.1	Integrative Pedagogy Model (adapted from Tynjälä, 2008; Tynjälä et al., 2021).	19
Figure 1.2	Schematic overview of this dissertation.	22
Figure 2.1	PRISMA flowchart (Page et al., 2021).	41
Figure 3.1	Coaching behaviours for relatedness support.	80
Figure 3.2	Coaching behaviours for competence support.	82
Figure 3.3	Coaching behaviours for autonomy support.	83
Figure 3.4	Competence support cycle.	85
Figure 4.1	Path model.	104
Figure 4.2	Sankey diagram of co-occurrences between coaching support types and students' learning process.	113
Figure 5.1	Clustered bubble chart. The size of the bubble indicates how many participants mentioned the code.	140
Figure 6.1	The path to success (Roslansky, 2021).	161
Figure 7.1	Book cover. Title in English: Coaching at the boundary between education and work: this is how you guide students.	180



Chapter 1

General introduction

"Before I started my academic career, I was enrolled in teacher education. I studied to become an English teacher for secondary school pupils. During this four-year program, I had to complete internships every year. Whilst my first internship consisted of mainly observing, I was gradually required to take over more lessons. During these internships, I especially had difficulties managing the classroom. I enjoyed teaching, but I felt that I had to put all my efforts into managing the classroom. Consequently, I felt ill-prepared to stand in front of a classroom and dropped out of my teacher education studies."

And I am not the only one not feeling ready for a job. I dropped out during my studies because I felt that probably I would not succeed as a young teacher. But, even for those who don't drop out and receive a degree, approximately half of the graduate employees leave their first job within two years after graduation (Liang & Sun, 2017; Wendlandt & Rochlen, 2008). Reasons for leaving their first job can vary, ranging from a better salary and career opportunities elsewhere to feeling ill-prepared for their first job. For example, approximately 20% of novice teachers and 14% of graduate nurses leave their sectors within two years after graduating because they do not feel work-ready (Bakker et al., 2019; van Nuland et al., 2022). Early turnover is a problem that is not unique to the Netherlands nor to these two sectors (e.g., Craig and Weed, 2018; Lee et al., 2023).

Leaving your first job can have serious consequences for both the individual and the organization. Leaving your job soon after starting can increase the risk of becoming a NEET (Ryan, 2001; Zudina, 2022). NEET stands for Not in Education, Employment, or Training, and refers to individuals who are not enrolled in any education, are unemployed, and are not engaging in any training programs. The Organization for Economic Co-operation and Development (OECD) estimates that 12.1% of tertiary education graduates are falling in the NEET category, with 18-24-year-olds forming the largest group (OECD, 2022). Becoming NEET at an early age increases the risk of long-term unemployment, which leads to financial insecurity, psychological distress, and reduced health (Lőrinc et al., 2020).

While the NEET group represents a very serious problem, early turnover in general can be a signal for substantial organizational issues. Early turnover can be considered as a brain drain from organizations, as graduates are an important source of talent and bring updated knowledge into the organization (Lee et al., 2023; van der Baan et al., 2023). In addition, early turnover is associated with tremendous costs. Organizations invest a significant amount of time and money in recruiting and training graduate

employees. There are also costs associated with loss of productivity (Ghadi, 2017; Lee et al., 2023). It is estimated that the costs of turnover lie between 150% to 250% of the employee's annual salary (Iqbal, 2010). Finally, early turnover reduces the size of the talent pool for organizations, making it more difficult to plan careers and prepare employees for management positions.

1.1 The education-to-work transition

Research shows that a large proportion of graduates leave their first job because they feel ill-prepared (Lee et al., 2023). They experience difficulties transitioning from higher education¹ to the workplace. The transition from higher education to the workplace, also called the education-to-work transition, refers to the period in a person's life when they switch from being a student to becoming an employee (Ng & Feldman, 2007). Whilst an unsuccessful transition might lead to early turnover, a successful transition to the workplace can lead to sustainable career development. Sustainable career development is defined as a sequence of career experiences providing meaning to the individual (De Vos et al., 2020; De Vos & van der Heijden, 2015). A recent literature review found that a successful education-to-work transition is associated with sustainable career development in terms of happiness, health, and productivity (Blokke et al., 2023).

Traditionally, research on the education-to-work transition focusses on the process of finding employment after graduation and how long the job search took (e.g., Akkermans et al., 2015; Vanoverberghe et al., 2008). Skans (2004) showed that 50 days of involuntary unemployment after graduation can already have negative effects five years later in terms of decreases in annual wage and later unemployment spells. It is therefore pivotal to ensure a swift transition from higher education to the workplace.

However, the transition process reaches well beyond the point of obtaining employment after graduation. Graduates encounter several challenges as they exchange the relatively stable and known context of higher education for a context that is dynamic, uncertain, and sometimes even unknown (De Schepper et al., 2023; Kowtha, 2011). When graduates have secured a job after graduation, they need to adapt to this new context, learn their new job tasks, and take on a new role as an employee with new responsibilities. Understanding how graduates experience their move to the workplace requires research to adopt a process-based approach to the education-to-work transition.

¹ This thesis focusses on higher education, referring to post-secondary education and above (i.e., level 4 to level 7 of the International Standard Classification of Education; ISCED).

According to Nicholson (1990), the transition process can be divided into four phases: the preparation phase, the encountering phase, the adjustment phase, and the stabilization phase (Grosemans et al., 2017). Students enter the preparation phase in the final year of their education before making the move to the workplace. During this phase, higher education aims to prepare students for their transition to the workplace. To do this, higher education has implemented various pedagogical interventions, such as internships and career workshops. The encountering phase describes the first period in which graduates first encounter the new context of the workplace. After the encountering phase, graduates enter the adjustment phase, in which they start to adjust to the workplace. The transition period ends with the stabilization phase when graduates have successfully adjusted to their new workplace. It can take up to three years for graduates to successfully adjust to their new workplace (van der Baan et al., 2023).

The education-to-work transition is a process that starts in higher education and only ends up to three years at the workplace. It is crucial for higher education institutions not only to facilitate a swift transition after graduation, but also to ensure that graduates can successfully adjust to their new workplaces in the long run. To foster adjustment to the workplace, work-related learning plays a pivotal role (Grosemans et al., 2020; Kowtha, 2011). Work-related learning, defined as the engagement learning activities both on and off the job aimed at acquiring and developing job-related competences (Kyndt & Baert, 2013), allows graduates to acquire job-specific competences and familiarize themselves with the rules of the organization. Work-related learning also allows graduates to keep up with the changes in job requirements and keep their knowledge updated. In addition, work-related learning as a career development opportunity prevent graduate employees to leave their job (Grohnert et al., 2021; Lee et al., 2023; van der Baan et al., 2023). To optimally prepare students for their education-to-work transition, higher education should not only support students in finding adequate employment after graduation, but also prepare them for work-related learning.

1.2 Employability

To capture students' preparedness for their education-to-work transition, an employability perspective is taken. In other words, employability is seen as a proxy-measure for transition. Recent research showed that students' employability support them in making a smooth transition to the workplace (Tuononen & Hyytinen, 2022). Tuononen and Hyytinen (2022) showed that several employability factors at the time of graduation, such as having career goals, a variety of competences, strong self-

efficacy beliefs, and an extensive network, predicted later career success in terms of job satisfaction and salary.

Employability refers to the ability to self-sufficiently navigate the labour market and secure sustainable employment after graduation (Hillage & Pollard, 1998). Thus, rather than focusing on whether graduates found adequate employment after graduation, employability refers to the potential to obtain employment after graduation. Employability also refers to maintaining employment (Fugate et al., 2021; Römgens et al., 2020). Maintaining employment requires graduates to learn the new job tasks and to cope with the fast-paced changes at the workplace (Grosemans et al., 2017; Kowtha, 2011).

Employability is thus seen as a set of personal resources, or competences, that increases graduates' potential to obtain and maintain a job after graduation (van Harten et al., 2022). Yorke (2006) defines employability in higher education as a set of competences 'that makes graduates more likely to gain employment and be successful in their chosen occupations' (p. 8). Different frameworks and models of employability in higher education exist with the aim of identifying these employability competences. Römgens et al. (2020) brought these different frameworks and models together and identified six dimensions of employability competences in higher education; 1) (applying) disciplinary knowledge, 2) transferable generic skills, 3) emotional regulation, 4) career development skills, 5) self-management skills, and 6) self-efficacy.

Not only are employability competences needed to make students employable, they are also required by employers (e.g., Tuononen et al., 2022). For example, James Heckman, winner of the Nobel Prize of economics, noted that to remain competitive and future-proof, companies require employees with both specific technical knowledge and the broader employability competences, such as communication and social skills (Radin et al., 2020). In addition, employers require a workforce that is able to quickly adapt to the frequent changes at the workplace, such as technological innovations and the rise of artificial intelligence (AI). Employability competence allow employees to cope and adapt to these changes, and allow them to learn at the workplace (van der Heijde & van der Heijden, 2006). According to a Forbes article (Marr, 2022), the ability to continuously learn is one of the top 10 skills required by employers. Employability thus creates a win-win situation for both employee and employer. From an employee's perspective, employability is necessary to survive and thrive in the workplace. From an employer's perspective, an employable workforce ensures competitive advantage.

1.3 Preparing students for their education-to-work transition

At the end of the twentieth century, interest in the relationship between higher education and the workplace started to increase (Harvey, 2000; Teichler, 1999). The amount of students enrolled in higher education grew quickly and a growing fear for a mismatch between higher education and what was required at the labor market emerged (Teichler, 2007). Due to technical innovations, the labor market changed quickly resulting in evolving job roles and competence requirements, but the curricula of higher education could not keep up with these changes (Doherty & Stephens, 2021). Competences required by employers were no longer static but continuously evolving and higher education needed to prepare students for continuous professional development and lifelong learning (Teichler, 2007). The ability to continuously learn and acquire new competences is pivotal for sustainable career development (Blokke et al., 2023; De Vos et al., 2020). To prepare students for lifelong learning, the Bologna declaration was signed in 1999, allowing higher education to supplement their teaching of knowledge with the teaching of competences for lifelong learning (Koenen et al., 2015).

The Bologna Declaration was signed on 19 June 1999 by the Ministers of Education of 29 European countries. The declaration sought to bring more coherence and align the European higher education system and encouraged higher education to supplement their teaching with the teaching of competences, leading to the emergence of Competence-Based Education (CBE). CBE is expected to better prepare students to function more flexible and adaptive at the labor market and the workplace (Koenen et al., 2015).

The focus of higher education on student employability is closely connected to CBE. To ensure that students become employable, attention must be given to the underlying employability competences. In addition, to optimally prepare students for their work life and make them employable, higher educational institutions could no longer work in isolation and needed to increase their connectivity with the workplace (Tynjälä et al., 2021). Connectivity between higher education and the workplace emphasized the importance of connections between learning activities in different contexts, such as learning in a higher education setting and workplace learning (Guile & Griffiths, 2001). To increase connectivity and to integrate workplace learning into formal educational programs, Tynjälä (2008) proposed the Model of Integrative Pedagogies (see Figure 1.1.; Tynjälä et al., 2021). This model aims to integrate different forms of knowledge into the curricula of higher education,

such as theoretical, practical, and self-regulative knowledge. Whilst theoretical knowledge refers to knowledge that is formal and explicit, practical knowledge is acquired through practical experiences and is often implicit and tacit. Integrating these types of knowledge includes the application of theoretical knowledge to practice and the explication and conceptualization of practical knowledge. Next, self-regulative knowledge refers to the processes that students use to regulate their own learning processes which requires reflective competences (Tynjälä, 2008; Tynjälä et al., 2021). Within the model of integrative pedagogy, students are expected to make connections between these different types of knowledge. To support students in making connections between different types of knowledge, mediating tools are needed. Mediating tools are activities that help students utilize theoretical concepts in practice or conceptualize and reflect on practical experiences, such as coaching (Nuis & Beusaert, 2021; Tynjälä et al., 2016). A coach can help students to connect the theoretical knowledge they gained in higher education with the practical knowledge they acquired at the workplace, and vice versa. In addition, coaching promotes self-regulative knowledge, referring to reflective skills, and can help students reflect on their learning experiences (Tynjälä, 2008).

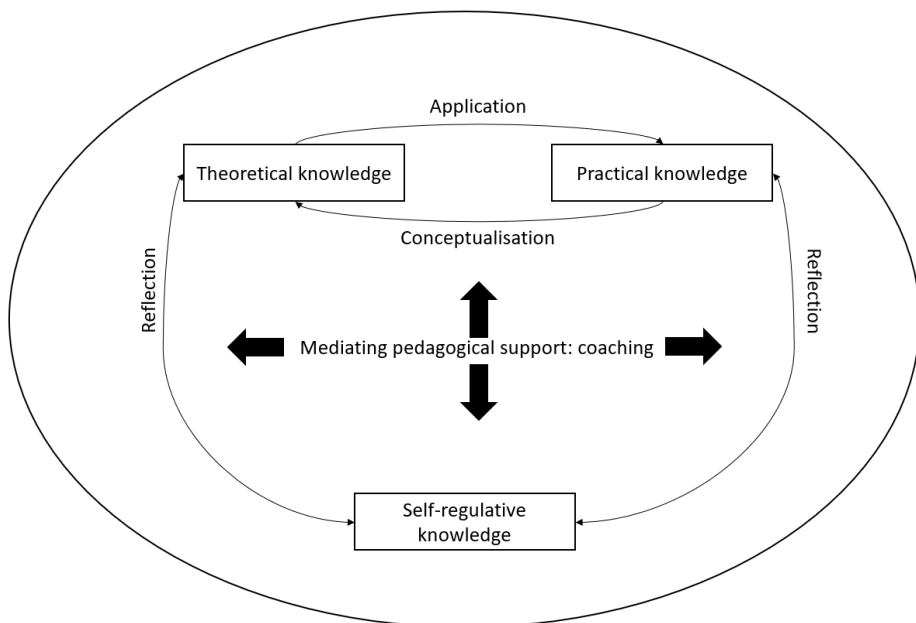


Figure 1.1 Integrative Pedagogy Model (adapted from Tynjälä, 2008; Tynjälä et al., 2021).

1.4 Coaching in higher education

Coaching in higher education² fits in with the tradition of CBE and has become an integral part of many higher education curricula (Crisp & Cruz, 2009; Devine et al., 2013; Gershenfeld, 2014). Since the rise of CBE, the job description of teachers has shifted from the traditional role of transmitters of knowledge to facilitators of students' learning process (Koenen et al., 2015; van Dijk et al., 2020). To facilitate their learning process, teachers display coaching behaviors to encourage students to formulate their own learning needs and stimulate their reflection (Koenen et al., 2015). Previous research showed that coaching and facilitating students' learning is one of the core tasks of teachers in higher education (van Dijk et al., 2020). Moreover, coaching provides a personalized approach towards learning (Nuis et al., 2022). A personalized approach to learning is needed when education focusses on students' competence development, where students decide on their own learning needs (Koenen et al., 2015).

Coaching in higher education has been used for different purposes, for example to promote students' retention, students' academic success (Crisp & Cruz, 2009; Devine et al., 2013) or improving students' self-regulation (Spence & Oades, 2011). In addition, coaching can be used to develop students' employability competences and facilitate their transition to the workplace (Gannon & Maher, 2012; Nuis, Segers, et al., 2023). Coaching stimulates students' reflection, and in turn, allows students to develop their employability (Nuis, van der Baan, et al., 2023).

Consequently, many different definitions of coaching exist today. The International Coaching Foundation (ICF) defines coaching as "partnering with clients in a thought-provoking and creative process that inspires them to maximize their personal and professional potential. The process of coaching often unlocks previously untapped sources of imagination, productivity, and leadership." Although this definition captures the essence of coaching, which is a developmental relationship between two people, it remains unclear how the coaching process looks like.

In this dissertation coaching refers to a formalized process based on a developmental relationship between two people in which one person is more experienced than the

² Coaching and mentoring are often used interchangeably. In their book, Garvey et al. (2010) argue that, even though the original roots are different, coaching and mentoring are essentially similar and determined by the social context (Rekha, 2010). Mentoring is often used in the setting of higher education (e.g., Crisp & Cruz, 2009; Gershenfeld, 2014; Jacobi, 1991; Nuis et al., 2022), whilst coaching is a term used at the workplace (e.g., Bozer & Jones, 2018; Jones et al., 2016). This dissertation uses the term 'coaching' to convey the importance of the continuation of coaching at the workplace to support graduates in their transition and adjustment to the workplace.

other (Nuis et al., 2022). Coaching is a holistic and multifaceted process in which the coach provides the coachee with various types of support (Devine et al., 2013).

To support students in the development of their employability, Nuis, Segers et al. (2023) found four support types. First, a coach in higher education provides autonomy support, encouraging students to think independently and acknowledging their perspectives. Students make their own choices and coaches should not make these choices for them. Second, a coach provides career support, referring to helping students set career goals and make career-related decisions. Third, a coach provides students with networking support in which the coach helps students to build their own networks, but also provides students with access to their network, if necessary. Fourth, a coach provides psychosocial support. Psychosocial support consists of trustworthiness, empathy, availability, and similarity. Trustworthiness, empathy, and availability refer to the relationship between the coach and the student. This relationship is built on trust between the coach and the student; the coach acts in an emphatic manner and is able to adopt the student's perspective, and the student feels that the coach is available, both physically and emotionally. Similarity refers to the student's perception about the degree of similarity in the attitudes, beliefs, and values between them and the coach.

A coach thus provides multiple types of support to stimulate the development of students' employability. These types of support form the basis of coaching practices in higher education aimed at facilitating students' education-to-work transition. Although all types of support are necessary, every student is unique and the coach can adapt their support accordingly (De Wilde et al., 2023). This makes coaching a more personalized approach than other interventions aimed at facilitating students' education-to-work transition.

1.5 This dissertation

At the end of each academic year, many students will graduate and make the transition into the world of work. Transitioning to the workplace can be challenging for many recent graduates as they make a contextual shift; they leave behind the relatively stable and known context of higher education and shift to a context that is more dynamic, unstable, and unknown. Consequently, many graduates leave their first job as they feel ill-prepared for it.

This dissertation explores how to optimally prepare students for their education-to-work transition. The aim of this dissertation is twofold. On the one hand, this

dissertation aims to analyze existing pedagogical interventions aimed at facilitating students’ education-to-work transition (**Chapter 2**). On the other hand, this dissertation proposes coaching as a pedagogical intervention to facilitate students’ education-to-work transition and aims to unravel this coaching practice (**Chapters 3, 4, and 5**). To unpack the two research aims of this dissertation, four studies are conducted.

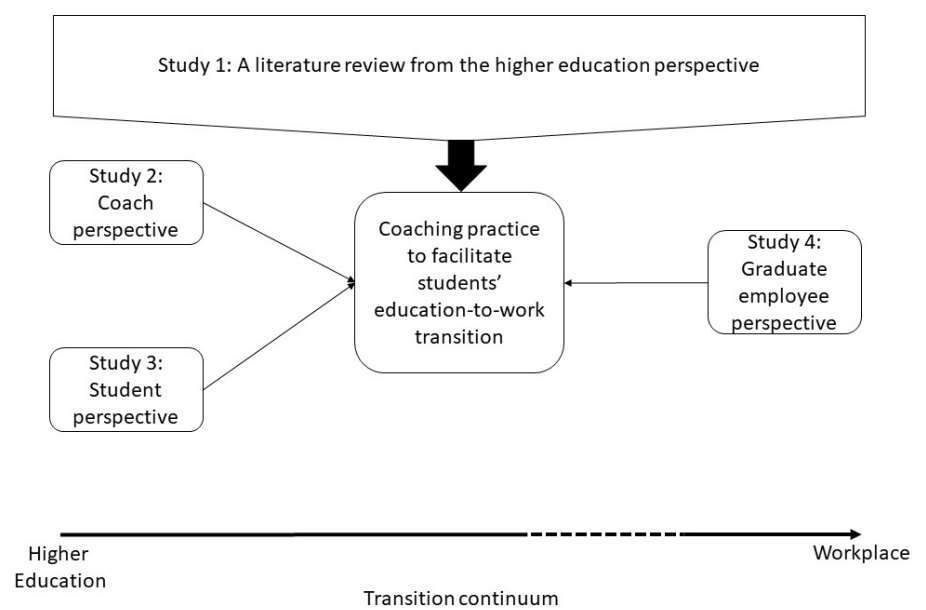


Figure 1.2 Schematic overview of this dissertation.

Each study in this dissertation takes another perspective. The perspectives of all relevant stakeholders (i.e., higher education, coaches, students, and graduates) serve as input to design and develop coaching practices in higher education aimed at facilitating students’ education-to-work transition. In addition, both higher education and the workplace form the research context of this dissertation. Higher education and the workplace are situated on the same transition continuum, as students’ transition period starts with the preparation in higher education and ends at the workplace. Therefore, the last study of this dissertation (**Chapter 5**) was conducted in the context of the workplace. Figure 1.2. provides a schematic overview of this dissertation.

Study 1: Analysing pedagogical interventions to facilitate students’ education-to-work transition

The first aim of this dissertation is to analyse existing pedagogical interventions aimed at facilitating students’ education-to-work transition. The first study (**Chapter 2**)

of this dissertation adopts a higher education perspective and aims to analyse pedagogical interventions to facilitate students' education-to-work transition and their effectivity. Two research questions are presented:

- 1) *How do pedagogical interventions aimed at facilitating students' education-to-work transition prepare and support them in their transition?*
- 2) *How is the effectivity of different pedagogical interventions measured?*

To answer these research questions, a systematic literature review was conducted. Several databases and keywords relating to the education-to-work transition were used. This study provides an overview of the pedagogical interventions used in higher education to facilitate students' education-to-work transition, how they are designed, and their effectivity.

The subsequent studies connect to the second aim of this dissertation and aim to unravel coaching to facilitate students' education-to-work transition.

Study 2: Conceptualising core competences of transition coaches

The second study of this dissertation (**Chapter 3**) adopts an expert coach perspective and aims to identify core competences of transition coaches to support students in their education-to-work transition. The following research question was presented:

What are the core competencies of a transition coach?

Focus groups with experienced coaches from higher education and the workplace were conducted to identify the core competences of transition coaches. This study provides insights in how coaches can support students in their transition to the workplace.

Study 3: Exploring the relationship between coaching and employability

The third study (**Chapter 4**) takes the student perspective and investigates the effectiveness of coaching as a pedagogical intervention in facilitating students' education-to-work transition, conceptualized and measured through students' employability. More specifically, the following two research questions were presented:

- 1) *What is the relationship between coaching and employability competences?*
- 2) *How does coaching for employability competences shape students' learning process?*

This study used a multiple methods approach and a two-study design. The first research question was answered using a quantitative approach. Students rated their own employability competences and coaching experience using an online questionnaire. To answer the second research question, a qualitative approach was adopted. Interviews were conducted with coaches in higher education to investigate students' learning process during the coaching sessions. This study provides insights into the relationship between coaching and the development of students' employability.

Study 4: How did coaching in higher education support graduates in their transition to the workplace?

The fourth and final study (**Chapter 5**) takes place in the context of the workplace and adopts the perspective of graduate employees. The following research question is presented:

How did recently graduated employees experience coaching aimed at improving students' employability competences, received in higher education, and how did the coaching practice help them to adjust to their new job?

To answer this research question, a qualitative approach was used and interviews with graduate employees who were coached in higher education were conducted. This study provides insights into how a coaching practice in higher education can help graduates in their transition to the workplace.

An overview of the studies included in this dissertation can be found in Table 1.1. All studies included in this dissertation were approved by the Ethical Review Committee Inner City faculties (ERCIC) of Maastricht University: ERCIC_291_20_09_2021.

As the aims of this dissertation were to analyze the contribution of pedagogical interventions to students' education-to-work transition and to unravel coaching to facilitate students' education-to-work transition, this dissertation contains four closely related, but separate studies. Although all studies contribute to the storyline of this dissertation, all studies were written independently and can be read separately. Therefore, overlap between the introductions and theoretical frameworks of the different studies exist.

Chapter 6 provides an integration and discussion of key findings of the four studies included in this dissertation, and their theoretical contributions. In addition, limitations of this dissertation are discussed and avenues for future research are provided. **Chapter 7** describes the societal relevance of this dissertation.

Table 1.1 Overview of the studies included in this dissertation, including their research question(s), design, data sources, and method of analysis.

Title	Research question(s)	Design	Data sources	Analyses
Education-to-work transition: a systematic analysis of pedagogical interventions in the setting of higher education (<i>Chapter 2</i>)	How do pedagogical interventions aimed at facilitating students' education-to-work transition prepare and support them in their transition? How is the effectivity of different pedagogical interventions measured?	Qualitative	Systematic literature review	Thematic Analysis
Coaching to prepare students for their school-to-work transition: conceptualizing core coaching competences? (<i>Chapter 3</i>)	What are the core competences of a transition coach?	Qualitative	Semi-structured focus groups	Thematic Analysis
Developing employability competence through coaching in higher education: supporting students' learning process (<i>Chapter 4</i>)	What is the relationship between coaching and employability competences? How does coaching for employability competences shape students' learning process?	Quantitative, qualitative	Questionnaires, semi-structured interviews	Structural Equation Modelling (SEM), Thematic Analysis,
How does coaching in higher education help graduate employees to adjust to the workplace? (<i>Chapter 5</i>)	How do graduate employees experienced coaching aimed at improving students' employability competences, received in higher education, and how did the coaching practice help them to adjust to their new job?	Qualitative	Semi-structured interviews	Thematic Analysis

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Education-to-work transition: a systematic analysis of pedagogical interventions in the setting of higher education

This chapter is based on:

van der Baan, N., Gast, I., Gijssels, I., Kyndt, E., Tynjälä, P., & Beusaert, S., (2023).

Education-to-work transition: a systematic analysis of pedagogical interventions in the setting of higher education. *Manuscript submitted for publication.*



Chapter 3

Coaching to prepare students for their school-to-work transition: conceptualizing core coaching competences

This chapter is based on:

van der Baan, N., Gast, I., Gijselaers, W. & Beausaert, S. (2022). Coaching to prepare students for their school-to-work transition: conceptualizing core coaching competences. *Education + Training*, 64(3), 398-415. <https://doi.org/10.1108/ET-11-2020-0341>

Abstract

The present study proposes coaching as a pedagogical intervention to prepare students for transitioning to the labour market. Taking a competence-based approach, the proposed coaching practice aims to enhance students' employability competences to facilitate a smoother school-to-work transition. However, what transition coaching looks like remains largely unclear. Moreover, in competence-based education, teachers are expected to be highly skilled coaches, facilitating students' transition to the labour market. The present study aims to map the core competencies of a transition coach. A qualitative design was adopted to map the core competences of a transition coach. Data were collected from two focus groups, consisting of coaches in higher education and in the workplace. Results show that, to create the necessary support conditions, a coach creates a safe coaching environment and supports students in setting goals, guide them in the activities they undertake to attain these goals, and asks reflective questions. Moreover, the coach stimulates students' ownership by putting the student in the centre of the decision-making process. Furthermore, the results emphasize the importance of the coach's professional attitude and knowledge about the transition process and the labour market. The article concludes with practical implications for novice transition coaches and teachers in higher education. The present study adds to the agenda of graduate work readiness by proposing a coaching practice aimed at preparing students for their transition to the labour market.

Keywords: school-to-work transition, work readiness, coaching, employability competences, higher education, workplace

3.1 Introduction

School-to-work transition marks an important turning point in the lives of many graduates. In 2017, for example, approximately 4.8 million students in the EU completed higher education and took the first step into the labour market (Eurostat, 2019). However, that transition does not always go well, and an unsuccessful transition to the labour market can have long-term consequences for the careers of starters, such as long-term unemployment, lower job satisfaction and accepting a job below their skill level (Baert, Cockx, & Verhaest 2013; Ryan 2001; Salas-Velasco 2007).

Traditionally, research on the transition to the labour market has taken a labour economics perspective (Teichler, 1999) and focused on the duration of the transition process, for example, how long graduates take to find adequate employment (e.g., Vanoverberghe et al., 2008). However, the transition period brings more challenges than merely obtaining a job. Among them, key issues are related to job fit, and how students acquire the necessary competencies enabling them to adapt to the dynamic workplace and continuously develop themselves (Braun & Brachem, 2015; Winterton & Turner, 2019). In this respect, it is essential to facilitate graduates in making the shift from the relatively stable context of higher education to a context that is still largely unknown to them. Graduates often encounter difficulties adapting to this new context, because they feel unprepared to cope with the demands of the workplace (Grosemans et al., 2017). Preparing students to cope with these demands of the workplace is an important task for higher education, in order to help students to adjust more easily to the dynamic labour market (Koen et al., 2012). It has thus become apparent that transition is a process, rather than a single event; it starts as early as the final year of higher education and only ends when graduates have found adequate employment in the labour market (Grosemans & Kyndt, 2017; Nicholson, 1990).

Because of the disconnection between higher education and the world of work, the Bologna declaration in 1999 initiated a change from the delivery of knowledge towards putting knowledge in the context of students acquiring competences. Higher education's increased focus on graduates' acquisition of competences geared to the needs of the workplace (e.g., Baird & Parayitam, 2019); Braun and Brachem, 2015). This has influenced the emergence of competence-based education focusing on required graduates behaviour within a range of relevant job situations and the knowledge, skills and attitudes (Baartman et al., 2007). Competence-based education is expected to better prepare students for their transition to the labour market and their professional future (Koenen et al., 2015). Within competence-based education, more emphasis is given to the coaching and guiding role of teachers. In addition,

guiding students in acquiring and developing the necessary competences for the labour market and supporting them in formulating their own learning goals is seen as an integral part of the teaching profession (Koenen et al., 2015; van Dijk et al., 2020). However, how teachers can best coach students in higher education as well as support them in acquiring and developing competences required for the labour market remains unclear (Spence & Oades, 2011; van Dijk et al., 2020). Therefore, concrete coaching guidelines are needed to support teachers in their role as a coach to facilitate students' transition to the workplace.

In higher education, several pedagogical and didactical interventions have been implemented aimed at acquiring and developing students' generic competence, such as work experience through internships and work placements. In this respect, it aims to support students in their school-to-work transition. For work experience to contribute to the acquisition and development of students' competences, students need to be guided or coached to learn from these experiences. Without proper guidance these experiences are seen "as isolated pockets of learning" (Blackwell et al., 2001, p. 282).

Coaching has already been studied as an intervention aimed at facilitating students' transition to the labour market in different contexts (Gannon & Maher, 2012). In their study, Gannon and Maher (2012) evaluated a coaching program in the Hospitality and Tourism sector in a UK university aimed at enhancing student employability. This study showed that the program was seen as a valuable intervention providing networking, industry insights, advice and opportunities support to foster students' employability. To support students in their competence development, Spence and Oades (2011) have developed a theoretical framework for coaching. Encouraging competence development goes along with a coach providing relatedness support, competence support, and autonomy support. However, how a coach can create these supporting conditions to enhance students' competences required by the labour market and thus facilitate the transition process remains unclear (Spence & Oades, 2011). Moreover, the transition process only ends at the workplace, when graduates have found stable jobs in terms of job position (part-time/full-time) and job satisfaction (Grosemans & Kyndt, 2017). Therefore, to support the full school-to-work transition, coaching for this transition not only takes place in higher education but also in the workplace. Existing coaching frameworks, such as the framework of Nora and Crisp (2008) of coaching in higher education or the framework of Spence and Oades (2011) of workplace coaching aim at academic, personal and professional development, and outline different characteristics and competences of a coach. However, to the best of our knowledge, a unified framework of characteristics and competences of a coach that is based on research situated in higher education and the workplace is still lacking.

The present study proposes coaching as a pedagogical intervention aiming at preparing students for their school-to-work transition by supporting in acquiring and developing competences required by the labour market. The present study identifies concrete coaching competences by reporting on two focus groups with experienced coaches in higher education and the workplace and answering the following research question:

What are the core competencies of a transition coach?

3.2 Theoretical framework

Coaching for the school-to-work transition starts in higher education and continues at the workplace. However, coaching in higher education and coaching at the workplace are conceptualized differently. Therefore, the first step in designing a theoretical framework for coaching for the school-to-work transition is synthesizing the literature on coaching in both higher education and at the workplace, coaching goals and coaching competences, such as the support behaviours a coach provides. The focus lies on the 'who', 'what', 'why' and 'how' of coaching.

Coaching in higher education

Ample research has been done on coaching in higher education (Crisp & Cruz, 2009; Gershenfeld, 2014; Nora & Crisp, 2008). Gershenfeld (2014) defined coaching in higher education as a multi-dimensional construct with multiple purposes. However, academic and student success remains the primary goal of coaching in higher education. Coaching in higher education can also aim at competence and professional development. In a recent review, Nuis and Beausaert (2020) define coaching in higher education as a formal, structured process based on a supportive, reciprocal coach-coachee relationship. In the setting of Higher Education, coaching sessions are often offered as individual sessions. Not only can a faculty member coach students, but more experienced peers or alumni may also guide students in their academic development (Lu, 2010). Various support behaviours are necessary to stimulate the academic development of the coachee. Previous research has indicated that a coach should provide the coachee with (1) *psychological and emotional support*, (2) *psychosocial support*, and (3) *career path support* (Nora & Crisp, 2008; Nuis & Beausaert, 2020; Ragins & Kram, 2007).

Psychological and emotional support refers to the coach as a listening ear. The coach actively and empathically listens to the fears and problems of the coachee to

establish a safe climate. The coach also provides moral support and ongoing feedback regarding the fears and problems the coachee is willing to discuss. Discussions “must be conducted in a safe environment as perceived by the mentee” (Nora & Crisp, 2008, p. 343), so that the coach is able to identify the problem and propose a solution to the coachee. To establish a safe environment, the coach must provide *psychosocial support*, in which the interaction between the coach and the coachee is pivotal.

Psychosocial support refers to the presence of trust and intimacy in the interaction between coach and coachee. Psychosocial support also refers to coaching behaviours that promote students’ personal growth concerning aspects such as self-efficacy and self-worth, including acceptance and confirmation (Ragins & Kram, 2007).

In addition, the coach provides the student with *career path support*. Career path support includes coaching behaviours that Ragins & Kram (2007) called *career functions*. “Career functions involve a range of behaviours that help protégés ‘learn the ropes’ and prepare them for hierarchical advancement within their organizations” (Ragins & Kram 2007, p.5), such as showing the student how to seek and apply for jobs (Crisp & Cruz, 2009). By providing career path support, the coach stimulates the coachee to reflect on his/her learning experiences (Nora & Crisp, 2008).

Coaching at the workplace

Coaching at the workplace is primarily aimed at workforce development (Bozer and Jones 2018; Cameron & Ebrahimi 2014; Jones, Woods, & Guillaume 2016). Workplace coaching is a goal-oriented process based on trust and discretion, and depending on the goal, workplace coaching can have a variety of outcomes (Grant & Cavanagh, 2007). In their review, Blackman, Moscardo, and Gray (2016) found a range of positive outcomes associated with workplace coaching, such as career development and advancement, improved psychological and social competencies, and enhanced self-awareness, assertiveness, and self-efficacy. In their meta-analytic review, Jones, Woods, and Guillaume (2016) distinguished between the affective, cognitive, and skill-based outcomes of workplace coaching. Affective outcomes refer to attitudes and motivational outcomes, such as self-efficacy, well-being, and job satisfaction. Knowledge gains fall under cognitive outcomes. Skill-based outcomes refer to the learning of new skills, such as leadership skills or problem-solving skills. Workplace coaching was found to have positive effects on all types of outcomes, with the largest effect size for the cognitive outcomes. Together, these cognitive, affective, and skill-based outcomes, or knowledge, attitudes, and skills, can be referred to as competences. Thus, to promote workforce development, coaching at the workplace is primarily concerned with competence development. Because coaching at the

workplace is a goal-oriented process, based on trust and discretion (Bozer & Jones, 2018; Jones, Woods, & Guillaume 2016), it is not necessary for the coach to have experience or expertise in the coachee's area of work. Coaching can also occur between two people of equal status within the organization (Jones, Woods, & Guillaume 2016).

Spence and Oades (2011) develop a coaching framework on how workplace coaches can support employees in their competence development. These authors took a motivational perspective and argued that the self-determination theory (SDT) provides "a useful set of ideas for guiding [a] coaching practice" (p. 39). SDT assumes that people are inherently capable of behavioural change under the right circumstances and with the right supporting conditions. Personal development largely depends on the satisfaction of three basic psychological needs of the coachee: autonomy, competence, and relatedness (Ryan & Deci 1985; Spence & Oades 2011). A coach at the workplace can provide support for these three basic psychological needs. In providing *autonomy support*, the coach places the coachee at the centre of the decision-making process, by encouraging ownership over the coachee's own goal setting and development. The coach assists in establishing personal development objectives for the coachee and encourages proactive behaviour from the coachee by supporting goal accomplishment and professional growth (Jones, Woods, & Guillaume 2016; Spence & Oades 2011). To create a feeling of competence, the coach provides *competence support* by assessing the coachee's abilities and talents, rather than focusing on analysing the problems. This is supported by a study conducted by Grant and O'Connor (2010), who showed that solution-focused coaching, in which people are connected with their strengths, led to better outcomes in terms of self-efficacy, goal-orientation, and positive affect compared to problem-focused coaching. Effective coaching can only take place in a safe environment, where the coachee feels safe to discuss personal problems and issues (Ragins & Kram 2007). Coaching is a person-centred process, and by providing *relatedness support*, a coach can establish this safe coaching climate. By actively listening to the coachee, showing empathy, and being attentive and responsive, the coach is able to satisfy the coachee's need for relatedness (Spence & Oades, 2011). By taking care to satisfy these three basic psychological needs of the coachee, a coach is then able to promote employees' competence development at the workplace.

Towards an integrative view of coaching in higher education and coaching at the workplace

Although coaching in higher education and coaching at the workplace are defined differently, similarities can be identified. Before investigating the core competences a

transition coach needs, the present study compares the 'who', 'what', 'why', and 'how' of coaching in higher education and workplace coaching. Concerning the 'what' and 'why' of coaching, both coaching practices can be defined as a formal, goal-oriented process based on a relationship of trust between the coach and coachee. Both practices aim at competence development, whether it is student success or workforce development, through the development of competences.

Next, overlap can be found in the 'how' of coaching. First, *career path support* is offered in both contexts. In higher education, providing career path support involves giving support in setting career goals and making decisions, by asking questions and stimulating students to reflect on their learning experiences (Crisp & Cruz 2009; Nora & Crisp 2008; Ragins & Kram 2007). At the workplace, a coach provides *competence support* and assists employees in establishing personal and professional development goals by providing the employee with ongoing feedback (Bozer & Jones 2018; Jones, Woods, & Guillaume 2016; Spence & Oades 2011). Even though a coach helps with setting personal and professional development goals, the coachee is stimulated to be proactive in attaining those goals, in both higher education and at the workplace, which relates to autonomy support. Within higher education, Ragins and Kram (2007) have termed this sponsorship: sponsoring or empowering the coachee in their advancement. Third, coaches offer relatedness support in both contexts. Within higher education *psychosocial* and *psychological/emotional support* is offered, which shows considerable overlap with *relatedness support* in workplace coaching. In higher education, the psychosocial dimension of coaching is "built on trust, intimacy and interpersonal bonds in the relationship" (Ragins & Kram 2007, p. 5) and shows overlap with relatedness support as far as building a healthy, supportive relationship between a coach at the workplace and an employee (Bozer & Jones, 2018; Jones, Woods, & Guillaume 2016; Spence & Oades 2011). *Relatedness support* overlaps with the psychological and emotional dimension of coaching in higher education, in which a coach establishes a safe climate (Crisp & Cruz, 2009; Nora & Crisp, 2008).

Although coaching models in higher education and at the workplace have their own characteristics, careful investigation reveals several similarities. Coaching in both worlds have competence development as their fundamental goal. Next, both groups of literature identify similar support behaviours. They refer to relatedness and competence support to encourage students' or employees' competence development. However, providing autonomy support was not mentioned in higher education literature, but it was in the workplace literature. The biggest difference between coaching in higher education and coaching at the workplace concerns the 'who' of coaching. While a coach in higher education is required to be more

experienced in terms of academic subject knowledge or knowledge about the labour market, whether the coach is a faculty member or a peer, this is not a requirement for coaching at the workplace, where a coach and coachee can be of equal status (Bozer & Jones, 2018). Table 3.1. provides an integrative overview of the 'who', 'what', 'why', and 'how' of coaching in higher education and coaching at the workplace.

Table 3.1 An integrative overview of coaching in higher education and coaching at the workplace.

	Coaching in higher education	Coaching at the workplace
Who?	Someone who is more experienced	Not necessarily someone with more experience
What?	A formal, structured process based on trust	A goal-oriented process based on trust and discretion
Why?	Student development <ul style="list-style-type: none"> • Promoting student success and personal and professional development • Competence development 	Workforce development <ul style="list-style-type: none"> • Competence development <ul style="list-style-type: none"> - Cognitive outcomes - Affective outcomes - Skill-based outcomes
How?	Providing: <ul style="list-style-type: none"> • Career support • Psychosocial support • Psychological and emotional support 	Providing: <ul style="list-style-type: none"> • Competence support • Relatedness support • Autonomy support

3.3 Method

Semi-structured focus groups were used, which elicit interaction between participants where they discuss concrete core competences of a transition coach (Morgan, 1996). This study will provide in-depth understanding of how a transition coach can create the necessary support conditions for students.

Participants

Two focus group sessions with coaches as participants were conducted in the Netherlands ($n = 4$) and in Belgium ($n = 5$) in October 2019. Participants were recruited from the researchers' networks and were selected based on their coaching experience either in higher education or at the workplace. Participants in the focus groups were coaches working as a coach in higher education ($n = 5$) or at the workplace ($n = 4$). These focus groups were mixed, with both coaches from higher education and coaches from the workplace as participants. In our sample, eight out of the nine participants (88%) were women. Participants' coaching experience ranged from less than 2 years of coaching experience (one participant) to more than

5 years of coaching experience (six participants). Ages varied from 31 to 55 years old ($M = 45.89$ years, $SD = 8.37$).

Procedure

The focus group sessions lasted approximately 2 hours each, were audio-recorded, and transcribed verbatim to facilitate the coding of the focus group discussions. The focus group sessions were chaired by an independent, experienced coach to mitigate the risk of interview bias, referring to the preconceived judgements of the researchers about the content of the focus groups. The focus group discussion guidelines were based on the theoretical framework, with open-ended questions about the who, what, why, and how of coaching for transition to the workplace (Bozer & Jones 2018; Crisp & Cruz 2009; Jones, Woods, & Guillaume 2016; Nora & Crisp 2008). The focus groups started out with more general questions about the goals of coaching and the tasks and responsibilities of coaches. Next, questions went into more detail about students' transition to the labour market, and how coaches can facilitate this transition. For example:

"What should a coach do to help students make the transition to the labour market?"

The six phases of thematic analysis proposed by Braun and Clarke (2006) were used to code the focus group discussion transcripts deductively and inductively, on a semantic or explicit level, and on a latent or interpretative level. To test the inter-rater reliability, the first author and an independent peer researcher independently coded 10% of the focus group discussion transcripts. A satisfactory Cohen's kappa of .80 was reached.

Analysis

The coded data from the focus groups were analysed using the thematic approach proposed by Braun and Clarke (2006). Analysis of the results started with the core competences a transition coach need. Based on the data, these core competences could be categorized as the knowledge, attitudes, and skills of a coach needed for supporting transition. Within the skills a transition coach needs, a distinction was made between the three different types of support behaviours a coach should provide: (1) *autonomy support*, (2) *competence support*, and (3) *relatedness support* (see Table 3.2 for the coding matrix).

Table 3.2 Coding matrix.

Code Groups	Descriptive codes (N**)	Description	Example quotes
Core characteristics*			
	Coaching competences* (N=13)	The competences - knowledge, skills, and attitudes - of a coach	"... so your professional attitude in the sense of you are involved, but not emotionally involved."
	Coaching experience* (N=2)	The experience being a coach in general.	"[Your] network and acquired experience - practical experience."
Coaching behaviours			
Relatedness support			
	Creating safe environment (N=8) Listening (N=3)	The coachee needs to feel safe in order to share his/her problems with the coach. A coach should actively and attentively listen to the coachee.	"So provide security." "I always try to listen to what I don't hear here. Yes. That is usually my context with which I start a coaching conversation."
	Creating trust (N=10)	Coaching is based on interpersonal process relations between the coach and the coachee. A coach should build a trusting relationship with the coachee.	"Create and build trust."
	Being transparent* (N=9)	Informing the coachee about the goal of coaching and your role as a coach and the goal of the coaching trajectory. If a coach has different roles, for example also the role of assessor, the coach should be open and explicit about this towards the coachee.	"And I try to explain that too. I will consciously sometimes say, 'And now I will stand up as HR, and now I will stand up as [coach]'"
	Being discreet* (N=10)	A coach should not discuss parts of the coaching conversation with a third party.	"I don't want my boss to know what we're discussing here."
	Expectations manager (N=6)	The coach discusses what the coachee can expect from the coaching trajectory.	"But students really come in and they say, 'yes I don't know whether I have to choose A or B, you are going to tell me what to choose.' I say, 'No, I'm not going to tell you that at all'"
	Referring (N=1)	If it's outside your scope (e.g. psychological issues), the coach refers the coachee to other departments/institutions	"So to refer people when they ask questions that are outside your scope, outside your role, or outside your responsibility."

Table 3.2 Continued

Code Groups	Descriptive codes (N**)	Description	Example quotes
Competence support	Guiding* (N=8)	Assisting and steering the coachee in the process of goal attainment	"Yes, but you guide the process. You actually manage his learning process as a coach."
	Explaining* (N=1)	Making the process and goals clear and explaining how to do something	"Explaining the processes, I think."
	Showing* (N=2)	A coach can show or demonstrates the coachee how things are done	"That's also what I mean by training on the job, just sit down at the computer together and search for vacancies together."
	Sponsoring (N=5)	Sponsoring or empowering their advancement. Stimulating the coachee to be proactive	"What is not there yet, what I often do during coaching, is encouraging people to cross that threshold. Encourage people to overcome their cold water fears."
	Goal setting (N=7)	A coach helps you explore, identify, and set your learning goals	"You have to put the finger on the right note, [identify] the right learning goal."
	Help define action plan (N=6)	After identifying the learning goals, the coach helps you to define actions and make a plan in order to attain those goals	"We now know what your learning goals are and we can make the link. Okay, what are we going to do now, we are going to work now."
	Supports scaffolding* (N=2)	The coach helps you to make those specific actions smaller	"By chunking. Small steps, chunking. Making bite-sized chunks"
	Giving advice* (N=2)	The coach gives the coachee recommendations about what he/she should or should not do	"For example, sometimes they just ask, how should I prepare a CV. Then it is really just pure advice."
	Exploring solutions* (N=3)	The coach and coachee explore numerous possibilities that can lead to accomplishing his/her goals	"How many possibilities are there now, and exploring them."
	Doing job simulation* (N=3)	The coach simulates job interviews and helps with writing a CV or application letter	"And yes, of course what we do a lot with students is job interview simulation."
	Offering tools* (N=5)	Offering practical tools, such as checklists or list of abbreviations used at the workplace	"And I think, actually what you both said. ... Because you do that by making it very concrete. Also with such a glossary."
	Offering a framework* (N=2)	The coach provides the coachee with a structure in which he/she can work towards the goals	"And also providing a framework, a framework with steps to take."

Table 3.2 Continued

Code Groups	Descriptive codes (N**)	Description	Example quotes
	Stimulating (self-) reflection (N=15)	The coach challenges the coachee to take different perspectives and stimulates the coachee to look at him/herself by holding up a mirror	"Learning them to hold up their own mirror."
	Asking questions* (N=7)	A coach stimulates reflection by asking concrete, practical, and open ended questions.	"Ask clarifying and in-depth questions."
	Giving feedback (N=2)	By giving ongoing feedback a coach can help stimulate reflection	"Then you also immediately give back to people if you notice something that does not help them."
	Evaluating one's own behaviour* (N=6)	The coach stimulates the coachee to evaluate his/her own behaviour in terms of the impact it has on others	"You also have to see how it comes across to the outside world and what happens there. I call that impact, what happens there, and how does it comes back to you."
	Exploring feelings* (N=1)	Exploring how the coachee feels about his/her past experiences	"And also what do I experience here now. What do I feel now. Here and now, if I'm with you ... When it comes to not listening well, [...] How do you feel it with me now, for example."
Autonomy support	Assessment of strength and weaknesses (N=5)	"in-depth review and exploration of interests, abilities, ideas, and beliefs" (Nora & Crips, 2008, p.343). The coach stimulates analysis of strengths and weaknesses of the coachee	"Knowing you strengths and learn how to use them"
	Stimulating ownership* (N=13)	Encouraging coachees to take ownership of their personal and professional development. The coachee should take responsibility over his/her own learning process.	"Stimulating ownership"

Note * codes identified inductively.
** frequency of mention.

3.4 Results

The present studies used semi-structured focus groups to identify core competences of a transition coach. The results are structured according to the attitudes, knowledge, and skills that together form the core competences of a coach for transition.

Coaching competences

Attitudes

Participants in both focus groups identified a coach's professional attitude as pivotal for supporting students' transition to the workplace. One participant defined a professional attitude as being engaged and involved with the coachee, without being emotionally attached, while other participants mentioned empathy as a core characteristic of a transition coach. During the coaching conversation, the coachee is in a vulnerable position. However, not only the coachee, but also the coach should open up and be vulnerable themselves. Results indicate that, aside from opening up, a transition coach must be transparent, discreet, and have integrity, which facilitates the trusting relationship between the coach and the coachee. Because coaching is based on a trust relationship, a transition coach should be trustworthy and being able to build trust in a relatively short amount of time:

To be able to build trust in the very short timeframe. And that is ... If that trust ... people will connect very quickly and can go very quickly to a personal level. And not everyone can do that, I see coaches who totally ... who stay on the surface. And the effect [of coaching] is much less if you have a superficial conversation. Or you will immediately go into that depth. So that is a characteristic of a coach that you really have to have. [Workplace coach - focus group 2]

Further analysis indicated that a professional attitude for a transition coach includes having passion for the coaching occupation, being curious and open-minded, but also knowing their own limitations, for example:

...to refer people when there are questions that are outside your scope, outside your role or outside your responsibility. [Workplace coach - focus group 1]

Knowledge

The primary responsibility of a transition coach is to prepare students for the labour market. Results indicate that a transition coach should, therefore, have knowledge about the labour market itself, in order to adequately prepare students for the

transition. Should a student come to the coach with a question outside the scope of the transition, the coach should refer the student to other departments or institutions that can help the student with that particular question. In other words, a transition coach should know their own limitations. Further results indicate that a coach should also have knowledge about learning at the workplace and the coachee's learning processes and should pay attention to the coachee's learning.

Skills

The coaching skills mentioned by both focus groups could be divided into the three coaching dimensions defined earlier (relatedness support, competence support, and autonomy support).

Relatedness Support. A transition coach should provide relatedness support by creating a *safe environment* in order to freely discuss the fears and uncertainties of the coachee. Results indicate that in order to establish a safe environment, a transition coach should *actively listen* to the coachee and be able to manage the expectations of the coachee by *creating a mutual understanding* of the goals of the coaching sessions, as illustrated by one participant:

But students really come in and they say, 'Yes, I don't know whether I have to choose A or B. You are going to tell me what to choose.' I say, 'No, I'm not going to tell you that at all.' [Higher education coach - focus group 1]

In addition, results indicate that to establish a safe environment, a transition coach should *build trust*, *create transparency* and *act discreetly*. Both focus groups identified building trust as pivotal for a safe coaching environment. Creating transparency and being discreet are especially important for transition coaching in a workplace context. At the workplace, other interests such as retention might play a role, which do not necessarily align with the goals of the coachee, who might plan to leave the company to seek opportunities elsewhere. It is important to agree on the goal of coaching, which refers to expectation management, and to be transparent about this with the coachee, and if necessary, with the manager or a third party. In addition, a coach can have multiple roles, for example, the role of supervisor, manager, or assessor. It is also pivotal to create transparency for the coachee on what role the coach is taking on. For example, one participant coaching at the workplace explained:

And I try to explain that too. I will consciously sometimes say, 'And now I will stand up as HR, and now I will stand up as [coach]. [Workplace coach - focus group 2]

As for discretion, both focus groups identified creating confidentiality as a key component of a safe environment. A transition coach should not discuss the coaching sessions with a third party, especially in a work setting where different interests collide. Figure 3.1. summarizes the results categorized as relatedness support.

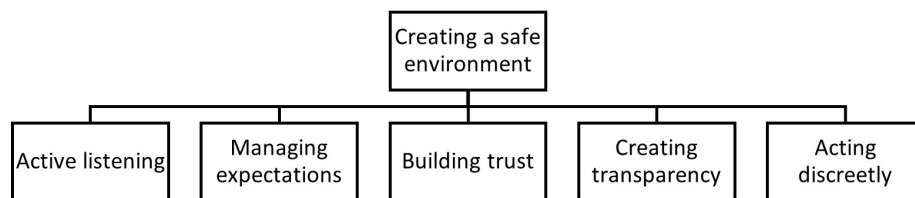


Figure 3.1 Coaching behaviours for relatedness support.

Competence Support. Providing competence support involves helping the coachee set future (career) goals and attain those goals. Both focus groups identified *stimulating the coachee's reflection* as a key component for providing competence support. By stimulating reflection of coachees, they are able to evaluate and adapt their own behaviour in the future. It is this reflection that enables coachees to keep developing themselves. For example, one participant defined this process as:

To think about it in such a way that you are able to find the solution to the problem yourself. [Higher education coach - focus group 1]

Specific coaching behaviours to stimulate a coachee's reflection were identified during the focus group discussions. Results suggest that a coach should start by providing *assistance with setting (career) goals* and *assessing the abilities, strength, and weaknesses of the coachee*. By starting with goal setting, the coach makes sure that the coaching conversation becomes goal oriented and purposeful. Although assessment of the coachee's strength and weaknesses is the next step, coaches in our focus groups agreed that the focus should be on the coachee's abilities, strengths, and talents instead of the coachee's weaknesses. Based on the strengths, abilities, and talents of the coachee, the goal can be adjusted. The next step is then *making an action plan* and working towards goal attainment:

We now know what your learning goals are and we can make the link. Okay, what are we going to do now? We are going to work now. [Higher education coach - focus group 2]

To make an action plan more concrete, steps to be taken towards goal attainment are identified. These smaller steps build on each other in order to reach the end goal, a process termed *scaffolding*. One participant used the term “chunking” for this, dividing your action plan into small concrete steps:

By chunking. Taking small steps. Making bite-sized chunks. [Workplace coach - focus group 1]

However, it is the coachee who works towards the goal themselves. The coach empowers the coachee and encourages proactive behaviour, termed *sponsorship*. In addition, the coach *provides a framework* for the action plan and the concrete steps to take. Even though it is the coachee who takes these steps themselves, the coach provides a range of support behaviours, including *guiding, explaining, showing, and advising*. The coach guides them through the action plan and explains the different steps. The coach can show or demonstrate how to perform certain tasks. In our focus group discussions, showing or demonstrating was linked with on-the-job-training in the workplace context. In addition to guiding, showing, and explaining, the coach sometimes gives advice to the coachee about which steps to take. One participant worded it:

So, you go through it with them, but in the end they also make decisions and steps. You merely give advice. [Higher education coach - focus group 1]

Again, it is the coachee themselves who works towards goal attainment. However, together with the coachee, the coach can *explore the possible paths* the coachee can take, the *possible solutions*. To support the coachee further in their goal attainment, the coach offers practical tools to the coachee; for example, in a workplace context this could be a list of unknown words or jargon.

After concrete actions have been taken towards goal attainment, the coach can evaluate this behaviour together with the coachee by *asking open-ended, in-depth, and reflective questions*. Both focus groups identified *giving feedback* as a vital part of evaluating. Moreover, results suggest that a coach can help the coachee see the effect of his behaviour on others and his environment. One participant defined this as impact:

You also have to see how it comes across to the outside world and what happens there. I call that impact, what happens there, and how does it come back to you. [Focus group 2]

Another coach from the same focus group related the impact on others to explicitly envisioning what empathy means and putting yourself in others' shoes:

When I say and do this, it comes across to the other person like that. So actually learning to make empathy visible, learning to put yourself in the shoes of the other. [Higher education coach - focus group 2]

The results for competence support behaviours are summarized in Figure 3.2.

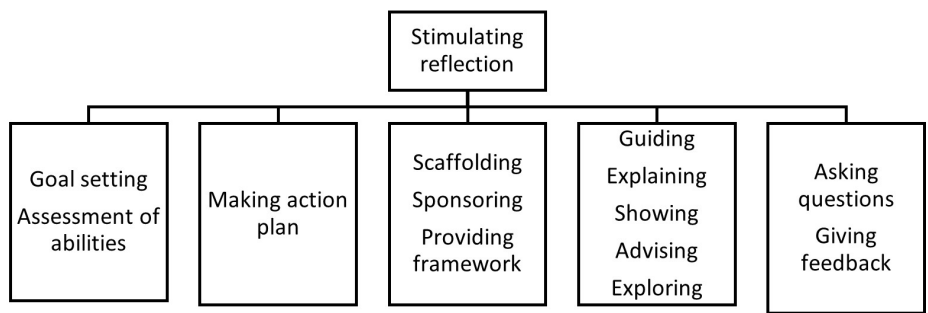


Figure 3.2 Coaching behaviours for competence support.

Autonomy Support. During the focus group discussions, empowering and encouraging proactive behaviour by the coachee was frequently mentioned. The coachee is put at the centre of the decision-making process, and the coach only guides, explains, shows how things are done, and advises the coachee during this process. These concrete coaching behaviours also relate to providing the coachee with autonomy support. By *handing over the responsibility* to the coachee and *stimulating proactive behaviour* by the coachee, the coach stimulates the coachee's ownership of their own development. A coach should make clear that it is the coachee who is in charge of their own transition and career path, as illustrated by this quote from a participant:

"You sit behind the wheel of your own career path, your own job." [Higher education coach – focus group 2]

Figure 3.3. summarizes the results found for providing autonomy support.

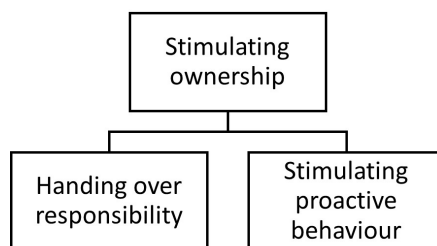


Figure 3.3 Coaching behaviours for autonomy support.

3.5 Discussion

The present study aimed at identifying the core competences of coaches who aim to support students in their school-to-work transition. By conducting semi-structured focus groups, the present study identified attitudes, knowledge and skills of a transition coach.

Coaching competences

Results from the focus group discussions indicated that a transition coach possesses certain competences – attitudes, knowledge, and skills – to support students in their transition to the labour market. The attitudes of a transition coach closely relate to the skills, or support behaviours, a coach provides to facilitate students' transition to the labour market. These attitudes refer mainly to the interaction of the coach with the coachee; without the attitudes suggested by the underlying theoretical understanding of coaching, the coach will be unable to provide the coachee with the necessary support. Results further indicate that a transition coach has knowledge about the labour market and the workplace. Since the coach is preparing the student for their school-to-work transition, it seems plausible that the coach must be up-to-date on the requirements of the labour market, such as the generic competences required (e.g., Braun & Brachem 2015). Aside from the fact that a transition coach has a professional attitude towards the coaching process and knowledge of the labour market, the main findings of the present study provided support for our theoretical framework. The core competences of a transition coach can be categorized according to the three types of support: relatedness support, competence support, and autonomy support.

Relatedness support

First, a transition coach provides relatedness support and establishes a safe environment in which a coaching conversation can easily take place. This finding

is in line with the study by Nora and Crisp (2008), who argued that coaching “must be conducted in a safe environment as perceived by the mentee” (p. 343). To establish a safe environment, a coach relies on several coaching behaviours, which Crisp and Cruz (2009) call psychosocial behaviours, referring to the quality of the coach-coachee relationship. Moreover, these psychosocial behaviours also relate to the attitudes of a coach. A coach with a professional attitude, who is reliable and dependable, can create and build a trusting relationship in a relatively short amount of time. Arguably, providing relatedness support is closely connected to the professional attitude of a transition coach. A coach who values a personal connection with the coachee and is empathic is able to create a safe environment where a coaching conversation can take place.

Competence support

Second, a transition coach provides *competence support*, in which they facilitate the decision-making process of the coachee by stimulating the coachee’s development and reflectiveness. When the coach stimulates reflection, the coachee becomes a reflective learner, which allows the coachee to critically analyse their own behaviour which, in turn, leads to behavioural change and personal and professional growth (Beusaert et al., 2015).

Careful investigation of the behaviours associated with providing competence support reveals strong parallels with the continuing professional development cycle proposed by Rouse (2004). By setting personal or professional development goals, working towards attaining those goals, and evaluating these experiences, a transition coach is able to stimulate the coachee’s reflection. This cycle consists of four phases: the reflective phase, the planning phase, the concrete experience phase, and the evaluation phase. Concrete coaching behaviours are summarized in Figure 3.4.

Autonomy support

Finally, results of our focus groups indicate that it is the coachee themselves who takes steps towards goal attainment and takes the initiative in the coaching conversation, while the coach provides the necessary supporting conditions for the coachee to take these steps. Whilst stimulating proactive behaviour by the coachee is explicitly part of sponsoring within competence support, the results suggest that stimulating proactive behaviour and ownership is not limited to a specific phase within competence support, but rather for the whole coaching process. It is the coachee who decides about goal setting, planning and taking concrete steps. By putting the coachee in the centre of the decision-making process, the coach satisfies the coachee’s need for autonomy.

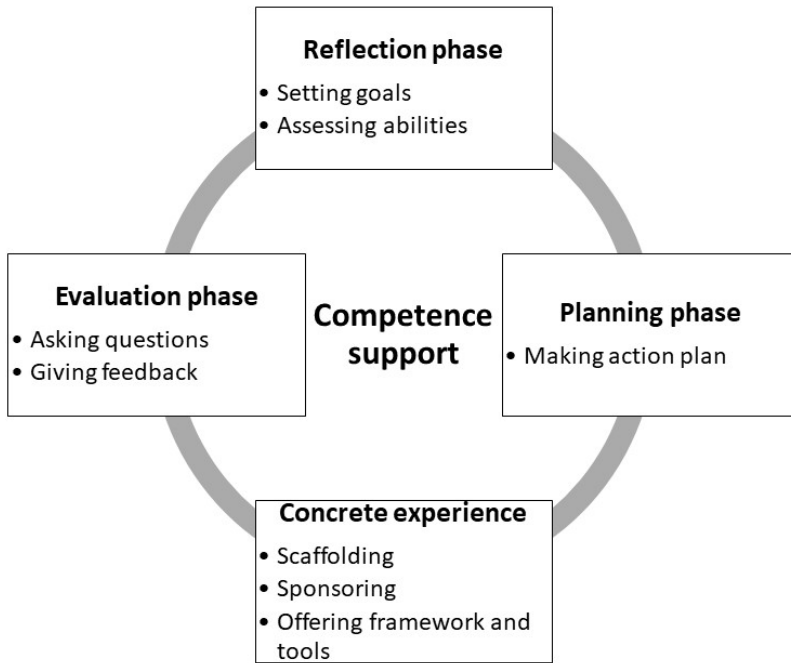


Figure 3.4 Competence support cycle.

Interestingly, autonomy support was only defined as a support behaviour in the literature on coaching at the workplace and not coaching in higher education. However, our focus groups identified it as pivotal for transition coaching. Even though motivation theories, such as self-determination theory (SDT), emphasize the importance of autonomy support for students' intrinsic motivation (Niemic & Ryan, 2009), autonomy support has not been described as a specific coaching behaviour in higher education. It can be argued that, as higher education provides a more structured and autonomy-supportive learning environment than the workplace (Grosemans et al., 2017), it is more important and up to the workplace coach to satisfy employees' need for autonomy. In the more dynamic workplace, new employees have to take ownership over their own development in order to cope with the constantly changing demands of the job (Grosemans et al., 2017). It can therefore be argued that in order to adequately prepare students for the labour market, students already need to learn to take responsibility and ownership over their own development in the future.

The present study has identified concrete coaching behaviours and competences that are necessary for a coach to facilitate the transition from higher education to

the labour market. Results of our focus groups support our theoretical framework about coaching and provide in-depth understanding of how a transition coach can establish the three supporting conditions necessary to support students in their transition to the workplace (i.e., relatedness, competence, and autonomy support). It could be argued that the coaching behaviours and competences identified are not only relevant for a transition coach, but for all coaches, no matter the purpose of the coaching practice. Nevertheless, a specific requirement for a transition coach was identified as well, namely a transition coach should have sufficient knowledge about the labour market. Knowing which competences are required by the labour market allows the transition coach to steer the student in the right direction when formulating developmental goals and determining steps to take.

Moreover, the lack of competences required by the labour market might be too narrow a view of the problem of transition. The transition period is also accompanied by feelings of uncertainty and a lack of motivation (Grosemans & Kyndt, 2017). The framework presented in this study draws parallels with self-determination theory, a motivation theory, in which relatedness, competence, and autonomy form the three basic needs of individuals (Ryan & Deci 1985; Spence & Oades 2011). By providing the coachee with support for relatedness, competence, and autonomy, a transition coach may also increase students' intrinsic motivation to take the first step towards the labour market (Spence & Oades, 2011).

Limitations and recommendations for future research

The sample of experienced coaches who specifically coach for transition was drawn from a small population of coaches involved in the current project. Two focus group discussions were conducted, and all data points in relation to our theoretical framework were satisfied. According to the criteria proposed by Malterud et al. (2016), such as the aim of the study with its theoretical foundation and approach to the focus groups discussions and data analysis, we argue that our sample had sufficient information power. We were able to offer concrete coaching competences for coaching practice aimed at facilitating students' transition to the labour market. Participants in the focus groups were coaches from higher education or the workplace with several years of experience, ranging from less than 2 years of experience to more than 5 years of coaching experience. The participants had all taken on the role of a coach for several years, but not all were officially certified coaches. Due to the small sample size of the present study, future research is advised to collect repeated measures.

The present research presented core competences of a transition coach. However, empirical evidence on the effectiveness of a coaching practice aimed at facilitating students' transition to the labour market is still lacking. Therefore, our findings recommend evaluation of the effectiveness of these coaching competences in preparing students for their school-to-work transition. This calls for a more quantitative approach applying a longitudinal and experimental design, in which the effect of coaching on the school-to-work transition can be evaluated. In addition, coaching has always been a process involving interaction between two people, the coach and the coachee. It is assumed that by exhibiting the concrete coaching behaviours identified by the present study, transition coaches are able to support students in their need for relatedness, competence, and autonomy. How this supportiveness is perceived by the student or coachee might give valuable insights into the effectiveness of these concrete coaching behaviours and in how to set up effective coaching practices aimed at facilitating students' transition to the labour market.

Our findings suggest a range of competences that a transition coach must possess in order to facilitate students' transition to the labour market. Our results also indicated that the core competences of a transition coach show similarities with the competences of a professional coach (i.e., providing relatedness, competence, and autonomy support (Spence & Oades, 2011)). One of the distinctive features of a transition coach consists of possessing knowledge about developments in the labour market; what are emerging fields, what are changing market needs, how do changes in the work call for adaptations in programs? Future research should look further into what kind of labour market knowledge a transition coach should have to achieve optimal outcomes.

Practical implications

The present study provides concrete supporting conditions and behaviours for transition coaches on how to support students in their reflection and competence development. By setting goals with the student, guiding the student in their activity, giving feedback and asking open-ended questions, transition coaches create supporting conditions that foster students' reflection. In addition, it is important that it is the student who decides on the goals, makes an action plan and undertakes activities. The coach merely guides the students in these activities. Furthermore, concrete coaching behaviours are identified that help the coach build a safe coaching environment in which students feel comfortable sharing their challenges, such as active listening and being discreet. Trainers can incorporate these concrete behaviours in training programmes for novice coaches in higher education.

The present study also suggests that the supporting conditions and behaviours found are not specific for transition coaches only, but are relevant for all coaches in higher education, regardless of the purpose of coaching. Since coaching is one of the core tasks for teachers in higher education (van Dijk *et al.*, 2020), the supporting conditions and coaching behaviours identified in this study can also be incorporated in teacher training programmes.

3.6 Conclusion

The present study identified various concrete competences transition coaches possesses, suggesting that coaching can be a valuable pedagogical intervention to prepare students in their school-to-work transition. Since coaching is already seen as a core task of academic teachers (van Dijk *et al.*, 2020), we suggest that, with the focus on the labour market and knowledge about what is required by employers, teachers in higher education can play a valuable role in fostering student's competence development (i.e., by providing relatedness, competence, and autonomy support) and facilitating students' transition to the labour market. Preparing graduates for their career on the future labour market may in this respect also be considered as a coaching process becoming part of the regular teacher roles of academic staff in higher education.

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Chapter 4

Developing employability competences through coaching in higher education: supporting students' learning process

This chapter is based on:

van der Baan, N., Nuis, W., Beausaert, S., Gijssels, W. & Gast I. (2023). Developing employability competences through coaching in higher education: supporting students' learning process. *Manuscript submitted for publication.*

Abstract

Higher education plays a pivotal role in preparing students for the dynamic and complex labour market. Helping students develop employability competences supports them in obtaining the necessary expertise and skills to facilitate their transition to the labour market and to address the requirements of their new jobs. Employability competences are considered to contribute to students' wellbeing and economic prosperity. Colleges and universities offer career coaching programs to support students in developing their employability competences. Despite the importance of employability competences, empirical studies on the impact of such coaching programs remain scarce. The present study aims to fill that gap by exploring the relationship between career coaching and the development of employability competences. A two-study design based on a multiple-methods approach was used to gain more insight in how coaching in higher education contributed to the development of students' employability. Data were collected at institutions of higher education in the Netherlands and Belgium via student surveys ($n = 491$) and interviews with coaches ($n = 9$). Our quantitative data showed a significant positive relationship between coaches' autonomy support and the development of students' employability competences. The interviews provided in-depth detailed findings on how coaches support students in their learning process. Coaching sessions became most effective by encouraging students to engage in trial and error and by stimulating (self-) reflection. Taken together, our results show that (career) coaching in higher education has the potential to support students' development of employability competences, which will, in turn, foster their transition to the workplace.

Keywords: Transition, Career coaching, Employability, Higher education, Workplace

4.1 Introduction

Graduation serves for many as a moment for celebration. However, transitioning to the workplace as a graduate from higher education can be challenging. After graduation, students exchange the relatively stable and familiar context of higher education for the largely unknown and dynamic context of the workplace. The workplace is characterized by constant change due to rapid technological innovations, such as artificial intelligence, and employees must adapt quickly and cope with the continuous pressure to develop and perform (e.g., Suarta et al., 2017).

In preparing students for the workplace, higher education institutions are increasingly investing in development of students' employability (Harvey, 2000; Knight & Yorke, 2003). *Employability* refers to individuals' ability to obtain and maintain a job after graduation (Römgens et al., 2020). However, measuring employability pertains to more than solely assessing whether a graduate managed to obtain a job. Essential competences are required for finding relevant jobs geared up to students' specific interests and capabilities and organizational demands (Römgens et al., 2020; van der Heijde & van der Heijden, 2006). Not only does it require necessary domain-specific expertise in terms of job competences, but also generic competence, enabling graduates to act effectively in the social context of work and to take agency of their development (Dacre Pool & Sewell, 2007; Yorke, 2006; Tuononen et al., 2022). In the social context of work, graduate employees deal with uncertainties and typically, generic competences help graduates to deal with uncertainty, understand and manage teamwork, and communicate effectively with others. Generic competences are considered as necessary enablers for graduates to continually learn and develop in the workplace (Grosemans et al., 2017; 2020).

Higher education offers coaching programs to prepare students for their transition to the workplace (van der Baan et al., 2022). Coaching is defined as formal process in which a coach fulfils a supportive role and encourages students' learning and reflection (Crisp & Cruz, 2009). In this supportive role the coach provides multiple types of support, such as autonomy support, networking support, career support, emotional support, and psychosocial support (Nuis et al., 2023). The present study focuses specifically on career coaching to prepare students for their education-to-work transition, referring to supporting students in setting career goals and increasing their employability (Nuis et al., 2023; Renn et al., 2014).

Previous research showed that career coaching leads to a range of positive career-related outcomes, such as job search intentions and career planning (Renn et al., 2014; Ogbuanya & Chukwuedo, 2017), and that career coaching increased students'

self-perceived employability (Pitan & Atiku, 2017). The work of Gannon and Maher (2012) shows that through reflection students can increase their employability. Reflection is a component of experiential career learning, and it reinforces and operationalizes learning experiences. For example, research shows that reflecting on previous learning experiences allows students to become aware of their own capabilities and set development goals to increase their employability (for examples and a discussion of career experiential activities see Van Wart et al., 2020).

The aim of the present study is twofold. First, the present study examines the relationship between the types of coaching support and students' employability competences. Second, this study explores how students perceive their learning behaviour after participating in coaching sessions aimed at improving their employability competences.

The present study uses a two-study design based on a multi-method approach. In the first quantitative study we explore the relationship between career coaching in higher education and the development of students' employability competences. In the second qualitative study we research students' learning as a result of these coaching practices, which might explain the why behind the relation studied in the first study. More specifically, the following research questions are introduced:

1. *What is the relationship between coaching and employability competences?*
2. *How does coaching for employability competences shape students' learning process?*

4.2 Theoretical framework

Employability: a competence-based approach

Employability is defined as the ability to gain and maintain employment (Forrier & Sels, 2003). Finding employment and moving self-sufficiently in the labour market requires not only subject knowledge, but also career management competences, such as the ability to identify job opportunities and to search for jobs (Hillage & Pollard, 1998; Dacre Pool & Sewell, 2007). Since HEIs prepare students for a dynamic workplace that is constantly changing and innovating, generic competences that are transferable across occupations are needed, such as e-literacy skills (Römgens et al., 2020). Research has also pointed out that employers frequently require these transferable generic competences (e.g., Braun & Brachem, 2015). Moreover, graduate employees need to learn how to perform their new job tasks. Self-efficacy, defined as one's belief in one's own capability to perform certain tasks (Bandura, 1977), is

strongly linked with the concept of employability (Römgens et al., 2020; Wujema et al., 2022). In the employability literature, self-efficacy refers to individuals' capability to maintain self-confidence in challenging work situations (Jackson, 2014).

Once at the workplace and to maintain employment, graduates need to continue working on their employability (Römgens et al., 2020). For example, graduate employees need to continually update their knowledge base in order to cope with the frequent changes and innovations at the workplace, which also requires certain skills. For example, generic competences are important for engaging in workplace learning (Grosemans et al., 2020; Heijke et al., 2003). Moreover, a certain degree of flexibility is required to cope with changes at the workplace (van der Heijde & van der Heijden, 2006). In addition, it is pivotal for employees to keep a balance between private and working life. Work-life balance refers to the ability to balance multiple, seemingly opposite responsibilities. Van der Heijde and van der Heijden (2006) defined balance as 'compromising between opposing employers' interests as well as one's own opposing work, career, and private interests' (p. 456). Taken together, these competences allow graduates to become and remain employable.

Experiential learning: (career) coaching for employability

Experiential learning theory (Kolb et al., 2014) can be used to study how students develop their employability by engaging in experiential learning and reflecting on their learning experiences (Gannon & Maher, 2012; Van Wart et al., 2012). When learning from experiences, distinction can be made between reflection-on-action and reflection-beyond-action (Edwards, 2017). The term reflection-on-action was coined by Donald Schön (1987), to refer to reflecting on past experiences and reconstructing what happened. These kinds of 'after-action accounts' do not necessarily lead to new insights or critical consideration leading to future improvements. Whilst reflection-on-action refers to looking back to past experiences, reflection-beyond-action refers to looking forward (Edwards, 2017). When reflecting-beyond-action, students distil learning lessons from their past experiences to improve and develop. The experiential learning theory stresses the importance of interventions that encourage and guide students in reflection about what they have learned or experienced. Coaching, especially career coaching, is considered to stimulate reflection (Devine et al., 2013; van der Baan et al., 2022).

The International Coaching Federation defines coaching as a partnership with clients in a thought-provoking and creative process (International Coaching Federation, 2023). Whereas in higher education, coaching is defined as a formal process in which a more experienced coach provides students with various types of support to

facilitate students' career development and employability (Crisp & Cruz, 2009; Nuis et al., 2023; Renn et al., 2014). These definitions emphasize important elements of coaching processes and its outcomes. Foremost, they put forward the importance of the process itself to achieve provision of support conditions for students.

By providing *autonomy support*, the coach places the student at the centre of the decision-making process and encourages the student's proactive behaviour and ownership (Spence & Oades, 2011). It is the student who 'takes steps towards goal attainment and takes the initiative in the coaching conversation, while the coach provides the necessary supporting conditions for the coachee to take these steps' (van der Baan et al., 2022, p. 410).

A coach provides the student with *competence support*. Competence support refers to creating a feeling of competence in the student (Spence & Oades, 2011). Therefore, the coach focusses on the student's abilities and talents, rather than their weaknesses (Grant & O'Connor, 2010). The coach assists students in setting learning goals and making an action plan. After the student engages in specific activities to work towards goal attainment, the coach helps the student to reflect on those activities by asking open, evaluative questions (van der Baan et al., 2022).

In *networking support*, coaches provide students with opportunities to build and broaden their own network. Coaches also can provide the student with access to their own network (Fullick et al., 2012).

Emotional support refers to sharing personal and professional issues with the coach. The coach actively listens and alleviates stress and anxiety by providing encouragement and support (Crisp & Cruz, 2009; Crawford et al., 2014).

To build a safe coaching environment, the coach provides *psychosocial support*. Conditions for psychosocial support include trustworthiness and approachability, a respectful relationship, and identification with the coach (Nuis et al., 2023). Trustworthiness and approachability refers to building trust between the student and the coach, in which the coach reserves time to talk to the student and is easily approachable (Crawford et al., 2014; Gullan et al., 2016). A coach builds a respectful relationship with the student by, for example, recognizing and respecting the student's feelings and being discreet and transparent (Tenenbaum et al., 2001; van der Baan et al., 2022). Identification with the coach refers to the match between the coach and the student. Ideally, the coach is someone the student can identify with (Molyn, 2020; Tenenbaum et al., 2001; Gullan et al., 2016).

Previous research has suggested that coaching can affect students' employability competences and, in turn, facilitate their transition to the workplace (Gannon & Maher, 2012). For example, the relationship between coaching and career development skills was found to be mediated by students' efficacy beliefs (Renn et al., 2014; Ogbuanya & Chukwuedo, 2017). Similarly, Molyn (2020) suggested that coaching can increase students' self-efficacy and employability efforts, to ensure lifelong learning. Furthermore, coaching can provide students with opportunities to enhance their social competences, by providing students with network opportunities and role models with whom the student can identify (Molyn, 2020).

In addition, coaching is associated with the development of generic competences (Nuis et al., 2022; Crisp & Cruz 2009; Gershenfeld, 2014), such as communication skills. A coach can provide students with opportunities to practice these skills under realistic work conditions (Wilhelm, et al., 2002). Coaching also increases awareness of these skills. For example, in the study by Stigt et al. (2018), the authors found that individual coaching sessions had a positive impact on the communication skills of medical residents and increased their awareness of the effect of their communication skills on others.

In sum, coaching is a multifaceted construct in which coaches provide students with multiple types of support to help students developing their employability. Providing these types of support allows for a personalized approach to learning.

4.3 Study 1: quantitative

In the first, quantitative part of this study, we aim to investigate the relationship between career coaching and employability to answer our first research question. The following hypothesis is presented:

Coaching, that is, particular types of support, is significantly positively related to the employability competences of students in higher education.

Method

Procedure and sample

Self-report surveys were digitally distributed to several study program leaders and course coordinators at four higher education institutions in the Netherlands and Belgium (one university and three universities of applied sciences). These program leaders and course coordinators were invited to distribute the questionnaires

electronically among their students, because they were involved in study programs that included a coaching trajectory for students. These coaching trajectories were mandatory for all students enrolled in these study programs. The study program leaders and teachers that distributed the questionnaires among their students were not necessarily coaches themselves. To ensure students filled in the questionnaire with their coach in mind, we explicitly asked them in the questionnaire to think of their coach. Coaches in these trajectories were teachers or other staff members within higher education institutions who coached students in their professional development. According to the definition of coaching in higher education, which is defined as a formal process in which a more experienced coach provides students with various types of support to facilitate students' career development and employability, these teachers and staff members were considered coaches, although they were not certified coaches.

Students from three cohorts filled in the surveys. The surveys were distributed in the spring of academic years 2018-2019, 2019-2020, and 2020-2021. All students were participating in coaching programs within their respective HEI aimed at facilitating their transition to the workplace. The coaching programs were comparable in that sense that they had the same goal, namely supporting the development of students' employability competences. Completing the survey was voluntary and anonymous ($n = 485$). Table 4.1 summarizes the sample distribution.

Table 4.1 Sample distribution.

	University of Applied Sciences	University
<i>n</i>	386	99
Average age (in years)	23.19 (<i>SD</i> = 6.93)	24.83 (<i>SD</i> = 3.15)
Gender		
Male	78	78
Female	307	21
Other	1	0

Measures

Employability

Students' employability was measured with the Student's Employability Competence Questionnaire (SECQ) developed and validated by Scoupe, Römgens, and Beusaert (2022). All subscales used 5-point Likert response scales, ranging from 1 (completely disagree) to 5 (completely agree).

A measurement model with a second-order latent construct for employability was built. We decided to create a second-order latent construct for employability for several reasons. First, our research question focuses on the relation with employability and does not aim to study differentiating effects between employability components. Therefore, we aimed to make our path model more parsimonious. Second, to our knowledge, when studying the role of antecedents of employability, previous research (e.g., De Vos et al., 2011) measured employability as generic construct (for an overview, see Fugate et al., 2021). The measurement model showed an acceptable fit ($\chi^2 = 2373.84$, $df = 1404$, $\chi^2/df = 1.69$, CFI = .931, RMSEA [CI 90 percent] = .038 [.035; .040]; Schreiber et al., 2006), indicating good construct validity. In addition, all individual employability competences showed significant factor loadings on the latent employability construct. The scale measuring employability had a Cronbach's alpha of .90, indicating good internal consistency (Tavakol & Dennick, 2011; see Table 4.2).

Coaching

The validated Mentoring Support Scale from Nuis et al. (2023) was used to measure students' coaching experiences. All subscales used 5-point Likert response scales, ranging from 1 (completely disagree) to 5 (completely agree). Cronbach's alphas for the coaching subscales were all above .8, indicating good internal consistency within these subscales (Tavakol & Dennick, 2011; Table 4.2).

Table 4.2 Sample items and Cronbach's alphas.

Scale	Sample item	n items	α
Coaching		21	
Autonomy support	I feel that my coach provides me choices and options.	4	.86
Networking support	My coach connects me to colleagues, both in school and the professional field.	5	.87
Emotional support	I share personal problems with my coach.	3	.89
Trust and approachability	My coach and I achieve a high level of trust.	3	.83
Identification	My coach displays values similar to my own.	3	.81
Respectful relationship	My coach conveys feelings of respect for me.	3	.89
Employability	The academic tasks motivate me to put in quite a lot of effort.	35	.90

Analyses

First, a measurement model was built to conduct a confirmatory factor analysis (CFA) of all the latent factors (see Appendix 1). Results revealed a satisfactory model

fit ($\chi^2 = 2373.84$, $df = 1404$, $\chi^2/df = 1.69$, CFI = .931, RMSEA [CI 90 percent] = .038 [.035; .040]; Schreiber, et al., 2006), confirming the factor structure proposed by the validated questionnaires used in this study. In addition, we tested for common method bias using Harman's single factor. Common method bias can pose a threat to the research findings, especially with self-report data (Podsakoff et al., 2003). The analysis revealed that common method bias was not a cause for concern. Second, the assumption of normality was checked before conducting further analyses. The skewness and kurtosis statistics indicated that all scales were normally distributed. Third, preliminary analyses (descriptives and correlations) were conducted on all the variables under study. IBM SPSS Version 27 software package was used to perform all preliminary analyses. Fourth, a structural path model was built. Structural equation modelling (SEM) and maximum likelihood (ML) estimation was used to test the hypothesis. The structural path model was built in SPSS Amos, version 28.

Results

First, results of our preliminary analyses are shown in Table 4.3. Results of the correlation analysis revealed significant positive correlations between employability and the different types of coaching support. Composite reliability (CR) of each of the factors was satisfactory. In addition, we calculated the Average Variance Extracted (AVE) and the square root of the AVE (the diagonal in Table 4.3), comparing the square root of the AVE with the correlation coefficients. According to the Fornell-Larcker criterion, the discriminant validity between the variables under study was no cause for concern (Fornell & Larcker, 1981).

Second, a path model was built to examine the relationship between the career coaching support types and employability competences (Figure 4.1). The structural path model demonstrated an excellent fit to our data ($\chi^2 = 2373.84$, $df = 1404$, $\chi^2/df = 1.69$, CFI = .931, RMSEA [CI 90 percent] = .038 [.035; .040]; Schreiber et al., 2006). Results of this path model showed that only autonomy support was significantly positively related to the development of students' employability competences, only partially confirming our hypothesis ($\beta = .37$, $p < .05$).

Table 4.3 Means (M), standard deviations (SD), composite reliability (CR), average variance extracted (AVE), square root of the AVE (the diagonal, in bold), and bivariate correlations for the variables under study (off-diagonal).

	M	SD	CR	AVE	1.	2.	3.	4.	5.	6.	7.	8.	9.
Age (years)	23.52	6.38	-	-	-								
Years of study	2.80	1.82	-	-	.04	-							
Trust and approachability	3.96	.72	.83	.62	.17***	.26***	.79						
Emotional support	3.21	.99	.90	.74	.13**	.30***	.57***	.86					
Networking support	3.14	.79	.88	.60	-.05	-.02	.44***	.42***	.77				
Autonomy support	3.73	.70	.85	.58	.17***	.26***	.69***	.51***	.48***	.76			
Identification with the coach	3.07	.84	.77	.53	.19***	.30***	.65***	.55***	.39***	.54***	.73		
Respectful relationship	4.18	.64	.84	.64	.09	.29***	.71***	.50***	.38***	.70***	.56***	.73	
Employability	3.70	.38	.8	.38	.09*	.29***	.30***	.26***	.21***	.35***	.28***	.30***	.62

Note. $n = 485$. Means of coach support types and employability are reported on a 5-point Likert scale, with 5 as completely agree.
* $p < .05$, ** $p < .01$, *** $p < .00$

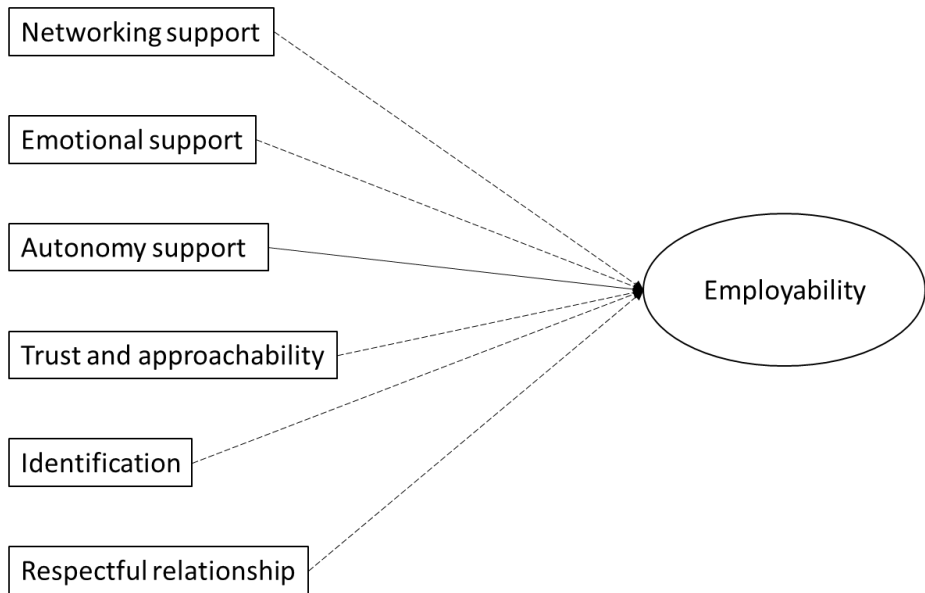


Figure 4.1 Path model.
Note. The solid lines indicate a significant relationship. The dashed lines indicate a non-significant relationship.

4.4 Study 2: qualitative

In the second, qualitative part of this study, we build further on our quantitative results and aim to explore how coaching stimulates the development of students’ employability and shape students’ learning processes, and answer our second research question:

How does coaching for employability competences shape students’ learning process?

Method

Procedure and sample

To explore students’ learning during coaching practices aimed at developing students’ employability competences, interviews were conducted. Coaches in higher education were invited to participate ($n = 9$; four from a university of applied sciences in Flanders, Belgium, five from a university in the Netherlands). Most participants had the Dutch or Belgian nationality. All coaching practices were aimed at supporting

the development of students' employability competences. Eight coaches also had teaching responsibilities in higher education while coaching students. One coach was working as student counsellor at a university. All coaches had 2 to 4 years of coaching experience. The interviews were conducted in Dutch or English and lasted approximately 30 minutes. The interviews were audio-recorded. Participation was voluntary. Informed consent was obtained in writing as well as verbally before the start of the recording. The interviews followed Critical Incident Technique (CIT), proposed by Flanagan (1954). CIT is an exploratory method that allows the interviews to be flexible and focus on specific incidents brought up by the coaches themselves. An interview guideline with open-ended questions was developed. First, general information from our participants was asked, such as their job title and how many years they have been coaching students. Second, we asked the coaches to retrieve a critical incident and describe the situation in which they felt a student was learning in their coaching session. We asked the coaches what the student was learning and how they noticed the student was learning.

Analysis

To facilitate data analysis, the interviews were transcribed verbatim. The thematic approach proposed by Braun and Clarke (2006) was used to code and analyse the interviews. The thematic approach allows sufficient flexibility and identification of themes in the data. On the one hand the interviews were deductively coded, based on our theoretical framework. On the other hand, interview segments that could not be coded based on theory were inductively assigned to a new code (see Table 4.4 for the coding matrix). The unit of analysis, or meaningful units, consisted of sentence, multiple related sentences, or part of a sentence. Codes were categorized into two deductive themes based on our theoretical framework 1) students' learning process and 2) coaching support. Atlas.ti version 9 was used to code the interviews. To facilitate co-occurrence analysis, multiple codes could be ascribed to quotes. For example, one quote could indicate more than one type of coaching support or more than one aspect of student learning. To check the inter-rater reliability, an independent researcher coded 10% of the interview transcripts. A satisfactory Cohen's kappa of .70 was reached.

Table 4.4 Coding matrix.

Theme	Code	Definition	Example quotes
Students' learning process	Adopting a future career perspective*	The student looks toward the future and aligns goals towards their future career.	For me, it is that they put things in line; that they look for what must happen first and what can be done next.
	Gaining insight*	The student has an eye-opening experience and gains insight.	That has been an eye opener [for the students].
	Positive experience*	The student has a positive learning experience.	That mindset change is also due to positive experiences, I think.
	Reflection-on-action	Students reflect on what happened during the activity, what they did, and whether they could have acted differently to get different results.	Thinking about what I have done and what the effect of it was.
	Reflection-beyond-action	The student thinks about future actions and changing their behaviour.	What are you going to do to get there?
	Self-reflection	The student thinks about their own goals and their strengths and weaknesses.	Critical thinking about why I am here, what do I like, what am I good and less good at, and where can I improve.
	Trial and error*	The student engages in learning by doing/experimenting.	I let them do it for themselves and then let them experience first-hand what works.
	Making thought process explicit*	The student engages in visualising and communicating their thought process.	The student must make his thinking and actions transparent based on that tool.
	Taking notes*	Students start writing, making notes to remember something.	When a student starts to write, starts writing things down, I notice that the student is learning.
	Practicing*	Students put into practice what they have learned.	You hear that they are practicing, that they deal more consciously with those things.
	Going through emotions*	Students go through and are confronted with various emotions during the coaching session.	I see the emotions as a motor that is needed for a change to happen. So for me, when there is room for emotions, that is already a sign of some learning happening.
	Change in body language*	The coach noticed that a student learned due to a change in body language and/or facial expression.	And you notice that in bodily tensions and body language.

Table 4.4 Continued

Theme	Code	Definition	Example quotes
Coach support	Autonomy support	The coaching conversation is tailored to the students' needs. The student is put in the centre of the decision-making process and the coach leaves the initiative to the student	As a coach, your expertise is in guiding students in their search and learning process, and you should leave the initiative to the student.
	Network support	The coach connects students with their peers, or connects them with others, or refers them to third parties (such as student psychologists) when the student's question is outside the coach's field of expertise.	The underlying issues of a student are sometimes outside your field of expertise. I think then you refer them to [third party service]
	Emotional support	The coach affirms and validates the feelings and actions of the student.	Providing affirmation to the student that it is going well.
	Competence support	Together with the student, the coach sets learning goals and makes an action plan. The coach also gives advice to the student, asks questions and provides feedback.	We give students oral feedback during mid-term evaluations.
	Trust and approachability	The coach makes time for the student. The coach is easily approachable and available to the student, and jumps in when necessary	I reserve more time for the student.
Psychosocial support	Respectful relationship	The coach listens to the student, is authentic and open	Providing a listening ear, giving constructive feedback.
	Acting authentic*	The coach acts as a role model and shares their own experiences and examples with the students.	Sometimes, students also ask about my own experiences, because I did [a job] and I of course know exactly what you can run into if they are very busy and have a lot of deadlines.

Note. * Codes identified inductively.

Results

Students' learning process

Interviews showed that students learn in various ways, during and between coaching sessions. For example, students learn after engaging in *trial-and-error* (12 mentions). During *trial-and-error* students experiment and learn by doing. Coaches indicated that a *positive experience* (2 mentions) especially makes students learn.

In addition, coaches noticed students learning during their coaching session when they saw the students *gain insights* (12 mentions) or *take notes* (6 mentions) during the session itself:

I notice that a student is learning when they start writing things down and can work with them later. That, for example, indicates something like 'ok, that is not how I looked at it before' or 'oh yes, that sounds so logical, but I never thought about it that way.' With comments like this I know that a student really wants to get started with something new.

Writing down the advice a coach has given them can also help the students remember the advice they received from the coach or *make their own thought process explicit* (7 mentions).

Coaches also mentioned that students engaged in three types of reflection during the coaching sessions: reflection-on-action, reflection-beyond-action, and self-reflection. During *reflection-on-action* (8 mentions), the student reflects on past actions and tries to learn from what happened during these actions. In *reflection-beyond-action* (7 mentions), the student, with help from the coach, goes further and starts to think about what to do differently in the future. During *self-reflection* (7 mentions) the student starts to question their own assumptions. One of the coaches commented:

You see them thinking, they are quiet for a while. And at some point, it is no longer the ready-made answers about themselves they gave in the beginning, but then it is more like 'okay, that is also possible, I haven't seen it that way yet.'

In addition, students learn during coaching sessions by *adopting a future career perspective* (5 mentions). Taking a future perspective helps the student realize the relevance of their coaching goals for their future career.

Moreover, one coach mentioned a *change in students' body language* (2 mentions) or facial expression as indicator of learning. For this coach, a change in students' body language was the result of the student *going through various emotions* (4 mentions) during the coaching session, such as sadness or anger.

Coach support

During the coaching sessions, the coach provides students with different types of support, such as autonomy, networking, emotional, psychosocial, and competence support.

Frequency analysis revealed that coaches predominantly provided *competence support* (64 mentions) during the coaching sessions. When providing competence support, the coach 'thinks along together with the student in terms of their learning goal'. For example, the coach assists the student with making an action plan, provides the student with tools and gives feedback, but the student themselves decide how to work towards goal attainment. With *autonomy support* (31 mentions), the coach focusses on the students' needs and leaves the initiative to the student. However, as one coach mentioned, it is important to always provide the student with feedback.

Coaches also provide students with *networking support* (5 mentions). The coach can refer a student with a specific question to a third party or to peers. Coaches indicated that they refer students to peers because of their 'equal status'. Students might be more comfortable sharing specific issues with peers, especially when the coach also assesses the student. Networking support also includes supporting the student in building their network and connecting the student with others.

Emotional support (24 mentions) involves giving the student affirmation that they are on the right track. However, a coach is also honest with the student:

Not always affirming. I think that sometimes we also dare to say 'look, here it went wrong' and discuss this as well.

Psychosocial support can be broken down into trust and approachability, respectful relationship, and identification with the coach. With *trust and approachability* (9 mentions), the coach assures the student that the student can always fall back on them and can approach them with questions.

A coach builds a safe coaching environment by building a *respectful relationship* (7 mentions) with the student by providing a listening ear, reserving time to listen

to the student, and behaving transparently. Behaving transparently is especially important for coaches who have a dual role as coach and assessor:

I also always mentioned at certain moments ‘now I am your coach’ and when the coaching role stops ‘now I am your evaluator.’

Because we conducted interviews only with coaches, we do not know to what degree students identified with their coaches. However, to come closer to the students, coaches *act authentic* (2 mentions). Frequencies of occurrence of the codes are summarized in Table 4.5.

Table 4.5 Frequency table for the codes.

Theme	Code	Mentioned by number of participants (range of responses)	Frequency of occurrence
Noticing students’ learning	Behavioural change*	3 (1-3)	5
	Mindset change*	3 (2-3)	8
Students’ learning process	Adopting a future career perspective*	4 (1-2)	5
	Gaining insight*	7 (1-4)	18
	Positive experience*	2 (1)	2
	Reflection-on-action	4 (1-3)	8
	Reflection-beyond-action	5 (1-2)	7
	Self-reflection*	5 (1-2)	7
	Trial and error*	5 (1-4)	12
	Making thought process explicit*	2 (2-5)	7
	Taking notes*	2 (1-5)	6
	Practicing*	1 (1)	1
	Going through emotions*	2 (2)	4
	Change in body language*	1 (2)	2
Coach support	Autonomy support	9 (1-10)	31
	Network support	3 (1-2)	5
	Emotional support	6 (1-8)	24
	Competence support	9 (2-13)	64
	Psychosocial support		
	Trust and approachability	5 (1-3)	9
	Respectful relationship	3 (1-3)	7
	Acting authentic	2 (1)	2

Note. psychosocial support consists of three factors; trust and approachability, respectful relationship, and acting authentic. Consequently, frequencies for all three underlying factors are reported.

On the role of coaching support for students' learning process: a co-occurrence analysis

To answer the question how coaching practice plays a role in students' learning process, a co-occurrence analysis was performed between, on the one hand, types of coaching support, and on the other hand, aspects of students' learning process during the coaching trajectory. Multiple codes assigned to one quote were seen as a co-occurrence. The number of co-occurrences is summarized in Table 4.6.

Competence support was most associated with students' learning in and between the coaching sessions. When coaches said they provided competence support, they saw students reflecting during their coaching sessions in various ways: reflection-on-action and reflection-beyond-action, as well as self-reflection. When coaches said they provided competence support they saw students gaining insights, adopting a future career perspective, and making notes or making their thought process explicit.

Autonomy support was most often associated with students engaging in trial-and-error learning. In addition, coaches saw students gaining insights and engaging in reflection-on-action when they said they provided autonomy support.

Emotional support, and trust and approachability, as part of psychosocial support, were mentioned together with various aspects of students' learning process. Providing emotional support was associated with gaining insight and making thought processes explicit. Emotional support was mentioned together with reflection-beyond-action, self-reflection, and trial-and-error learning. Trust and approachability was mentioned together with gaining insights, students' reflection-on-action, self-reflection, and trial-and-error learning.

Results of this co-occurrence analysis are visualized in Figure 4.2.

Table 4.6 Co-occurrence table for the types of coaching support and aspects of students' learning process.

Coaching support types	Students' learning process								Total
	Adopting a future perspective	Gaining insight	Making notes	Making thought process explicit	Reflection-on-action	Reflection-beyond-action	Self-reflection	Trial and error	
Autonomy support	-	2	-	-	1	-	-	3	6
Competence support	3	7	1	3	2	5	4	1	26
Emotional support	-	3	-	1	-	2	1	2	9
Trust and approachability	-	1	-	-	1	-	1	1	4
Total	3	13	1	4	4	7	6	7	45

Note. The number of co-occurrences is displayed in the cells.

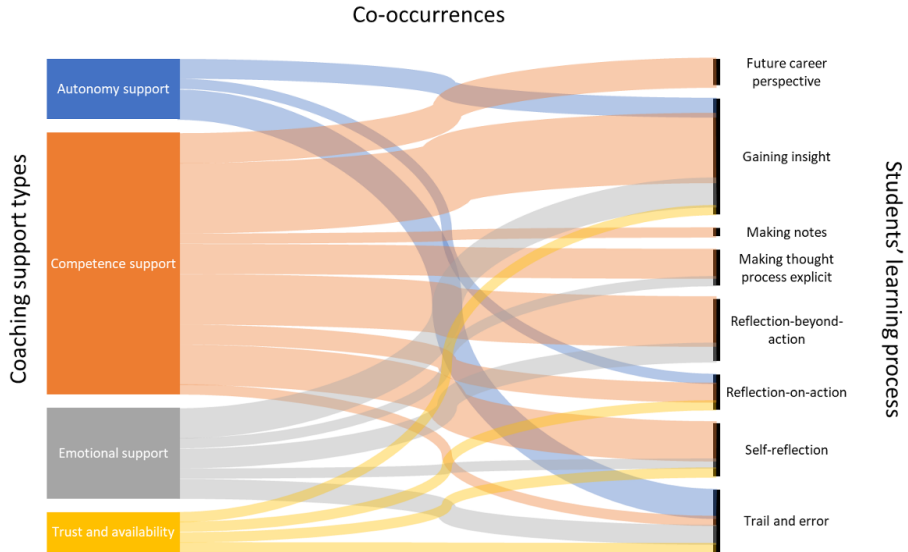


Figure 4.2 Sankey diagram of co-occurrences between coaching support types and students' learning process.

4.5 Discussion

The aim of the present study was to explore the role of (career) coaching practices in the development of students' employability competences. The present study used a two-study design to answer two separate but complementary research questions. A quantitative and qualitative study were used in a sequential manner to provide more insights into how coaching contributed to students' employability. First, a quantitative study based on a student survey was conducted to investigate the relationship between the various types of coaching support (i.e., autonomy support, personal support, emotional support, networking support, trust and approachability, respectful relationship, and identification with the coach) and students' employability competences. Second, interviews with coaches were used to go beyond the statistics and to gain more insight into how coaching for employability competences shapes students' learning process.

Results of our quantitative study revealed a significant positive relationship between autonomy support and students' employability competences, partially confirming our hypothesis; the more autonomy support is offered, the higher students' level of employability competences. This is in line with previous research suggesting that autonomy support is pivotal for engaging in learning activities (Spence & Oades, 2011).

These authors suggested that creating a feeling of autonomy will increase students' willingness to act and make decisions, which makes them more 'apt to learn and apply new strategies and competences' (p.44).

Network support, emotional support, and the three aspects of psychosocial support (trust and availability, respectful relationship, and identification) were not related to students' employability. Network support refers to the coach providing students with opportunities to build and broaden their own network. Networking with others is pivotal when searching for a job and may predict later career success of graduate employees (Higgins & Kram, 2001; Renn et al., 2014). A large professional network gives students access to potential employers and information that can help them in their job search, but does not directly affect their employability, which refers to students' internal resources and potential to gain and maintain employment after graduation (Batistic & Tymon, 2017; Fugate et al., 2021). Next, emotional and psychosocial support create a safe coaching environment and form the foundation for providing other support types that facilitate the development of students' employability.

Our qualitative results showed that several of these types of coaching support types were mentioned together with students' learning process during coaching sessions aimed at improving students' employability competences.

Results of our qualitative study and co-occurrence analysis (see Table 4.5 and Figure 4.2) showed that providing autonomy support was related to students' trial-and-error learning. By focussing on the autonomous motivation and needs of the student, the coach provides the student with sufficient freedom and autonomy to experiment with different learning activities that relate to their learning goal (Jang et al., 2010). In the interviews, one coach pointed out that the best feedback students can get is experiencing for themselves what works and what does not. This process of trial-and-error also shows parallels with experiential learning theory (Kolb et al., 2014). Experiential learning theory states that individuals learn through experiences and reflecting on those experiences. However, as one of the coaches indicated in the interviews, students do not automatically reflect on their experiences.

Results of the present study suggest that a coach can support students in their reflection by providing competence support. This result is in line with previous research which suggested that competence support from a coach is able to stimulate students' reflection (van der Baan et al., 2022). More specifically, our results suggest that coaches who provide competence support especially stimulate students'

reflection-beyond-action. This result suggests that students might be capable of looking back and creating these 'after-the-fact' accounts themselves, but they need the support of a coach to be able to look forward and reflect on how their learning experiences helped them develop and improve (Edwards, 2017). In addition, our results indicate that competence support from a coach helps students adopt a future perspective. Thus, it is not enough to provide students only with autonomy support for the development of their employability competences. To encourage students in their learning process, specifically their reflection, coaches also provide competence support. It is suggested that reflection is the main mechanism for developing employability competences, as reflection helps students to become and remain aware of their employability competences (Moon, 2004).

Furthermore, emotional support and, trust and approachability were found to be related to several learning activities, such as trial and error and reflection. Emotional support provides students with a feeling of safety (Nuis et al., 2022; Crisp & Cruz 2009). Providing the student with emotional support, especially in the form of affirmation, can also increase students' self-efficacy (van Dinther et al., 2011). Self-efficacy, as the belief in their own capabilities, increases students' motivation and willingness to engage in learning activities, such as trial-and-error (Bandura, 1977). Trust and approachability refers to feelings of trust between the coach and the student. In addition, the student feels that the coach is available and approachable, and that they can fall back on the coach for guidance and advice. Emotional support and trust and approachability may provide students with a safety net for experimenting with different learning activities.

Emotional support and trust and approachability were also found to be related to students' reflection. Reflection, and especially self-reflection in which students question their own assumptions, is not always easy. Students might shy away from self-reflection, as they 'fear that it will destroy their mode of professional survival' (Moon, 2004, p. 12) and challenge their identity. Gelfuso and Dennis (2014) suggested that reflection will not take place in the absence of support structures. Emotional support might be such a support structure. By providing emotional support, a coach creates a safe environment for students to reflect in. Trust and approachability assure the student that the coach will be available when the reflecting activities unearth unforeseen issues. Thus, trust and approachability and emotional support are not directly related to students' employability competences, but rather provide the necessary conditions to engage in activities to develop employability competences.

Networking support, identification with the coach, and a respectful relationship did not show a relation with students' employability competences or their learning process.

However, this does not mean that these coaching dimensions are not important. For example, a coach providing networking supports refers students to third parties when students have questions outside the coach's field of expertise and connects the student with others (Nuis et al., 2022). It is therefore possible that networking support is not related to students' learning process during coaching sessions. Instead, networking support might facilitate students' learning outside the coaching sessions.

Identification with the coach and a respectful relationship were also not found to be mentioned together with the various aspects of students' learning process. Identification with the coach and a respectful relationship, as part of psychosocial support, refer to how students perceive the coach. Because we interviewed coaches, it was not possible to establish links between these forms of psychosocial support and students' learning process.

In conclusion, the present study shows that (career) coaching in higher education is a valuable pedagogical intervention to support students in the development of their employability competences and their learning process, and, in turn, will facilitate their transition to the workplace.

Limitations and recommendations for future research

Although the present study provides evidence for (career) coaching as a pedagogical intervention to improve students' employability competences, along with insights into students' learning process during these coaching sessions, several limitations can be identified.

First, quantitative data included self-reports about students' employability competences, which could lead to more socially desirable answers. Students could, for example, rate their employability competences high because they liked the coach or were afraid of being assessed on those competences, even though data collection was anonymous.

Second, given that we wanted to associate the various coaching support types with students' employability, we worked with a generic latent construct for employability. It is recommended that in future research, attention is directed towards the effects of (career) coaching on distinct employability competences. Moreover, to trace the effect of (career) coaching on the development of students' employability competences, it is recommended that researchers conduct longitudinal studies.

Third, to explore students' learning process, we conducted interviews with coaches about students' learning process. Although the coaches might have a good

understanding of when a student learned during the coaching sessions, it would be valuable to include the student perspective in future research by interviewing students who were coached or observing coaching sessions. In addition, by interviewing coaches, our insights into students' learning process were restricted to what happens during the coaching sessions. As one of our interviewees mentioned, most learning happens outside the coaching sessions. To gain insight into students' learning journey between coaching sessions, it is recommended that future research include longitudinal case studies.

Fourth, in the present study there was a disconnect in the data obtained from the students and the coaches. Future research could include dyadic pairs of coach and student data to get a complete picture about how coaches support students in developing their employability.

Fifth, the match between the coach and coachee can influence the relationship and consequently the learning outcomes. Similarity between the coach and coachee is argued to be a strong predictor of the quality of the coach-coachee relationship (Nuis et al., 2023). However, research also suggests that learning opportunities might get lost when coach and coachee are similar because the coachee might not get exposed to different perspectives (Froehlich et al., 2021). Future research could study the role of matching between coach and coachee and its influence on the coachee's learning and development.

Sixth, although quantitative data were collected from multiple cohorts, most data was collected during the COVID-19 pandemic. During the pandemic, all coaching sessions were conducted online, which may have impeded students' learning process. In addition, qualitative data were collected during the aftermath of the COVID-19 pandemic. During the interviews we asked coaches about critical incidents. It remained unclear if coaches were describing incidents from coaching sessions that were conducted online or face-to-face coaching sessions. It is recommended that when conducting similar research in the future, online and face-to-face coaching sessions are distinguished.

Seventh, only undergraduate students were included in our sample. Future research could include graduate and professional students, doctoral and postdoctoral students in their sample to provide evidence for the generalizability of our findings.

Finally, as coaching definitions differ in different contexts and sometimes lack specificity, future research could investigate the specificity of coaching in different contexts and educational levels.

Practical implications

Results of the present study show that (career) coaching is a valuable pedagogical intervention to support students in the development of their employability competences. During the coaching sessions, students learn to develop their employability in various ways. By providing the right types of support, coaches can assist students in their learning process.

First, results show that coaches providing autonomy support can support students in increasing their employability. By providing autonomy support and putting the student at the centre of the decision-making process, the coach can stimulate students to engage in trial-and-error learning. At the same time, coaches should provide emotional support by affirming and validating students' feelings, to let the student feel sufficiently safe to engage in different learning activities to work towards goal attainment. In addition, the coach needs to invest in building a relationship of trust with the student by reserving time for the student and being readily available.

Second, coaches can stimulate various aspects of students learning process by providing competence support. For example, coaches should ask reflective questions to encourage students to reflect. More specifically, coaches can encourage students to take a future perspective and stimulate their reflection-beyond-action.

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Coaching in higher education Does it help graduates to adapt to the workplace?

This chapter is based on:

van der Baan, N., Beusaert, S., Gijbels, W. & Smeets, I. (2023). Coaching in higher education. Does it help graduates to adapt to the workplace? *Manuscript submitted for publication.*



Chapter 6

General discussion and conclusion

The previous chapters discussed preparing students for their transition to the workplace after graduation as one of the main responsibilities of higher education. To that end, improving students' employability has been placed increasingly higher on the agenda of institutions of higher education. Employability refers to the students' potential not only to find adequate employment after graduation, but also to be successful in their chosen occupation. Research has demonstrated that employability can be beneficial for both the employer, in terms of competitive advantage, and for the employee, in terms of sustainable career development (Blokker et al., 2023; De Vos et al., 2020; Fugate et al., 2021). This is why it is critical for higher education to support its students in developing their employability.

The aim of this dissertation was twofold. On the one hand, this dissertation aimed to analyse how higher education prepares students for their education-to-work transition. On the other hand, building further on the first aim, this dissertation proposed coaching as pedagogical intervention to facilitate students' education-to-work transition. Coaching provides a more personalized approach to learning that other interventions might lack. Therefore, this dissertation aimed to acquire a better understanding of how coaching can serve as a pedagogical intervention to increase students' employability, and, in turn, facilitate their transition to the workplace. To address the first aim, a systematic literature review was conducted to explore how different pedagogical intervention contribute to students' education-to-work transition (**Chapter 2**). To address the second aim of this dissertation, studies were conducted to identify the core competences of a transition coach (**Chapter 3**), explore the relationship between coaching and employability (**Chapter 4**), and investigate how coaching in higher education supported graduates in their transition to the workplace (**Chapter 5**).

The empirical evidence presented in this dissertation suggests that coaching is a valuable pedagogical intervention to facilitate students' education-to-work transition and increase their employability. More specifically, coaching acts as a catalyst for students to reach a deeper level of reflection, which is a key employability competence. In addition, coaching teaches students how to reflect, which allows them to reflect by themselves when necessary and which is crucial for lifelong learning.

6.1 How does higher education contribute to students' education-to-work transition?

The first study of this dissertation explored how pedagogical interventions used in higher education contributed to students' education-to-work transition. Results of this study, described in **Chapter 2**, showed that higher education institutions increase their connectivity with the workplace by collaborating with the workplace. To our knowledge, this is the first study providing an overview analysing pedagogical interventions aimed at facilitating students' education-to-work transition. Results showed that higher education has implemented a variety of pedagogical interventions to facilitate students' transition. Although these interventions are all aimed at facilitating students' education-to-work transition, designs are only partly based on relevant transition theories.

The findings of this study emphasize the importance of the theoretical underpinnings on which a pedagogical intervention is based. In this study, two frequently used transition theories were used to analyse the interventions. The first was connectivity theory. According to this theory, the workplace provides a meaningful context for students to acquire new knowledge and skills. Higher education and the workplace work together and co-create intervention to increase the connectivity. The second theory was the boundary-crossing theory. According to the boundary theory, higher education can learn from this co-creation by coordinating tasks and exchanging perspectives with the workplace. When designing interventions aimed at facilitating students' transition, higher education should not only work together with the workplace, but also learn from this collaboration.

Higher education institutions can increase their connectivity with the workplace in several ways when designing interventions, such as designs based on alignment, incorporation, and hybridization (Bouw et al., 2019). These different designs characterize learning environments at the education-work boundary. Results also revealed that although higher education and the workplace often work together when designing pedagogical interventions, they do not always learn from this collaboration. Boundary-crossing theory assumes that the boundary between higher education and the world of work provides opportunities to learn from each other's practices, such as through identification, coordination, reflection, and transformation (Akkerman & Bakker, 2011). *Identification* refers to recognizing that there is a boundary between education and work, which use different practices. *Coordination* refers to the collaboration between higher education and the workplace. *Reflection* refers to the comparison of different perspectives to foster understanding of the

different practices used. *Transformation* refers to changes in existing interventions to incorporate practices from both worlds. Results revealed that when designing pedagogical interventions, higher education does not always learn from collaboration with the workplace, as could occur through comparing perspectives with workplace partners to foster understanding about the differences in practices. Based on these results, we recommend that when designing pedagogical practices, higher education should also discuss differences in perspectives with the workplace and incorporate practices from both worlds in the intervention.

To support students in making the connection between theoretical and practical knowledge, higher education can make use of *boundary objects*, such as a portfolio, or use *boundary people*. Portfolios act as repositories in which students document their learning experiences from both contexts. *Boundary people*, such as coaches can also support students in making connections between theoretical and practical knowledge by fostering their reflection. Boundary objects and boundary people show parallels with the mediating tools in the theory of Integrative Pedagogies (Tynjälä, 2008). In the model of Integrative Pedagogies different types of knowledge, such as theoretical and practical knowledge, are integrated within the curricula of higher education. Research has shown that portfolios or coaches help students make connections between these types of knowledge. Results of our study show that portfolios and coaches act as a bridge between higher education and work during internships. In addition, our results show that coaches can help coordinate tasks and actions between higher education and the workplace and can help align the different practices.

6.2 How does coaching facilitate students' education-to-work transition?

The subsequent studies included in this dissertation (**Chapters 3, 4, and 5**) focused on coaching, for several reasons. First, coaching provides a more personalized approach to learning, which other pedagogical interventions might lack (e.g., Nuis et al., 2023). This personalized approach is necessary when focusing on students' employability, referring to a set of personal resources and competences (Fugate et al., 2021). Second, when used in combination with other pedagogical interventions, such as internships, coaching acts as a mediating tool (Tynjälä, 2008) fostering the connections between different types of knowledge, such as theoretical, practical, and self-regulative knowledge. Without coaching, students' activities during internships run the risk of becoming isolated pockets of learning experiences (Blackwell et al., 2001). Third, coaching has become embedded in many higher education curricula

and is used in different ways for a variety of purposes (e.g., Devine et al., 2013). By applying a focus on students' employability competences, coaching can also become a valuable intervention to support students in their education-to-work transition.

To date, coaching in higher education has been used for a variety of purposes, such as to promote academic achievement, to increase student retention, and to improve students' competence development (e.g., Nuis et al., 2023). Coaching has also been studied as an intervention aimed at facilitating students' transition to the workplace. Gannon and Maher (2012), for example, showed that coaching was seen as a valuable intervention to develop students' employability. However, it remained unclear how coaching can support students in increasing their employability. Therefore, the second study included in this dissertation (**Chapter 3**) aimed to identify the core competences that coaches need to support students in developing their employability. Results of this study identified several core competences that transition and career coaches need to provide students with the necessary support to develop and increase their employability. In addition, results revealed concrete coaching behaviours to create these different types of support, such as building a creating a safe coaching environment, stimulating students' reflection, and stimulating students' ownership over their own development. The research described in this dissertation showed that these concrete coaching behaviours and support types could be categorized according to dimensions included in self-determination theory (SDT; Ryan & Deci, 1985; Spence & Oades, 2011). SDT suggests that every individual has three basic psychological needs: 1) the need for *autonomy*, referring to the feeling of being in control of one's own decisions; 2) the need for *competence*, referring to the feeling of being able to achieve a task or reach a goal; and 3) the need for *relatedness*, referring to a sense of belongingness. Our findings revealed that in a coaching context: 1) autonomy support refers to stimulating students' ownership over their own development, 2) competence support focusses on stimulating students' reflection, and 3) relatedness support aims at establishing a safe coaching environment. To support students in their education-to-work transition, coaches create several support conditions and foster students' competence development.

To answer the question *how* coaching supported students in developing their employability, the third study (**Chapter 4**) aimed to establish a relationship between coaching and students' employability and explored students' learning processes, using a multi-method approach. Results of the quantitative part of the study showed that autonomy support is directly related to students' employability. By providing autonomy support, the coach puts the student in the centre of the decision-making process; it is the student who decides what to work on, not the coach. The coach

stimulates students' ownership over their own development. An autonomy-supportive coach allows the student sufficient freedom to engage in various learning activities and trial-and-error learning. These findings are in alignment with other research identifying the importance of autonomy support in increasing students' willingness to learn, experiment, and apply new strategies and competences (Spence & Oades, 2011).

Reflection on one's past experiences has been identified as a powerful tool for learning (Kolb et al., 2001). The present research shows that reflection is indeed one of students' main learning processes during coaching sessions aiming to increase their employability. Reflection allows students to become aware of their own abilities and explore ways to improve them (Moon, 2004). However, reflection-beyond-action, referring to reflecting on experiences to distil learning for the future, is difficult to achieve (Edwards, 2017). When unguided, students' reflection remain superficial and on the level of an 'after-action-account' (Edwards, 2017; Leijen & Sööt, 2016). The third study (**Chapter 4**) showed that a coach providing competence support is able to stimulate students to reach deeper levels of (self-) reflection. More specifically, while students are capable of looking back at their learning experiences and describing what happened (Edwards, 2017), they need support from a coach to see how these learning experiences can help them improve their performance when they encounter similar situations in the future.

While the third study (**Chapter 4**) focussed on the relationship between coaching and students' employability in higher education, the fourth study (**Chapter 5**) investigated how coaching for employability in higher education helped students in their transition to the workplace. To this end, interviews were conducted with graduates at the workplace. Most graduates looked favourably back on the coaching they received at university. Results revealed that the main outcome of coaching was reflection. More specifically, coaching in higher education taught the students how to reflect and created a habit of reflection for these graduates. Graduates at the workplace were able to reflect by themselves and by asking themselves questions similar to those the coach had asked them in higher education. It was this reflection that helped graduates in their transition to the workplace. More specifically, reflecting at the workplace allowed graduates to successfully adjust to the workplace. Reflection allowed them to analyse their own capabilities, and identify the competences that were missing or that they needed to develop further. This is in line with previous research suggesting that reflection is a key employability competence and ensures lifelong learning (Knight & Yorke, 2002; Moon, 2004).

However, students often struggle with reflection and do not always see the benefit of it. In addition, students often experience reflection fatigue, referring to students

becoming tired of reflecting yet again on their abilities and development. They see reflection as another box to check or as busywork (Trumbo, 2017). It is therefore pivotal to make the purpose of reflection explicit to the students and give students sufficient freedom to decide themselves what to reflect on (i.e., provide them with autonomy support). Reflection should serve an explicit purpose and should not be used just for the sake of reflecting; students should set goals that they can accomplish through reflection. The present dissertation shows that a coach can help students in setting explicit development goals for themselves (see **Chapter 3**).

6.3 Theoretical contributions

This dissertation makes several contributions to the transition, employability, higher education, and coaching literature. First, this dissertation links the concept of employability with the education-to-work transition. Although employability has been stated to foster students' education-to-work transition (e.g., Blokker et al., 2023; Fugate et al., 2021; Tuononen & Hyytinen, 2022), this dissertation used a competence-based approach to employability and empirically demonstrated that employability fosters students' education-to-work transition. More specifically, results demonstrated that reflection, as a key competence of employability, helps students make the transition from higher education to the workplace (see **Chapter 5**). Reflection allows graduates to analyse their own capabilities, identify gaps in their competences, and seek out learning activities to address these gaps. Furthermore, these results confirm earlier employability models, suggesting that reflection plays a prominent role in students' employability.

Second, this dissertation adds to the employability literature by suggesting that reflection is an important part of students' learning process to develop their employability. Results of the third study included in this dissertation (**Chapter 4**) suggest that reflection, specifically reflection-beyond-action, enables students to derive learning lessons from their experiences to improve their employability. By reflecting on past experiences, students analyse what went well and was still challenging during that situation. Students then set themselves learning goals to overcome these challenges in the future, when a similar situation presents itself.

Third, this dissertation adds to the employability literature by considering employability as antecedent for work-related learning (**Chapter 5**). Whilst employability can be considered as input or antecedent for work-related learning as well as output of work-related learning (De Lange et al., 2021), research has predominantly studied

employability as an output variable of work-related-learning (Crans, Gerken, et al., 2021; Froehlich et al., 2014; Raemdonck et al., 2012; van der Baan et al., 2022).

Fourth, this dissertation adds to higher education literature by contributing to our understanding of how higher education prepares students for their education-to-work transition (**Chapter 2**). Connectivity and boundary-crossing theories provide essential theoretical insights regarding how higher education contributes to students' education-to-work transition. Institutions of higher education aim to facilitate students' transition by increasing their connectivity with the workplace. To increase this connectivity, these institutions have implemented various pedagogical interventions to help students cross the boundary between higher education and the workplace. This boundary also provides opportunities for higher education and the workplace to learn from each other's practices. Results indicated that, although higher education collaborates with the workplace in several ways to increase their connectivity, it does not always use the full learning potential of the education-work boundary. To optimally prepare students for their education-to-work transition, it is also necessary to take the learning mechanisms of the education-to-work boundary into account. By exchanging perspectives with the workplace, higher education is able to adopt boundary practices that include practices from both worlds which help students cross the education-to-work boundary.

Fifth, this dissertation proposes coaching as a valuable pedagogical intervention to facilitate students' education-to-work transition and increase their employability (**Chapters 3, 4, and 5**). Coaching in higher education is used for a variety of purposes, such as promoting academic success, student retention, student competence development, and students' well-being (Crisp & Cruz, 2009; Devine et al., 2013; Gershenfeld, 2014; Nuis et al., 2022). This dissertation adds to the coaching literature by suggesting that facilitating students' education-to-work transition and fostering students' employability can be seen as a purpose of coaching in higher education (see **Chapters 4 and 5**). In addition, this dissertation shows that, although coaching in higher education and coaching at the workplace are defined differently, there are similarities between coaching practices in both contexts, such as the support coaches provide (see **Chapter 3**).

Finally, results described in this dissertation suggest that coaching acts as a catalyst for reflection. Results described in the second study (**Chapter 3**) showed that a coach aims to stimulate students' reflection by providing competence, i.e., setting goals, making an action plan, and asking reflective questions. Results of the third study (**Chapter 4**) built further on this by revealing that a coach supports students

in reaching a deeper level of reflection, termed reflection-beyond-action. In addition, although the coaching was aimed at supporting students in developing their employability, reflection was the main outcome of coaching in higher education.

Previous research has already linked coaching to reflection and lifelong learning (Hauer et al., 2018). This dissertation provides empirical evidence for the association between coaching and lifelong learning through reflection. Through reflection, individuals become aware of their own capabilities, analyse which competences need to be developed further, and plan and seek out learning activities to update their competences, such as engaging in work-related learning activities or seeking feedback from colleagues (**Chapter 5**). As reflection is difficult, coaching teaches students how to reflect, creates the habit of reflection, and enables graduates to engage in reflection by themselves, without the presence of a coach (**Chapter 5**). Although previous research has highlighted the importance of coaching at the workplace (e.g., Bozer & Jones, 2018; Jones et al., 2016), coaching empowers individuals to become self-sufficient in their professional development. As coaching lays the foundation for continuous professional development and lifelong learning, support of a coach can be gradually phased out throughout one's career. Thus, coaching in higher education not only prepares students for their transition to the workplace, it also prepares students to take agency over their future professional development and prepares them for lifelong learning.

Table 6.1. summarizes the theoretical contributions of this dissertation.

Table 6.1 Summary of theoretical contributions.

Literature	Theoretical contributions
Transition and employability	<ul style="list-style-type: none"> • Transition and employability are empirically linked (Chapter 5). • Employability is an antecedent for work-related learning (Chapter 5). • Reflection, as a key aspect of employability, enables a successful transition to the workplace (Chapter 5). • Reflection is an important aspect in students' learning process to develop their employability (Chapter 4).
Higher education	<ul style="list-style-type: none"> • Combining connectivity and boundary-crossing theories fosters understanding of how HE contributes to students' education-to-work transition (Chapter 2). • Coaching can be a valuable pedagogical intervention to facilitate students' education-to-work transition (Chapters 3, 4, and 5).
Coaching	<ul style="list-style-type: none"> • Facilitating students' education-to-work transition can be an additional purpose of coaching in higher education (Chapters 4 and 5). • Although coaching in higher education and coaching at the workplace are defined differently, there are similarities between coaching practices in both contexts (Chapter 3). • A coach is a catalyst for reflection (Chapters 3 and 4). • Coaching in higher education creates the habit of reflection and the ability to reflect on one's own (Chapter 5). • Coaching fosters lifelong learning (Chapter 5).

6.4 Limitations and recommendations for future research

This dissertation contributes to our understanding of how higher education supports students in their transition to the workplace. It provides compelling evidence for coaching as a pedagogical intervention. However, several limitations can be addressed in future research and additional avenues can be explored.

First, the present dissertation focused on how higher education prepares students for their education-to-work transition, such as through internships (**Chapter 2**) and coaching (**Chapters 3, 4, and 5**). This dissertation took a process-based approach towards the education-to-work transition to emphasize that the transition only ends when graduates have successfully adapted to the workplace and found stability in their job. Therefore, the last study of this dissertation (**Chapter 5**) was conducted in the workplace context and aimed to analyse how coaching in higher education helped graduates adjust to their new context. Also, the workplace supports graduates to adjust to their new context. Therefore, it would be interesting for future research to analyse how organisational support students in their adjustment to the workplace. Based on the results of this dissertation, interventions aimed at supporting employees in their adjustment to the workplace should include a reflection component. In addition, continuity between interventions in higher education and the workplace could be aimed for. For example, in **Chapter 3**, we advocated that coaching for transition should continue at the workplace, following a similar vein, to support students in their reflection. Although, results of the fourth study (**Chapter 5**) showed that graduates who received coaching in higher education are able to reflect themselves at the workplaces, they still preferred a coach at the workplace.

Second, this dissertation approached the education-to-work transition as a single status change, the change from student to employee. In this approach, the education-to-work transition is conceptualized as a linear route from education to work (Blokker et al., 2023). However, the education-to-work transition and people's career paths are often not linear. For example, after making the transition to the workplace and having worked for several years, individuals can decide to go back to education because they want a career switch or want to gain more knowledge (see Figure 6.1; Roslansky, 2021).

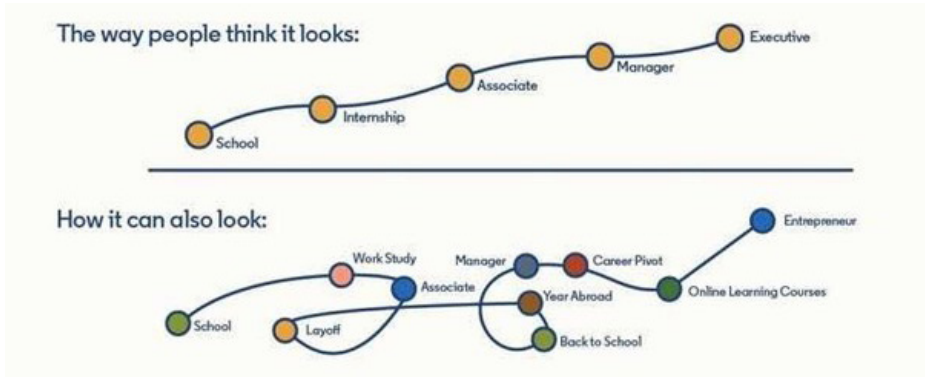


Figure 6.1 The path to success (Roslansky, 2021)

The education-to-work transition can be seen in the context of an individual's life course development, in which the education-to-work transition is viewed as a sequential process that extends over a long period of time (Blokker et al., 2023). Similarly, in their transition theory Schlossberg (1984) argued that individuals continually move in, move through, and move out of transition, after which they move into the next transition. For example, at graduation, students move into the transition to the workplace. After graduation, they move through that transition and must adjust to their new environment. After having successfully adjusted to their new work environment, they move out of that transition and towards the next, for example, to a new job or back to education (Anderson et al., 2011). As the education-to-work transition is often non-linear and extends over a long period of time, it is recommended that future research also consider the long-term career development trajectories of individuals and how early education-to-work transition experiences influence later career development trajectories.

This also raises the question when a transition is considered successful. As seen in the first study of this dissertation (**Chapter 2**) and drawing on previous literature (e.g., Akkermans et al., 2015; de Oliveira et al., 2016; De Schepper et al., 2023), indicators of a successful transition can include both objective and subjective measures. Objective measures often refer to labour market outcomes: finding employment after graduation. Subjective measures refer to job quality, such as job satisfaction or the fit between individual and job (Grosemans et al., 2017, 2021; de Oliveira et al., 2016). In addition, the development of a professional identity can be considered an indicator of a successful transition (e.g., Arnett, 2000; Grosemans et al., 2020). This dissertation focussed on employability as a personal resource that allowed students to obtain and maintain a job after graduation. Consequently, this dissertation looked

at an objective measure of a successful transition; whether students were employed six months after graduation and how graduates managed to maintain their job (see **Chapter 5**). It is recommended that future research include both objective and subjective measures when aiming to determine whether graduates made a successful transition to the workplace, by including measurements of graduates' job satisfaction.

Third, in this dissertation, employability was taken as a proxy for transition. Recent research showed that students' employability was associated with career success later in life (Tuononen & Hyytinen, 2022). Employability can be interpreted in three ways: 1) in terms of personal resources that increase individuals' employment potential, 2) in terms of self-perceived employment opportunities, and 3) in terms of the education-to-work transition as a realization of employment potential (Forrier et al., 2015; van Harten et al., 2022). This dissertation focussed predominantly on the first interpretation of employability, as a personal resource that increases students' potential to obtain and maintain a job after graduation. According to the second and third interpretations, that is, self-perceived employment opportunities and employment realization, students' employability is influenced by both individual capabilities, as proposed by the first interpretation of employability, and contextual factors, such as the state of the labour market (de Cuyper & de Witte, 2011; Rothwell et al., 2008). It is recommended that future research consider both individual capabilities and contextual factors when looking at the employability of students and graduates.

Fourth, this dissertation considered employability as an antecedent for work-related learning (**Chapter 5**). Employability is a personal resource that allow individuals to engage in different learning activities at the workplace, such as seeking feedback from colleagues, that help them to adjust to the new context of the workplace. However, whether or not a person engages in learning activities at the workplace also depend on contextual factors, dubbed the *smell of the place*, such as the learning climate (Crans, Bude, et al., 2021; Ghoshal, 1995). It is therefore recommended that future research takes into account the interplay between contextual and individual factors when looking at facilitating graduates adjustment to the workplace.

6.5 Practical implications

This dissertation explored how to optimally prepare students for their education-to-work transition. More specifically, this dissertation adopted different perspectives (higher education's, expert coaches', students', and graduates' perspectives) to

investigate how coaching could prepare students for their education-to-work transition. These different perspectives provided input for the development of effective coaching practices aimed at facilitating students' transition to the workplace.

Implications for higher education

To facilitate students' education-to-work transition, institutions of higher education have implemented various pedagogical interventions. All these pedagogical interventions are aimed at increasing the connectivity between higher education and the workplace. Pedagogical interventions that increase that connectivity can take shape in different ways. For example, the design of a pedagogical intervention can be based on alignment, incorporation, or hybridization (Bouw et al., 2019). Pedagogical interventions based on alignment allow students to temporarily move to a workplace setting and take on the role of an employee, as is often the case during internships. Pedagogical interventions based on incorporation bring parts of the world of work into the educational context, which is the case with client-projects or problem- and project-based learning interventions. During these interventions, students work on authentic cases from the workplace and assume the role of consultants. Within pedagogical interventions based on hybridization, students work and study simultaneously, as is the case with student-run businesses. Every type of intervention can promote specific knowledge outcomes, for example, conceptual knowledge, practical knowledge, self-regulatory knowledge (Tynjälä, 2008). It is recommended that higher educational institutions implement a combination of pedagogical interventions based on the different forms of collaboration (i.e., alignment, incorporation, and hybridisation). In addition, simply increasing the connectivity with the workplace is not enough to design interventions aimed at helping students in their transition. Boundary-crossing theory suggests that working together with workplaces when designing an intervention provides higher education with the opportunity to learn from them. For example, by comparing perspectives with the workplace, higher education can get insights into what employers require from graduates, and they can then incorporate these elements in their pedagogical interventions. It is therefore recommended that, when designing interventions, higher education and the workplaces consciously work together and compare their perspectives on what is required from students.

Coaching has already become embedded in many higher education curricula and is used with different purposes, such as to promote students' academic success, students' retention, or students' well-being (e.g., Devine et al., 2013). This dissertation proposed coaching as also a valuable intervention to facilitate students' education-to-work transition and increase their employability. Coaching allows for a more personal

approach to the development of students' employability, which other pedagogical interventions aimed at facilitating students' education-to-work transition might lack. Therefore, it is advisable that to use coaching to facilitate students' education-to-work transition in combination with other interventions, such as internships, to support students in making the connection between what they learn during the internship and what they have learned in school, and help them reflect on their learning experiences. When used in combination with other pedagogical interventions aimed at facilitating students' education-to-work transition, coaching can be seen as a mediating tool (Tynjälä, 2008). According to Tynjälä's (2008) theory of integrative pedagogy, mediating tools are necessary for integrating theory and practice, and promoting self-regulatory knowledge. In addition, when used in combination with pedagogical interventions based on alignment, such as internships, coaches can act as *boundary people* and help to ensure alignment between higher education and workplace practices. For example, coaches can take responsibility for coordinating the internship and make sure students work on the learning goals set by their institution of higher education during their internship (Crebert et al., 2004).

Based on the results of the later studies described in this dissertation (**Chapters 3, 4, and 5**), coaching can also be implemented as a *stand-alone* pedagogical intervention, not in combination with other interventions. Coaching as a stand-alone pedagogical intervention aims at facilitating students' employability. Although the link with employability and a successful transition to the workplace has been studied before (see Tuononen & Hyytinen, 2022), this dissertation shows that reflection, as a key competence of employability, especially helps students in their transition to the workplace (see **Chapter 5**). It is therefore recommended that also during other pedagogical interventions aimed at increasing students' employability, such as internships and client-projects, attention is given to students' reflection.

Thus, coaching to facilitate students' education-to-work transition can be implemented in different ways: in combination with other pedagogical interventions to foster the connections between different types of knowledge or as a stand-alone pedagogical intervention aimed at increasing students' employability.

Implications for coaches

Coaching in higher education has various purposes (e.g., Devine et al., 2013) and consequently is done in different ways. To align coaching practices in higher education aimed at supporting students in their transition to the workplace and developing their employability, this dissertation provides concrete coaching

guidelines (see **Chapter 3**). These coaching guidelines include three types of support: autonomy, competence, and relatedness support.

First, a coach provides autonomy support by putting the student in the centre of the decision-making process and by stimulating their ownership of their own development. Consequently, it is the student who decides what to work on and not the coach. Results of the third study (**Chapter 4**) showed that autonomy support is significantly positive related to students' employability. Autonomy support allows the student sufficient freedom to engage in different learning experiences and sees what works for them. It is therefore essential that a coach leaves the student sufficient freedom to experiment.

Second, as the results of the final study (**Chapter 5**) showed that reflection especially facilitates graduates' transition and that reflection is a key employability competence, it is recommended that coaches stimulate students' reflection. Results described in **Chapter 5** also showed that a coach is able to create a habit of reflection for graduates. Moreover, reflection is also a key aspect of students' learning process during coaching sessions for employability (see **Chapter 4**). To stimulate reflection by students and teach students how to reflect, a coach provides competence support (see **Chapter 2**). The coach first assesses the student's abilities to determine their talents and challenges, and together with the student sets developmental goals and makes action plans. It is essential for the coach to allow the student sufficient freedom; it is the student who decides, not the coach. The student then carries out the action plan and goes through concrete experiences. Together with the student, the coach evaluates these experiences and provides feedback. The coach asks the student reflective questions. Based on the outcome, the developmental goal is adjusted or a new goal is set (see Figure 3.4.).

Third, it is essential that the coach create a safe coaching environment in which the student feels safe to reflect and experiment with different learning activities. The coach does this by building a trustful relation with the student, providing a listening ear, managing their expectations, creating transparency and acting discreetly (see **Chapter 3**). Results of the third study (**Chapter 4**) showed that providing a safe coaching environment is associated with students' reflection and trial-and-error learning. It is suggested that a safe coaching environment provides students with a safety net. This safety net can give students the confidence to experiment with different learning activities and reflect on them. Table 6.2. summarizes the coaching support types and concrete coaching behaviours.

Table 6.2 Coaching support types and their behaviours.

Coaching support types	Coaching behaviours
Autonomy support	Stimulating students' ownership <ul style="list-style-type: none"> • Handing over responsibility for their own development • Stimulating proactive behaviour • Let the student decide on their own learning goals
Competence support	Stimulating students' reflection <ul style="list-style-type: none"> • Help to set development goals • Help the student with making an action plan • Support the student in their learning activities by providing guidance, tool, and advice. • Ask the students reflective question (e.g., how did this activity help you to reach your goal?)
Relatedness support	Creating a safe coaching environment <ul style="list-style-type: none"> • Actively listen to the student • Manage the expectations • Build a trustworthy relationship with the student. Get to know the student • Create transparency. Make explicit which role you take, are you now their teacher who assesses them, or their coach? • Act discreet

Implication for the workplace

As the education-to-work transition does not end after graduation, but only ends at the workplace when graduates successfully adjust to their new context, it is essential that employers also support graduates in their transition. As the results of this dissertation suggest that reflection is the main mechanism that helps graduates to adjust to the new context (see **Chapter 5**), employers should pay considerable attention to reflection when onboarding new employees, for example, with coaching. **Chapter 3** of this dissertation showed that, although coaching in higher education and at the workplace are defined differently, similarities exist, such as the type of support a coach provides. We therefore argue that the coaching practices in higher education to foster students' employability can also be used at the workplace.

In addition, as suggested by the results presented in **Chapter 5**, is recommended that organisations give employees time for reflection. Time to reflect on their work experience give employees the opportunity to update their competences. The importance of reflection at the workplace is also stressed in numerous professional articles and reports (e.g., Ketchum, Forbes, Harvard Business Review). For example, it is suggested that reflection at the workplace improves job performance, job satisfaction, and decreases burnout (e.g., Rodriguez & Herter, 2022).

6.6 Concluding remarks: reflection is key!

The education-to-work transition can be very difficult for recent graduates, as they need to adjust to a new, often unfamiliar context. This dissertation aimed to contribute to a more seamless and well-prepared transition to the workplace for graduates. Results of this dissertation show that reflection is the foundation of employability and ensures a successful education-to-work transition. From a graduate's perspective, reflection is one of the main mechanisms that helps them to adjust to a new context. When graduates engage in reflection at the workplace, they are able to assess their own capabilities and analyse what needs to be learned or improved. From a student's perspective, reflection is one of the main elements of their learning process and underpins the development of their employability. From a coach's perspective, stimulating students' reflection is essential for facilitating students' education-to-work transition. Coaching creates the habit of reflection and teaches students reflective skills they can use on their own. From the perspective of institutions of higher education, reflection helps students to make connections between theoretical and practical knowledge. Taken together, reflection plays an essential role in students' employability and their transition to the workplace, and coaching is a catalyst for reflection.

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Chapter 7

Impact paragraph

7.1 Societal relevance

Being responsible for the onboarding and on-the-job training of new employees at a Dutch telecom company, I noticed many new employees who had just graduated struggling with adjusting to their role as an employee, with all its responsibilities. Challenges they encountered, besides learning how to perform their job, included adapting to the organizational culture, meeting job-related expectations, building a professional network, and knowing whom to go to when having specific questions. These were all challenges I had recognized when, I made the transition from university to the workplace myself.

Being an “onboarding officer” made me realize that preparing students for their transition to the workplace can be as equally essential as equipping them with content knowledge of a specific field. Higher education and the workplace can be considered as two points along the same continuum. This raises the question of whether supporting students in their transition to the workplace is the responsibility of employers or higher education. On the one hand, employers have the responsibility to provide incoming employees with onboarding and coaching to assimilate them into the organization. On the other hand, higher education has the responsibility to prepare students for their transition into the workplace and continuous learning at the workplace by making them employable and competent. The present dissertation builds further on my personal observations as an onboarding officer and experiences as a young graduate by conducting a series of studies on how higher education can improve student’s employability.

Moreover, this dissertation connects with the Sustainable Development Goals (SDGs) set by the United Nations in 2015. This dissertation addresses SDG 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. More specifically, this dissertation connects with target 4.4.: Substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs, and entrepreneurship. In addition, this dissertation connects to SDG 8: Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all. More specifically, this dissertation connects with target 8.6.: Substantially reduce the proportion of youth not in employment, education, or training (NEET).

The results of the studies included in this dissertation show that higher education institutions can provide learning experiences allowing students to increase their employability and, in turn, facilitating their education-to-work transition. As higher

educational institutions bear the responsibility for preparing students for their future careers, they can use insights from the present dissertation to improve student employability. The present dissertation defines student employability as students' ability to obtain and maintain a job after graduation. It has been high on the agenda of higher educational institutions for many years (e.g., Yorke, 2006). Although higher education has implemented various pedagogical interventions aimed at increasing students' employability, a recent OECD report argued that higher education needs to increase its efforts to prepare students for the workplace further (OECD, 2022). According to this report, it is more important than ever that students develop their employability in order to navigate the world of work; a world that is characterized by uncertainties and frequent changes due to globalization and technological innovations, such as artificial intelligence (AI). Not only does employability allow students to find a job after graduation, but it also allows them to learn and develop further on the job (Römgens et al., 2020). One of the lessons learned in recent research is that employability indeed contributes to the early career success of recent graduates (Tuononen & Hyytinen, 2022). It is thus paramount that 1) higher educational institutions support students in the development of their employability, and 2) higher educational institutions develop effective pedagogical interventions for students to do so.

This dissertation provides compelling evidence for coaching as an effective pedagogical intervention to facilitate students' education-to-work transition. The results of this dissertation can be used to improve existing teaching and learning practices focusing on employability.

Coaching and employability in higher education

Employability has been high on the agenda of higher education for several years for two main reasons. First, employability allows students to make a smooth transition to the workplace after graduation. Second, employability allows graduates to continuously learn at the workplace, resulting in more sustainable career development. In preparing students for their education-to-work transition and sustainable career development it is thus pivotal that higher education supports students in developing their employability. For example, Maastricht University is committed to developing highly skilled and employable graduates by equipping them with academic knowledge and the necessary competences to make a successful transition to employment¹. Initiatives such as the Implicit-Explicit toolkit² and an online learning platform (Heymann et al., 2022) have been implemented already. Initiatives to include coaching practices are in progress.

¹ <https://www.maastrichtuniversity.nl/about-um/employability>

² https://edlab.nl/wp-content/uploads/2018/10/EDview_Dos-Donts-and-Dont-Knows.pdf

Coaching at Maastricht University

Coaching has already been implemented as a pedagogical intervention within Maastricht University to support students in the development of their employability competences. For example, within the master's program for Learning and Development in Organizations, students follow a year-long coaching trajectory as part of their education.

Through the “Competence-Based Coaching” course students are supported in developing their employability. The activities in the Competence-Based Coaching trajectory follow a repeated cycle of goal setting, planning of activities, and reflection on those learning activities.

Teachers and other academic staff provide coaching during this course. I also coach students within this trajectory and I try to translate the empirical results of my studies to my own coaching practice. For example, I try to incorporate the best practices found in my second study into my own coaching practice, such as providing students with autonomy, competence, and relatedness support (see Chapter 3). In addition, I was invited to present the results of my second study, that is, the concrete guidelines for coaching, at a workshop for novice coaches in this coaching trajectory. To support students in their competence development, it is necessary for the coach to create three support conditions based on the three basic psychological needs of every individual; autonomy support, relatedness support, and competence support (Spence & Oades, 2011; van der Baan et al., 2022). To create an autonomy-supportive condition, it is necessary that the coach stimulates students' ownership over their own development. Relatedness support refers to the creation of a safe coaching environment in which the student feels safe to share their challenges and worries. Lastly, by creating a condition of competence support, the coach is able to stimulate students' reflection.

Coaching at Odisee

To increase students' employability Odisee, a University of Applied Sciences in Flanders, Belgium, launched a digital portfolio in 2019. However, a digital portfolio in itself is not sufficient to enable students to develop their employability. Without a structured coaching practice that supports the use of a portfolio, students' learning experiences are left behind.

The findings of this dissertation gave shape to the current coaching practice complementing the digital portfolio implemented at Odisee. On numerous occasions, I shared the (preliminary) findings of my studies with the steering committee for the project. These findings were used to finetune the coaching practice within

this project. For example, in my second study, I proposed concrete behaviors for coaches to create the necessary support conditions that students need to develop their employability competences. Practical guidelines for coaches were developed based on these behaviours. In addition, I participated in a symposium presented at a professional conference for teacher educators in Bruges, Belgium (Vereniging voor Lerarenopleiders Nederland/Vlaanderen; VELON/VELOV) where I presented my findings in relation to this project. During this symposium, we discussed coaching as an amplifier of reflection and professional growth.

The examples of Maastricht University and Odisee show that coaching for transition can be used both as a stand-alone intervention to help students develop their employability, and in combination with other pedagogical interventions, such as a (digital) portfolio.

Coaching and employability at the workplace

Employability allows employees to cope with frequent changes at the workplace (e.g., van der Heijde et al., 2006). Employability is also associated with continuous learning and sustainable career development (e.g., De Vos, 2020). In addition, findings of this dissertation reveal that employability helps graduates adjust to the workplace. It is thus pivotal that employers also provide opportunities for their employees to develop their employability. For example, coaching at the workplace could help graduate employees adjust to their new context (Bell & van der Baan, 2023). Therefore, in this dissertation, I argue that coaching for employability should continue at the workplace in a similar vein.

In the last year of my PhD, I was involved in the *Voorspongfonds (VSF) project Boost for Starters*, in which coaching trajectories were offered to graduate employees to help them adjust to the workplace (Geuijen & van der Baan, 2023). The results of this project suggested that these coaching trajectories supported graduate employees in adjusting to the workplace. Future valorisation activities should therefore focus on implementing coaching practices for newly hired employees.

7.2 Dissemination activities: spreading the word

In order to valorise the research findings of this dissertation and to ensure widespread implementation of coaching practices in higher education and at the workplace, it is pivotal to disseminate the findings of this dissertation. Coaching is frequently used in both higher education and at the workplace for different purposes (e.g., Nuis et al., 2022).

Findings of this dissertation suggest that increasing students' employability can be added to the purpose of coaching. Since coaching is already used in both context, a different focus to coaching can be applied to increase students' and graduates employability. To support students and graduates in increasing their employability, coaches should stimulate their (self-)reflection. Reflecting on their own abilities allows students and graduates to identify their talents and specific competences that they need to develop further.

Sharing best practices with the international research community and universities in Finland and Sweden

During my PhD work, I presented my studies at various national and international academic conferences as a roundtable (van der Baan et al., 2023), a poster (Nuis and Van der Baan, 2022), paper presentations (van der Baan et al., 2021a; 2021b; 2022; 2023), and presentations as part of symposia (van der Baan et al., 2021; 2022; 2023). During my research visits at the Finnish Institute of Educational Research, the University of Helsinki and the University of Karlstad, I presented my research during seminars and discussed the findings of my studies with fellow researchers and other academic staff members, such as teachers. Considering the findings and discussion sections of my second, third and fourth studies, I have argued that teachers should coach students to prepare them for their transition to the workplace and how they should do that. A question I often get relates to the practicality of my suggestion. It is often pointed out to me that teachers already experience a high workload and that my recommendation that teachers should also coach students is not feasible. However, I do not argue that teachers should take on the extra role of coaches, but that they should incorporate coaching behaviors while teaching. Since the emergence of competence-based education, the role of the teacher has shifted from being a transmitter of knowledge to guiding students in their learning process (Koenen et al., 2015). Moreover, a recent literature review identified coaching as one of the core tasks of university teachers (van Dijk et al., 2020). The second study included in this dissertation provides practical guidelines for coaching behaviours for teachers, among others. The practical guidelines include concrete coaching behaviors to create the necessary support conditions for students' competence development.

Sharing best practices among expert coaches

The second study included in this dissertation can be seen as itself a valorisation activity. In the second study, two focus groups were conducted with experienced coaches in higher education and at the workplace. During the focus groups, participants discussed best practices with each other. Participants mentioned that they received inspiration for their own practices from hearing others' approaches to coaching.

Sharing best practices with teacher(-educators)

To disseminate the results of the studies included in this dissertation further, I (co-) authored several blog posts. The first blog post³ that I wrote relates to the first study of my dissertation. In this blog post, I wrote about bridging the boundary between school and work by increasing collaboration between the two worlds and making use of boundary objects. I argued that a more personalized approach to learning is needed to help students cross the boundary between school and work. In the second blog post⁴, I built further on this notion to suggest reflection as a personalized approach to learning. Encouraging students to reflect on their own competences will pave the way for competence development and professional growth. I came back to this in my third blog post⁵ in which I propose coaching as a valuable intervention to support students in the development of their employability competences and facilitate their transition to the workplace. I also provided concrete coaching tips and tricks.

7.3 Co-authoring a book: Coaching at the boundary between education and work: this is how you guide students

7

I co-authored a book about coaching for practitioners, both in higher education, such as teachers, and at the workplace, such as HR-managers. Coaching has been implemented both in higher education and at the workplace to support students and (newly hired) employees in their professional growth. Higher education and the workplace are two different contexts along the same lifelong learning continuum, which means that both worlds can learn from each other when it comes to coaching. Yet, both worlds remain separate and rarely look to each other's coaching practices. This book aimed to define four types of support of coaching based on scientific research (including this dissertation). Support types include autonomy support, career or competence support, emotional support, and networking support. The book also provides concrete examples of coaching practices in higher education and at the workplace (see Figure 7.1.; De Wilde et al., 2023).

³ https://onderzoekonderwijs.net/2020/11/17/___trashed/

⁴ <https://www.velov.be/reflectie-in-het-onderwijs-een-vlag-met-meerdere-ladingen/>

⁵ <https://educationalist.substack.com/p/coaching-for-employability-facilitating>



Figure 7.1 Book cover. Title in English: Coaching at the boundary between education and work: this is how you guide students.

7.4 Concluding remarks

Employability is pivotal to ensure a smooth education-to-work transition. In addition, employability empowers graduates to continue to learn at the workplace, enabling them to adapt to the changing demands of their chosen occupation, thus fostering sustainable career development. As it is one of the main responsibilities to prepare students for their future, higher education has implemented various pedagogical interventions aimed at supporting students in developing their employability. This dissertation adds coaching to the list of interventions aimed at increasing students' employability and their transition to the workplace. As the transition does not end after graduation, it is pivotal that coaching continues at the workplace, in a similar vein. This continuity ensures that graduates receive the necessary support to navigate upcoming challenges in their early career stages.

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Appendices

Summary

Samenvatting

About the author

Curriculum vitae and list of publications

Acknowledgements

ICO Dissertation Series

1 Summary

After graduation, many higher education students will take their first steps into the world of work. Making the transition to the world of work can be challenging, as graduates leave behind the relatively stable and known context of higher education and exchange it for a context that is more dynamic, unstable, and sometimes even unknown. In severe cases, an unsuccessful education-to-work transition leads to early turnover. For example, in the Netherlands, 20% of novice teachers and 14% of graduate nurses leave the sector within two years after graduation due to feeling ill-prepared for their respective jobs. Early turnover can have consequences for the individuals, such as psychological distress and financial problems. Companies can face substantial financial costs and reputation loss. For society, it implies increasing personnel shortages or (youth) unemployment.

Early leave due to misalignment between graduates' preparation for their first job is a serious issue when looking at the financial, material and psychological costs it implies. This calls for educational action resulting in lower early leave. In line with previous research, this dissertation assumes that employability supports students in making a smooth transition to the workplace. Employability refers to a set of competences that allow graduates to self-sufficiently navigate the labour market and find adequate employment. In addition, employability allows graduates to successfully adjust to their new context and engage in continuous professional development and lifelong learning. Moreover, employability competences, such as teamwork skills and flexibility, are increasingly demanded by employers.

This dissertation explores how higher education can optimally prepare students for the education-to-work transition. To that end, the first study of this dissertation analyses existing pedagogical intervention aimed at facilitating students' education-to-work transition (**Chapter 2**), such as internships and client-projects, and how these interventions contribute to students' transition to the workplace. Results of this study indicate that designs of pedagogical interventions aimed at facilitating students' education-to-work transition are only partly based on relevant transition theories, such as the connectivity theory and boundary crossing theory. When designing interventions, higher education should not only work together with the workplace, but also learn from this collaboration.

The subsequent studies in this dissertation focus on coaching as pedagogical intervention aimed at facilitating students' education-to-work transition and increasing their employability. Coaching has become an integral part of many higher

education curricula and allows for a more personalized approach toward learning, in which students formulate their own learning needs and stimulates their (self-) reflection. This personalized approach towards learning is necessary when focusing on the development of students' employability competences.

Findings of the second, third, and fourth study (**Chapters, 3, 4, and 5**) provide compelling empirical evidence for coaching as pedagogical intervention aimed at facilitating students' education-to-work transition. In the second study (**Chapter 3**) we conceptualized the core competences of a transition coach and provided concrete coaching behaviours necessary to provide students with support to develop their employability. After having conceptualized coaching for transition, we studied the relationship between coaching in higher education and students' employability in study 3 (**Chapter 4**). Quantitative results showed that there is a positive relationship between coaching, particularly the autonomy support a coach provides, and students' employability. To dive deeper into this relationship, we explored how coaching stimulates the development of students' employability in a qualitative manner (**Chapter 4**). Results showed that a coach stimulates students' reflection and creates a safe environment for the student to experiment with different learning activities. The last study of this dissertation (**Chapter 5**) deepens our understanding of how coaching in higher education supported graduates in their transition to the workplace. Results of this study showed that coaching in higher education taught graduates how to reflect and created the habit of reflection. Graduates at the workplace reflected on their past experiences and analysed what went well and was still challenging. Based on the outcomes of this reflection, graduates sought out opportunities to learn and increase their competences.

In conclusion, coaching in higher education facilitates students' education-to-work transition and increases their employability by teaching them the skill of reflection and makes them lifelong learners.

2 Samenvatting

Na het afronden van hun opleiding zetten veel studenten in het hoger onderwijs hun eerste stappen op de arbeidsmarkt. De overgang naar de arbeidsmarkt kan uitdagend zijn, omdat afgestudeerden de relatief stabiele en bekende context van het hoger onderwijs achterlaten en inruilen voor een context die dynamischer, instabieler en soms zelfs onbekend is. In ernstige gevallen leidt een onsuccesvolle overgang van onderwijs naar werk tot vroegtijdig vertrek. Bijvoorbeeld in Nederland verlaat 20% van de beginnende leraren en 14% van de afgestudeerde verpleegkundigen de sector binnen twee jaar na afstuderen omdat ze zich onvoldoende voorbereid voelen op hun respectievelijke banen. Vroegtijdig vertrek kan gevolgen hebben voor individuen, zoals psychologische stress en financiële problemen. Bedrijven kunnen financiële verliezen en reputatieschade oplopen. Voor de samenleving impliceert dit oplopende personeelstekorten of (jeugd)werkloosheid.

Vroegtijdig vertrek als gevolg van onvoldoende voorbereiding van afgestudeerden op hun eerste baan is een serieus probleem, gezien de financiële, materiële en psychologische kosten die dit met zich meebrengt. Dit vraagt om onderwijsmaatregelen die leiden tot minder vroegtijdig vertrek. In lijn met eerder onderzoek gaat dit proefschrift ervan uit dat inzetbaarheid studenten helpt bij een soepele overgang naar de arbeidsmarkt. Inzetbaarheid, i.e. 'employability' verwijst naar een set competenties die afgestudeerden in staat stellen zelfstandig door de arbeidsmarkt te navigeren en passend werk te vinden. Daarnaast stelt inzetbaarheid, afgestudeerden in staat om zich succesvol aan te passen aan hun nieuwe context en zich levenslang te ontwikkelen op de werkplek. Bovendien worden inzetbaarheidscompetenties, zoals teamworkvaardigheden en flexibiliteit, steeds meer gevraagd door werkgevers.

Dit proefschrift onderzoekt hoe het hoger onderwijs studenten optimaal kan voorbereiden op de overgang van onderwijs naar werk. Daartoe analyseert de eerste studie van dit proefschrift bestaande pedagogische interventies gericht op het vergemakkelijken van de overgang van hoger onderwijs naar werk (**Hoofdstuk 2**), zoals stages en client projecten, en analyseert hoe deze interventies bijdragen aan de overgang van studenten naar de arbeidsmarkt. De resultaten van deze studie geven aan dat de ontwerpen van pedagogische interventies gericht op het vergemakkelijken van de overgang van onderwijs naar werk slechts gedeeltelijk zijn gebaseerd op relevante transitietheorieën, zoals de connectiviteitstheorie en de *boundary crossing* theorie. Bij het ontwerpen van interventies moet het hoger onderwijs niet alleen samenwerken met de werkplek, maar ook leren van deze samenwerking.

De daaropvolgende studies in dit proefschrift focussen op coaching als pedagogische interventie gericht op het vergemakkelijken van de overgang van onderwijs naar werk en het vergroten van de inzetbaarheid van studenten in het hoger onderwijs. Coaching is een integraal onderdeel geworden van veel curricula in het hoger onderwijs en maakt een meer gepersonaliseerde benadering van leren mogelijk, waarbij studenten hun eigen leerbehoeften formuleren en coaching hun (zelf)reflectie stimuleert. Deze gepersonaliseerde benadering van leren en een focus op reflectie is noodzakelijk wanneer de focus ligt op het ontwikkelen van inzetbaarheidscompetenties.

De bevindingen van de tweede, derde en vierde studie (**Hoofdstukken 3, 4 en 5**) bieden overtuigend empirisch bewijs voor coaching als pedagogische interventie gericht op het vergemakkelijken van de overgang van onderwijs naar werk. In de tweede studie (**Hoofdstuk 3**) hebben we de kerncompetenties van een transitiecoach geconceptualiseerd en vonden we concrete coaching gedragingen die nodig zijn om studenten ondersteuning te bieden bij het ontwikkelen van hun inzetbaarheidscompetenties. Na het conceptualiseren van 'coaching voor transitie' hebben we in studie 3 (**Hoofdstuk 4**) de relatie tussen coaching in het hoger onderwijs en de inzetbaarheid van studenten onderzocht. De kwantitatieve resultaten toonden aan dat er een positieve relatie is tussen coaching, met name de autonomieondersteuning die een coach biedt, en de inzetbaarheid van studenten. Om dieper in te gaan op deze relatie hebben we kwalitatief onderzocht hoe coaching de ontwikkeling van inzetbaarheidscompetenties van studenten stimuleert (**Hoofdstuk 4**). De resultaten toonden aan dat een coach studenten stimuleert tot reflectie en een veilige omgeving creëert voor de student zodat ze kunnen experimenteren met verschillende leeractiviteiten. Dit speelt een rol bij het kunnen ontwikkelen van hun inzetbaarheidscompetenties. De laatste studie van dit proefschrift (**Hoofdstuk 5**) verdiept ons begrip van hoe coaching in het hoger onderwijs afgestudeerden heeft ondersteund bij hun overgang naar de arbeidsmarkt. De resultaten van deze studie toonden aan dat coaching in het hoger onderwijs afgestudeerden leerde reflecteren en van reflectie een gewoonte maakte. Afgestudeerden op de werkplek reflecteerden op hun ervaringen uit het verleden en analyseerden wat goed ging en nog steeds uitdagend was. Op basis van de uitkomsten van deze reflectie zochten afgestudeerden mogelijkheden om te leren en hun competenties te vergroten en verduurzamen.

Samengevat faciliteert coaching in het hoger onderwijs de overgang van onderwijs naar werk van studenten en vergroot het hun inzetbaarheid door hen de reflectievaardigheid aan te leren en hen zo in staat te stellen tot levenslang leren.

3 About the author



Niels Andreas van der Baan was born in 's-Hertogenbosch, the Netherlands, in 1990. When he was three years old, he suffered from a viral infection resulting in meningitis and encephalitis. After extensive therapy and rehabilitation, he started on the preparatory secondary vocational education track (VMBO-T) and moved to pre-university education (VWO).

In 2009, Niels embarked on his studies in psychology, specializing in biological psychology. He obtained his master's degree in Neuropsychology. His personal experience with his illness and recovery fuelled his interest in understanding the coping mechanisms from individuals who suffered from acquired and traumatic brain injury, aiming to understand why some individuals could resume regular education after such illness while others faced mental handicaps.

After obtaining his master's degree in Neuropsychology in 2014, Niels started working part-time at VodafoneZiggo. Given the vast differences between this job and his background in (neuro)psychology, he encountered difficulties adapting to the corporate culture. Concurrently, he enrolled in part-time teacher education at the Fontys in Tilburg. After 2,5 years and a lengthy internal debate, he decided to discontinue teacher education, due to a lingering feeling of unpreparedness to stand in front of a classroom.

After obtaining a second master's degree in Learning and Development in Organisations, Niels started working part-time as a research assistant and teacher at Maastricht University. The project he was working on slowly evolved into a PhD project about the education-to-work transition, a project in which he also could express his own experiences with transition.

Throughout his academic career, all of Niels' research interests were driven by a deeply personal motivation stemming from his own life experiences.

4 Curriculum vitae and list of publications

Work Experience

2023 – present | Assistant professor | Maastricht university

- Taskforce Program Evaluation

2019 - 2023 | PhD candidate | Maastricht university

- Dissertation: Facilitating the education-to-work transition: coaching for employability unravelled
- Mobility period (5months):
 - Finnish Institute for Educational Research (FIER), University of Jyväskylä, Finland
 - Centre for University Teaching and Learning (HYPE), University of Helsinki, Finland
 - Department of Educational Studies, Karlstad University, Sweden
- University Teacher Qualification (UTQ)

2018 - 2019 | Research assistant and teacher | Maastricht University

- Research assistant of Prof. Dr. Simon Beausaert

2014 – 2019 | Credit assessment, risk and fraud | Vodafoneziggo

- Conducting risk assessments, and fraud prevention (C2B, B2B)
- Training on the job of new employees

2011 – 2012 | Prison project | Leiden University | Utrecht University | NSCR

- Data collection for a large-scale longitudinal research project examining the effects of imprisonment on the further life course of offenders and their families.

Education

2018 - 2019 | MSc., Learning and development in organisations | Maastricht University

- Master's thesis: On the relation between perceived autonomy support and (in) formal learning: the mediating role of self-directed learning
- Project DECP: How the Competency Management Cycle can contribute to bridging the skills gap. Available at <https://www.decp.nl/publications/how-the-competency-management-cycle-can-contribute-to-bridging-6446>

2014 – 2017 | Propedueuse Teacher education | Fontys University of applied Sciences

- Teacher education in the English language

2013 – 2014 | Msc., Neuropsychology | Maastricht university

- Master's thesis: Coping and cognition in patients with acquired brain injury (ABI): the predictive value of planning, attention and working memory | Tolbrug Rehabilitation Centre, 's-Hertogenbosch.

2009 – 2013 | Bsc., Psychology | Maastricht university

- Bachelor's thesis: Coping with traumatic brain injury (TBI)
- Minor Neuropsychology and Development, Maastricht University
- Minor Criminology, Utrecht University

Academic publications

Peer reviewed journal articles

- van der Baan, N., Gast, I., Gijsselaers, W. & Beausaert, S. (2022). Coaching to prepare students for their school-to-work transition: conceptualizing core coaching competences. *Education + Training*, 64(3), 398-415. <https://doi.org/10.1108/ET-11-2020-0341>
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Manuscripts submitted

- van der Baan, N., Nuis, W., Beausaert, S., Gijsselaers, W. & Gast I. (2023). Developing employability competences through coaching in higher education: supporting students' learning process. *Under review*.
- van der Baan, N., Gast, I., Gijsselaers, W., Kyndt, E., Tynjälä, P., & Beausaert, S., (2023). Education-to-work transition: a systematic analysis of pedagogical interventions in the setting of higher education. *Manuscript submitted for publication*.
- van der Baan, N., Meinke, G., Virolainen, M., Gast, I. & Beausaert, S. (2023). Turnover intentions among graduate employees: a systematic literature review. *Under review*.
- Nuis, W., van der Baan, N., Segers, M. & Beausaert, S. (2023). Mentoring for reflection and employability competences of students in higher education: A pre-test post-test design. *Under review*.

- van der Baan, N., Beusaert, S., Gijsselaers, W. & Gast, I. (2023). How does coaching in higher education help graduate employees to adjust to the workplace? *Under review*.
- Lejeune, C., van der Baan, N., Beusaert, S., & Raemdonck, I. (2023). On the relation between perceived autonomy support and (in)formal learning: The mediating role of self-direction in learning. *In preparation*.

Peer reviewed conference papers

- van der Baan, N., Beusaert, S., Gijsselaers, W. & Gast, I. (2023). How does coaching facilitate students' education-to-work transition? In H. Hyytinen (chair) *Factors supporting successful transition from higher education to working life*. Symposium conducted at the 20th Biennial EARLI conference for learning and instruction, Thessaloniki.
- van der Baan, N., Nuis, W., Beusaert, S., Gijsselaers, W. & Gast, I. (2023). Exploring the relationship between coaching and employability competences: preparing students for workplace learning. Paper presented at TEPE, Karlstad.
- van der Baan, N., Nuis, W., Beusaert, S., Gijsselaers, W. & Gast, I. (2023). *On the relationship between coaching and employability competences: a multiple perspective study*. Roundtable presented at the AERA, Chicago.
- van der Baan, N., Beusaert S., Gijsselaers, W. & Gast, I. (2022). *Exploring the relationship between coaching and employability competences: A mixed-method study*. Paper presented at the EARLI SIG1+4, Cádiz.
- Nuis, W., & van der Baan, N. (2022). *Coaching and reflection for school-to-work transition, employability competences and lifelong learning*. Poster presented at the L&W Workshop Sustainable Employability: A multi-disciplinary perspective, Maastricht.
- van der Baan, N., Nuis, W., Beusaert, S., Gijsselaers, W. & Gast, I. (2022). *Coaching voor het ontwikkelen van inzetbaarheidscompetenties*. In S. Beusaert and C. Struyve (chair), *Coaching, de versterker van reflectie en professionele groei*. Symposium conducted at VELOV - VELON; Eigentijds professioneel, Brugge.
- van der Baan, N., Gast, I., Beusaert S. & Gijsselaers W. (2021). *Coaching to prepare students for their school-to-work transition: conceptualizing core coaching competences*. Paper presented at the 19th Biennial EARLI conference for learning and instruction, Online.
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- van der Baan, N., Gast, I., Beusaert S. & Gijsselaers W. (2021). *Coaching to prepare students for their school-to-work transition: conceptualizing core coaching*

competences. In N. van der Baan (chair), *(Study) career guidance in secondary and Higher Education: Definition and Practice*. Symposium conducted at the Onderwijs Research Dagen, Online.

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- van der Baan, N. (2023, June 12). Facilitating the education-to-work transition: Coaching for employability unravelled [Blog post]. Available at <https://educationalist.substack.com/p/coaching-for-employability-facilitating>
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- van der Baan, N. & Beusaert, S. (2019). *Over de relatie tussen reflectie, zelfregulatie en inzetbaarheidscompetenties: Kan MTC een rol spelen?* Odisee

Projects

- Centre of Teaching and Learning (EDLAB; 2023-2025): Using evaluation data to guide teacher's Continuing Professional Development
- Voorsprongfonds (VSF; 2022-2023): Boost voor starters in het werkveld (2022-2023).
- Praktijkgericht Wetenschappelijk Onderzoek (PWO; 2019-2021): MyTalentCompass (MTC) - het bevorderen van inzetbaarheid en zelfregulatie van studenten en (startende werknemers) door middel van mentoring.

Seminars/presentations/workshops

- Maastricht University, Centre of Teaching and Learning (EDLAB; 07-06-2023). *Charters, contracts, constitutions: students setting their rules of engagement*.
- University of Jyväskylä (HIEST; 13-12-2022). *The school-to-work transition: coaching for employability competences*.

- University of Karlstad, Department of Education (05-10-2022). *The school-to-work transition: coaching for employability competences.*
- Maastricht University, Staff Career Centre (SCC; 27-09-2022). *The education-to-work transition: coaching for employability competences.*
- University of Jyväskylä, Finnish Institute of Educational Research (FIER; 12-09-2022). *The school-to-work transition: coaching for employability competences.*
- Stella Maris College, Meerssen (07-05-2022) *Ben jij inzetbaar op de arbeidsmarkt?*
- Maastricht University, Student Service Centre (SSC; 22-02-2022). *Coaching for employability competences.*
- Jan van Brabant College, Helmond (06-04-2021). *Ben jij inzetbaar op de arbeidsmarkt?*

5 Acknowledgements

My PhD was my academic Odyssey. Also, with subtle reference to Odisee, the university of applied sciences in Flanders, Belgium. Much like the Homeric epic my PhD was also a quest, a quest for knowledge and expertise. Like Odysseus I encountered various challenges, hurdles, and setbacks that tested my determination, perseverance, and resilience. I also sought guidance along the way. Like Nestor and Mentor, my supervisors provided me with wisdom and offered me advice. They helped me navigate the challenging waters of academia. Finally, like Odysseus found his way home to Ithaca, this dissertation is the culmination of my PhD.

Dear Wim, much like the legendary Nestor, you have been an unwavering source of wisdom and support throughout my academic Odyssey. I vividly remember one of our first encounters as PhD and supervisor, in which you advised me to come more prepared to our meetings. You told me the story of one of your former PhD students and suggested that I should be more like her. This confused me. Only later I realized being more prepared meant, among other things, bringing snacks. Unfortunately, COVID-19 hit, and when our meetings were finally onsite again, I always forgot the cookies. I promise next time we have a meeting, I'll bring some snacks.

Dear Simon, according to research, role modelling can also be considered a coaching behaviour. You were always a role model to me. So, when Wendy mentioned that if it wasn't for my name in the email I send her, the email also could have been from you, I felt kind of honoured. You also once told me that I started to look more like you. You pointed out to me that my increasing coffee intake was turning me into your doppelgänger. Our conversations were as stimulating as a double shot of espresso, and I am very grateful to have had you on my team. Thank you for the positive influence you've had on me and way you've inspired me to grow both personally and professionally. Thank you for all the opportunities you gave me to surpass and exceed my PhD, such as project work and writing a book together, which made my PhD more practical.

Dear Inken, I hope you had a good experience supervising your first PhD. Like a coach, you provided me with the necessary support during my PhD. I remember that during one of our meetings later in my PhD, you told me that by now I probably had more expertise regarding this particular topic than you, which really gave me a boost in my confidence. I always could come to you for emotional support, or you came to my office, when I was feeling down because I forgot a meeting, or yet another paper got rejected. I wish you all the best with the new addition to your family.

Also, special thanks to Steven Vanmol and Johan De Wilde for assisting me with my data collection. Johan, thank you for your corporation on the various blogposts we wrote together, the symposium we organised in Bruges, and of course, our book about coaching.

I want to thank the assessment committee, Prof. Dr. Diana Dolmans, Prof. Dr. Didier Fouarge, Prof. Dr. Trudie Schils, Prof. Dr. Isabel Raemdonck and Dr. Ilya Zitter, for taking the time to read my work. I look forward to a fruitful discussion during my defence. Thank you, Dr. Nina Kilbrink, for joining my opposition.

During my PhD, I spend almost six months in the Nordic countries. My stay in Finland and Sweden was both personally and professionally rewarding. Thank you, Päivi Tynjälä and Nina Kilbrink for inviting me to your universities and your sincere interest in my research. Thank you Maarit Virolainen, for your collaboration on a paper related to this dissertation. Thank you Tarja Tuononen and Heidi Hyytinen for inviting me to organize a symposium at the EARLI conference together. And thanks to all the friends I made, you made my stay unforgettable!

I also want to thank my paranympths, Wendy and Bart. Wendy, when I started my PhD, I expected it to be a rather lonely endeavour. Nothing was farther from the truth. Thank you for the great collaborations, and your friendship. I enjoyed working together with you in teaching our course, on several papers, in different symposia, and travelling to different conferences together. And as the cherry on our collaboration-pie, we wrote a book together! I wish you all the best with finalizing your PhD.

Thank you, Bart, for letting me share all my challenges related (and unrelated) to my PhD with you, either during our (coffee) walks or over Zoom (due to COVID-19). When I started my PhD journey, you were completing yours, and your insights helped me a lot. You taught me how important it is to have downtime from your PhD. Thanks to all my friends, who provided this downtime. Thank you for all the lunches and dinners, movies, museum visits, concerts, operas and weekend trips.

I want to thank all my colleagues from ERD for all the shared laughs and hardship, and for all the great times we had on conference trips. Special thanks to Laura, for showing me the ropes of tutoring, Laurie, for being my second coder, and my office mates, Catherine, Melanie, and Iver. Thanks, Iver, for all the restaurant-worthy dinners at your place. When I came to dinner at your place, you always wanted to keep things simple, but I would hardly call a three-course dinner simple. Thanks, René, for

organizing the occasional Taco Tuesday (even when it was on a Monday and no tacos were involved). I also want to thank my new colleagues, Renée, Carolin, and Jill, for their support and flexibility towards the end.

Last, but definitely not least, I would thank my parents, for their unwavering support. I could not have done this without you, and I mean that. If it wasn't for your support, I wouldn't have made it this far. Thank you for letting me vent my occasional frustrations. Dad, thanks for proofreading all my stuff. Also, thanks to my sister Janneke, her husband Niels, and my little nephew Bas, just for being there.

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