Career conversations in vocational schools
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The purpose of this study was to examine career conversations between teachers and students in competence-based vocational education in the Netherlands. A total of 32 career conversations were observed and analysed with respect to four elements: content, teacher activities, student activities and relationship. Results showed that career conversations often focused on school issues (such as student’s progress and course curriculum) rather than career issues (such as future ambitions or characteristics of a profession). Furthermore, teachers hardly facilitated students in the development of self-directedness. Students asked few questions and teachers often dominated discussions. The findings revealed implications for the practice of career guidance in schools, for example for teachers to change their role from that of a traditional knowledge transmitter to facilitator, provide students with more opportunities for self-direction, and put career issues more centrally and elaborately on the agenda of discussions.

Keywords: career conversations; vocational education; career development

Introduction
Internationally, there is a growing recognition of the importance of career education and guidance in schools (Hughes, Bailey, & Mechur, 2001; Watts & Sultana, 2004). Schools increasingly acknowledge their responsibility towards guiding young people towards lifelong learning and career development. In many countries, this trend is embedded in broader educational innovations and includes stimulating the development of career competence (for example, the capacity to direct one’s own career) (Jarvis & Keeley, 2003; Perry & Ward, 1997). Another trend is to expand guidance services vertically to include all levels of education and not just the specific moments at which study or career choices are usually made. Career guidance in schools is thus becoming increasingly more developmental in nature (Sultana, 2004).

In the Netherlands, a similar development is noticeable and coincides with the implementation of competence-based education in secondary vocational education. In competence-based education, capacities needed for the actual working context rather than academic disciplines are taken as the starting point for curriculum development (Mittendorff, Jochems, Meijers, & den Brok, 2008). Competence-based learning environments typically stimulate a more self-directed, student-centred approach in which the learner is made responsible for his or her own career path, and in which teachers are seen as coaches guiding students along their way (Biemans, 2008).
Nieuwenhuis, Poell, Mulder, & Wesselink, 2004). In keeping with these developments, The Netherlands Association of VET Colleges (2007) formulated specific career competencies for students and demanded that schools guide students in the development of these competencies. These competencies are: (a) reflecting on motives, ambitions and qualities; (b) examining work opportunities and suitability of professions; and (c) aiming career development at motives, ambitions and opportunities and taking action accordingly. The implementation of competence-based learning environments urged many schools to implement a system of integral career guidance (Mittendorff et al., 2008), used to guide students in planning their personal development and to supply a context in which students can explore their ambitions, strengths and weaknesses, and spell out future plans (Meijers, 2008). An integral career guidance system is composed of a series of interconnected instruments and accompanying activities for teacher and student, such as assessment methods, intake procedures, personal development plans and career conversations (Meijers, 2008). The overarching goal is to help students develop the necessary career competencies and guide them in the development of a vocational identity (Wijers & Meijers, 1996). Integral career guidance is often implemented as part of everyday educational practice by teachers who are given direct responsibility for the supervision of students and receive extra time for this. In most vocational schools, all teachers are expected to participate in career guidance. Most teachers are also entitled to receive training and guidelines to help them carry out this new task. Besides guidance from teachers, students are entitled to one-to-one career advice or guidance from guidance professionals (when needed).

In the Netherlands, recent research by Mittendorff et al. (2008) and Kuijpers, Meijers, and Bakker (2006) showed the career conversation to be an essential element of integral career guidance. The provision of one-on-one guidance by teachers during career conversations with students was deemed important because students often find it difficult to reflect on their own learning processes, or to construct meaning about themselves and their future career (Bullock & Jamieson, 1998; Mittendorff et al., 2008). Reflective dialogues between teacher and student have been shown to deepen student reflection and thereby help students in taking control over their own career development (Meijers, 2008). Both the studies by Mittendorff et al. and Kuijpers et al. nevertheless showed that schools in the Netherlands experienced major difficulties in realising career conversations. In most schools, there is simply not enough expertise regarding the conduct of career conversations. In addition, detailed research on these career conversations and the guidance process during these conversations more particularly, is scarce (van den Berg & de Bruijn, 2009).

Although there is little research available on career conversations in Dutch vocational education, there is a huge amount of international literature on career guidance interviews (e.g. Kidd, 2006; Millar & Brotherton, 2001; Wilden & La Gro, 1998). However, these interviews are not identical to career conversations as examined in the present study. Most career guidance interviews concern adults or students experiencing career problems, with important elements of the discussion being the identification of problems, the search for possible solutions and the development of client strategies. Career guidance interviews are often used to guide students during specific moments at which study or career choices are usually made, and to guide students during transitions and their preparation for transitions (Kidd, 2006; Sultana, 2004). Career conversations as investigated in the present study are organized on a much more regular basis and are considered to be part of everyday educational
practice (Mittendorff et al., 2008). They are an integral part of a student’s education and usually conducted by a teacher. Career guidance interviews, on the other hand, are usually conducted by a professional career counsellor or guidance worker.

Much of the research available on career conversations or career guidance interviews focuses on what these conversations should look like (e.g. Kuijpers, 2008; Spijkerman, 2005). The manner in which clients and counsellors perceive career conversations or career guidance interviews is also frequently considered in these studies (Howieson & Semple, 2000; Millar & Brotherton, 2001). Among similar lines, studies have analysed perspectives taken by clients and counsellors on, for example, the quality of career interviews or interpersonal skills of counsellors (Bosley, Arnold, & Cohen, 2006), changed guidance practices or changed counselling paradigms (Patton & McMahon, 2006; Savickas, 2000). When Wilden and La Gro (1998) described characteristics of career interviews, their focus was on what was perceived to be useful by clients. A study by Bimrose, Barnes, Hughes, and Orton (2004) investigated the actual guidance practice of counsellors during career guidance interviews by examining digital recordings of 50 one-to-one guidance interviews. They examined counselling behaviours and perceptions of client usefulness, and developed a four stage framework for practice together with 40 categories of practitioner techniques and strategies (to be described later in this article). Apart from the work of Bimrose et al. (2004), there is not much research available on the current conduct of guidance within career conversations. Also, limited studies are available focusing on the behaviour or guidance strategies adopted by teachers during career conversations.

The aim of the present study is to investigate the nature of the career conversations conducted in a competence-based education context. This will provide insight into the career guidance given in Dutch competence-based education.

Theoretical framework

Following the work of several communication scholars (Remmerswaal, 2003; Schultz von Thun, 1981; Watzlawick, Beavin, & Jackson, 1967) three aspects of the conduct of career conversations were examined: the content of the conversations; the activities undertaken by teachers and students during the conversations; and the nature of the relationship between the teacher and the student during such conversations. The following research question will be investigated: what is the nature of the career conversations taking place in competence-based vocational education in the Netherlands in terms of content, activities and the relationship between teacher and student?

The answer to this question can provide insight into career guidance given in Dutch vocational schools and the practices of teachers with respect to this task. It can help both schools and teachers to improve their professional practices. In the following, each of the three mentioned aspects will be considered more elaborately.

Content

The nature of the career conversation between a teacher and student is largely defined by the topics discussed. The goal of integral career guidance in vocational education is to guide students in the development of required career competencies and a vocational identity (Kuijpers et al., 2006). This goal addresses the importance
of meaning-making of students with respect to the professional context and their
own, personal identity (Peavy, 2000). Meaning-making is seen as the process of
making experiences of students explicit and stimulating students to reflect on these
experiences and learn more about their personality, ambitions, strengths and
weaknesses but also about the professional context (Peavy, 2000). Meaning-making
concerns the connection of knowledge and one’s understanding of oneself in relation
to certain professions (Patton & McMahon, 2006). Consequently, it is important for
teachers to discuss student personality, qualities, motivations and ambitions in
relation to future work, norms and values in relation to labour, but also professional
experiences and characteristics of certain professions. Research showed these
subjects to be essential for the creation of a dialogue about what is meaningful
and important for the student (den Boer, Mittendorff, & Sjenitzer, 2004).

Another aspect of career guidance within career conversations is related to the
personal development planning or action planning of students, for which purpose
instruments such as portfolios or personal development plans are often being used
(Mittendorff et al., 2008). One of the fundamental aims of personal development
planning is to develop skills of personal understanding. Important topics for
conversation in this respect are students’ motivations for writing something in their
portfolio or personal development plan, or the learning goals students will set for
themselves (Kuijpers et al., 2006). A study by Bullock and Jamieson (1998) showed
that tutors, guiding students in their personal development process during individual
one-to-one dialogues, were focusing on two different topics. Some tutors felt it more
appropriate to discuss personal and educational aspects while others emphasised
transition choices and career issues. The dialogues that were flexible enough to move
between both topics seemed most effective (Bullock & Jamieson, 1998).

Bimrose et al. (2004) reported on topics discussed by counsellors and students or
adults during career guidance interviews. These topics ranged from the discussion
itself (by means of scene-setting, explaining goals and evaluation) to work-related
history and education or training of the client. Other topics were, among other
things, aspects of personality, skills and abilities of the client, the client’s feelings,
interests and motivations, and the client’s self-awareness and awareness of employ-
ment structures.

the present study will analyse the content of career conversations with respect to
work and educational history of students, students’ personal characteristics (skills and
abilities) as well as students’ feelings (including self-awareness) and future ambitions
and motivations. Following Peavy (2000), other topics considered will be labour
market issues, such as apprenticeship or part-time job experiences. Finally, based
on previous work conducted by Mittendorff et al. (2008) and Kuijpers et al.
(2006) the topic of personal development planning instruments will be considered as
well.

Activities
There is a large knowledge base on approaches or techniques to be used for career
counselling. Bimrose et al. (2004), for example, observed guidance interviews and
identified four broad categories, each comprised of sub-sets of more specific
activities. They identified building a working alliance (scene-setting/orientation,
contracting and rapport building/maintenance), exploration of potential (exploration
of hard, factual data and exploration of soft data), *identification of options and strategies* (information, advice and influencing) and *ending and follow through* (evaluation, action plans, follow through). Their study also investigated clients’ and counsellors’ perceptions of usefulness of interviews. The results showed that useful guidance comprises: supporting outcomes considered positive by clients (exploring and challenging client perceptions, providing direction or information and creating awareness of learning and employment opportunities); giving clients access to networks, information and knowledge, enabling them to feel better informed and better able to progress; encouraging constructive change in the client (increasing self-confidence, developing skills, developing understanding which broadens ideas, together with motivating, inspiring and encouraging clients); and providing clients with positive experiences (creating opportunities for reflection and in-depth discussion by reassuring, confirming and/or clarifying plans and/or showing progress) (Bimrose et al., 2004).

Wilden and La Gro (1998) studied career guidance interviews and client and counsellor perceptions of counsellor interventions. Analyses of three career guidance interviews and perceptions of clients and counsellors led to a distinction between ‘affective’, ‘organisational’ or ‘transformational’ counsellor strategies. Responses which were categorised as affective referred to clients’ feelings of being understood or comprehended. They also covered positive feedback regarding self-worth and achievement. Within the organisational category, responses were categorised as explanations about the conduct of the interview and whether client and practitioner could work effectively together. Clients found it helpful to have a systematic line of questioning, organised responses, and a focus on a particular task. The transformational category, finally, related to re-interpretation or re-structuring of situations. Here, career counsellors interpreted elements of client responses, leading to greater integration or change in clients’ conceptual maps. Interventions with negative impact were also identified and related to lack of clarity about the procedure or conduct of career guidance interviews, and to confusions around expressions, intentions and meanings.

Focusing on the Dutch career counselling context, Spijkerman (2005) addressed several activities for effective career guidance interviews similar to activities mentioned by Bimrose et al. (2004) and Wilden and La Gro (1998). According to Spijkerman these include structuring the conversation, creating a positive atmosphere, active and apparent listening, being personal, making information concrete, helping the client to clarify and deepen things, working with goals and evaluating.

The activities or techniques of counsellors that are either considered important or occurred often in career interviews according to the literature, are strongly related and show considerable overlap. In short, overarching activities seem to be: *structuring the conversation* (setting goals, structuring in phases, summarising client responses), *deepening the conversation* (re-interpreting the situation, stimulating reflection, providing feedback), *advising or providing information* (helping the client/student), *asking for personal information* (exploring the client/student’s hard and soft data), *building a relationship/rapport* (active listening, making clients feel welcome, showing empathy), and *evaluating or ending* (following up, setting agreements on student actions, evaluating).

Although these activities were all found to be useful in career guidance interviews (and have not yet been studied in career conversations), most of these activities and techniques are likely to be important for career conversations as well. There is, however, one important aspect that does not emerge from previous studies, but that
is highly important for career conversations in education: *stimulating the self-directedness or action planning of students* (Bullock & Jamieson, 1998; Mittendorff et al., 2008). Therefore, in the present study this category will be added.

Because of the strong emphasis on self-directedness of students, we will not only focus on what teachers do during their career conversations with students, but also on the activities of students during such conversations. Research on the activities of students during career conversations (i.e., what students actually say or do) is only scarcely available. While there are several studies on the perceived quality of career interviews from the perspectives of both clients (e.g. Bosley et al., 2006; Kidd, Hirsch, & Jackson, 2004) and students (e.g. Millar & Brotherton, 2001), empirical research on what students actually do (or not do) in a career guidance situation is rare. Lately, it has been argued by many scholars that coaching or counselling may be particularly effective in situations where the client/student has an active role to play, can clearly influence the conversation and in which stimulating the client's/student's agency is part of the agenda (Patton & McMahon, 2006; Peavy, 2000; Savickas, 2000). Individuals must, after all, learn to make choices in order to cope with a flexible, constantly changing and complex society; counsellors and teachers must learn to give students opportunities to take control and direct their own actions (Coutinho, Dam, & Blustein, 2008). As a result, the posing of questions and initiation of actions by students, deep engagement of students in the conversation and the formulation of personal action points by students can be considered indicators for such autonomy and agency (Vandamme, 2003).

In addition to student agency, the importance of meaning-making by the student has been stressed for career development purposes (Peavy, 2000; Wijers & Meijers, 1996). Particularly relevant (student) activities for meaning-making are describing one's personality and ambitions (as opposed to only facts or details), posing questions, reflecting on experiences and connecting knowledge to experience via paraphrasing or summarising (see also Kuijpers, 2008). For the present study, the following student activities will be taken into consideration: *talking about oneself, personal aspects, questioning and reflecting on experiences.*

**Relationship**

The last important aspect of the communication between student and teacher is the nature of the interpersonal relationship. This nature is an essential part of communication and can certainly affect the manner in which students learn from teachers (Brekelmans, Sleegers, & Fraser, 2000; Erickson & Schultz, 1982; Schultz von Thun, 1981). For effective career guidance and counselling, the importance of beneficial interpersonal relationships has also been emphasised (e.g., Heppner & Heppner, 2003; Peavy, 2000). Both clients' and counsellors' expectations regarding interpersonal behaviour have been studied explicitly, for example, in addition to whether these expectations are in line with or relate to session evaluations (Schedin, 2005). In other research, interpersonal behaviour has not been mentioned as such but personal qualities such as showing interest, establishing commitment and being trustworthy appeared to be critical to the career counselling process (Kidd et al., 2004; Rogers, 1951) or that the 'working alliance' or personal bond between counsellor and client is clearly important (Gysbers, Heppner, & Johnston, 2003).

Interpersonal circumplex models are often used to characterise relations between people communicating (Blustein, Schultheiss, & Flum, 2004; Kremer-Hayon &
In interpersonal circumplex models, the interpersonal behaviour of people is described along two independent dimensions which are both necessary and sufficient to describe the communication process (Wubbels, Brekelmans, den Brok, & van Tartwijk, 2006). Circumplex models in education include a *proximity* dimension which ranges from opposition to cooperation and an *influence* dimension which ranges from dominance to submission. These two dimensions can be combined to create a circular structure as depicted in Figure 1. The proximity and influence dimensions of the circumplex model of interpersonal relations can be used to describe singular actions of the individual but also to describe styles of interpersonal behaviour (Wubbels et al., 2006).

A circumplex model with a specific focus on the relations between teachers and students is the model for interpersonal teacher behaviour of Créton and Wubbels (1984). This model is based on Leary's 1957 model for the interpersonal diagnosis of personality and was specifically adapted for the study of interpersonal teacher behaviour. That is, the dimensions of proximity and influence can be incorporated into a coordinate system with eight equal sections as depicted in Figure 1 and thus be used to characterise the relationship between teacher and student.

The present study will investigate the teacher–student relationship during career conversations using the model of interpersonal teacher behaviour, through analysis of the level of *proximity* and *influence* behaviour of the teacher.

Figure 1. Model interpersonal teacher behaviour (Wubbels et al., 2006). Reproduced with permission.
Based on the aforementioned theoretical framework, the following research questions will be answered:

1. How can we characterise career conversations in vocational education in terms of content that is discussed?
2. How can we characterise career conversations in vocational education in terms of activities performed by teacher and student?
3. How can we characterise career conversations in vocational education in terms of the nature of the relationship between teacher and student, using the dimensions of influence and proximity?

**Method**

**Participants**

Four secondary vocational education schools from different parts of the Netherlands participated in the study. For each school, a different course of study was selected: juridical services (a course that educates for occupations such as desk employee at a law office), agriculture (educates for occupations such as gardener), social and cultural work (educates for occupations such as youth worker) and car mechanics (educates for occupations such as car mechanic or salesperson in the car industry). Schools were selected to cover the four main areas of vocational education (technology, care and welfare, economics and agriculture) and because of their indication of using career conversations as part of an integral career guidance system (in which they used instruments such as portfolios and personal development plans). Through interviews with school leaders and analysis of documents regarding school policy and guidelines for career guidance, the intended practice of schools could be typified. Juridical service and car mechanics had a very clear weekly curriculum for integral career guidance and used manuals for all teachers in which weekly assignments and instruments were incorporated. Agriculture and social and cultural work did not use manuals and did not have weekly plans for the career guidance, but both used an existing book on career guidance (not written by the teachers in the school). The schools representing social and cultural work and juridical services had approximately four years of experience with conducting career conversations; the school representing agriculture had approximately two years of experience; and the school representing car mechanics had just started with career conversations.

At each school, four teachers and two of their students participated in the study, leading to a total of 16 teachers and 32 students. Seven teachers were male, nine were female. Teacher age ranged from 26 to 54. All teachers were of Dutch ethnic background. Student age ranged between 16 and 19 years. In terms of gender, 20 students were male and 12 were female. Three students had a non-Dutch ethnic background, 29 students were of Dutch origin.

**Data collection**

Career conversations with two first-year students of each of the 16 teachers were videotaped. Career conversations were often held in a separate room in the school, so students and teachers could talk privately. Career conversations were videotaped to avoid interference by the researcher and to allow analysis of both verbal and
non-verbal behaviour. The average conversation length was 42 minutes. Duration of career conversations for car mechanics was between 12 and 29 minutes, with an average of 19 minutes. For social and cultural work studies, duration ranged between 48 and 74 minutes, with an average of 57 minutes. For juridical services duration ranged between 10 and 39 minutes, with an average of 23 minutes. And conversations for agriculture, finally, ranged from 12 to 28 minutes in duration, with an average of 20 minutes.

**Analysis**

The videotaped career conversations were transcribed verbatim, and an elaborate category system was developed for coding purposes. The development of the category system and the actual coding occurred in four phases.

In the first phase, transcripts were coded with regard to their **content**. Conversational fragments or a sequence of utterances which related to a specific topic or occurrence were identified for this purpose. That is, the end of a conversational fragment and beginning of the next were identified in terms of change of topic. Each conversational fragment was then coded separately based on sensitising concepts derived from the literature (Boeije, 2005). When the literature did not provide a suitable code, a new code was developed; examples of these are ‘School’, ‘Progress of student’ and ‘Learning process of student’.

In the second phase, transcripts were coded separately with regard to **teacher activities** and **student activities**. This was done in a manner similar to the above. However, a new fragment was now defined in terms of a change of activity. Each fragment was then coded in terms of sensitising concepts derived from the literature. A new code was developed when the literature did not provide a suitable code; examples are ‘Questioning for formal information’ for teacher activities or ‘providing information’ for student activities.

In the third phase, the transcripts were coded with respect to the **relationship between teacher and student**. The conversational fragments identified for the content analyses were used to code the nature of the relationship, because identification of separate fragments in terms of changes in the nature of the relationship between teacher and student during a career conversation proved difficult, if not impossible. The model for interpersonal teacher behaviour as depicted in Figure 1 was used to code conversational fragments with regard to the relationship between teacher and student. Each fragment was coded along a five-point scale for influence and proximity. The influence codes ranged from **very submissive** (1) to **very dominant** (5) and the proximity codes ranged from **very oppositional** (1) to **very cooperative** (5). For coding the relationship between teacher and student, non-verbal communication is essential, and conversational fragments were therefore coded while watching the videotaped career conversations (Wubbels et al., 2006).

In the fourth phase, the final coding system was established. After coding 17 career conversations, no more (new) codes were deemed necessary to describe the data. Codes that were found to overlap were merged; for example, ‘evaluating and ending’ and ‘structuring’ were taken together to form ‘structuring and regulating’. Each career conversation (including the 17 conversations analysed for the initial development of the coding system) was then coded using the final set of definitions and codes.
In Table 1, the main categories for the final categorisation system are presented together with their definitions. Each of the main categories had several subcategories and codes associated with it to further specify the nature of the career conversations. The details on these subcategories are not presented here, but can be obtained from the corresponding author on request. An example of a coded transcript is provided in Table 2.

After the preliminary category system had been developed, tested and established, it was checked again by determining inter-rater reliabilities. Two career conversations which encompassed all of the coding categories were coded by a second researcher. Inter-rater reliabilities for the different elements of the career conversations are presented in Table 3. Kappa coefficients indicated the categorisation system to be reliable (Cohen, 1960).

Absolute and relative frequencies for every coding category across the different career conversations were determined conveying context, activity and relationship aspects of the career conversation.

In Table 4, the overall results of the study are depicted.

Results
The results show the total number of conversational fragments for the content, activity and relationship categories and subcategories coded for the career conversations, the relative percentages in relation to all coded fragments and the percentage ranges for the 16 teachers per coding subcategory.

The results for the content, activity and relationship aspects of the career conversations are described below and illustrated with actual fragments from the transcripts.

Content
Teachers and students discussed personal development planning and related instruments in 25% of all the conversational fragments, with a range of 13% to 42% across the 16 different teachers. When teachers and students talked about personal development planning, some were found to talk mainly about technical aspects (eight teachers). An example is Madeline who indeed focused on just how the portfolio should be organised.

Madeline: Yes, okay, good, it looks very neat. Only one thing, you should, ehh, here, I guess you missed something, right? You still have to complete that?
Student: Ah, yeah, I’ll do that at home. I’ll put in a tab sheet organiser here...
Madeline: Yes, okay, so these are your tab sheets, you only have to fill in this section where everything should come together...
Student: Okay.

Others talked more about personal characteristics of the students in connection with their personal development planning (five teachers). Gwen, for example, used that which her student had written in her portfolio to initiate reflection upon the personal characteristics of the student.

Gwen: So, when I read this [personal characteristic in instrument – author]: ‘I hate people that do nothing for school and always come late’. That says something about you. People who do that, don’t hate that. So what does that say about you?
Table 1. Categorisation system for career conversations in vocational schools.

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Content</strong></td>
<td></td>
</tr>
<tr>
<td>Personal situation or characteristics of student</td>
<td>The personal situation (e.g. home situation, well-being) or personal characteristics as opposed to behaviour of the student (e.g. shyness, laziness, perseverance).</td>
</tr>
<tr>
<td>Learning process or behaviour of student</td>
<td>The behaviour of the student in or outside school as well as the learning process of the student, how this evolves or what he or she has experienced as learning.</td>
</tr>
<tr>
<td>Personal development planning and related instruments</td>
<td>Personal development planning instrument such as the portfolio or personal development plan, the planning process and the actual learning goals of the student.</td>
</tr>
<tr>
<td>Career issues</td>
<td>Previous education of the student, motives for taking present course and feelings about being in the right place, and student’s ambitions.</td>
</tr>
<tr>
<td>Labour market or apprenticeship</td>
<td>Characteristics of the profession being pursued, apprenticeship (i.e. experiences or characteristics, no technical issues) and part-time job experiences and characteristics.</td>
</tr>
<tr>
<td>Progress or functioning of student</td>
<td>Formal aspects of how the student is doing in school (e.g. progress in certain subjects or in certain assignments) and what his or her grades are.</td>
</tr>
<tr>
<td>School</td>
<td>Formal aspects of school, such as when something should be finished or when a test is due, extra guidance possibilities for the student at school and also characteristics and content of the course.</td>
</tr>
<tr>
<td>Conversation</td>
<td>Welcoming of the student, subjects for the agenda, the conversation itself or the notes which are to be made.</td>
</tr>
<tr>
<td>Other</td>
<td>Other behaviour of the teacher such as jokes or chit chat; references to the camera or research; and conversational fragments which were difficult to code with any other code.</td>
</tr>
<tr>
<td><strong>Relationship (interpersonal behaviour of teacher)</strong></td>
<td></td>
</tr>
<tr>
<td>Dominance – Submission scale</td>
<td>Ranges from 1 ‘Very Submissive’ (student is in control, teacher acts insecurely and has no influence) to 5 ‘Very Dominant’ (teacher is clearly in control, looks inspired or even strict, and student cannot escape his/her attention).</td>
</tr>
<tr>
<td>Opposition – Cooperation scale</td>
<td>Ranges from 1 ‘Very Oppositional’ (tense relationship or conflict between teacher and student, teacher is suspicious and corrects the student, there is a cold and distant relationship) to 5 ‘Very Cooperative’ (teacher is really friendly and amicable towards the student and acts very empathic).</td>
</tr>
<tr>
<td><strong>Teacher activities</strong></td>
<td></td>
</tr>
<tr>
<td>Questioning (for information, facts, details)</td>
<td>Requesting clarification or more information; checking to see if student has understood things or wants to add anything; asking facts or details; closed questions regarding what student has experienced, thinks or feels.</td>
</tr>
</tbody>
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Table 1  (Continued)

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition</th>
</tr>
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<tbody>
<tr>
<td>Stimulating reflection</td>
<td>Open questions about what student has experienced, thinks or feels; questions intending to encourage reflection by asking the student to analyse a situation, think about why things have happened; challenging of student’s thoughts; inquiries about what student has learned.</td>
</tr>
<tr>
<td>Active listening</td>
<td>Encouraging elaboration by nodding, saying ‘yes’ or ‘go on’ and/or paraphrasing of information; teacher may, for example, listen, summarise what the student has said and ask if this is correct.</td>
</tr>
<tr>
<td>Rapport building</td>
<td>Being nice and friendly towards the student, making kind remarks and laughing, showing empathy, reassuring the student, offering help, agreeing or apologising and self-disclosure (i.e. telling the student something about oneself).</td>
</tr>
<tr>
<td>Structuring and regulating</td>
<td>Structuring or summarising by, for example, stating what will be handled first or what has been said, formulating of agreements.</td>
</tr>
<tr>
<td>Suggesting or advising</td>
<td>Giving advice or suggestions.</td>
</tr>
<tr>
<td>Providing feedback</td>
<td>Providing information regarding aspects of the student’s performance or understanding; information can be positive, neutral or negative; information can be aimed at different levels (e.g. the person, self-regulation, processing of task, task).</td>
</tr>
<tr>
<td>Explaining or informing</td>
<td>Explaining how things work, informing the student, stating importance of something and giving instructions or assignments.</td>
</tr>
<tr>
<td>Activating or encouraging of agency</td>
<td>Emphasising student responsibility, encouraging student to take initiative and act.</td>
</tr>
<tr>
<td>Other</td>
<td>Used when conversational fragments cannot be coded using any of the other available codes.</td>
</tr>
</tbody>
</table>

**Student activities**

| Questioning                      | Asking for clarification, for information, or for ideas of the teacher (e.g. what the teacher thinks about something).                                                                 |
| Providing information            | Explaining what something looks like or how it works, or saying ‘yes’ to the teacher to indicate that he or she is listening to the instructions or explanation being provided by the teacher. |
| Describing personal experiences, opinions or feelings | Describing or explaining own behaviour and/or personal characteristics, expressing thoughts or feelings about something, explaining interests or ideas, paraphrasing information given by the teacher or laughing. |
| Other                           | Used for conversational fragments which cannot be coded using any of the other available codes.                                                                                                           |
Table 2. Example of coded transcript.

<table>
<thead>
<tr>
<th>Speaker</th>
<th>Utterance</th>
<th>Content</th>
<th>Teacher Activities</th>
<th>Student Activities</th>
<th>Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher</td>
<td>What did you say just now?</td>
<td></td>
<td>Ask for clarification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student</td>
<td>That others don’t say anything, that uh, they don’t say thank you or something. I cannot stand that…</td>
<td>Personal characteristics of student</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td>So letting other people work and not even saying thank you…</td>
<td>Paraphrasing information</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student</td>
<td>Yes, that is something I can’t stand. I don’t know, I just want to hear, thank you Seline, you did your best. Even if it’s not good, you did your best. And that is not, well, then I don’t like it.</td>
<td>Express opinion, feeling or interest</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td>Okay, that is something we will work on today. You will say this also to the group. I will get back to you later today, because I want to also give you feedback on your reflection reports. I don’t have to do that with you anymore, yours is fine but…</td>
<td>Agreements for coming period</td>
<td>Give instruction</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3. Inter-rater reliability coefficients for each element (Cohen’s Kappa).

<table>
<thead>
<tr>
<th>Element</th>
<th>Cohen’s Kappa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td>0.72</td>
</tr>
<tr>
<td>Teacher Activities</td>
<td>0.78</td>
</tr>
<tr>
<td>Student Activities</td>
<td>0.78</td>
</tr>
<tr>
<td>Relationship – Proximity dimension</td>
<td>0.74</td>
</tr>
<tr>
<td>Relationship – Influence dimension</td>
<td>0.72</td>
</tr>
<tr>
<td>Overall</td>
<td>0.80</td>
</tr>
</tbody>
</table>
Table 4. Results for each aspect of career conversations and main categories (numbers and percentages of fragments coded)

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Category</th>
<th>Frequency of fragments coded</th>
<th>Percentage of fragments coded</th>
<th>Range across teachers (and average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td>Personal development planning and instruments</td>
<td>244</td>
<td>25%</td>
<td>13–42% (11)</td>
</tr>
<tr>
<td></td>
<td>Personal situation or characteristics of the student</td>
<td>138</td>
<td>14%</td>
<td>4–38% (24)</td>
</tr>
<tr>
<td></td>
<td>Conversation</td>
<td>99</td>
<td>10%</td>
<td>0–21% (10)</td>
</tr>
<tr>
<td></td>
<td>School</td>
<td>98</td>
<td>10%</td>
<td>0–23% (9)</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>88</td>
<td>9%</td>
<td>2–20% (10)</td>
</tr>
<tr>
<td></td>
<td>Learning process or behaviour of student</td>
<td>76</td>
<td>8%</td>
<td>0–14% (5)</td>
</tr>
<tr>
<td></td>
<td>Career issues</td>
<td>81</td>
<td>8%</td>
<td>0–19% (14)</td>
</tr>
<tr>
<td></td>
<td>Progress, functioning of student</td>
<td>77</td>
<td>8%</td>
<td>2–27% (8)</td>
</tr>
<tr>
<td></td>
<td>Labour market or apprenticeship</td>
<td>74</td>
<td>8%</td>
<td>0–21% (7)</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>975</strong></td>
<td><strong>100%</strong></td>
<td></td>
</tr>
<tr>
<td>Teacher activities</td>
<td>Explaining or informing</td>
<td>1895</td>
<td>33%</td>
<td>15–52% (6)</td>
</tr>
<tr>
<td></td>
<td>Questioning (for information)</td>
<td>1497</td>
<td>26%</td>
<td>9–44% (32)</td>
</tr>
<tr>
<td></td>
<td>Active listening</td>
<td>712</td>
<td>12%</td>
<td>4–25% (9)</td>
</tr>
<tr>
<td></td>
<td>Stimulate reflection</td>
<td>380</td>
<td>7%</td>
<td>2–19% (26)</td>
</tr>
<tr>
<td></td>
<td>Rapport building</td>
<td>356</td>
<td>6%</td>
<td>2–13% (12)</td>
</tr>
<tr>
<td></td>
<td>Structuring and regulating</td>
<td>307</td>
<td>5%</td>
<td>1–10% (5)</td>
</tr>
<tr>
<td></td>
<td>Give feedback</td>
<td>307</td>
<td>5%</td>
<td>3–10% (4)</td>
</tr>
<tr>
<td></td>
<td>Suggesting or advising</td>
<td>226</td>
<td>4%</td>
<td>1–8% (7)</td>
</tr>
<tr>
<td></td>
<td>Activating and encouraging agency</td>
<td>46</td>
<td>1%</td>
<td>0–3% (1)</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>33</td>
<td>1%</td>
<td>0–2% (1)</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>5759</strong></td>
<td><strong>100%</strong></td>
<td></td>
</tr>
<tr>
<td>Student activities</td>
<td>Provide information</td>
<td>2788</td>
<td>54%</td>
<td>25–57% (42)</td>
</tr>
<tr>
<td></td>
<td>Express personal experiences, opinions or feelings</td>
<td>2134</td>
<td>41%</td>
<td>1–14% (5)</td>
</tr>
<tr>
<td></td>
<td>Questioning</td>
<td>227</td>
<td>4%</td>
<td>42–73% (52)</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>32</td>
<td>1%</td>
<td>0–2% (1)</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>5181</strong></td>
<td><strong>100%</strong></td>
<td></td>
</tr>
<tr>
<td>Relationship</td>
<td>Dominance – Submission scale (score of 1 to 5)</td>
<td>5</td>
<td>26%</td>
<td>0–26%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>685</td>
<td>76% (5–100%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>188</td>
<td>20% (0–95%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>11</td>
<td>1% (0–11%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>0</td>
<td>0% (0%)</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>911</strong></td>
<td><strong>100%</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Opposition – Cooperation scale (score of 1 to 5)</td>
<td>1</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>7</td>
<td>1% (0–11%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>303</td>
<td>33% (3–74%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>521</td>
<td>57% (14–94%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>80</td>
<td>9% (0–28%)</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>911</strong></td>
<td><strong>100%</strong></td>
<td></td>
</tr>
</tbody>
</table>

*aThe order of these categories is based on frequencies and is therefore different from the order in Table 1.*
Student: That is my own behaviour.
Gwen: Exactly, what is it then, what do you do?
Student: I am always on time and always try my best at school.

Career issues of students were discussed in 8% of the coded fragments but not addressed in every career conversation, as indicated by the percentage range of 0% to 19% across teachers.

The labour market and apprenticeship were discussed in 8% of all conversational fragments with a range of 0% to 21% across the 16 teachers.

On average, in 14% of all conversational fragments personal student issues were discussed, although percentages varied widely across teachers, ranging from 4% to 38%. In several career conversations (13 out of 32), only the personal situation of the student, such as the home situation, was discussed and no personal characteristics were discussed whatsoever. John and his student, for example, talked about how the student’s father was doing as John knew that the father had been in hospital.

John: Yeah, I heard your father was in hospital. Is he okay now?
Student: Ehm, yes, he is a bit better now. Only, when he feels anything, or doesn’t feel good, you know, and then he can be so grumpy and he reacts to all of us...
John: Mmhh.
Student: I always take it so personally...
John: Yes, you are sensitive to that, you want your father to feel well.
Student: Yes...

Teacher activities
As far as the conversational fragments referring to activities performed by the teachers are concerned, 26% referred to questioning of students for information (i.e., facts or details) and 33% consisted of explaining things or informing students. Ranges were 9% to 44% for questioning and 15% to 52% between teachers for explaining or informing. Particularly at the beginning and end of career conversations, teachers informed students about what would be discussed. Robin, for example, informed her student about the agenda for the conversation.

Robin: Eh, okay, so today I want to talk to you about your learning goals, ehm later. But first: I read your portfolio, and it was interesting. Some notable things became visible, which eh, I would like to discuss as well.
Student: Yes.
Robin: And then we’ll do your personal development plan, that’s actually... what it comes down to.
Student: Yes.
Robin: Yes?
Student: Yes.
Robin: Do you have anything to add? Eh, anything you would like to discuss perhaps?
Student: No.

Providing feedback and stimulating reflection occurred considerably less frequently than teacher questioning or explaining. Stimulating student reflection occurred on average during 7% of all the conversational fragments, with a range of 2% to 19% across teachers. Providing feedback occurred on average during 5% of the fragments, with a range of 3% to 10% across teachers. Most of the feedback was provided at the level of
the task (i.e., constituted 53% of all feedback). Joyce provided feedback on the learning
goals formulated by the student in her personal development plan, for example.

Joyce: This is written down properly, but try to think of something to make it more
concrete. You should do that for every learning goal…Just look at the text I
gave you, okay? Here, this is the addition you wrote down of what you really
want to learn, right?
Student: Yes.
Joyce: Okay, so what you want to do, write that down as part of your learning goal as
well, okay?

Only the feedback provided by a few of the teachers concerned the processing level
(6%), the self-regulation level (6%) or the person level (35%). Gwen, for example,
provided feedback at the level of the person when she mentioned a personal
characteristic of a student and stated her opinion about this.

Gwen: You’re a very spontaneous person, and that is good!
Student: I think I’m always like that…
Gwen: Yes, it’s one of your characteristics.

The majority of the feedback provided by teachers was positive, namely 56% of all
conversational fragments concerned with feedback. Negative feedback was given in
only 15% of these fragments, and neutral feedback (i.e., a description of what is
observed) was provided in 29% of the fragments.

Very little was done to activate the student or stimulate agency; on average only
1% of all conversational fragments was coded as such. The range across teachers was
also small, with 0% to 3% of conversational fragments.

Teachers certainly tried to stimulate students to talk more, with on average 13%
of the conversational fragments coded as active listening, with a range of 4% to 25%
across teachers. John, for example, paraphrased what the student had said and asked
her whether it was correct in an attempt to stimulate the student to talk more and
help her analyse the situation.

John: Mmh, okay. So, what you are actually saying is that you say to yourself that
you want to start earlier, but somehow it doesn’t work?
Student: Yes, that happens to me all the time, I’m trying to, but I don’t know…
John: Mmhh…
Student: I want to, but yeah…

Finally, rapport building was found to be undertaken in 6% of all fragments, but only
by eight of the 16 teachers with a range of 2% to 13%. Some teachers undertook
virtually no rapport building activities while others did this a lot. Most of the rapport
building activities were ‘being nice or friendly’ or ‘agreeing with the student’. Only six
of the teachers used self-disclosure in the form of expressing their own opinion or
relating something personal, such as John.

John: Yes, home comes first, school is second. It’s the same for me.

Student activities
Students mostly provided explanations or information and only rarely asked
questions. Explaining or supplying information occurred in 54% of all the fragments
concerned with student activities, with a range of 42% to 73% across students. Providing facts, describing details or explaining procedures could concern, for example, just how something was organised in class.

Student: In the project group, I work together with John and Sacha.

Only 4% of the conversational fragments concerned with student activities were coded as involving a question. Most of the questions of the students were requests for information or clarification (i.e., 95% of the fragments coded as questions). In the following, for example, a student inquires about when a test is scheduled.

Student: Do we have the test today?
Teacher: No, it's on Wednesday, just look at the schedule in the hall.
Student: Okay.

Personal experiences, opinions or feelings were coded for 41% of the fragments concerned with student activities with a range of 25% to 57% across students. Most of the personal expressions concerned opinions or feelings with regard to, for instance, a particular assignment.

Teacher: So what did you think of that subject?
Student: Yeah, that was fun! It was different than I expected, but it was really interesting.
Teacher: Why?
Student: I don't know, it just was, I liked it a lot, not so much of that heavy stuff...

Relationship between teacher and student

In terms of the influence dimension of the relationship between teacher and student, all of the teachers were found to behave in a mostly dominant manner during career conversations. While conversational fragments coded as very dominant were found for 3% of the relevant fragments (with a range of 0% to 26% across teachers), conversational fragments coded as dominant were found for 76% of the relevant fragments (with a range of 5% to 100% across teachers). Most of the dominance/influence fragments occurred at the beginning or the end of the career conversation when the teachers had to structure or control the conversation.

Joyce: Okay, sit down, you can take your jacket off.
Student: Okay...
Joyce: How are you doing today?
Student: I'm okay.
Joyce: So, we're going to talk about your portfolio today! And I found it really good, wonderfully organised.

The proximity dimension of the relationship between teacher and student showed greater diversity than the influence dimension. Some of the teachers showed no fully cooperative behaviour whatsoever, while 9% showed behaviour which was very cooperative (with a range of 0% to 28% across teachers) and 57% showed behaviour which was cooperative (with a range of 14% to 94% across teachers); 33% of the relevant conversational fragments were scored as neutral along the proximity scale; and only 1% of the relevant fragments showed opposition (with a range of 0% to 11% across teachers).
Discussion

The aim of this study was to investigate career conversations conducted in competence-based vocational education in the Netherlands. Four aspects of the communication between teacher and student were investigated for this purpose: the content of the conversation, teacher activities, student activities, and the nature of the interpersonal relationship between teacher and student. The results revealed several notable outcomes about the career guidance process during the career conversations.

First, the main topics in the conversations were not always related to the goals of career conversations — namely, the stimulation of students to think about themselves, their futures and their personal development plans. Although teachers and students talked a great deal about personal development planning instruments, many of the teachers only addressed technical aspects of the use of the instruments, for example whether the student had done something right or wrong or how the student should use such an instrument. Very little was done to create a process of meaning-making using these instruments, which corresponds to the results of earlier studies (Mittendorff et al., 2008). Instruments such as the personal development plan or portfolio were rarely used to initiate a dialogue about what the student had written down and what this actually meant (to stimulate a reflection process).

Additionally, little discussion on students’ career issues occurred, and characteristics of certain professions or work-related experiences of students were also rarely discussed. Obviously, when the aim is to discuss qualities and motives of a student, a student’s ambitions for the future and the steps needed to achieve this, career and personal issues should be on the agenda. Discussion of the student as an individual person with specific characteristics and desires in conjunction with attempts to relate these to characteristics of certain professions would seem to constitute a more fruitful start for a meaningful conversation with the student regarding his or her career (Patton & McMahon, 2006; Wijers & Meijers, 1996). Work and life experiences of students are crucial in this respect (Hodkinson & Sparkes, 1993). As Hodkinson (1995) addresses, young people’s career choices or decisions are very context-related and cannot be separated from family background, culture and work or life histories of students. Meaning-making of students can only be understood in terms of their own work and life histories, wherein identity has developed and evolved through interaction with significant others, and with the culture in which the subject has lived and is living. The question that arises is whether teachers are capable enough to integrate these work life histories of students into career conversations, to start a fruitful dialogical conversation in which personal experiences of the student are more important than what the student has to do for school or what his or her progress at school is (Hodkinson, 1995).

Another notable finding was that relatively little was done to stimulate reflection on the part of the student and that feedback was rarely provided at different levels. When teachers asked students questions, these were mostly aimed at obtaining formal information and not intended to invite the student to reflect upon his or her career-related experiences, feelings or thoughts. Experiences of the student were rarely used to start a process of reflection or meaning-making. Furthermore, most of the feedback provided to the student was provided at the level of the task. Feedback at the task level may be preferable in situations where students must learn to use an instrument (Hattie & Timperly, 2007), but is certainly less important when the goal is...
to increase self-management and reflective skills of students in relation to their personalities and ambitions.

Finally, many of the teachers were found to act in a dominant manner during the career conversations. Little was done to stimulate agency or self-directedness on the part of the student. Teachers spent a lot of their time either explaining or asking for information; students rarely asked questions. When the goal is to stimulate personal development planning and self-directedness of students in terms of career processes, this lack of focus on the stimulation of self-directedness is an unwanted situation (Peavy, 2000). Students should somehow be given more opportunities to influence the conversation and ask questions. There is, however, discussion in the literature on this topic. As Kidd (1996) emphasised, for example, guidance workers should not only be facilitators but should also be able to diagnose and make judgements, and help students or clients to take steps and make certain decisions. The question is to what extent a teacher in vocational educational or other forms of education can be expected to direct the student’s learning process and what the balance between autonomy and control of the conversation should look like.

The findings have several implications for actual practice. If teachers want to initiate a career dialogue focusing on the individual, actual career issues (as well as personal issues) should be given a more central role on the agenda than currently appears to be the case. Reasons for not focusing on these issues should be investigated and discussed with teachers, along with directions on how this situation can be improved.

Also, our data show that in career conversations the traditional education structure and culture still comes through: lots of instruction, giving and asking of information, instrumental use of personal development plans and portfolios, and very little emphasis on reflection and agency. When schools and/or teachers really want to stimulate greater self-directedness on the part of students, it would appear that teachers must change their role from that of a traditional teacher to a facilitator. The training of particular skills or techniques for this purpose (see also King, 1999) could help increase teachers’ ability to analyse their own behaviour using, for example, video feedback or peer coaching sessions. The question arises, however, whether training or instructing teachers for career conversation is enough to prepare them for their new roles, as these might also challenge their professional identity or the culture and structure of their school.

The present study has some limitations. To start with, only career conversations with first-year students in four competence-based vocational education schools were analysed. The present results therefore cannot be generalised to all levels of education in the Netherlands or to other countries.

Furthermore, the results showed many differences between teachers, not only with regard to the activities undertaken during career conversations but also with regard to the content of conversations and teacher–student interpersonal behaviour. Individual differences between teachers were not investigated in great detail, which means that consideration of just why practices of teachers differed could be an important topic for future research. The amount of experience or training for the conduct of career conversations may play a critical role, for example (King, 1999). Teachers’ own beliefs and goals for career guidance (which presumably relate to their more general life attitudes and ideologies) may also play a role in addition to teachers’ degree of self-efficacy with respect to career guidance (Lent et al., 2006). School culture may play a role, as the schools represented four very different
educational sectors. The facilitation of teachers in terms of time and other career guidance resources most certainly differs between schools. Future research could consider teachers’ perceptions of their career guidance role, the objectives pursued for this purpose, the support provided on this front by the school management, the embeddedness of career conversations in a broader guidance system and the degree of experience and training which teachers with career guidance tasks have.

Another limitation of this study relates to its focus on observations of career conversations between teachers and students. This information, for example, was not (yet) related to student outcomes, such as the development of necessary career competencies or tendency to drop out (e.g. Kuijpers et al., 2006). Student perceptions of the utility or quality of the career conversations have not been considered (Bosley et al., 2006; Howieson & Semple, 2000; Millar & Brotherton, 2001). Future research could combine the observation of career conversations with the development of student competencies and/or student perceptions of such career conversations in order to gain even deeper insight into the quality of career conversations.

Finally, the study described was a first exploration of the guidance processes taking place between teachers and students in a career development setting. The developed categories for coding this career guidance process could benefit from extended research and further validation and refinement.

Notes on contributors
Kariene Mittendorff is a PhD student at the Eindhoven School of Education (Eindhoven University of Technology). She also works as a teacher at Fontys University of Applied Sciences, educating students to become teachers in vocational education. Her PhD project deals with career guidance in vocational education and focuses specifically on the conduct of career conversations and their effect on career competences of students.

Perry den Brok is associate professor at the Eindhoven School of Education (Eindhoven University of Technology). His research focuses on students’ and teachers’ perceptions of teaching and the classroom environment, and teaching in diverse classes. He is secretary of the Netherlands Educational Research Association, European Editor of the Learning Environments Research journal, and board member of various journals.

Douwe Beijaard is professor of Professional Learning in the domain of teaching and teacher education at the Eindhoven School of Education (Eindhoven University of Technology). Beijaard started his career as a secondary school teacher. He was and is (executive) member of editorial boards of several scientific journals. His current research addresses the professional identity, quality and development of (beginning) teachers.

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