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Crossing horizons: Continuity and change during second-career teachers' entry into teaching

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Abstract

Findings are reported from two studies examining from which specific backgrounds and in which ways second-career teachers make the transition to teaching. The transfer of existing competencies to teaching is shown to involve a challenging interplay between experiences of continuity and change. Continuity was found at the level of beliefs. Change predominated at the level of the work environment. Continuity as well as change were experienced at the levels of behaviour, competencies, identity and mission. Several aspects of career changers' workplace learning are identified which deserve special attention in designing and implementing alternative certification programmes.
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1. Introduction

Throughout the world, alternative certification programmes (ACPs) are being developed to combat teacher shortages. As these programmes proliferate, one may wonder what they actually contribute towards solving the problem of teacher shortages. Even if ACPs generate an influx of new teachers, an important question is whether they stay in the profession. As several authors, notably Ingersoll (1997, 2001), have signalled, a "revolving door effect" is at work, meaning that career changers

who went into teaching may in the longer run disappear again from the profession. This leads us to the question whether abridged teacher education routes such as ACPs, which often consist primarily of workplace learning, offer career changers adequate opportunities and support to make a successful transition to teaching, given their personal backgrounds (cf. Chin & Young, 2007).

An important assumption underlying ACPs is that career changers are able to attain professional teaching competence within a shorter time span than students in regular preservice programmes. The idea is that their earlier experiences in training, work and life generally should enable these career changers to transfer the competencies and knowledge they acquired earlier, to teaching. As we shall discuss below, this assumption is called into

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question by the scarce available evidence about career changers' experiences while learning to teach. If we use the term career changers, who are we talking about? Eifler and Potthoff (1998) concluded from a review of 40 studies on ACPs in the US that the definition of "non-traditional teacher candidates" needs clarification. The picture emerging from their review is one of persons well over 25, possessing substantial life experience resulting from previous careers and raising children, which enables them to bring important assets, such as maturity and expertise to teaching. Zeichner and Schulte (2001), who examined the peer-reviewed literature on the effectiveness of ACPs in the US, confirmed the lack of a shared definition of the term "non-traditional" when referring to teacher candidates. They also concluded that there is almost no evidence-based knowledge about the conditions influencing the outcomes of ACPs and call for research targeting the relationships between programme characteristics and programme outcomes. Since then, a few studies have demonstrated specific relationships between ACP characteristics and graduates' attrition patterns (Shen & Palmer, 2005), as well as between beginning teacher turnover and different "induction packages" (Smith & Ingersoll, 2004).

Given this state of the art, we feel that, if we want to promote retention and professionalism in the graduates of ACPs, there is a need to know more about career changers' backgrounds and about how these programmes equip them to become teachers. In this article, we report about two small-scale studies of ACPs in secondary education in the Netherlands. The purpose of these studies was to gain an in-depth understanding of second-career teachers' backgrounds and the experiences involved in their transition to teaching.

In the first study, six experienced teacher educators were consulted about what they viewed as the characteristics defining second-career teachers and their specific backgrounds. We will refer to this study as "the supervisor study". The research questions for this study were:

1. What are characteristic differences between second-career teachers and first-career teachers, when they enter a teacher education programme?
2. What are characteristics in which second-career teachers differ among each other?
   The findings from the supervisor study helped us to identify the respondents of the second study,

which will be referred to as the "career-changer study". Eight second-career teachers participating in ACPs were interviewed in depth about their biographies and their experiences during the transition to teaching. This study began by checking to what degree the respondents fulfilled the characteristics found in the supervisor study. It then focussed on the following research questions:

3. Which experiences of continuity and change do career changers report during their transition to teaching?
4. In what respects do career changers experience their teacher education programmes as supportive for the transition to teaching?

In the following sections, we will first describe the context in which ACPs were introduced in the Dutch system of teacher education. Then, we will introduce the theoretical framework used for studying career changers' transition to teaching. On this basis, the design and the findings of both studies are presented. Finally, we will discuss implications for teacher education and make suggestions for further research.

2. Context

In the USA, where alternative teacher education has a history of more than 20 years, the concept of ACPs or "alternative routes" has varied meanings (McCabe, 2004; Zeichner & Schulte, 2001). In the context of Dutch teacher education, "alternative" refers to programmes adapted to adult students with a variety of life and work experiences (Bolhuis, 2002).

Teacher education for the Dutch secondary education system is organised in fulltime as well as part-time programmes in 55 school subjects, arranged in seven clusters in general and vocational education: languages, natural sciences, social sciences, health, arts, technology and agriculture. These programmes are provided by a relatively large number of institutions, most of which cater for a specific region: seven non-university institutions, which educate teachers for the lower strata of secondary education and five universities, which educate teachers for the upper strata. The non-university institutions offer 4-year undergraduate programmes, in which subject study and pedagogical education are integrated. The universities offer

1-year postgraduate programmes with a specific pedagogical emphasis.

Since 2000, the Dutch government, reacting to growing teacher shortages has taken several measures—in cooperation with trade unions and employers in education—to encourage adults with a degree in higher education to enter teaching by participating in ACPs (Ministerie van OC&W, 1999a, 1999b). New alternative routes were introduced, consisting primarily of workplace learning (Brouwer, 2007). The participants in these ACPs form a quite heterogeneous group, which is on average much older than the students in regular preservice teacher education in the Netherlands. The career changers differ considerably in age (from 23 to 56 years), previous training, work and life experiences and ambitions on the labour market, and in most cases, their motivation to work in education is high (Inspectie van het Onderwijs, 2003, Section 2.1).

Until mid-2006, the Dutch ministry of education allowed participants a maximum study duration of 14 months, considering that only higher education graduates are eligible for participation. Since then, this period has been extended to 24 months. In most cases, ACP participants spend $2\frac{1}{2}$ days per week in a school, 1 or $1\frac{1}{2}$ days in a teacher education institute plus 1 or $1\frac{1}{2}$ days on independent study, individually or in groups. The ACPs involved offer tailor-made routes, in which participants can strengthen specific deficiencies identified in intake assessments. To this end, candidates formulate personal learning and development plans, write logbooks and produce portfolios to reflect on their experiences in workplace learning. In the college-based components of many programmes, small group work is the setting for peer mentoring. Also, teacher educators hold individual supervision meetings with their students.

Despite this tailor-made approach, evaluation studies yield mixed findings. Firstly, in participants' actual practice in schools, doing the work of teaching often overrides workplace learning (Brouwer, 2007). Secondly, the dropout rates appear to be high. Until 2005, 1.550 second-career teachers in secondary education have been certified. At the end of 2005, only 800 of those were at work as teachers (Ministerie van OC&W, 2005), which means that 48% of ACP graduates in Dutch secondary education were not or no longer employed in education. Such findings make it all the more relevant to study the learning processes second-career teachers go through.

3. Theoretical framework

In this section, we first examine the backgrounds of teacher candidates in ACPs and how their earlier experiences can affect their transition to teaching. We do so on the basis of studies of ACPs in the US from the last two decades that are relevant to our own studies. "Earlier experiences" is a broad concept covering a wide range of aspects, so in consulting the available research literature, we chose to focus in particular on career changers' experiences as they relate to: environment, behaviour, competencies, beliefs, professional identity and mission. These six aspects constitute the so-called "onion model" (Korthagen, 2004, p. 80), which we use to conceptualise second-career teachers' learning. This model helps us interpret the available evidence and theorise about the ways in which the transition to teaching may take place.

3.1. Second-career teachers' earlier experiences

In one of four large-scale survey studies, Chin and Young (2007) collected data from interns enrolled in 30 of California's more than 84 teacher internship programmes during 2001–2004. Of the total of 6.367 respondents, 67% answered most of the questions asked about their backgrounds and 29% answered all questions, allowing five distinct profiles to be generated by means of cluster analysis. Four motivational factors turned out to be most influential in the respondents' choice to participate in ACPs: the perception that teaching can best be learned by doing it; programme compatibility in the sense that a programme's mission and the communities it serves align with the intern's aims and desires to work in those communities; an ideal to serve young people or specific communities educationally; and material benefits, notably alignment of work schedules with candidates' life styles and perceived job security. Of the six profiles derived from the data, just one typically fit the category of "second-career seekers", which included 14% of the respondents. Of all respondents, the career changers were the oldest and earned the highest salaries in their previous work. Most of them were not parents and had no previous experience working with young people. Personal and intellectual fulfilment was their main motive to become a teacher.

Several studies indicate that second-career teachers' earlier experiences play a role in how they cope with the working conditions in their new

professional context. Eifler and Potthoff (1998), reviewing 40 studies of "non-traditional" students, showed that in this respect, career changers can draw on earlier experiences that taught them to adapt to new situations. In a mixed-method study, Richardson and Watt (2005) explored the reasons behind graduates' decisions to pursue teaching as a career in a 1-year preservice teacher education programme. The 74 career changers involved were more than aware that teaching would be psychologically and socially demanding. At the same time, they thought that teaching would be a career in accordance with their competencies, interests and future goals. Earlier experiences encouraged these feelings.

However, other studies showed feelings of frustration and stress in career changers during their transfer to a new professional environment. Freidus (1994), who sampled data from five cohorts consisting of 50 participants in two types of teacher education programmes, using case study methodology, quotes the words "I knew it would be hard, but I never dreamed it would be this hard" as echoing through the data (Freidus, 1994, p. 9). Other research confirms the occurrence of such feelings. For example, candidates were frustrated by the vast amounts of time required by teaching (Freidus, 1994; Novak & Knowles, 1992), by perceived inefficiencies of school bureaucracies (Eifler & Potthoff, 1998), by being a novice at a point in life when one may already have experienced a successful career and raised a family (Dill, 1996), and by stress in coping with the realities of an adjusted income and workload (Freidus, 1994; Powers, 2002). The work environment of the school may even inhibit the potential of career changers, as pointed out by Powell (1997), who explored a gap between what teachers want to teach and what they actually teach in his cross-case analysis of a first-career and a second-career beginning teacher.

Earlier experiences may also strongly affect the way in which second-career teachers behave in new situations. Gonzales Rodriguez and Sjostrom (1998), comparing in a qualitative study the professional beliefs and teaching behaviours of adult teacher candidates in "traditional" and "non-traditional" programmes ($N = 25$ and 18, respectively), observed that early in their experiences with teaching, second-career teachers demonstrated student-centredness in their behaviour, while beginning first-career teachers were more curriculum-centred. The second-career teachers involved were also more

aware of the consequences of their behaviour in the existing culture and politics of schools. Freidus and Krasnow (1991), investigating the needs and concerns of career changers in relation to their biographies, noted in their mixed-method study that the 20 second-career teachers involved were able to understand their professional roles quickly. Novak and Knowles (1992) investigated in their case study the influences of earlier life and employment histories on the thinking and practice of four beginning second-career teachers in elementary and secondary schools. They described how earlier experiences could help career changers set up organisational and management structures in classrooms and solve instructional problems. At the same time, some studies manifest the difficulties second-career teachers may have in dealing with "little people" and working with groups (Freidus, 1994; Madfes, 1989).

Most researchers agree that second-career teachers draw on valuable competencies and knowledge based on earlier experiences in previous careers. The competencies they bring into schools were shown to be quite diverse, such as problem solving, coping, and communicating with students, colleagues, parents and school administration (Chambers, 2002; Gonzales Rodriguez & Sjostrom, 1998; Haipt, 1987–1988). Mayotte (2003), exploring the perceived influences of earlier experiences of four career changers on their classroom practice, found second-career teachers using knowing-why, knowing-how and knowing-whom competencies developed in their first careers. Chambers (2002), studying the effects of previous successful careers of ten second-career teachers on their development as teachers by interviewing them, showed that the respondents felt proficient in the content area of instruction, in solving instructional problems, in curriculum design and in their approach to the task of teaching.

However, transferring competencies to teaching is not an automatic process. Eifler and Potthoff (1998) stated that the competencies second-career teachers bring from previous careers may not be the same competencies necessary for successful teaching. Madfes (1989), looking for alterations to teacher education programmes to better accommodate career changers, showed that eight second-career teachers recruited from industry into a special science teacher preparation programme, did not necessarily apply the content knowledge of their former careers to teaching.

Earlier experiences of second-career teachers may also influence their expectations and beliefs about children, as shown by Novak and Knowles (1992). Gonzales Rodriguez and Sjostrom (1998) found that career changers entering new professional environments had well-articulated reasons for choosing teaching, while first-career teachers showed doubts. Chambers (2002) described second-career changers perceiving themselves as different from first-career teachers in "a subtle but significant way". The respondents involved in her study believed they offered their pupils new perspectives, including a commitment to helping pupils to apply their knowledge to the real world, and a willingness to make use of innovative pedagogies such as application-based teaching. They expressed the value of connecting the classroom to the outside world. They saw themselves as adopting alternative pedagogies and engaging in educational reform.

However, transfer could also be problematic as far as beliefs are concerned, as shown by Freidus (1994). The three cohorts of participants ($N = 28$) involved in this qualitative study identifying motivations and concerns of second-career teachers, came with either the belief that they would have the autonomy to carry out own ideas in the classroom, or with the belief that the dialogue with mentor teachers would be part of the culture of school life. In contrast, the existing reality of isolation within the structures of traditional school settings came "as a form of culture shock" (Freidus, 1994, p. 14).

In some studies, the relationship between earlier experiences and professional identity is discussed. Bendixen-Noe and Reick (1995), examining in a comparative quantitative study the career development of 430 beginning secondary teachers in "non-traditional" and "traditional" programmes found that the second-career teachers exhibited more self-confidence and self-concerns. Gonzales Rodriguez and Sjostrom (1998) showed that second-career teachers perceived themselves as practitioners in need of time and practice, whereas first-career teachers perceived themselves more as students who needed to learn skills. Novak and Knowles (1992) noticed the influence of earlier experiences on the views that second-career teachers held of themselves as teachers. Other studies report about the personal qualities and strengths of career changers, i.e. they had developed a well-defined sense of self and an understanding of human nature through former work and life experience (Crow,

Levine, & Nager, 1990; Freidus, 1992, 1994; Freidus & Krasnow, 1991).

Several studies have shown that career changers often bring an articulated sense of mission and agency and a strong sense of commitment based upon earlier experiences to teaching (Bullough & Knowles, 1990; Crow et al., 1990; Freidus & Krasnow, 1991; Gordon, 1993; Powers, 2002; Resta, Huling, & Rainwater, 2001). In these studies, examples are reported of career changers who care a great deal about children, want to help young people, have the desire to make a difference in the lives of their pupils, are aware of social issues related to education, and show vocational mission, community service and personal commitment.

At the same time, a strong sense of mission can lead to disenchantment. Crow et al. (1990) claimed that second-career teachers can be grouped into three categories with respect to mission: "home comers", who see teaching as a turn to a career they had always hoped to enter; "converted", who consider teaching for the first time as a pivotal event that causes them to reconsider plans; and "unconverted", who have "achieved high status in other occupations", but quickly become "disenchanted with a teaching career".

On the basis of these findings, it can be concluded that earlier experiences do play an important role in career changers' transition into teaching. Yet, having earlier experiences, whether these relate to behaviour, competencies, beliefs, identity or mission, does not automatically imply that the transfer of earlier experiences into the new professional situation is self-evident and easily made. This means that the assumption underlying ACPs that earlier experiences enable career changers to attain professional teaching competence within abridged time spans is a problematic one.

3.2. Levels of change

From the literature reviewed above, it becomes apparent that career changers to teaching share specific types of earlier experiences, even though individuals may differ widely in how these experiences manifest themselves. The various aspects distinguished can be interpreted with the aid of the so-called "onion model" (Fig. 1), derived from the work of Dilts (1990) and Korthagen (2004). In this model, six levels are distinguished: environment, behaviour, competencies, beliefs, professional

identity and mission. Conceived as levels of change in personal development, they provide a framework, which can be used to try and understand the ways in which second-career teachers' different backgrounds and experiences may influence their learning during the transition to teaching.

At each level, second-career teachers bring with them earlier experiences and mental constructions based on these experiences. The outermost level in the ''onion model'' represents the second-career teacher's environment, i.e. both their former working conditions and the situations they encounter in their new context. The next levels are those of their behaviour and the underlying competencies, which also include knowing-how and knowing why. Further inwards, first the level of beliefs is situated. Beliefs regarding learning and teaching influence teachers' actions, and they can be deep-rooted and persistent (Fiske & Taylor, 1984, p. 171). The next inner level is that of (professional) identity, self-concepts and images about what kind of teacher someone wants to be. The deepest level of mission has to do with a person's sense of engagement in life and work. The level of mission refers to issues such as why the person decided to become a teacher, or even what he or she sees as his or her calling in the world. In essence, this level is concerned with what inspires a person and what gives meaning and

significance to his or her work and life. As can be seen in the above overview of the literature, all of these six levels are relevant in describing career changers.

One idea behind the onion model is that the inner levels determine the way an individual functions at the outer levels, but that a reverse influence from outside to inside is also possible. Another assumption underlying the model is that when people experience alignment between the levels, they feel what Csikszentmihalyi (1990) calls ''flow''. If, instead of alignment, there is inner tension, they will feel limited in their potential (Korthagen & Vasalos, 2005). We expect that alignment of the different levels is associated with experiences of continuity, as opposed to experiences of change.

4. The supervisor study

The supervisor study formed the basis for the career-changer study, in substance as well as method. We therefore report the design and the findings of the supervisor study and the career-changer study separately and consecutively. In accounting for the design of each study, we report on the instrumentation and the methods used for sampling, data collection and analysis.
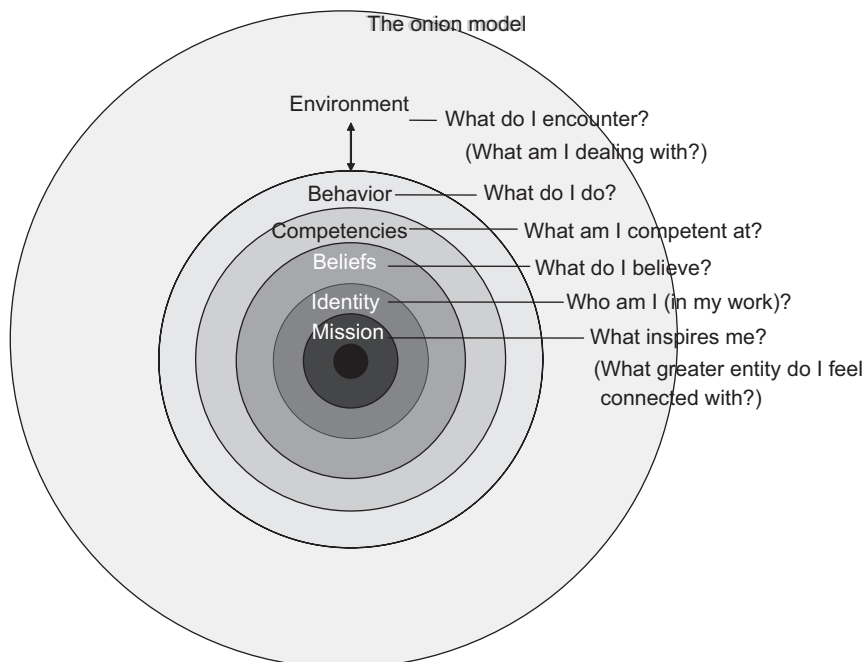

Fig. 1. The Onion Model (Korthagen, 2004).

4.1. Identifying second-career teachers

A suitable starting point for identifying specific characteristics of career changers entering teacher education was to consult experienced teacher educators working in ACPs. These supervisors were selected as respondents—rather than mentor teachers in the schools—because they get acquainted with a wider variety of candidates and usually have a broader view of the field of teacher education. Supervisors encounter most ACP participants in their daily work and this affords them an insider view of this new group of prospective teachers. From that vantage point, they could also inform us about differences with students in regular preservice programmes. This is why the first research question was phrased in terms of differences between these two types of participants. The second research question aimed at differences among career changers because of the diversity within this group known both from the literature and from teacher education practice.

In order to obtain the greatest possible variety of responses, six supervisors were selected who had at least 3 years of experience and were currently active in ACPs providing for either the upper or the lower strata of secondary education (they had not been second-career teachers themselves). From both these types of programmes, three supervisors were selected. They worked in three different institutions.

A semi-structured interview and a written questionnaire were designed as different ways of finding out how the supervisors perceived characteristics and earlier experiences of career changers. The interviews were meant to elicit perceptions and ideas originating from the supervisors' work experience, while the questionnaire contained characteristics of career changers found in the literature that we wanted to verify against the supervisors' work experience.

After an introduction, the supervisors were invited to voice possible differences and similarities between second-career teachers and first-career teachers. Another lead question was what motives and learning needs the supervisors remembered the career changers brought forward during their first contacts with them. In order to explore differences within the group of career changers, we asked the supervisors to produce a mind map of what they saw as "the ideal career changer" and to compare or contrast this with the characteristics they perceived in the career changers whom they actually encoun-tered. The supervisors' reactions were then probed by asking for examples of "strong" and "weak" career changers and what made out the differences between the two. In addition, we asked what earlier and recent experiences career changers reported to the supervisors and whether and how career changers could apply competencies acquired earlier in education. Finally, we asked the supervisors what images of education they saw career changers bring with them and if and how, in working with them, they differentiated between certain types of career changers.

The questionnaire contained 35 items describing possible characteristics of career changers derived from the following sources. From earlier research on ACPs in the Netherlands (Bolhuis, Doornbos et al., 2001; Bolhuis, Imants et al., 2001), we derived 16 characteristics of career changers' functioning in schools attributed to them by their supervisors. For example, one item drawn from this source was: "Career changers do not have a realistic image of adolescents". Six characteristics were developed on the basis of Thijssen's study (1996) of adult learning in corporate settings, for example: "Career changers are aiming at efficiency in their learning". Finally, our own experience as teacher educators yielded 13 characteristics focussing on earlier experiences in work, life and learning, for example: "Career changers are able to connect classroom situations with specific situations in their former work." Five out of the six supervisors found the opportunity to rate each of these items on 7-point scales and thus indicated to which extent they thought career changers differed from (a) fulltime students in regular programmes and (b) each other.

The interviews in the supervisor study were transcribed verbatim and analysed first using a within-case, then a cross-case approach (Miles & Huberman, 1994, pp. 90–142 and 172–177, respectively). The within-case analysis proceeded from describing verbally represented meanings to identifying and naming recurrent themes (Wester & Peters, 1994, pp. 118–119). The cross-case analysis was meant to ascertain how the supervisors viewed these themes. A theme was defined as recurrent, when it fulfilled the decision rule that four or more of the supervisors made statements about it. All the above analysis steps were carried out by two independent researchers. Where discrepancies occurred in their results, these were resolved by comparing, discussing and rephrasing the

career-changer characteristics gleaned from the data. The questionnaire data were used for deciding how applicable the 35 potential career-changer characteristics were, according to the supervisors. This was done by means of the following decision rule. Any item for which four or more of the supervisors scored on or one point away from either of the scale endings (on a seven-point Likert scale) was selected as clearly indicative of career-changer characteristics. The characteristics selected from the interviews, the questionnaires or both—on the basis of the decision rules—were used as a starting point in the career-changer study.

4.2. Characteristics attributed to second-career teachers

The interviews with the supervisors and their questionnaire data yielded ten characteristics attributed to second-career teachers as compared to first career teachers, presented in the first column of Table 1. In the second column, each characteristic is illustrated by one or two exemplary quotes from the interviews.

From the findings in Table 1, an image of ACP participants emerges distinguishing them markedly from students in regular preservice programmes in a number of respects. Second-career teachers bring an abundance of work experiences with them, from which they can and do benefit in becoming a teacher. Their competencies range from communication and pedagogy in working with groups through facilitating cooperation, organisation and management to doing research. Second-career teachers are willing to contribute to innovations in teaching, whereas student teachers in regular programmes are more resistant to pedagogical innovation. Second-career teachers are also more aware of the fact that they are employees of the school and that they are expected to contribute to the organisation as a whole. In the course of life and work, second-career teachers have developed behavioural routines, which in some cases seem hard to change. Second-career teachers often have children. Those who do, derive from their experience as parents valuable communication skills in dealing and working with adolescents.

From the interview accounts, a tentative typology could be derived of how supervisors distinguish between second-career teachers entering ACPs. The five types are presented in the left-hand column of Table 2 together with the distinguishing characteristics

Table 1
Comparison of first-career and second-career teachers

Characteristics attributed to second-career teachers	Exemplary quotes from supervisor interviews
1. They have work experience.	People entering an ACP have an abundance of work experiences, which for me, automatically means that they are older.
2. Before entering the programme, they have made a conscious choice for working with children.	For second-career teachers, working with children is a motive that plays an explicit part in their decision to participate in an ACP. For students in regular programmes, it often works the other way round. They choose the teacher education programme in the first place, and working with children then becomes a result of that choice.
3. They have motives for entering teaching, based in part on earlier work experiences.	Now, take P. He's from business and tells me that he has missed contact with people and for that reason he chooses to work in a school, because of the community feeling.
4. They go about learning in a focussed way.	They are able to set their own goals, they don't want to waste any time.
5. Considering the tension between being in training and being an employee, they take responsibility for their own learning.	Second-career teachers dare to make choices, they negotiate, they join us as captains at the steering wheel of our ACP.
6. They possess competencies acquired elsewhere, especially in the domain of interaction.	They possess communication skills. Which means you can just let them loose on parents, colleagues, pupils and so on.
7. They have non-recent experiences as a pupil with frontal, teacher-centred schooling and are therefore open to instructional innovation.	I find the traditional ideas about learning far more entrenched in regular teacher education students, who just came from school themselves. Someone like T. is a great example [of the opposite]. They [second-career teachers] probably have a lot more experience with other kinds of learning.
8. Because of earlier experiences in work and life, they are able to determine their place in the school organisation more quickly and precisely.	People from the business sector also work in education with a good eye for organisation. … They don't stay put in a muddle with their pupils and their lessons, but they quickly

Table 1 (*continued*)

Characteristics attributed to second-career teachers	Exemplary quotes from supervisor interviews
	conclude they can't solve certain things on their own and will address them on the level of the organisation. They just have a grip on that interaction. A regular student still has to learn these things.
9. They are shaped by life experience, i.e. have developed behaviour patterns which are sometimes hard to change.	They all have their own individuality, their own patterns and routines, you can't change them, you have to deal with that.
10. They have experience in raising children.	V. herself has adolescents at home growing up. From her life experience with adolescents, she also has ideas about the way to explain things to them.

used by the supervisors (middle column), and illustrative quotes from the interviews (right-hand column).

Type 1, the regular teacher education student beginning to work before certification, and Type 2, the parent, the supervisors agreed, were essentially first-career teachers, because they had little work experience. Type 3, the reintegrating person, was regarded by the supervisors as a "difficult" and "vulnerable" group. They did not really feel equipped to support the specific needs of these teacher candidates. Type 4 comprises people with some kind of expertise in education, developed either as a certified or as an uncertified teacher. To the supervisors, the teacher candidates in this group presented fewer problems, because they had a certain acquaintance with education. Type 5, the person coming from a sector other than education, was considered by the supervisors to be "the real career changer" or the "career changer in a strict sense". These candidates were aged above 32, possessed substantial life experience and belonged to the group targeted by legislation opening up teaching for people from other professions. In this group, the challenge facing the ACP participant of transferring competencies acquired earlier to teaching plays a prominent part and this, the six supervisors reported, involves an abundance of previous experiences. To address this issue, the supervisors stated, they themselves "simply miss deeper insights in the earlier experiences of career

Table 2
Differences among second-career teachers

Types	Distinguishing characteristics used by supervisors	Illustrations given by supervisors
1. Regular teacher education student	Without work experience	Student from a regular preservice teacher education programme, prematurely employed as a beginning teacher, entering an alternative route because of work schedule
2. Parent	Without work experience	Parent, usually a mother, after having raised children, new in the labour process
3. Reintegrating person	With non-recent work experience outside education	Person who has been ill or unemployed for at least one year, involved in reintegration in the labour process
4. Person with teaching expertise	With work experience and/or competence in teaching	Person who has experience in another educational setting. Subtypes mentioned:
		(a) "seeking a second-subject degree": certified teacher employed in a school who wants to acquire a degree in a second subject
		(b) "updater": certified teacher who first pursued another career and now wants to update his or her teaching competence
		(c) "someone with teaching expertise from a different sector": person without teacher certification having worked in a university, occupational or adult education, a high school or an elementary school.
5. Person from outside education	With recent work experience outside education	Person with relevant work experience coming from another professional domain than teaching

changers". One of them sighed: "I think we do a bad job in linking previous experiences with their actual experiences. To be honest, I think I

haven't interested myself enough in their previous experiences.''

5. The career-changer study

Considering the findings of the supervisor study, we decided to focus in the career-changer study on second-career teachers in a strict sense, i.e. those teacher candidates possessing substantial experience in life and work outside education (type 5 in Table 2). After accounting for the design of the study, we report in the findings sections from which backgrounds the career changers in our sample came to teaching and how they experienced the transition to their new profession. Separate attention is given to the role of their ACPs in this process.

5.1. Exploring second-career teachers' transitional experiences

In this account of the design of the career-changer study, we first explain how the concepts used in formulating research questions 3 and 4 were operationalised in the instruments. Then, the procedures employed for sampling, data collection and analysis are described.

On the basis of the existing literature, we were sceptical about the often heard assumption that career changers can easily make the transition to teaching because of their earlier experiences in work and life. To explore this assumption, it would be necessary to generate in-depth knowledge of how, during the transition to teaching, processes of personal development unfold. We therefore limited our number of respondents so that data of a sufficient qualitative wealth could give us insight in the career changers' ''lived reality'' as aspiring teachers. This should enable us to determine in which respects and in which ways the characteristics attributed to them by the supervisors influenced their becoming a teacher.

We decided to conduct *semi-structured biographical interviews*, structured on the basis of the findings from the supervisor study as well as the onion model. In-depth interviews were held with eight second-career teachers for $1\frac{1}{2}$h each. During the interviews, we wanted to leave the respondents free to report any personal information and current experiences in becoming a teacher that they considered relevant. To achieve this, specific opening questions were used as well as probing questions depending on the respondents' reactions. The interviews covered the following main themes.

- *Personal backgrounds*
  In order to clarify with which personal backgrounds they entered their ACP, we first asked the career changers about their previous education, work, motives for becoming a teacher as well as their images of the teaching profession.
- *Continuity and change during the transition to teaching*
  The second part of the interview covered experiences of continuity and change during their career change. We asked the career changers to elaborate on commonalities and differences, which they encountered between their earlier professions and teaching by drawing comparisons between these different work contexts. On the basis of these comparisons, we also probed how they experienced their transition to the teaching profession on each level of change as distinguished in the ''onion model''. While this part of the interview was loosely structured, the interviewer aimed at receiving accounts of what, during the transition to teaching, was familiar, slightly familiar or new to the career changer at each level of change.
- *The contribution of teacher education*
  In connection with each of the above two themes, we asked the career changers how the ACP in which they participated influenced their learning as a teacher. To explore this issue, we asked them to elaborate on how they personally experienced situations and activities during workplace learning and in the college seminars.

At the end of the interviews, we checked explicitly if the career changers themselves considered the ten entry characteristics identified in the supervisor study applicable. To this end, a *written questionnaire* containing the characteristics presented in Table 1 was administered. This procedure served to verify the respondents' personal backgrounds against the findings of the supervisor study. Forced-choice items were used with response categories ''yes, applicable'' or ''no, not applicable'' (see for the items Table 3 in the next section). We also quantified to what degree their ACPs and the personal support the career changers received from their supervisors met their expectations. For this purpose, five-point scales were used (see for the items Table 4 in Section 5.4). The respondents filled out both parts of the written questionnaire in the interviewer's presence, so that items could be clarified when necessary.

Table 3
Entry characteristics as rated by second-career teachers

Entry characteristics	Frequencies "applicable" ($N = 8$)
1. I have work experience.	8
2. Before entering the programme, I made a conscious choice for working with pupils.	8
3. My motives for entering teaching are based (in part) on earlier work experiences.	6
4. I go about learning in a focussed way.	8
5. Considering the tension between being in training and being an employee, I take my responsibility for my own learning.	8
6. I possess competencies that I acquired elsewhere, especially in the domain of interaction.	8
7. I have non-recent experiences as a pupil with frontal, teacher-centered schooling, which makes me open to instructional innovation.	7
8. Because of my earlier experiences in work and life, I can determine my place in the school organisation more quickly and precisely.	7
9. I have life experience: I have been shaped and I have developed behaviour patterns which are hard to change.	2
10. I have life experience: I have children.	4

Before selecting and contacting the respondents, both the interview protocol and the questionnaire were piloted among teacher candidates with backgrounds similar to those of our definitive respondents. This enabled us to clarify some questions and items and to develop an interview protocol which remained within $1\frac{1}{2}$ h' time.

In *sampling* and *data collection*, we took the following course. Even though this is a small-scale study, we sought to maximise our chances of collecting generalisable data. We did so by using location, gender and age as sampling criteria. Accelerated teacher education programmes for secondary education situated in four different regions of the Netherlands were approached. The programme coordinator in each region was asked to select at random one female and one male ACP participant aged 32 years or above. This age limit was chosen on the basis of nationally representative data, which showed that most candidates in Dutch alternative routes were older than 32 (Inspectie van het Onderwijs, 2002). The participants selected by the programme coordinators were contacted by telephone and/or email and asked for their coopera-

tion. All agreed at first request, except in one region, where no male respondents could be found who had sufficient time available. This is why eventually five women and three men participated in the study. The respondents turned out to be aged 39 on average. Three interviews were conducted by the first author and five by the second author. In no case were the respondent and the interviewer from the same institution.

The data analysis was conducted as follows. All biographical interviews were first transcribed verbatim. The resulting texts were studied by three researchers independently (the first author studied all the interviews; the second and third author each studied four different interviews). On this basis, following a grounded theory approach (Glaser & Strauss, 1967) each researcher developed a proposal for response categories in which the information in the transcripts could be meaningfully structured. Discussion of these proposals then yielded the categories in which all interview responses were ordered in the form of summaries and quotations. The number of responses falling within each category was tallied. A separate category was required to contain at least five responses.

In addition to this cross-case analysis of all the interview data, specific within-case analyses were performed. A within-case analysis of the first interview part made it possible to compose individual portraits of the respondents. Within-case analyses of the second interview part enabled us to find out whether continuity or change dominated the career changers' development at the different levels of the onion. From the questionnaire data, descriptive statistics were generated.

5.2. Second-career teachers' backgrounds, motives and images of teaching

The teacher candidates in this study entered their ACPs in large part possessing the characteristics attributed to them by the supervisors. This finding will first be detailed here. Then, we report the respondents' experiences of continuity and change during their transition to teaching. Finally, their perceptions of how they were supported by their ACPs are presented.

5.2.1. Entry characteristics
From the questionnaire, it became apparent that the majority of respondents possessed the first eight entry characteristics identified in the supervisor

Table 4
Support experienced in alternative certification programmes

Cf. entry characteristic[a]	Questionnaire item	"Applicable" ($N = 8$)	
		Average	Standard deviation
1.	My teacher educators do something with my earlier work experiences.	2.6	1.1
2.	In the programme, my teacher educators do something with my conscious choice for working with pupils.	3.3	1.2
3.	In the programme, my teacher educators do something with my motives for entering teaching.	3.1	1.1
4.	My teacher educators adjust the programme to what I want to learn.	3.8	0.7
5.	My teacher educators give me real opportunities for being responsible for my own learning.	3.1	1.5
6.	My teacher educators adjust the programme to the competencies I possess because of my earlier experiences.	2.0	2.0
7.	My teacher educators adjust the programme to my wish to teach differently from what I experienced myself as a pupil.	3.0	3.0
8.	My teacher educators do something with the fact that I quickly find my place in the school organisation.	2.9	2.9
9.	My teacher educators do something with the fact that I have sufficient self-knowledge.	3.5	3.5
10.	My teacher educators do something with my experience in raising children.	2.0	2.0

[a]Cf. Tables 1 and 3.

study (cf. Table 1). As Table 3 makes clear, the career changers sampled in this study deviated from the characteristics found in the supervisor study only on the items about behaviour patterns and parenting. Most of our interviewees denied having developed behaviour patterns that were hard to change (item 9). This might be due to the social undesirability of the item wording. Also, half of our respondents were parents (item 10).

5.2.2. Winding roads

In their biographical interviews, the career changers reported having followed winding roads in their earlier professions and lives. Teaching offered them a perspective of finding a relatively stable position after more or less frequent changes of direction in life and work. The respondents were: a former project manager in the IT industry, who went to work as a teacher of business economy; a former solo hoboist, who became a music teacher; a former cultural manager, now a teacher of geography; a former communication consultant, who moved to being a teacher of history; a former conference manager, who began to work as a teacher of German; a former chef de cuisine, now a teacher of household management; a social worker who became first an international transport representative, then a teacher of French; and a home coach, who became a teacher of health care. The heterogeneous backgrounds of our respondents are illustrated by the following extracts from two of the portraits written about each person.

The former international transport representative, teacher of French

After graduating as a social worker, this career changer moved to Paris, where he married a Frenchwoman and lived for 19 years. Because in France, his degree proved to be of hardly any practical value, he worked in a hotel during the first few months. There he was dismissed during his trial period. Through an employment agency, he had an offer from an international transport firm. In retrospect, he felt the transport sector was a bad one to be employed in, as it had been under pressure of reorganisations for years. Nine years after his move to France, he became unemployed for two years, receiving no allowances anymore during the last months. During the following ten years, he had a high commercial position in the French transportation sector, acquiring large contracts for his firm. Then he moved back to the Netherlands with his family, where he represented an international parcels delivery company for three years. During this

time, he discovered in himself an early affinity with teaching and began his career change.

The former home coach, teacher of health care
After graduating from secondary school, the home coach trained as a social worker, but instead of graduating for this profession, she worked with drug addicts in a health care job and with asylum seekers in migrant centres. It was in this last job that she repeatedly found herself taking on teacher duties, working with Moroccan and Turkish women. Still seeing herself as a social worker, the idea of becoming a teacher did not occur to her until later. At the time of interviewing, she combined 15 h of teaching per week with her earlier occupation as a home coach of mentally handicapped people. She chose this combination, because as a divorced mother she could not balance her budget with 15 h of teaching alone. Being a fulltime teacher offers her the perspective of financial stability and the opportunities she needs to care for her children.

5.2.3. Motives and images of teaching
In the motives, which the career changers reported for entering teaching, the individual differences between them become apparent, depending on their life and work circumstances. The questionnaire results about motives for entering teaching and wanting to work with children (see Table 3, items 3 and 2, respectively) became understandable through interview statements in which the second-career teacher expressed that "something has always has [sic] been in me", meaning aspects of the profession such as teaching lessons, love or passion for the subject matter or social aspects of being a teacher. These statements have a bearing at the levels of identity and mission.

Seven career changers reported that they based their image of the profession partly on earlier experiences as a child. Only the former home mentor of socially handicapped adolescents described her image of the profession more in connection to recent work experiences. Six of these seven respondents referred to an image of a teacher as transmitter. Subsequently, their own practical experiences in teaching had shown them the need to adjust such images to those of the teacher as a facilitator of learning. These adjustments were sometimes experienced as drastic. These interview statements were confirmed by questionnaire item 7 about changes in early images of teaching. The

former cultural manager is an exception in this respect, probably due to his childhood experiences in a reform-oriented school.

5.3. Continuity and change in second-career teachers' development

In this section, we describe how the career changers in this study experienced working and learning as a teacher in contrast to their earlier work and lives. The categories developed during the data analysis revealed five themes of continuity and change in their personal development, which we will illustrate by representative quotes from the interviews and combined with the questionnaire findings in Table 3.

5.3.1. Complexity and workload
Six of the eight respondents reported about changes at the level of the demands of the new professional environment. They reported that for them, teaching was complex and quite different in nature, compared to their previous jobs. They also experienced the job as "sometimes heavy". These experiences had to do specifically with changes in the rhythm of their day, both at work and in their private lives, in their daily routines and in the demands on their flexibility. The former international transport representative said for example:

> Teaching is much more complex and much more tiring than I have ever experienced before, in my previous jobs. Nowadays I'm working even in the evening. My wife and I had a quarrel about that. You are always busy with school, she said, even when you are home, you are fixed on school.

The former chef de cuisine, too, experienced a change in his daily rhythm, but he reported feelings of relief. Teaching was less hectic to him and gave more structure to his life than he was used to in his earlier work.

5.3.2. Dealing with groups of adolescents
Because of their varied backgrounds, the career changers brought a wealth of "knowledge about people" with them, which benefitted them in their transition to teaching and their functioning in the school organisation. As apparent from the questionnaire findings, they all felt they already possessed useful competencies in the domain of interaction (item 6). This experience of continuity went hand in hand, however, with experiences of

change related to specifics in the work of teaching. Teaching, the career changers felt, placed drastic new demands on them, when it came to managing adolescents.

Seven respondents reported experiencing continuity at the levels of behaviour and competencies in managing groups, because they had developed and used skills in working with teams. Yet, the relevant concrete behaviours and skills they mentioned in relation to teaching all had to be adapted to the teaching setting: presentation skills; skills in establishing learning goals and working up to a certain goal with a group; being able to survey a group; being able to empathise with different individuals while working with a whole group; being able to distinguish between pupils; making eye contact deliberately; dealing with lively or sometimes malicious behaviour; using humour in interaction deliberately.

What the career changers experienced as different in dealing with adolescents was that their behaviour was ''intense, pure, honest, direct, spontaneous, confronting, not as sly as adult behaviour''. All respondents reported feelings of tension being aroused by adolescents' behaviour. For instance:

> It touches me personally. It evokes my feelings of care. I feel responsibility for their development. It absorbs all my energy and I feel vulnerable. Sometimes it is scary. I have feelings of being disarmed. Their outspokenness makes me feel good.

In dealing with the appeals made on them by pupils, the career changers sought ways to adapt their own behaviour. For example, the former manager said:

> Working with people at the age of adolescents triggers different problems. Teaching people something, I have gone through that, but at a very different level. Now, I feel much more nearness to them, compared to my former clients in business. Yes, I have client contact, that's the same. Nevertheless, the client contact in school is much more intense. Really much more intense, it has a personal impact on me.

5.3.3. Sharing subject-matter expertise

Six of the interviewees reported continuity in how they could use subject-specific expertise from their earlier professions in the classroom. In their stories about transferring the kinds of competencies involved, also the levels of beliefs and mission were surfacing, as they expressed their willingness to pass on expertise from their earlier professions to their pupils. For example, the former home coach told us:

> Last week I had to substitute for a colleague. I didn't know what to do in class, so I just sat down. … Well, they wanted to know about what it is like to be in an apprenticeship [as a home coach]. So I told them something about my previous job. And they were listening attentively. I felt deeply satisfied being able to pass on my experience. They want to know what it means and I can tell them. I can tell them about certain values. I tell them being a home coach is not only dealing with children in a friendly way. You must have patience, you must be able to listen.

The former project manager said:

> The connection I make with business life, which I can make on a daily basis, that is important. Look, eighty percent of my pupils will have a future job in business. And afterwards, looking back, they will remember: Oh that's what Mrs. E. told us.

5.3.4. Autonomy and team work

As apparent from the questionnaire findings, the career changers in our study felt they could determine their place in the school organisation relatively quickly and precisely (item 8). However, in the contacts with the new team of colleagues, all but one reported experiences of change, which had to do with the large extent of autonomy allowed to them at work. This touched on the level of professional identity in work. Depending on different former experiences, the feelings reported here ranged from disappointment to relief. The former communication consultant said:

> Working without a team, being independent, that's a change. I have always worked in teams. I was so used to working in a team, standing together for something, and working towards a result together. That's not the feeling I have here. We should work together, though, in our school team, we should do that, but I don't experience it, and I miss it.

The former cultural manager stated:

> What I experience is: in the classroom you are the director, the moviemaker, you are the one who decides what happens, what to do… observing a

video, giving an instruction, giving them a group assignment. There is nobody who sticks his nose into everything. In my previous business work, if you intended to do something, you always had to negotiate. You could never be the chef in your own kitchen.

All of our respondents reported experiences of continuity in feelings of self-confidence, they knew themselves because of all the experiences they had in life and work. They displayed a certain basic self-confidence, a kind of "ego-strength" (cf. Freud, 1972). The former cultural manager stated:

I have insight in human nature, that's what I bring along. But the most important thing is, once you know yourself, and you know yourself because of all the experiences you have had in life and work … once you know who you are and you know your weaknesses and strengths, you can project yourself in the classroom. … My self-confidence, that's what I bring with me.

5.3.5. Long-standing aspirations

All career changers reported continuity in long-standing and deep-seated aspirations to make socially useful contributions through their work. The former project manager, for example, wanted to show her pupils that economics is a real-life subject. The former solo hoboist wanted to pass on a deeper awareness of the values of other cultures. The former chef de cuisine wanted to pass on his passion for cooking. The former cultural manager wanted to pass on the message "Don't be afraid to be critical". Four of the career changers stated that in this respect, teaching offered them more satisfying opportunities for contributing socially than their earlier work. However, the other four respondents also reported feelings of vulnerability and disappointment in connection with their ideals. For example, the former international transport representative said:

Certain behaviour, to deal with that… I can give you a few examples. Pupils who are offending you in a very bitchy way at a particular moment, who treat you without showing any respect, who are provoking you… being offended in such a bitchy way that I have to take the pupil apart and have to say "Listen, this is not the way we treat each other here… this is not the way I want to be treated", that is very unpleasant. It absorbs all my energy (…) and it makes me feel vulnerable.

5.4. The contribution of teacher education

In this section, we report in what respects the career changers experienced their ACPs as supportive for their transition to teaching. In this account, questionnaire and interview findings are combined. Table 4 contains the questionnaire results.

The response percentages for the items 1–9 in Table 4 range from 75% to 100%. For item 10, a non-response of 50% was found. This represents the fact that half of our respondents were parents.

5.4.1. Adjusting ACPs to second-career teachers' backgrounds, motives and images of teaching

As a group, the second-career teachers were moderately positive about how their teacher educators took account of their backgrounds, motives and images of teaching, as expressed in their wish to teach in ways different from what they themselves had experienced as pupils, in their motives for entering teaching and in their conscious choice for working with pupils (see in Table 4 the averages found just above the middle of the five-point scale on items 7, 3 and 2). The second-career teachers varied considerably in their desire to teach in ways different from what they themselves had experienced as pupils (see in Table 4 the considerable standard deviation found on item 7). In the interviews, five career changers reported that their ACPs paid attention to their backgrounds, motives and their images of the profession, but three of them noted that this attention was restricted to the beginning of the programme.

5.4.2. Addressing second-career teachers' individual learning needs

The second-career teachers' most favourable judgments about the contribution of their ACPs referred to how their teacher educators adjusted the programme to what they wanted to learn and to the opportunities they were given to build on their self-knowledge and take responsibility for their own learning (see in Table 4 the averages found well above the scale middle on items 4, 5 and 9). The interviews showed that the respondents' ACPs varied to a large extent in design and in their approach to the phenomenon of teaching as a second career. Seven interviewees reported about the good intentions they perceived in their teacher educators to address their individual learning needs. From their side, they specifically mentioned a wish to deepen their knowledge in relation to their

teaching experiences in the following areas: pedagogical content knowledge (3 times), classroom management (4 times) and dealing with adolescents (5 times). In addition, they experienced practicing with real-life situations as supportive, for example trying out activity settings and formats for working with pupils (3 times). Seven career changers mentioned different forms of peer learning as supportive.

The respondents' interview statements were permeated by a tendency that can be described as: "the more concrete, the better". Those career changers who had completed a basic skills training before entering teaching indicated having experienced this as very supportive (3 times). One respondent said—unsolicited—that she would have preferred such a training. Three second-career teachers indicated that they wished to receive more concrete and personally focussed feedback and suggestions. One of them said:

> I guess you got a taste of how engaged I am as a person in everything I do. That has a strong influence on my behaviour. … And yet, I have to figure out a lot by myself. To really touch upon that, you need almost personal mentoring. They don't go as deep as that in the programme. When we talk about my style, the conversation soon shifts to something you have in common. And then there's the fact that they don't see you functioning personally in a classroom at all. (Interviewer: Would you like that?) Yes, for instance with a video. I talked to another pupil recently, who had made a video recording. … I think that by viewing videos together, you can better analyse what your current proficiency is.

5.4.3. Transferring competencies acquired earlier to teaching

In the interview statements, all our respondents considered it important or very important that their teacher educators did something with the competencies they brought to teaching. As the questionnaire showed, however, they valued least what their teacher educators actually did to support them in transferring these competencies to teaching. These were competencies acquired in work and particularly in parenting (see in Table 4 the averages found on items 6, 10, 1 and 8, two of which are under and two of which are just above the scale middle).

Seven second-career teachers reported that no attention was paid in their ACPs to the transfer of

earlier work experiences. The chef de cuisine reported that this was a theme in small peer sessions, but:

> About the transfer, no, actually we didn't talk about that. I think everyone has his own advantages because of his prior experiences, but in our programme we focussed more on the difficulties we experienced.

6. The transfer to teaching, a challenging mission

In the two studies reported here, we have examined characteristics of second-career teachers entering ACPs and the kinds of experiences that shape their transition to teaching. In this final section, we first discuss our findings in light of the evidence available in the literature. Then, we explore their implications for designing and implementing teacher education programmes for second-career teachers. The article concludes with suggestions for further research.

7. Conclusions

The supervisor study has yielded a typology defining "career changers" as one category of ACP participants with specific backgrounds, motives and images of teaching. In the career-changer study, characteristic learning experiences and learning needs of second-career teachers were identified.

7.1. How to define career changers to teaching

As shown in Table 1, the supervisors interviewed attributed characteristics to second-career teachers distinguishing them markedly from first-career teachers. In addition, their statements allowed us to define recognisable categories among ACP participants. Table 2 shows the resulting typology. As the supervisors explained, the differences explicated in this typology are related to second-career teachers' learning needs and learning styles. These findings confirm both the distinct characteristics of ACP participants and the heterogeneity within this group reported in the available research, summarised in Section 3.1.

At least in the Netherlands, where this research was carried out, a group of "career changers in a strict sense" could be distinguished from other ACP participants, i.e. candidates aged over 32, having previous careers of at least 5 years as well as recent

work experience outside education. The supervisors in our first study reported that during their transition to teaching, this group of career changers experiences specific challenges in transferring competencies acquired earlier to their new profession. These career changers are defined in Table 2 as type 5.

These findings can contribute towards arriving at precise definitions of "alternative" candidates and programmes as called for in the literature (Cochran-Smith & Zeichner, 2005; Zeichner & Schulte, 2001). Not all ACP participants are career changers, as Chin and Young (2007) have rightly noted. Our findings have brought us closer to answering the question: "Who are real career changers?" From the typology in Table 2, two underlying criteria can be derived that, in terms of backgrounds, may really matter for answering this question: having recent work experience outside education and lacking any kind of teaching experience. Compared to these criteria, other characteristics may be considered of secondary importance, notably age and having non-recent work experience.

7.2. Relevant aspects of the transition to teaching

The second study reported here was directed at career changers themselves and began by checking if the respondents in our sample matched the characteristics found in the supervisor study. Table 3 shows that this match was almost perfect. The respondents in the career-changer study had followed winding roads in their previous careers and lives. They had made a conscious choice to shift their careers towards working with youngsters. Their motives to become teachers were clearly related to their earlier experiences in work and life and influenced the ways in which they became teachers.

The transfer of competencies acquired in earlier careers to the world of teaching was shown to involve a challenging interplay between continuity and change on the six levels of the "onion model" underlying our theoretical framework: environment, behaviour, competencies, beliefs, professional identity and mission. We found five themes to play a significant role in the career changers' transition to teaching: (1) complexity and workload; (2) dealing with groups of adolescents; (3) sharing subject-matter expertise; (4) autonomy and team work; and (5) long-standing aspirations.

The complexity of their daily tasks as teachers and the workload the career changers encountered in their new profession (theme 1) confronted them with thorough change at the level of the environment. In particular, their daily rhythms changed and they had to muster considerable flexibility in dealing with unpredictable situations. More than once, they underestimated how demanding teaching can be. These findings are in line with those reported by Novak and Knowles (1992), Freidus (1994) and Dickar (2005).

Interestingly, theme 2 (dealing with groups of adolescents) placed demands on the career changers in our study, which were at once new and familiar to them. They experienced continuity with their earlier work in the sense that they could transfer complex behaviours and competencies, notably in the form of routines in dealing with groups. In doing so, they resorted to earlier work experiences in teamwork settings. This aspect is also found in earlier research (Freidus & Krasnow, 1991; Madfes, 1989; Mayotte, 2003). At the same time, the intensity of interacting with adolescents generated experiences of change, which had a strong personal impact at the level of identity. Similar findings were reported by Dickar (2005), Freidus (1994) and Novak and Knowles (1992). Despite their outspoken motives to work with and serve fellow human beings, the career changers appeared to a certain degree to experience a "practice shock" as it is known among graduates from regular teacher education programmes (cf. Brouwer & Korthagen, 2005).

With regard to theme 3, our respondents expressed a clear willingness to pass on knowledge and experience acquired in their earlier professions to their pupils. In this way, they could transfer and transform subject-matter expertise in the classroom. Such findings are also reported by Murray (1989). Here, the levels of beliefs and in some cases also of mission, are surfacing.

As regards autonomy and team work (theme 4), the respondents in our study experienced both continuity and change, compared to their earlier careers. In the school environment, they found their place in relation to colleagues with relative ease, benefitting from self-confidence developed in their earlier work. In this respect, continuity was found at the levels of environment and behaviour. However, the career changers also reported surprising experiences of change at the level of identity because of the large extent of autonomy allowed to them at work. Even though they knew how to find their way

in their schools, they could also feel isolated. Depending on their former work, the feelings involved range from relief to disappointment. These findings confirm those of several other researchers (Freidus, 1992, 1994; Freidus & Krasnow, 1991; Murray, 1989; Resta et al., 2001).

The career changers in our study clearly expressed long-standing aspirations to make socially useful contributions through their work (theme 5). This result confirms findings of Freidus and Krasnow (1991), Gordon (1993) and Resta et al. (2001). Yet, the feelings of disappointment reported in connection with dealing with adolescents and isolation among colleagues show that changes in the environment negatively affected the continuity they experienced at the level of mission.

All in all, what stands out in the experiences reported by the career changers in our study is not so much pure continuity or change, but rather a mixture of both involving in part an opposition between the two. The transition to teaching experienced by our respondents is dominated by a juxtaposition of feelings of alignment and harmony on the one hand and feelings of discrepancies and tensions on the other. In terms of the onion model, they met with continuity as well as change at both the outer and the inner levels. This partly uneasy coexistence of experiences can also be found in the work of Mayotte (2003).

In the face of these findings, the assumption that career changers participating in ACPs may attain professional teaching competence in abridged time spans becomes even less self-evident than the available research literature already suggests. What this study adds to our knowledge is a specification of challenges posed to career changers as they transition into teaching. These challenges may affect their well being, their learning and eventually also their professional success as teachers and motivation for the profession.

8. Implications for alternative certification programmes

If we want to promote retention and professionalism among second-career teachers, how can ACPs support and equip them so as to make their transition to teaching a success? Both Zeichner and Schulte (2001) in their discussion of peer-reviewed research into ACPs and the AERA Panel for Research on Teacher Education (Cochran-Smith & Zeichner, 2005) have called for research-based recommendations on this issue focussing on effective programme features.

8.1. Admission, intake and advice

First, we found recent work experience outside education and lack of teaching experience appear to be influential characteristics with which career changers enter ACPs, as shown by the typology in Table 2. We recommend using these two entry characteristics as criteria for admitting and allocating career changers to tailor-made teacher education programmes, which cater for their specific learning needs. Career changers have become a source of teacher candidates that is here to stay. This is why in our view, ACPs should make possible more differentiation and flexibility in choosing which types of programmes candidates might best participate in. On the other hand, it might be wise to stimulate candidates without any earlier work experience, independently of age, to participate in regular teacher education programmes or in regular programmes specifically designed for older candidates (cf. the synthesis by Eifler and Potthoff 1998, p. 193).

Once candidates are admitted and allocated on the basis of evidence-based criteria, teacher educators would do well to recognise and take into account more explicitly that career changers face the necessity to traverse, as it were, a new experiential landscape, replacing old for new horizons. Teacher educators may underestimate how challenging this endeavour is, because they may be inclined to focus, predominantly or even exclusively, on the new horizon, the profession of teaching. However, career changers will, at least during the beginning of their career switch, operate with their earlier experiences in work and life as their main frame of reference. Teacher educators, therefore, should actively show an interest in how career changers' backgrounds, motives and images of teaching shape their transition to teaching and invite them to make explicit links between their earlier and their current experiences.

The processes of negotiation that career changers are engaged in while they move from old to new settings can be supported by ACPs, when they offer candidates opportunities to orient themselves on the specific demands which teaching makes on them. ACPs could devote the first few weeks to such orientation and invite candidates to discover, given their own backgrounds, with which challenges and

learning goals teaching confronts them. Simultaneously, person-oriented forms of intake assessment, coupled with advice pointing out knowledge, skills and attitudes to be developed, should enable career changers to decide if teaching is a worthwhile and realistic career perspective for them to pursue.

Instead of a one-shot decision moment, admission to ACPs could become more of a process, in which career changers and teacher educators mutually explicate expectations and cooperate in order to arrive at a well-motivated go or no-go decision. Convincing examples of this approach have been piloted in the Netherlands in ACPs serving steel workers to become teachers in lower secondary occupational schools (Bolhuis, Doornbos et al., 2001; Bolhuis, Imants et al., 2001) and higher education graduates moving to teaching in general secondary schools (Tigchelaar, 2003).

8.2. Curriculum and pedagogy

Since adjusting to a new work environment, dealing with groups of adolescents and the other aspects detailed in Section 5.3 pose particular challenges for career changers, they should be focal points to which ACPs turn their attention in designing, redesigning and implementing ACPs.

Quite relevant in this respect is what the career changers whom we interviewed reported as being supportive or less supportive features of their ACPs, while they worked on their transition to teaching. These findings indicate that there was room for improvement. The career changers in our study felt that most gains could be made in addressing specifically how they could transfer competencies acquired during their earlier careers to teaching. A second avenue for improvement suggested by them was taking their backgrounds, motives and images of teaching more into account. While providing such opportunities, teacher educators should be aware of the considerable interindividual variability in how career changers go about their learning. A sensible ambition to have in this respect is to seek and maintain throughout the ACP a dialogue with every candidate about what is a sensible course to take and what are fruitful activities to engage in. Support of this kind can and should be provided to career changers also in the workplace. We believe that the availability and quality of mentoring, collegial consultation and peer support are important conditions of teacher

learning in the workplace (cf. McCabe, 2004; Smith & Ingersoll, 2004), which are especially important to career changers.

What stands out in the findings of the career-changer study is that during the shift to teaching, experiences of change and continuity are interwoven. Moreover, how these experiences merge with another is recognisably different for each individual teacher candidate. Each person confronts in his or her own way the challenge of fulfilling the social demands and expectations inherent in the teaching profession. This interplay of earlier and new experiences could well provide a leading perspective in programming ACPs for career changers and supporting them in their personal learning trajectories.

8.3. Suggestions for further research

Our suggestion that the criteria of recent work experience outside education and lack of teaching experience gleaned from the supervisor study could guide allocation to different kinds of ACPs is a proposition based on a small-scale study. As such, it requires further exploration and testing in other contexts. Another question worthy of research is if and what such allocation criteria might contribute to pinpointing relevant predictors of success in teacher education and in teaching (cf. Ackley, Fallon, & Brouwer, 2007).

Important issues for further research are also raised by the career-changer study. There is a real risk that graduates from ACPs may fall victim to the "revolving door effect" pointed out by Ingersoll (2001; cf. also Ingersoll and Smith, 2003). This risk might be aggravated if ACPs do not meet minimal quality standards in the sense that they equip career changers to function as effective teachers. Sufficient starting competence as a programme outcome could well be an influential condition for staying in teaching in the longer run, especially for those participants and graduates who incur losses in salary or other setbacks. From this perspective, it is important to know more about the kinds of experiences that ACP graduates encounter in the course of their further careers as teachers, especially when they span 2 or more years. Which kinds of environments and experiences in particular promote dropout from the profession and to what extent and in which respects is this undesirable outcome related to features of and deficiencies in teacher education programmes as perceived by career changers?

Longitudinal as well as retrospective follow-up studies can elucidate the issues put forward above. Such research into learning to teach by career changers should preferably cover all stages in their further careers and attend to turning points between those stages as well as the interplay of personal development and context factors (cf. the plea for an ecological approach made by Chin and Young, 2007).

Finally, the career-changer study illustrates that there is merit in probing the innermost, subjective interpretations accompanying career changers' learning. The onion model is one suitable theoretical framework for taking these into account in studies of teachers' professional competence and motivation. The levels in this model offer teacher educators and researchers a perspective on relevant influences on personal development that might otherwise escape attention.

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Further-reading

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