Chapter 1

Introduction
1. Introduction

1.1 Relevance
Universities worldwide are struggling with their identity (Barnett, 1999, 2003). They consider themselves knowledge institutions, but what kind of knowledge is it they focus on and to what end? What is their main aim, what do they contribute to society and why are they organised as they are organised? As the variety in universities increases these questions play an even more important role. In 2002 twelve leading European research universities took the initiative to start the League for European Research Universities (LERU) by which they wanted to establish themselves at the forefront of European higher education policy. This league is focused on promoting fundamental research as the ultimate source of innovation in society, and also stresses the value of high-qualitative teaching in an environment of internationally competitive research (Boulton & Lucas, 2008). The increasing expectations put on universities and other higher education institutes, including the general recognition of their importance for the knowledge society, caused the need for universities to redevelop and rethink their own place in society and consequently their internal organisation (Leisyte, Enders, & De Boer, in press).

Most western universities are based on the university model of Wilhelm von Humboldt, who promoted the unity of research and teaching (Boulton & Lucas, 2008; Simons, 2006). Schimank and Winnes (2000), however, state that this unity was never truly established. In today’s universities the main element is that academics do both research and teaching, but at different times and in different situations instead of simultaneously. Many researchers stress the important shift in higher education in recent decades, during which the universities changed from elite, small-scale institutions to large open institutes: the so called ‘massification’ of higher education (Barnett & Griffin, 1997; Brew, 2003; Elen, Lindblom-Ylänne, & Clement, 2007; Robertson & Bond, 2001; Schimank & Winnes, 2000; Smeby, 2003). In the 1950s only about 5% of each cohort went to higher education institutes in Europe, but this figure increased to about 20-30% in the 1990s (Schimank & Winnes, 2000). In the Bologna Declaration 29 European countries agreed on aiming at even greater percentages of each cohort entering higher education institutes by 2010 (European Ministers of Education, 1999). This enormous increase in student numbers led to increasing demands of the university as a whole, and especially of individual academics. These academics are expected to accomplish teaching tasks, carry out research activities, be involved in
administration, and preferably also serve society by disseminating their research in various ways. We see a worldwide increase of scientific publications, leading to higher expectations from and demands on individual scholars (Smeby, 2003). Furthermore, staff/student ratios increased, while at the same time international attention to teaching and student learning increased. This trend is reflected in the Scholarship of Teaching and Learning movement (Kreber, 2007) and the tightening of qualifications required for teaching in universities worldwide. In the Netherlands this trend is visible in the recent agreement between all universities regarding the Basic Teaching Qualification (Basis Kwalificatie Onderwijs) (VSNU, 2008).

One of the most important issues regarding the identity of the university is the link between research and teaching. Elen and Verburgh (2008), for example, studied the link between research and teaching in eight LERU-universities from an educational perspective and showed that academics consider a close link between research and teaching to be the heart of these research-intensive universities. However, many universities are moving to a post-Humboldtian pattern in which research and teaching are driven apart because of separate roles of staff, separate funding mechanisms, and partly organisational distinctions (Leisyte et al., in press; Schimank & Winnes, 2000). Therefore, many universities are looking for (new) ways of uniting research and teaching, that may benefit both research and teaching, and academics as well as students.

1.2 Theoretical framework

1.2.1 Quantitative and qualitative studies into the research-teaching nexus

The studies into the research-teaching nexus can be divided into two main streams. The first stream is focused on empirical correlations between research and teaching, the second on academics’ and students’ perceptions of the relationship between research and teaching. In 1996 Hattie and Marsh conducted a meta-analysis regarding the first stream. To prove or disprove the relationship between the individual academics’ research quality as measured by citation indexes, and teaching quality as measured by student satisfaction they analysed the many studies conducted in the 1970s and 1980s. They conclude that ‘the common belief that research and teaching are inextricably entwined is an enduring myth. At best, research and teaching are very loosely coupled’ (Hattie & Marsh, 1996). However, they claim that universities should aim for the improvement of the research-teaching nexus, by looking for ways to create supportive circumstances in which teaching and research meet. This claim is,
among other things, based on the finding by many researchers (Elton, 1986; Jensen, 1988; Neumann, 1993) that academics value the link between research and teaching and have a great belief in the existence of the link. However, according to administrators and academics the status and position of these tasks in the university are different. Normally, research is given a higher status than teaching, which might be due to problems identifying quality teaching; there are standards for research, although these are not undisputed (Rowland, 1996). This difference is expressed for instance by differences in reward systems (Serow, 2000). Strengthening the nexus should therefore include both university policy (Colbeck, 1998; Stoecker, 1993) and approaches to research, scholarship and teaching (Barnett, 2005). The latter is the focus of this research project.

As stated above, the second stream of the literature focuses on academics’ and students’ perceptions of the link between research and teaching (Jenkins, Breen, Lindsay, & Brew, 2003). The overwhelming belief among academics in a symbiotic relationship has already been noted (Jensen, 1988; Neumann, 1993; Robertson & Bond, 2005). What, then are the perceived benefits and why do these not show up in the meta-analysis by Hattie and Marsh (1996)? With regard to the latter question, a number of researchers (Brew & Boud, 1995; Elton, 1986; Griffiths, 2004) emphasise that most correlational research restricts itself to very narrow definitions of research and teaching. Moreover, the various conceptions of research and scholarship prevalent among academics are not taken into account (Brew, 2001; Moses, 1990; Neumann, 1993), and neither are important conceptions such as the conceptions of teaching (Kember, 1997; Prosser, Martin, Trigwell, Ramsden, & Middleton, 2008) or knowledge (Robertson & Bond, 2003; Rowland, 1996), which mean different things to different academics. The meanings academics attribute to these concepts are important mediators of what the link between these concepts might be and should, therefore, not be neglected. So, these conceptions need to be included to gain a better understanding of the perceived or desired symbiosis of research and teaching.

In general, academics are in favour of a strong link between research and teaching, although they notice that both activities are increasingly breaking apart (Leisyte et al., in press). The perceived benefits are largely one-directional, namely going from research to teaching, although benefits going in the opposite direction are reported as well (Coate, Barnett, & Williams, 2001; Jensen, 1988). Jensen (1988) found that research is supposed to raise the level of teaching by introducing complex problems, building bridges towards the developments in the
field, and creating research-like learning environments for the students. Teaching primarily contributes to research in broadening academics’ views, and scholarly vitality is maintained by the interaction with the students (Neumann, 1992). Perceived problems concern interference of interest, an imbalance in the appreciation of research over teaching, and lack of time (Colbeck, 1998; Stoecker, 1993). The advantages and disadvantages as perceived by students reflect the scholars’ perceptions. Teachers’ lack of time and interest is seen as problematic (Healey, Jordan, Pell, & Short, in press; Lindsay, Breen, & Jenkins, 2002), while students value being taught by a researcher as more intellectual challenging (Neumann, 1994; Robertson & Blackler, 2006). In Chapter 5 the perceived benefits and disadvantages perceived by the students will be discussed in detail. This research project can be considered part of the second stream of research-teaching nexus studies, in which the views of academics are taken as the point of departure.

1.2.2 The importance of variety

In the last decades several researchers have come up with models to characterise the research-teaching nexus. Most models or categorisations present ways to use research for the benefit of the students. Teacher-student interactions are seen as important features of a successful link between research and teaching (Elsen, Visser-Wijnveen, Van der Rijst, & Van Driel, 2009). However, there is an enormous variety in the ways in which academics connect research and teaching, including explicit or more implicit relations between aspects of research and teaching. Several researchers (Griffiths, 2004; Healey, 2005; Neumann, 1992; Robertson, 2007) have suggested models or categorisations to point out the different forms that the research-teaching nexus can take. An extensive discussion of these categorisations can be found in Chapter 3. In the humanities and social sciences more opportunities to link research and teaching are reported than in the natural sciences, but this distinction is only present in undergraduate education (Smeby, 1998). Furthermore, Brew (2003) argues that the university tradition of disciplinary divisions hinders the establishment of a strong connection. She suggests leaving these boundaries behind us and start working towards communities in which students and academics learn together (Brew, 2006).

The diversity shows that there is not just one single way to link research and teaching. Actually, the fact that we speak about the research-teaching nexus might cause confusion as this might suggest that there is an optimal way of connecting the two. Until now, no evidence has been found that suggests one
optimal way; on the contrary it is argued that different forms of linking research and teaching offer different gains to academics and students (Elsen et al., 2009; Zamorski, 2002). Hence, variety should be encouraged instead of striving for one specific form of the relation. As many authors argue the potential influence of disciplinary variation (Barnett, 2003; Robertson, 2007) it seems wise to be aware of disciplinary characteristics when designing studies regarding the research-teaching nexus. In Chapter 4 the disciplinary variety is specifically addressed.

1.2.3 The importance of beliefs
Several authors (Brew, 2003; Robertson & Bond, 2001; Rowland, 1996) emphasise the importance of taking academics’ conceptions of research and teaching into account in the discussion about the research-teaching nexus. These conceptions are fundamental to scholars’ attempts to link research and teaching. A variety of conceptions of research (Brew, 2001) and teaching (Samuelowicz & Bain, 1992) are reported, and these various inevitably lead to different forms of linking research and teaching. For example, when research is seen as group work and a highly qualified job, and teaching as the transmission of knowledge, there is little common ground, and linking research and teaching might consist of transmitting the results of this group work to the students. However, if research is seen as mainly integrating various data sources and teaching as engaging students in thinking skills, the link might be to include students in parts of the research process. So, these different views on research and teaching greatly affect the potential relations between the two as seen by academics. Moreover, these influence the way the actual link is perceived and implemented.

From a more general point of view beliefs are considered important factors in academics’ actions. The terms ‘beliefs’ and ‘conceptions’ are used interchangeably in this manuscript, as in general the former is used in the literature about teacher education, while the latter is more common in higher education literature, due to its long phenomenographic tradition (see also Hativa & Goodyear, 2002). Academics are supposed to base their practices to some extent on the theories they hold (Samuelowicz & Bain, 1992). Beliefs colour how individuals experience phenomena and how they interpret and recall situations (Pajares, 1992). This is the adaptive function of beliefs: allowing individuals to relate to the world around them. Furthermore, beliefs are considered not easily changeable. This first of all applies to core beliefs, less to peripheral beliefs (Pajares, 1992). In the debate about the research-teaching nexus academics’ conceptions of knowledge, research, and teaching are regarded as core beliefs.
These are considered central to the meaning academics yield to academic practice, while their view on the nexus itself is seen as following from these conceptions (Robertson & Bond, 2001; Rowland, 1996), and therefore as more peripheral.

1.3 Context and research questions
The research project central in this thesis consisted of two studies, the first focusing on academics’ beliefs and the second on academics’ practice. Both studies were carried out in the Faculty of Humanities of Leiden University. Our approach of looking in one area in depth was advocated by Becher (1994), who warned against the risk of overlooking certain features of the nexus by focusing only on comparative studies regarding disciplines in different academic areas. However, in recent years most studies into the research-teaching nexus have focused on the sciences or have provided comparisons between a few subjects from various academic fields. Concentrating on one faculty, that in itself contains great variety, might uncover specific features of the research-teaching nexus for this part of the academic world. An in-depth study in one area might raise new issues concerning the research-teaching nexus, which then make it necessary to pay attention to related aspects in other academic areas.

Before we turn to the research questions we will briefly explain the specific features of the faculty in which the research was conducted. The Faculty of Humanities, formerly the Faculty of Arts, of Leiden University is a broadly oriented faculty and known for the great variety of languages and regions studied. In the years our data was collected (2006 – 2008) the faculty had three main disciplines: history and art history, linguistics, and literature and culture. These disciplines are subdivided into a wide variety of regions including Latin America, Africa, Asia, and most parts of Europe. Because of the rich diversity of languages and cultures studied, many departments are relatively small and so are the student numbers: the average staff/student ratio is 1:9. However, student numbers vary largely depending on the subject. History and Chinese are popular, for example, while languages and cultures from the Middle East or Southern Asia attract only a small number of interested students. The great majority of staff appointments include both research and teaching tasks. Formally, 30-40% of their time should be devoted to research, but many academics report spending far more than half of their time on teaching and administration. So, many academics experience a great teaching load, at the expense of research. A small number have been appointed only to teach language courses. During the research project reorganisations were
taking place in which research institutes were rearranged and extensive discussions about reorganising educational programmes were held.

Our main interest concerned academics’ conceptions of the research-teaching nexus in the Faculty of Humanities, and how these conceptions were related to other views they hold and to their practice. Therefore, our study focused on the following questions:

- **Chapter 2**: What are the relations between the conceptions of knowledge, research, and teaching held by academics in the humanities?
- **Chapter 3**: What variations in ideal images of the research-teaching nexus can be found among academics in the humanities?
- **Chapter 4**: How is the preferred research-teaching nexus related to conceptions of knowledge, research, and teaching, and to (disciplinary) background?
- **Chapter 5**: In what ways do academics in the Faculty of Humanities integrate research in their teaching when encouraged to, and what learning outcomes do their students report?
- **Chapter 6**: What change patterns occur in academics’ conceptions of the research-teaching nexus when they intentionally integrate research in their teaching?

### 1.4 Outline

#### 1.4.1 First study

Chapters 2, 3, and 4 are based on the first study. In this study 30 academics in the Faculty of Humanities, evenly distributed over the various disciplines, were interviewed. The interviews were conducted in June and July 2006 and consisted of three parts. The first part included questions related to the participants’ backgrounds, the second part consisted of metaphors related to knowledge, research, and teaching, and the last part focused on ideal images of the research-teaching nexus. In Chapter 2 the metaphor study is discussed in which academics’ conceptions of knowledge, research, and teaching are investigated and related to each other. In Chapter 3 ideal images academics in the faculty hold about the research-teaching nexus are described, and five forms of linking research and teaching are distilled from these. In Chapter 4 the conceptions of knowledge, research, and teaching from the metaphor study are related to the ideal images study, and to academics’ backgrounds regarding their disciplines, sexes, ages, and positions.
1.4.2 Second study

Chapters 5 and 6 are based on the second study. In this study twelve academics from the Faculty of Humanities were followed for the duration of one term, more precisely September 2007 until January 2008, focusing on one course they taught in which they strengthened the link between research and teaching. Their main task was to enhance the research-teaching nexus in the way they thought most fruitful, both for themselves and their students. The design of the study is graphically represented in Figure 1.1. In Chapter 5 the focus is on the courses themselves: course design as investigated via course goals and course programmes and course practice as investigated via weekly logs and group interviews with students. In Chapter 6 academics’ beliefs are the centre of attention, measured at the start and end of the term with the use of Q-sorts, the focus is on any changes that occurred during the intervention.

Figure 1.1 Conceptual representation of study 2