Research in higher professional education: A staff perspective

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Chapter 7

Higher Education Lecturers’ discourse on research: Three themes to demark ‘research’
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Three Themes to Demark ‘Research’

7.1 Introduction

Despite a long tradition in universities, different notions exist of what the gist of research consists of (Brew, 2001; Rupp, 1997). In the second part of the twentieth century and as an effect of the massification of the higher education system, higher professional education (HPE) was seen as an important addition to the university system in several European countries. This resulted in the creation of, e.g., the ‘new’ universities in the UK, and the uplift of the institutes of higher professional education in the Netherlands (Huisman, 2008). As an effect of this system change, the Dutch institutes of HPE gained in 2001 the possibility of conducting publicly funded research (Dutch Ministry of Education Culture and Science & Netherlands Association of Universities of Applied Sciences, 2001). The extension of tasks from only teaching to teaching and research implies adjustments in the lecturers’ responsibilities and student education (Griffioen, et al., 2012; Kyvik & Skodvin, 2003).

As often occurs with the introduction to newcomers in an existing field, notions that were previously silently agreed on came under pressure. In this case, the notion of ‘research’ became part of a public debate on the function and position of both types of institutes in a single higher education system (Griffioen & De Jong, 2007). The result was the suggestion that the traditional universities aim to educate their students in the more fundamental types of research to become ‘professional scholars’. The aim of institutes of professional higher education is to train their students in more practise-based or evidence-based types of research, resulting in the graduation of ‘scholarly professionals’ (Griffioen, 2011; Van der Rijst & Visser-Wijnveen, 2011). Previous research has shown that lecturers’ research and teaching conceptions can be expected to form a foundation for the research-related education of students (Visser-Wijnveen, et al., 2009), which is said to be of a different character at both institutional types. Since all students at both types of institutes are educated in their own types of research-related competencies, the different focuses of the institutes also imply differences between the lecturers of both types of institutes on what research consists of, at least if these differences are more than theoretical or political notions. Additionally, previous research has indicate that conceptions influence not only the choices that lecturers make in shaping their research and teaching but also how they balance between the different tasks of research, teaching, and working in the professional field (Boyd & Smith, 2011). At the same time, the connection between conceptions and
behaviour is complex and inconclusive (Visser-Wijnveen, 2009).

This Chapter studies the discursive notions of research among lecturers in higher education. Special attention is paid to the differences between the lecturers of traditional universities and higher professional education.

7.2 Dutch Context

Within the Dutch binary system of higher education, both the 14 publicly funded traditional and technical universities (here collectively called ‘traditional universities’) and the over 40 institutes of higher professional education (HEP) each have their own position and history (De Boer, et al., 2007; Huisman, 2008). The latter type of institution, somewhat comparable to the former British polytechnics and the German Fachhochschulen, call themselves at the European level ‘universities of applied sciences’ (De Weert & Leijnse, 2010; Teichler, 2008; Vogel, 2009). These Dutch institutes of higher professional education currently account for over 60% of all Dutch students in higher education (CBS, 2011) and mostly provide bachelor-level programmes and do not have the right to award doctorate degrees. The traditional Dutch universities consist of institutes that were among the first in Europe to be established but also include several ‘younger’ technical and general institutes. All traditional universities provide bachelor, master, and PhD programmes.

Where the traditional universities gained research responsibility in 1876, as an effect of the developments in German universities related to Von Humboldt, the institutes of HPE have had the legal right to conduct research since 1986, but in practise, hardly any research activities were undertaken. Here, research activities usually only appeared in the final year of the curricula, and most institutions lacked any ‘research culture’ (Boei & Griffioen, 2011; Van der Linden, et al., 2012). In the context of the knowledge economy of the 21st century, public means for research have been provided to the institutes of HPE since 2001, hence providing a stimulus to actually develop research activities. Thus, the current Dutch higher educational system nowadays consists of two types of higher educational institutes, each with their own teaching and research responsibilities.

7.3 Conceptions of Research

Previous research on the conceptions of research can be grouped by three objects for study: senior academics, supervisors of research, and students. The first group considers the research-related conceptions of senior academics, all from a somewhat different angle. Neumann (1993) studied the perceptions of senior academic administrators separately on research and scholarship. Perceptions of research were found to be about; a) discovery, the pursuit of something ‘new’ within a theoretical framework, b) fundamental and systematic enquiry, and c) publication. The results on scholarship showed a division in: a) a quality
or mode of working and b) an activity such as acquisition of extensive knowledge, writing and dissemination of knowledge, or teaching (about knowledge). The other three studies that examined research conceptions of senior academics did not explicitly divide research and scholarship and chose a somewhat different focus. Visser-Wijnveen, Van Driel, Van der Rijst, Verloop, and Visser (2009) studied the conceptions of research of academics in the humanities based on metaphors. Their results showed a five-step typology of research from the absent researcher (patterns are disclosed) to the researcher being fully central in the process (patterns are created by the researcher). The study of Brew (2001, 2003) on the conception of the nature of research resulted in four quadrants around two axes, of which one is also the presence/absence of the researcher, somewhat comparable to the results of Visser-Wijnveen et al. (2009). The other axis consists of the dimension from tangible products (e.g., articles) to intangible processes (e.g., learning). These two axes combined create four different conceptions on the nature of research as: a) combining different parts (ideas, data, techniques) to solve problems or answer questions (Domino), b) social phenomenon with a strong external product orientation (Trading), c) bringing light to ideas, explanations, and truths by uncovering layers (Layer), and d) a journey, learning, and personal transformation of the researcher (Journey). Finally, the study of Prosser, Martin, Trigwell, Ramsden, and Middleton (2008) showed how university academics ‘experience research’, which resulted in research conceptions based on the amount of impact, which also implies differences in the construct and focus of research activities.

Second, research supervisors’ conceptions on research were studied. Bill’s (2004) work focussed on what research supervisors ‘count as research’, which resulted in four not mutually exclusive dichotomies: a) small-r research versus capital-R research, b) systematic, rigorous, and sound versus personal or less systematic, finding out, c) quantitative versus qualitative, and d) university versus HPE. Kiley and Mullins’ (2005) study on supervisors resulted in four concepts of research: a) technical, b) creative and innovative, c) integrating complexity, and d) new ways of seeing. At least the first two seem similar to Neumann’s (1993) quality or mode of working, as is also the case for the first three aspects of Bill (2004). The last aspect of Bill (2004) seems to indicate that context is relevant for how research is conceived.

The last group investigated are students. McCormack (2004) studied a very small sample of postgraduate researchers in depth, resulting in very individual conceptions. The research conceptions of post-doctoral students that Pitcher and Åkerlind (2009) studied, as well as those of doctoral students studied by Pitcher (2011) were labelled as: a) explorative, b) spatial (being about a field or area), c) constructive (about building knowledge, filling gaps), and d) organic (go with the flow). Furthermore, Meyer, Shanahan, and Laugksch (2005) and Levy and Petrulis (2012) studied students’ conceptions on research, with
comparable results. Both studies found that students conceive ‘research’ as: a) the gathering of information, b) discovering something (‘truth’ in the study of Meyer et al.), c) a process where the student learns and develops ideas, d) exploring others’ ideas or research studies, and e) discovering or solving problems. Meyer, Shanahan, and Laugksch (2005) additionally categorised ‘misconceptions’ of research.

Finally, Åkerlind (2008) conducted a meta-analysis on conceptions of research based on (part of the aforementioned) previous work, which resulted in four dimensions where research conceptions could be divided into: a) research intentions, b) research outcomes, c) research questions, and d) research process. She added “being a researcher” by her own empirical study, reported in the same article.

While it is important to consider previous studies on conceptions of research since they all also consider ‘research’ to be an object, the current study explores the discursive structures that underpin lecturers’ judgement on research or non-research activities to understand their demarcations and actions in daily practice. Thus, the current study does not study conceptions but discursive demarcations of research.

7.4 Discourse of Research

The current study explores discursive building blocks and themes on research among lecturers in higher education. The notion of discourse is based on the work of Michel Foucault (2000, 2001), who defines discourse as ‘a collective of concepts and practices (techniques, procedures) with a certain productive force’. A discourse consists of related statements and actions that collectively produce meanings and have effects. The productive force of a discourse contains the human ability to create and label groups of people or objects by speaking (or acting). By speaking, people create and confirm the division between ‘healthy’ and ‘sick’ people or the demarcation between a ‘good’ and ‘bad’ score on a test (Carabine, 2001; Foucault, 1975). Following Entwistle and Peterson (2004), where ‘concept’ as a shared understanding of something (here, ‘research’) is meant, while ‘conception’ is seen as the individual conditions that one applies to define an object. In contradiction to ‘conception’, a discourse is defined by how words and actions are handled in action to produce truth claims or what has been perceived as true (Bills, 2004). To find discursive themes, one should look at statements as they are phrased and not consider the meaning behind a statement. Furthermore, one should consider the productive function of a (group of) statements: what does it want to include and what not? What aspects are relevant to distinguish ‘research’ from ‘non-research’?

In line with the productive force of actions, in their daily practice, lecturers divide activities –their own as well as that of students, colleagues, and others – in ‘research’ and ‘non-research’ and hence produce the demarcation of ‘research’. These divisions mostly
happen intuitively, and when asked, one will usually find their own choices to be normal and logical. However, when encouraged to make the choice explicit – as this study has done in interview settings – lecturers find it suddenly rather hard to argue why they demark as they do (see also Neumann, 1993). At the same time, the demarcation of research by lecturers is relevant since it demarks the space of research-related activities, e.g., for students when they choose topics and methods for their thesis (‘you cannot make that choice for your thesis; that is not research…’). Thus, the discursive structure of research enables and limits what activities are considered ‘normal’ for research (Carabine, 2001), and, whereas discursive systems are created and enacted by human action, people are, at the same time, defined by them (Foucault, 2001). The central function of the lecturer makes it plausible that this ‘truth’ on research will influence the shape and execution of research in the educational programs and beyond. By mapping the statements that lecturers use in relation to research the discursive rules that underline these judgements and actions can be outlined since they are part of the statement themselves. These discursive rules are considered time- and context-specific and different discursive systems can co-exist at a similar moment or situation or within a single (professional) group (Foucault, 2001).

The questions answered in this study are: What are the building blocks of lecturers’ discourse on ‘research’ and ‘non-research’ (question 1); what are the rules that demark the notion of ‘research’, resulting in one or more discursive themes (question 2); and, if there are more, what are the differences between lecturers from higher professional education and lecturers from traditional universities (question 3)?

7.5 Method

Sample

An archive of statements on ‘research’ and ‘not-research’ was created to provide an answer to the aforementioned questions. HEP lecturers (N=16) who were previously part of a large survey study were found willing to participate in this study. Their selection was based on having teaching responsibilities, willingness to join in the somewhat time-consuming procedure, and the ability to participate in an interview on set days at their institution.

These respondents were requested to keep a log of all their own work-related activities during ten subsequent workdays. The logs were the basis for structured interviews (45-60 minutes) in which the respondents were asked per activity to consider it ‘research’ or ‘non-research’ and to explain the answer. The framing of the log and of the interviews was based on Eekelen (2005) and Kahneman, Krueger, Schkade, Schwarz, and Stone (2004). The analytic unit of analysis was ‘a statement’ of the respondent, defined as an uninterrupted utterance. Statements where the judgement of the author was inconclusive or covered no content on research/non-research were excluded.
A second sample of traditional university lecturers with teaching responsibility (N=20) was added to see whether there are differences in discursive rules between the lecturers of the two types of institutes. The second sample was matched to be comparable to the first sample and consisted of junior lecturers (in this sample, preferably without PhDs) and university lecturers (starting level based on PhD), in both the social science and natural/technical science fields. The interviews with these respondents were based on a list of activities that was distilled from the activities present in the first group (Table 7.1) to make it less time-consuming for the respondents. The further procedure was similar between the two groups. The total group of respondents was divided into four groups based on disciplinary and institutional differences (Table 7.2).

Table 7.1: Example Topics to Discuss in the Second Interview Sample.

- To teach a class
- To grade work (theses, assignments, tests, papers)
- To guide a student
- To Prepare a series of classes
- To create a test or exam
- To discuss the results of student evaluations with students
- To deliberate with one or more colleagues
- To create a research proposal
- To collect data / to do measurements
- To analyse data / to do measurements
- To answer to emails
- To write (scientific article of book for students)
- To collect and read literature
- To take a class
- To participate in a conference

Table 7.2: Gender and Educational Level Characteristics of Participating Lecturers.

<table>
<thead>
<tr>
<th>N=36</th>
<th>Gender</th>
<th>Educational level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%women</td>
<td>%bachelor</td>
</tr>
<tr>
<td>Professional high. ed. – science &amp; technique (n=8)</td>
<td>-</td>
<td>20</td>
</tr>
<tr>
<td>Professional high. ed. – social professions (n=11)</td>
<td>45</td>
<td>18</td>
</tr>
<tr>
<td>University - science &amp; technique (n=9)</td>
<td>66</td>
<td>-</td>
</tr>
<tr>
<td>University – social sciences (n=10)</td>
<td>30</td>
<td>-</td>
</tr>
</tbody>
</table>
Analysis
The first aim of the analysis was to find the basic structure for positive and negative judgements on research, here called ‘building blocks’ of the discourse on research (question 1). These building blocks are a prerogative to answer the research question on discursive themes, similar to a basic code structure in qualitative analysis (Charmaz, 2006). The audio of the interviews was transcribed ad verbatim. Eight of the transcripts were coded in vivo by deciding for each statement on research what the judgement was (research or not) along with the specific phrase used by the respondent. This resulted in two lists of phrases: a) positive judgements (‘in research...’) and b) negative judgements (‘in non-research...’). Then, the positive codes and the negative codes were ordered separately to find the building blocks among the statements.

The second aim of the analysis was to find the rules that demark ‘research’ from ‘non-research’ and, hence, to find out whether the discourse consists of one or more themes (question 2). This part of the analysis is based on the notion that a discourse consists of statements that can be co-used in a similar context (situation, time) to create the discursive rules of a concept (Foucault, 2001). To explore the discursive rules, all transcripts were re-coded by creating one or more codes for each utterance by each time applying; a) one relevant building block along with b) one open code to provide for the content of the utterance (see Table 7.3). The direction (‘research’/’non-research’) of the codes applied was based on whether a part of the statement contributed to ‘research’ or ‘non-research’. Thus, in the example, the judgement on the activity was ‘non-research’, while the individual content-codes were ‘research’(R) since the content of the argument is analysed as: ‘if it had been research, then...’

Table 7.3: Example of a Combination of Utterance, Judgement, and Codes (Respondent 13).

<table>
<thead>
<tr>
<th>Label activity given by R13: “Judging concept design literature study”</th>
</tr>
</thead>
</table>

R13 “Yes, more the role and the target. Look, if i.. eh.. would do this as part of research, then it would be about a research proposal.. eh.. with the goal to generate funding.. ehm.. or some grand. And, ehm.. well, than I would create a nice design and hope to get funded. That would be the actual goal ehm.. to generate funding to execute the research.”

Judgement: ‘not research’
Codes:
R-To acquire (activity)
R-A plan, strategy, design, proposal (object)
R-Funding, money (object)
R- To generate funding (goal)
The next step was to file the different codes in two types of connections: a) between the code and the person and b) between each combination of two codes that were applied within a single statement. Based on the frequency of the specific relations found, a relative weight was added to every relation. These two lists of weighted duo-codes created the data file that was used for further analysis in NODEXL (Smith, et al., 2010), which is a tool for network analysis. In this case, the network is of discursive codes and the lecturers who uttered them. The Fruchterman-Reingold algorithm (Fruchterman & Reingold, 1991) was applied, indicating a graphical position for the vertices (here statement codes and persons), based on the principle of repulsive force among vertices. Hence, the visual position of a vertex in the graph indicates similarities and differences among vertices. Furthermore, the Clauset-Newman-Moore grouping tool was used to find groups of more homogeneous vertices based on the relations they have with other vertices.

Since NODEXL is used here as a tool for discursive analysis, the content of the different groups found in the graphs were qualitatively interpreted as different themes within the discursive network on ‘research’ and ‘non-research’. Hereby, the graphical display of vertices was qualitatively analysed, while the analysis was supported by the quantitative notions of the degree and betweenness centrality of the vertices, as NODEXL provides. Furthermore, the position of the respondents in the network is additionally qualitatively analysed to indicate similarities and differences between the lecturers’ higher professional education and that of traditional universities (question 3).

7.6 Findings
The findings are structured by the three analytic steps: 1) the building blocks of the discourse of research 2) the discursive themes, and 3) the characteristics of the respondents that are part of each discursive theme.

Types of Statements: Building Blocks of Discourse
The ordering of the grounded codes of the first eight transcripts resulted in a coding structure for the positive statements and a coding structure for the negative statements. These were found to be similar where they could have been different. The structure consisted of five different ‘research’ and ‘non-research’ building blocks: a) the quality or mode of research (based on Neumann, 1993); b) the goals or aims of the activity; c) the actual activity; d) the characteristics of the respondent him/herself, and e) the object(s) part of the activity. See Table 7.4 for an overview of all the building blocks, including the three codes with the highest frequencies.
After the application of the building blocks to all transcripts, the results of the grouping analysis shows that the collective statements of respondents on ‘research’ and ‘non-research’ can be divided into seven discursive themes: three large ones and four rather small ones (see Figure 7.1 for the graphical position of all themes). The three larger ones are further qualitatively described. The four smaller themes are considered outliers and not further investigated. The respondents who participated in this study are included in the different discursive themes and reported in the next section.

Discursive Themes

Table 7.4: Building Blocks of Lecturers’ Discourse on ‘Research’ and ‘Non-Research’.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Degree</th>
<th>'NOT RESEARCH'</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MODALITY OR QUALITY</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>440</td>
<td></td>
<td>179</td>
</tr>
<tr>
<td>New, renewing</td>
<td>92</td>
<td>Is educational (task)</td>
<td>31</td>
</tr>
<tr>
<td>It is my research</td>
<td>31</td>
<td>Is existing (not new)</td>
<td>18</td>
</tr>
<tr>
<td>It is part of research</td>
<td>30</td>
<td>Is routine, fill out</td>
<td>12</td>
</tr>
<tr>
<td>It is of others, not mine</td>
<td></td>
<td>It is of others, not mine</td>
<td>12</td>
</tr>
<tr>
<td><strong>AIM</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>177</td>
<td></td>
<td>75</td>
</tr>
<tr>
<td>Aim to solve, improve, answer, change, prevent</td>
<td>25</td>
<td>Aim to inform, transfer, exchange</td>
<td>16</td>
</tr>
<tr>
<td>Aim to find, discover, collect, find out</td>
<td>17</td>
<td>Aim to let perform, realize</td>
<td>15</td>
</tr>
<tr>
<td>Aim to develop, create, find out, generate</td>
<td>16</td>
<td>Aim to let learn</td>
<td>9</td>
</tr>
<tr>
<td><strong>ACTIVITY</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>501</td>
<td></td>
<td>201</td>
</tr>
<tr>
<td>To collect, find, search, discover</td>
<td>82</td>
<td>To transfer, make available, repeat, explain, inform</td>
<td>36</td>
</tr>
<tr>
<td>To create, improve, resolve, find out, answer</td>
<td>72</td>
<td>To guide, support, counsel, advise</td>
<td>32</td>
</tr>
<tr>
<td>To analyse, select, proces</td>
<td>37</td>
<td>To process, use, compare, fill out, carry out</td>
<td>24</td>
</tr>
<tr>
<td><strong>RESPONDENT</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td></td>
<td>59</td>
</tr>
<tr>
<td>My role=researcher</td>
<td>3</td>
<td>My role=mentor, guider</td>
<td>6</td>
</tr>
<tr>
<td>My role=active</td>
<td>2</td>
<td>My role=supporter</td>
<td>5</td>
</tr>
<tr>
<td>My role=(co-)author</td>
<td>2</td>
<td>My role=teacher, lecturer</td>
<td>4</td>
</tr>
<tr>
<td>My role=observer, listener</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>OBJECT</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>623</td>
<td></td>
<td>216</td>
</tr>
<tr>
<td>Question, problem, goal, motive, assignment</td>
<td>106</td>
<td>Students, colleagues, people</td>
<td>51</td>
</tr>
<tr>
<td>Knowledge, ideas, facts, connections, perspectives, patterns</td>
<td>71</td>
<td>Information, formats, arrangements, knowledge</td>
<td>50</td>
</tr>
<tr>
<td>Tangible output (publications, papers)</td>
<td>54</td>
<td>Lesson, presentation</td>
<td>25</td>
</tr>
</tbody>
</table>

The respondents who participated in this study are included in the different discursive themes and reported in the next section.
Theme 1: ‘Research in Phases versus Transfer of Existing Knowledge’

The results show that the first theme is mostly built of objects that demark ‘research’ for the lecturers, such as the presence of a question or problem, a theory, a method or instrument, a hypothesis, data, and conclusions or results (Figure 7.2). These objects seem to indicate a discourse of research in phases or cycles, also confirmed with the presence of the object code ‘phases or steps’. Other prominent building blocks are activities with contents such as collecting, finding, and discovering; designing, planning, and choosing; analysing, writing, and reporting; and thinking and reflecting. The two goals that are part of ‘research’ in this theme are solving, improving, or changing and encouraging reflection or thinking. The three most prominent modalities show that ‘research’ is demarked by a certain level, quality, depth, or complexity, but can also be considered ‘research light’. Furthermore, it is mentioned that the activity should be (scientifically) relevant, valuable, and interesting to consider it research. Other modalities are as follows: of a critical nature, serious, or a quest. Furthermore, different types of research are named, such as qualitative, quantitative, clinical, or literature study, indicating that it is relevant to distinguish between types of research. The building blocks of the researcher show that, to demark ‘research’, the role of the respondent him/herself as an active researcher has an influence on the judgement. This argument of researchers’ role is combined with the aforementioned objects and activities that can be labelled as research in phases with the modality of depth and complexity, which
define an activity as ‘research’.

An activity is considered ‘non-research’ when the goal is to transfer material, such as curricula or books or knowledge and ideas. Furthermore, a prominent modality indicates ‘non-research’ to be about something that already exists and about a topic other than a research topic. Other goals mentioned are to find something out or to improve something. The characterisation of the respondent is framed as a guide or facilitator to others, not as a researcher.

Figure 7.2: Impression of the Theme 1 Network ‘Research in Phases versus Transfer of Existing Knowledge’ (all vertices with degree>5, betweenness centrality>100; R=‘research’; N=‘non-research’; Rx=respondent).

Theme 2: ‘New versus Educational Routine’

The results of theme 2 (see Figure 7.3) show a higher number of ‘goals’ as building blocks for ‘research’ than theme 1, such as adding or contributing knowledge or insight but also learning. The discursive network also shows the modality ‘directed towards a goal’ and the object ‘intent’ for an activity to be judged as research. The building block activities show: sharing or discussing, guiding or explaining, teaching, and checking. Furthermore, objects are a gathering, thesis, or assignment; skills; and reflection. The modality ‘the respondent him/herself learns as well’ is also part of the discursive theme.

The object building block ‘subject’ is one of the more prominent ones, while the
respondents consider an activity research when ‘the subject is the same as the respondents’ research’. In contrast to theme 1 is the modality ‘new’, positioned as the most prominent modality of ‘research’, along with: creative, explorative, without compromise, and state of the art. Furthermore, an activity can be considered ‘research’ when it can contribute to research or when it feels like research.

An activity is considered ‘research’ when respondents themselves learn of it, while learning is also an argument part of ‘non-research’, such as by the goals of learning, guiding, developing, or gaining more insight. Activity building blocks for ‘non-research’ in this theme are judging or checking, answering, testing, finding or collecting, and developing.

The modalities to indicate that activities are non-research are educational, didactic, or informative and serve the function of graduation, with disciplining and preparatory as less prominent. Other modalities consider ‘non-research’ activities to be procedural, practical, fixed, and based on routine. The only building block that characterises the respondent is: ‘passive’.

Figure 7.3: An Impression of the Theme 2 Network: ‘New versus Educational Routine’ (all vertices with degree>5, betweenness centrality>100, R=‘research’; N=‘non-research’; Rx=respondent).

Theme 3: ‘Tangible versus Invisible’
The arguments that construct the judgement on ‘research’ in theme 3 (see Figure 7.4) are based mainly on the more tangible aspects of research. Relevant goals to judge an activity as ‘research’ are graduating (PhD), publishing, receiving funding, developing, creating, or
generating. These mostly tangible goals are combined with some less tangible goals, such as to keep up with the discipline, to substantiate or deepen, and to conduct research. Also, the formal status of the activity is important, indicated by *modalities* such as ‘is formally research’ as well as ‘is formally non-research’ as part of ‘research’ in this theme. The most prominent blocks of ‘research’ in this theme are creating, improving or solving (activity), tangible output (object), knowledge, ideas, facts (object), and orienting or reading (activity), and the *modalities* are scientifically, structured, substantiated, coherent, and comparable, combined with exploratory and contradictory.

Judgements on ‘non-research’ are based on deliberation (activity) and on the presence of a meeting or email (objects), which indicate a more communicative perspective on activities. Furthermore, ‘non-research’ activities seem to be less about the respondent him/herself and more about someone or something else, indicated by *modalities* such as facilitating and executing and respondents’ characterisations such as neutrality or outsider. Other (more active) *respondent* roles are lecturer or project leader, with the *goals* of checking, organising, or guiding.

![Figure 7.4: Impression of the Theme 3 Network: ‘Tangible versus Invisible’ (all vertices with degree>5, betweenness centrality>100, R=‘research’; N=‘non-research’; Rx=respondent).](image-url)
**Characteristics of Respondents in Each Discursive Theme**

People create the discourse but are themselves also defined by it (Foucault, 2001). Hence, the respondents were placed inside the network analysis and were found to be part of one specific theme (see Figure 7.5). The respondents in the current study were selected based on having teaching responsibilities. The results show that, of the lecturers in theme 1, ‘research in phases versus transfer of existing knowledge’, four are employed in traditional universities in natural/technical science disciplines and five are from social fields at both types of institutes. When this last group is considered in detail, three have a specific background in methodology and/or psychology, which in the Dutch educational system indicates that they have had extensive training in quantitative research principles and the empirical cycle.

Theme 2, ‘new versus educational routine’ is first based on lecturers of the traditional higher education institutes, both in the social science fields (4) and in the natural/technical science fields (4), along with a smaller group employed in higher professional institutes. When considered more closely, two of the lecturers from traditional universities work in the economics sector and one from the professional field. Also, one of the lecturers from the natural science field in traditional higher education work in informatics, while another works in applied mathematics. Thus, at least five of the lecturers in theme 2 have a work environment that is familiar with mathematical model-building activities.

Theme 3, ‘tangible versus invisible’, is dominated by lecturers from social professions at the institutes of higher professional education, mostly from a ‘caring’ profession such as pedagogics, social work, or health care. Two lecturers from traditional universities in this

Figure 7.5: Different Types of Lecturers as part of the Different Discursive Themes (T1-T7)
theme are from the ‘society side’ of the social sciences, which in general has a positive feel toward care-related topics in society.

7.7 Conclusion and Discussion

This study has explored the discourse on research of lecturers in higher education with the aim of finding the characteristics of lecturers’ discourse on ‘research’ and ‘non-research’. To do so, lecturers were questioned on what activities they consider to be ‘research’ or ‘non-research’ and why. The activities that were discussed would generally be considered research activities or teaching activities (see Table 7.1). The grounded coding approach resulted in five different building blocks of lecturers’ discourse on research (question 1). Based on the application of these building blocks to the interview transcripts, seven discursive themes on research have been found, of which three are prominent (question 2). Special attention was furthermore given to the differences and similarities between lecturers from higher professional education and lecturers who work for traditional universities (question 3).

The following five building blocks were found by which lecturers demark activities as ‘research’ or ‘non-research’ (question 1): a) the quality or mode of research; b) the goals that the activity should be directed toward; c) the activities undertaken; d) the characteristics of the researcher; and e) the objects that are part of the activity. These building blocks were compared to the results of the aforementioned previous studies on conceptions of knowledge. This showed that four out of five were present (see Table 7.5 for an overview).

The first building block on the ‘qualities or modes’ of research was found in the results of previous studies as part of process characteristics (new, innovative), a certain way of working (fundamental, systematic), and as a more interpersonal or social quality. The second building block, ‘goal’, was found to result in information, something new (ideas, truths, theory), solutions to problems, publication, or learning, insight, and personal transformation. The third building block, ‘activities’, was found to be as follows: collecting something, combining, applying, or integration, developing, creating, or building, explaining, writing, and disseminating, and learning or transforming. The fourth building block, ‘characteristics of the researcher’, was found in the meta-analysis of Åkerlind (2008) and as an underlying principle to structure their results in the studies of Brew (2001, 2003) and Visser-Wijnveen et al. (2009). The fifth building block, ‘objects’, was not found in previous studies on conceptions of research. Additionally, a sixth aspect, the context of the research, that was shown in the study of Bills (2004) was no criterion for the demarcation of research in the present study.

Thus, based on the comparison of the results of the present study with previous results, six possible building blocks should be considered when the demarcation of research in higher education is discussed.
Table 7.5: Presence of Building Blocks in Previous Studies on Conceptions of Research.

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Type of respondents</th>
<th>B1</th>
<th>B2</th>
<th>B3</th>
<th>B4</th>
<th>B5</th>
<th>B6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neumann, 1993</td>
<td>Senior academic administrators</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brew, 2001, 2003</td>
<td>Senior researchers</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>McCormack, 2004</td>
<td>Postgraduate researchers</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bills, 2004</td>
<td>Research supervisors</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meyer, Shanahan &amp; Laugksch, 2005</td>
<td>Students</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kiley &amp; Mullins, 2005</td>
<td>Research supervisors</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prosser, Martin, Trigwell, Ramsden &amp;</td>
<td>University academics</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middleton, 2008</td>
<td>Integration of ten previous studies</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

B1: the quality or mode of research; B2: the goals that the activity should be directed to; B3: the activities undertaken; B4: the characteristics of the researcher; B5: the objects that are part of the activity, and B6: the context of the research.

The content of each building block and a network analysis of the combination(s) in which they are applied resulted in seven different discursive themes (question 2) – of which three are prominent – to be distinguished within the discourse on ‘research’ and ‘non-research’ among lecturers in higher education. The lecturers in the first theme – referred to as ‘research in phases versus transfer of existing knowledge’ – consider activities to be ‘research’ when the respondent functions as a researcher, when the activity is dividable into phases or steps, and when the activity needs to have a certain depth or complexity and (scientific) relevance or interest. Furthermore, the activity needs to be aimed to solve or improve something or to encourage thinking for respondents to consider it ‘research’. An activity is considered ‘non-research’ when it is about transferring or finding out about existing knowledge (not new and mostly teaching-related objects such as books) of a different subject than the respondent’s subject. The lecturers that employ this theme are mostly from the natural science field or from a closely related social science (behavioural) strand such as psychology. This theme is dominated by lecturers from the traditional universities.

In the second theme, ‘new versus educational routine’, ‘research’ and ‘non-research’ are both often considered activities that can bring more insight. Research activities are new, creative, and feel like research, while ‘non-research’ activities can be considered more educational and more practical, fixed, and routine-based, with a more passive role for the respondents. Most respondents have a work context that is related to mathematical models, such as economics or applied math.

The third theme, ‘tangible versus invisible’, shows how arguments on ‘research’ are mainly based on tangible aspects such as publications or funding. The codes for ‘non-research’ are based on the invisibility of the respondents, who mainly have a facilitating character. Most lecturers that are part of this theme have social and care-related work...
contexts. This theme is dominated by lecturers from the vocational institutes. Furthermore, to provide an answer to question 3, the differences among lecturers in higher education can be somewhat based on institutional differences, but the differences between disciplinary fields seem much more prominent.

The three discursive themes found show that ‘research’ cannot be considered a single entity. The rules underlying the demarking of ‘research’ from ‘non-research’ by lecturers can be considered part of the same discourse in the sense that lecturers all apply similar building blocks in their reasoning, although not always in the same amount or with the same content. One can say that lecturers of different discursive themes do understand the construct of the arguments that lecturers in other themes apply, but they do not see eye to eye on what actually delimits ‘research’. The cyclical process and the active role of the lecturers in the first theme is a rather different perspective than the central role for learning and the modality of the activity in the second theme. There, cycles or phases are less relevant for it to be research as long as the activity has a certain depth, creativity, or newness. This is, again, a different perspective than the output orientation of the third theme.

Limitations
The sample in this study consisted of 36 lecturers from two types of institutes, including lecturers from social science/professions as well as from natural science and techniques. Excluded were lecturers from humanities since they form only a very small part of the educational programmes at the professional institutes. Thus, future research should also consider this group of disciplines as well (see also Visser-Wijnveen, 2009).

Furthermore, the differences between lecturers can be considered both discipline-based and institutional. One can wonder which group boundary is more dominant when a larger and more diverse sample is investigated, but it is also possible that the boundaries will shift. More elaborate research can bring a firmer conclusion. Additionally, the categorisation of disciplines by Biglan (1973) in hard and soft, applied and non-applied, and life and non-life should then be considered. When quickly applied to the current results, it seems that theme 1 can be labelled ‘hard’ (natural sciences and behavioural psychology), theme 2 labelled ‘non-life’ (economy and applied mathematics), and theme 3 labelled ‘soft’ and ‘life’ (social and care-related professions). Hence, it seems that the Biglan (1973) dimensions can also be an interesting method to categorise the lecturers’ discursive themes when more interdisciplinary professional fields are included. It is also clear that, in this quick comparison, not all six categories are present in the current outcomes. Thus, further research should consider these categories much more carefully and precisely in relation to lecturers’ discourse on ‘research’ and ‘non-research’.

Another aspect to consider is what implications each discursive theme has for
choices in the balance between research and teaching (Boyd & Smith, 2011), as well as the choices of research methods, outputs, or partnerships with students and colleagues (Visser-Wijnveen, et al., 2009).

For the time being, the differences between the lecturers do not fully follow institute boarders. Discipline – as always – plays an important role, and while many consider this the main difference between the two types of institutions, Biglan’s (1973) applied and non-applied dimension does not seem to be too influential for the research discourse, at least not at the institutional level. Hence, lecturers (and researchers) from both types of institutes should consider the others more as colleagues than as strangers since they more fully share discursive themes on research among disciplinary colleagues than among colleagues of another field at a similar institute.