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The Desired Teaching Qualities of Lecturers in Higher Education

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A Means End Analysis

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Abstract

Purpose – The study aims to develop a deeper understanding of the teaching qualities of effective lecturers that students desire and to uncover the constructs that underlie these desire expectations and reveal the underlying benefits that students look for.

Design/Methodology/Approach - A semi-standardized qualitative technique called laddering was applied that allows researchers to reach deeper levels of reality and to reveal the reasons behind the reasons. The study was conducted amongst teacher education students at a large German University of Education and laddering questionnaires were handed out to 53 students enrolled in a business management course.

Findings – The exploratory study gave a valuable first insight into the desired qualities of lecturers. In particular, the study results indicate that students want lecturers to be knowledgeable, enthusiastic, approachable, and friendly. Students predominately want to

encounter valuable teaching experiences to be able to pass tests and to be prepared for their profession. This study also showed that students are mainly concerned about vocational aspects of their studies and are less interested in their subject.

Research limitations/implications – Due to the exploratory nature of the study and the scope and size of its sample, the results outlined are tentative in nature. As the study involved only a single group of university students from one university, the results cannot be generalized to the student population as a whole.

Originality/value – The study was the first to successfully apply the means-end approach and the laddering technique to the issue of service quality in higher education. The study has, hopefully opened up an area of research and methodology that could provide considerable further benefits for researchers interested in this topic.

Keywords Service quality, Higher education, Means and ends, Laddering

Paper Type Research paper

The Desired Teaching Qualities of Lecturers in Higher Education – A Means End Analysis

Introduction

In January 2005, Germany's highest court overturned a federal law that had banned the introduction of fees and thereby paved the way for German universities to start charging student tuition fees for the first time. By 2009/2010 German universities will also have switched completely to the two- level system of higher education (bachelor-master) to achieve the objectives of the Bologna process. The aim of the so-called Bologna process is the establishment of a European higher education area by harmonising academic degree standards and quality assurance standards throughout Europe by 2010. 45 European countries participate in the Bologna Process, which is named after the Italian city of Bologna where the Bologna declaration was signed by European ministers of education in 1999. All participating

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countries commit themselves to adopt a system of comparable academic grades, introduce a system with two main cycles (undergraduate/graduate), and to promote European co-operation in quality assurance. Therefore, all students in Germany will be able to complete a Bachelor degree at one university and begin a master's degree at a different university. As a consequence[1], German universities have to treat their students more as customers in the future and try to retain them as study results indicate that the recruitment of students is several times more expansive than their retention (Joseph *et al.*, 2005). While service quality studies are quite common in the UK, as universities are expected to providing its students with well-supported lecturers, excellent learning environments, and appropriate support services, German universities have not as yet paid sufficient attention to the service quality concept applied to the university setting.

The new environment, however, will force German universities to compete for good students and the profits they generate in the medium-term. German universities will have to monitor the quality of the educational services they offer more closely to retain current and attract new students. Moreover, due to the introduction of tuition fees and the new two level system of educational qualification, students in Germany will probably become more selective and demanding, which will make it particularly important for universities to better understand the expectations of both current and prospective students.

Student expectations are a valuable source of information (Sander *et al.*, 2000; Hill, 1995). Especially new undergraduate students may have idealistic expectations, and if higher education institutions know about their (new) students' expectations, they may be able to respond to them to a more realistic level. At least, universities could inform students of what is realistic to expect from lecturers (Hill, 1995). The knowledge of student expectations may also help lecturers to design their teaching programmes (Sander *et al.*, 2000). Hill (1995) found that student expectations in general, and in particular, in relation to academic aspects of higher education services such as teaching quality, teaching methods, and course content

have been quite stable over time. Telford and Masson (2005) point out that the perceived quality of the educational service depends on students' expectations and values. The authors cite several studies that indicate a positive impact of expectations and values on variables such as student participation (Claycomb *et al.*, 2001), role clarity, and motivation to participate in the service encounter (Lengnick-Hall *et al.*, 2000; Rodie and Kleine, 2000). Accordingly, Telford and Masson (2005) believe that it is important to understand expectations and values of students in higher education.

This paper investigates the nature of service quality in higher education, and in particular, what qualities and behaviours students expect from their lecturers. We begin by reviewing the literature on service quality and the role of the lecturer. We then describe a study that uses the means-end approach, and laddering technique to develop a deeper understanding of the attributes of lecturers preferred by students. The research study uncovers constructs that underlie students' expectations, and the paper concludes with a summary of findings and suggestions for further research in this area.

Higher education as service

According to Hennig-Thurau *et al.* (2001, p. 332), educational services "fall into the field of services marketing". The authors, however, also point out that educational services differ from other professional services in several ways: Educational services play a central role in the students' lives and students require huge amounts of motivation and intellectual skills to attain their goals. Similar to a service encounter, the interaction between students and lecturers in a classroom is a form of human behaviour that is limited in scope, and that has clear roles for the participating actors who pursue a purpose (Czepiel *et al.*, 1986).

Moreover, educational services have several service characteristics. They are predominately intangible, perishable, and heterogeneous. Each student has his/her own experiences and unique demands and needs. In addition, the lecturer's teaching efforts are simultaneously "produced" and "consumed" with both lecturer and student being part of the teaching experience (Shank *et al.* 1995). Thus, it should be possible to apply findings from the services literature to the context of higher education.

Definition of service quality

Due to the unique characteristics of services, namely intangibility, heterogeneity, inseparability, and perishability (Parasuraman, 1986), service quality cannot be measured objectively (Patterson and Johnson, 1993). In the services literature, the focus is on perceived quality, which results from the comparison of customer service expectations with their perceptions of actual performance (Zeithaml *et al.*, 1990, p. 23). Zeithaml *et al.* (1993) distinguish between four types of service expectations: expected service; desired service; adequate service; and predicted service. According to this, customers have a desired level of service which is the level of service customers hope to receive. It comprises what customers believe can be performed and what should be performed. Customers also have a minimum level of service that they will accept as they realise that desired levels cannot always be

reached. This level is called adequate service level. Between these two service levels is a zone of tolerance that customers are willing to accept. Finally, customers have a predicted level of service, which is the level of service that they believe the company will perform.

This paper examines how lecturers should behave and which qualities they should possess (desire expectations) from a student's point of view. It has been recognized that despite its importance, the issue of customer expectations is still a neglected area and desire expectations in particular have received little attention (Yim *et al.*, 2003; Pieters *et al.*, 1998). Customers can use such desire expectations as reference standards for satisfaction judgments (Singh and Widing, 1991). In addition, desire expectations are thought to be more stable and less dependent on the particular service situation than other types of expectations (Zeithaml *et al.*, 1993). Therefore we contend that examining the nature of desire expectations is an important contribution to the area of satisfaction and service quality, which are related but still distinct concepts.

Service quality and customer satisfaction are fundamentally different concepts. While quality is a general attitude, satisfaction is linked to particular transactions (Robinson, 1999; Aldridge and Rowley, 1998; Rowley, 1997; Patterson and Johnson, 1993). There are, however, conceptual issues in the services literature concerning the sequential order of the two constructs. While authors such as Yavas *et al.* (2004); Farrell *et al.* (2001); Andreassen (2000); Cronin *et al.* (2000); Dabholkar *et al.* (2000) regard perceived quality as an antecedent to satisfaction, other authors (e.g. Bitner, 1990; Parasuraman *et al.*, 1988), however, consider customer satisfaction as an antecedent to service quality. Farrell *et al.* (2001) give a good overview of this contentious conceptual issue. Zeithaml and Bitner (2000), who also assume that service quality and customer satisfaction are fundamentally different concepts, regard satisfaction as the broader concept with service quality being a component of satisfaction. They believe that customer satisfaction is influenced not only by service quality perceptions but also by product quality, price, personal factors, and situational factors.

In higher education literature, Browne *et al.* (1998) and Guolla (1999) show that students' perceived service quality is an antecedent to student satisfaction. Thus, this paper follows the majority of recent papers that regard service quality as an antecedent to customer satisfaction. Positive perceptions of service quality can lead to student satisfaction and satisfied students may then attract new students by engaging in positive word-of-mouth communication to inform acquaintances and friends, and they may return to the university to take other courses (Marzo-Navarro *et al.*, 2005; Wiers-Jenssen *et al.*, 2002; Mavondo *et al.*, 2004; Schertzer and Schertzer, 2004). Student satisfaction has also a positive impact on fundraising and student motivation (Elliott and Shin, 2002).

Quality in higher education and the role of lecturers

Quality in higher education is a complex and multifaceted concept and a single correct definition of quality is lacking (Harvey and Green 1993). As a consequence, consensus concerning "the best way to define and measure service quality" (Clewes, 2003, p. 71) does not exist yet. Every stakeholder in higher education (e.g. students, government, professional bodies) has its own view of quality due to particular needs. This paper is concerned with one particular stakeholder in higher education: students. As stated, due to the introduction of tuition fees and the new degree structure, students in Germany will probably be regarded more as customers of educational services in the not so distant future. Students receive and use the training offered by the university, which makes them priority customers of educational activities (Marzo-Navarro *et al.*, 2005). Authors such as Sander *et al.* (2000), Gremler and McCollough (2002), and Hill (1995) also regard students as primary consumers of higher education service. This view, however, does not mean that other perspectives may not be valid and important as well. In this connection, Guolla (1999) rightly points out that students could also take the role as clients, producers, and products. Based on findings in the service quality literature, O'Neill and Palmer (2004, p. 42) define service quality in higher education

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as "the difference between what a student expects to receive and his/her perceptions of actual delivery".

Pieters *et al.* (1998, p. 757) suggest that the "extent to which customers attain their goals depends partly on the behaviour of service employees" and Oldfield and Baron (2000, p. 86) characterize higher education as a "pure" service and point to the importance of the quality of personal contacts. Thus, the underlying assumption of this paper is that for students, the qualities and behaviours of lecturers have a significant impact on their perceptions of service quality. This proposition is extensively supported in the services literature; Hartline and Ferrell (1996) for example believe that it is the behaviours and attitudes of customer contact employees that primarily determine the customers' perceptions of service quality. Other studies indicate that the human interaction element is essential to determine whether service delivery will be deemed satisfactory (Chebat and Kollias, 2000). Importantly, employees who are competent, able and willing to solve a problem can increase customers' service encounter satisfaction (Bitner *et al.* 1990). Bitner *et al.* (1994) recognized that in services satisfaction is often affected by the nature of the interpersonal interaction between the customer and the contact employee. Similarly, Van Dolen *et al.* (2004) and Chung-Herrera *et al.* (2004) have argued that for retail companies, frontline employees operate before during and after a purchase as the primary point of contact and key to providing good service.

In the context of higher education, Hansen *et al.* (2000) developed a valid instrument to evaluate modules or units of study. Their findings indicate that the instructional quality of the lecturer is the main influence on the perceived quality of modules. Likewise, Hill *et al.* (2003) found that the quality of the lecturer belongs to the most important factors in the provision of high quality education. Research findings by authors such as Schwaiger (2002) and Harnash-Glezer and Meyer (1991) also stress the crucial role of lecturers. Pozo-Munoz *et al.* (2000, p. 253) even maintain that "teaching staff are key actors in a university's work". Therefore, the

behaviours and attitudes of lecturers should be the primary determinant students' perceptions of service quality in higher education.

The student perspective

Winsted (2000) and Zeithaml *et al.* (1990) maintain that service providers will only be able to deliver service encounters that will satisfy customers if they know what their customers expect in general, and if they understand the critical employee behaviours and attitudes from a customer's point of view in particular. If lecturers know what their students expect, they may be able to adapt their behaviour to their students' underlying expectations, which should have a positive impact on their perceived service quality and their levels of satisfaction.

Oldfield and Baron (2000, p. 86) maintain that "there is an inclination to view service quality in higher education from an organizational perspective". They suggest that institutions should better pay attention to what their students want instead of collecting "data based upon what the institution perceives its students find important". Similarly, Joseph *et al.* (2005) point out that research on service quality in higher education has relied too strongly on the input from academic insiders while excluding the input from the students themselves. They believe that traditional approaches leave "decisions about what constitutes quality of service (e.g. such as deciding what is 'most important' to students) exclusively in the hands of administrators and/or academics" (p. 67). The authors, therefore, suggest that academic administrators should focus on understanding the needs of their students, who are the specific and primary target audience

Following Joseph *et al.* (2005), this paper focuses on the elements in service quality that students themselves believe to be of prime importance. After all, students have to decide what the term quality means to them. Sander *et al.* (2000) designed a University Students' Expectations of Teaching (USET) questionnaire to ask students what they believe should happen in learning and teaching (ideal expectations), what is likely to happen (predictive

expectations) and what they certainly do not want to happen (counter-ideal expectations). The questionnaire was also used to collect students' opinion about the qualities of a good teacher. Concerning the latter, students had to rank the following teacher qualities in order of preference: approachability, teaching skills, enthusiasm, knowledge, and organisation. Although students could have named additional qualities of a good teacher, no respondent added any further quality to the list.

The present study will go a step further. Instead of asking students to rank given teacher qualities, respondents will be allowed to name the attributes of good lecturers, which are the most important to them. In this connection, Rowley (1997, p.11) believes that researchers should identify the quality dimensions that are the most important to students as they are "most likely to have an impact on their overall satisfaction". Students can also give the reasons why the attributes are of particular relevance to them.

Given the current lack of knowledge concerning desire expectations (Pieters *et al.*, 1998) the research study will be exploratory in nature. The study aims to develop a deeper understanding of the attributes (qualities and behaviours) of effective lecturers that students desire and to uncover the constructs that underlie these desire expectations and reveal the underlying benefits that students look for. To address these issues, a semi-standardized qualitative technique called laddering will be applied as O'Neill and Palmer (2004, p. 41) suggest that qualitative methods "provide an interesting insight into the mindset of individual students". Laddering allows researchers to reach deeper levels of reality and to reveal what Gengler *et al.* (1999, p. 175) refer to as the "reasons behind the reasons". It is normally used to reveal relations between attributes of products, services or individuals ("means"), consequences provided by those attributes, and personal values or goals that the consequences reinforce ("ends"). By asking students about the qualities lecturers should possess and how they want them to behave, we will be able to *compare* what qualities lecturers should possess and what behaviours they should exhibit from a student's point of view with what the

literature on this topic suggests lecturers to do. To our best knowledge, no research study has applied the means-end chain framework and the laddering technique to the issue of service quality in higher education. Below we shall detail how the means-end approach is appropriate and useful in this research study.

The means-end approach and the laddering technique

Grunert *et al.* (2001, p. 63) describe the means-end approach as "one of the most promising developments in consumer research since the 1980s". It offers researchers the ability to examine the consumer's individuality in depth while still producing quantifiable results. Although initially used to solve product-or brand positioning problems in general and to link the consumer's product knowledge to his/her self-knowledge (Olson and Reynolds, 1983; Gutman, 1982) in particular, the means-end approach is not limited to these areas (Reynolds *et al.*, 2001a). Recently, the means-end framework has been applied to the domain of consumer behaviour (e.g. Bagozzi and Dabholkar, 1994; Pieters *et al.*, 1995; Pieters *et al.*, 1998), sales management (e.g. Deeter-Schmelz *et al.*, 2002; Botschen *et al.*, 1999; Reynolds *et al.*, 2001b), and strategic marketing (e.g. Reynolds and Rochon, 2001; Norton and Reynolds, 2001).

Botschen *et al.* (1999), for example, examine the reasons why customers seek specific characteristics and behaviours of sales personnel with the view that by understanding the underlying benefits sought, sales personnel could be encouraged to adapt their behaviour to their customers' expectations, and in turn, improve customer satisfaction. The rationale of the study was that the *behaviours* of sales personnel are the *means* by which customers can satisfy or strengthen their personal goals and *values*. The work of Pieters *et al.* (1998) is concerned with customers' desired expectations about service employees. They suggest that the ability of a customer to attain his personal goals and values (the ends) depends partially on the behaviours (the means) of service employees.

Thus we see that the means-end chain approach (Olson and Reynolds, 1983; Gutman, 1982; Howard, 1977; Young and Feigin, 1975) attempts to discover the salient meanings that consumers associate with products, services and behaviours. The approach focuses primarily on the associations in the consumer's mind between the attributes of products (or services or behaviours) (the "means"), the consequences of these attributes for the consumer, and the personal values or beliefs (the "ends"), which are strengthened or satisfied by the consequences. Attributes are the tangible and intangible characteristics of a product or service. Consequences are the reasons why a certain attribute is important to the consumer. They are the psychological or physiological results that consumers are motivated by in their use of the product or service (Gutman, 1982). Values may be seen as the consumers' universal life goals and the most personal and general consequences individuals are striving for in their lives (Rokeach, 1973). The linkages between attributes, consequences and values are the means-end chains assuming that customers have knowledge about the symbolic and/or personal value that products or services help them to achieve or satisfy (Peter *et al.*, 1999). There is also an assumption that consumer knowledge is hierarchically organized in the consumer's memory in a manner which spans different levels of abstraction (Reynolds *et al.*, 1995). At higher levels of abstraction, the connections to the self are more direct and stronger than at lower levels of abstraction. Therefore, consequences (mid level of abstraction) are more relevant to the self than attributes (low level of abstraction) and values (high level of abstraction) are more relevant to the self than personal consequences (Olson and Reynolds, 1983). In this way, there is a movement at increasingly higher levels of abstraction to desired ends, reflecting progress from the product to aspects of the consumer's self concept (Gutman, 1997).

The means-end approach is based on two premises (Manyiwa and Crawford, 2002): First, that values have a significant impact on (buying) behaviour, and secondly that consumers cope with the huge diversity of products (or services or behaviours) by classifying them into

classes or sets to make the choice-making process easier. The means-end approach has its roots in Kelly's Personal Construct Psychology (1991/1955). According to Kelly, individuals have their own view of the world and are probably capable of reflecting on and controlling their behaviour by creating rules or developing theories. Similar to Kelly, a means-end researcher believes a consumer's understanding of how elements of the world relate to them can be represented through means-end chains (Gengler *et al.*, 1995). The means-end chain approach also parallels the expectancy-value theory (Rosenberg, 1956), which proposes that consumer actions have consequences and that consumers learn to relate certain consequences to certain product attributes (Reynolds and Gutman, 1988). Consumers will seek attributes that produce desirable and relevant consequences able to help them attain their personal goals. Similarly, consumers learn to avoid certain attributes that produce consequences which prevent them from reaching their goals or from justifying their beliefs and/or behaviour.

Grunert and Grunert (1995) distinguish between two different views of the means-end approach. According to the *motivational view*, means-end chains and laddering should help the researcher learn about the consumers' buying motives. This view is modelled on traditional motivation research by authors such as Dichter (1964). The *cognitive structure view*, advocated by others (Gutman, 1982; Reynolds and Gutman, 1988; Jolly *et al.*, 1988) proposes that means-end chains should be regarded as modelling consumption-relevant cognitive structure. Here knowledge relevant to consumption is stored and organised in the memory (Grunert and Grunert, 1995). This view assumes a hierarchical model that consists of cognitive concepts of various levels of abstraction that are interrelated in chains and networks. In accordance with the cognitive view of human beings, cognitive structures and cognitive processes interact and control human behaviour (Grunert and Grunert, 1995). Cognitive structures are often displayed as networks of cognitive categories and the linkages between them. A system of means-end chains can then be seen as an *extract* from the

cognitive structure that is regarded as being significant for explaining consumer buying behaviour.

The means-end approach assumes that cognitive structures are hierarchical with cognitive concepts spanning different levels of abstraction. Moreover, the approach states that the extracts from the cognitive structure are of linear type, which means that the cognitive concepts are linked by one-to-one associations. However, the interviewer deduces this linear structure from a possibly larger cognitive network during the laddering interview (Grunert and Grunert, 1995). Herrmann (1996) criticizes the means-end approach for assuming a *hierarchical* knowledge structure while modern cognitive psychology research indicates that cognitive structures are complex *networks*. Van Rekom and Wierenga (2002) suggest that knowledge representations are better viewed as association patterns or *semantic networks* (Chang, 1986). In this alternative model, consumers have patterns of interconnected concepts in their minds where the resultant network may be more critical than the hierarchies within (Van Rekom and Wierenga, 2002). Similarly, Olson and Reynolds (2001) maintain that it is the connections between components (attributes, consequences, values) where the importance lies as it is here that the most meaning is presented. This view suggests that we should be more interested in the *relations* between the concepts of meaning than the *hierarchy* of concepts. Thus, means-end relations should be regarded as semantic relations between concepts with both hierarchical *and* non-hierarchical relations.

Types of laddering methods: hard and soft laddering

There are two different laddering approaches that can be distinguished: soft laddering and hard laddering (Grunert *et al.*, 2001; Botschen and Thelen, 1998). *Soft laddering* refers to in-depth interviews where respondents are restricted as little as possible in their natural flow of speech. Researchers have to understand the meaning of the given answers and to link them to the means-end model (Grunert *et al.*, 2001). *Hard laddering* refers to data collection

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techniques (interviews and questionnaires) where researchers compel respondents to "produce ladders one by one and to give answers in such a way that the sequence of the answers reflects increasing levels of abstraction" (Grunert *et al.*, 2001, p. 75). Although the majority of published means-end chain studies use in-depth laddering interviews as data collection tool (Botschen and Thelen, 1998), some authors use questionnaires to collect laddering data. In 1991, Walker and Olson developed a paper-and-pencil version of the laddering interview. The researcher asks respondents to fill in a structured questionnaire and to write down maximally four attributes that are of relevance to them and then specify why a certain attribute is important to them. For each attribute, respondents can give up to three reasons (Botschen and Hemetsberger, 1998).

Botschen and Hemetsberger (1998) believe that by using a paper-and-pencil version, the researcher can prevent interviewer bias without difficulty. Furthermore, no social pressure is involved, and respondents themselves can decide when they want to end the laddering process. According to Botschen *et al.* (1999), the major advantage of the paper-and-pencil version in comparison to the traditional in-depth interviewing technique is the cost-efficient data collection. It is also easier to manage and it takes less time to collect and to analyse laddering data compared to soft laddering. Moreover, several researchers (e.g. Pieters *et al.*, 1995; Goldenberg *et al.*, 2000; Botschen and Hemetsberger, 1998; Botschen and Thelen, 1998) have already employed the paper-and pencil version successfully. Thus, we decided to hand out laddering questionnaires instead of conducting personal interviews.

Analysis of laddering data

According to Reynolds and Gutman (1988), the analysis of means-end data consists of three stages:

1. Content Analysis

The analyst has to content analyse and code all the sequences of attributes, consequences, and values (the ladders) obtained from the laddering questionnaires so that comparisons of ladders from several respondents can be made. The researcher has to break down the raw laddering data into separate phrases (chunks of meaning). Then meaningful categories have to be developed so that comparable phrases with identical meaning are grouped together. Coding is frequently an iterative exercise as the researcher has to recode data, split or combine categories, and generate new or drop existing categories several times. A decision-support software programme called LADDERMAP can be very helpful at this stage. The analyst can use an interactive data entry feature to enter up to ten chunks of meaning per ladder and to categorize each phrase as either an attribute, a consequence, or a value (Gengler and Reynolds 1995). With the software, the analyst can change and review the content analysis without difficulty and for example alter each coding within seconds. Gengler and Reynolds (1995, p. 24) suggest that researchers should develop many specific codes for the first analysis and combine all codes "until a manageable number of approximately 50 remain".

2. Implication Matrix

The researcher then has to aggregate the codes for individual means-end chains across subjects and to illustrate them in a matrix to express the number of associations between the conceptual meanings (attributes/consequences/values). Therefore, the analyst gives each code a number, which is then used to compute a matrix consisting of rows and columns. Rows represent the respondents' ladders, while columns correspond to the elements within the ladders. The constructed computed matrix is called an implication matrix as the associations between the constructs are generally labelled as "implications". An implication matrix "bridges the gap between the qualitative and quantitative aspects of the laddering technique" (Deeter-Schmelz et al., 2002, p. 619) by showing the number of times one code leads to another code. An implication matrix generally displays two different types of implications: In

a *direct* implication one attribute/consequence is stated directly after another

attribute/consequence in the same ladder, without any intervening attributes/consequences. In

an *indirect* implication two attributes/consequences are stated in the same ladder but separated

by at least one intervening attribute/consequence. LADDERMAP automatically generates

implication matrices. In the next step, the found associations have to be represented on a

hierarchical value map.

3.   Hierarchical Value Map

A hierarchical value map is "a graphical representation of a set of means-end chains which

can be thought of as an aggregate (e.g., market-level) cognitive structure map" (Gengler *et al.*,

1995, p. 245). A hierarchical value map is made up of nodes, which stand for the most

important attributes/consequences/values (conceptual meanings) and lines, which represent

the linkages between the concepts. It graphically sums up the information collected during the

laddering interviews (Claeys *et al.*, 1995) and thus illustrates the customer's voice (Zaltman

and Higie, 1993). A value map normally consists of three different levels, which relate to the

three concepts of meaning: personal value concepts are put at the top of the diagram,

functional and psychosocial consequences are positioned near the middle and attributes are

placed at the bottom of the map.

In order to facilitate the map in general, and the readability in specific, the researcher has

to decide that the value map only displays associations beyond a specific "cutoff" level, which

means that linkages have to be mentioned by a certain number of respondents in order to be

graphically represented. For example, a cutoff level of 1 means that every connection between

constructs mentioned by respondents is graphically represented. The resulting map is "a mass

of links and concepts that usually is unintelligible" (Christensen and Olson, 2002, p. 484).

The higher the chosen cutoff level is, the more linkages and constructs of meaning will

disappear and the more interpretable the map will become. However, if the cutoff level is too

high, too many constructs will have disappeared and the resulting map will not be interesting. Researchers, therefore, have to find a balance between data reduction and retention (Gengler *et al.*, 1995) and between detail and interpretability (Christensen and Olson, 2002) to create a clear and expressive map with sufficient information. Researchers should try different cutoff levels and explore their resulting maps in order to identify a consensus map that is the most meaningful and interpretable given the goals of the research study (Christensen and Olson, 2002).

After having described the means-end approach in general, and the laddering technique in particular, the next section is concerned with the research study that was carried out to explore the desire expectations of teacher education students in general and to reveal the desired attributes (qualities and behaviours) of lecturers in particular.

The study

The study was conducted from March to June 2004 amongst teacher education students at a large European University. Laddering questionnaires were handed out to 53 students aged between 19 and 32 years (X=22.9) enrolled in a business management course who took part on a voluntary basis. Grunert and Grunert (1995) suggest that researchers should collect ladders that are from a group of *homogeneous* respondents, and teacher education students at this university all have similar backgrounds, come from the surrounding area, and they want to achieve a common purpose: they all want to become teachers. For students to be able to fill in the laddering questionnaire, they received a detailed laddering instruction that we developed from existing instructions (Pieters *et al.*, 1998; Botschen and Hemetsberger, 1998). In particular, respondents were asked to:

- *Think about the behaviours or characteristics of lecturers that are important to you. Please do not describe the behaviours or characteristics that lecturers actually exhibit or have, but how you would like them to act or be.*

- *On the next page four sequences of boxes appear. Each sequence contains four boxes. The text above the first box in each sequence reads "I would like the lecturer to be … or to act …" Write in the first box of the first sequence the desired characteristic or behaviour of the lecturer that comes first to mind. Please be as specific and as exact as possible.*

- *Now think about another characteristic or behaviour that you would like the lecturer to have or to display. Write this in the first box of the second sequence, and so on, until you have written your desires in the first boxes of the four sequences.*

- *Once you have done this, proceed to the second box of the first sequence. The text above this box reads: "… that is important to me because…" Indicate in this box why the characteristic or behaviour of the lecturer is important to you.*

- *After you have indicated that, proceed to the third box of the first sequence. The text above this box reads: "… and this is important to me because…" Indicate in the third box, why what you indicated in the second box is important to you in this situation. Please then complete the fourth box in the same way.*

- *When you have completed the first sequence, proceed to the second sequence, and so forth, until you have completed all four sequences. If you really do not know why something that you indicated in a previous box is important to you, you can leave the following box open. However, we would appreciate it if you try to be as complete as possible.*

The following figure presents the laddering questionnaire used in our research study:

(Take in figure 1)

A total of 53 laddering questionnaires were handed out. The number of distributed questionnaires was theory-driven as qualitative researchers should always theoretically reflect on gathered data to decide whether they need more data. Researchers should sample respondents until they believe that their categories achieve theoretical saturation. Theoretical saturation means that no new, or relevant data emerge concerning a category, that the category is well-developed, and that the linkages between categories are well-established (Strauss and Corbin, 1998). The problem for qualitative researchers is that they do not know the minimum sample size at the beginning of a study (Bryman, 2004, p. 334). We originally planned to hand out 78 laddering questionnaires in three courses. After having analysed the filled in questionnaires from the first two courses, however, we discovered that respondents did not provide any new categories. As our categories reached theoretical saturation, we

decided that no additional questionnaires were necessary from the third course and we

stopped the laddering process after 53 questionnaires.

Data analysis and results

Meaningful categories were developed to group together phrases with identical meanings.

Following Gengler and Reynolds (1995), we combined all codes until a manageable number

of approximately 50 remained. The following tables show the 8 attributes, 11 consequences,

and 2 values. The codes are listed in descending order, based on the frequency of mention in

the ladders.

(Take in Tables 1, 2, and 3)

We then used LADDERMAP to create implication matrices and a hierarchical value map. The

following table shows an extract from an implication matrix:

(Take in Table 4)

The number of direct relations is given to the left of the decimal and indirect relations are

expressed to the right of the decimal. For example, "enthusiasm" leads to "motivation" 7

times directly and 8 times indirectly. Thus, 7 respondents said that the lecturer's enthusiasm

directly leads to their motivation, whereas 8 respondents sequentially related the two elements

with another element in between.

In the next step, the found associations are represented on a hierarchical value map, which

represents the most important attributes, consequences, and values (conceptual meanings) and

the linkages between them. The map only displays associations beyond the cutoff level of 5,

which means that linkages have to be mentioned by at least 5 respondents in order to be

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graphically represented. This cutoff level was chosen as the resulting map keeps the balance between data reduction and retention and between detail and interpretability.

(Take in Figure 2)

The hierarchical value map in figure 2 reveals a complex structure. Students mentioned several attributes. Thus, the most critical attributes are ,expertise, approachability, communication skills teaching skills, friendliness, enthusiasm, humour, and teaching methods.

These findings are similar to previous study results that indicated the importance of these instructor factors (e.g. Feldmann, 1976; Braskamp *et al.*, 1981; Patrick and Smart, 1998; O`Toole *et al.*, 2000; Willcoxson, 1998; Westermann *et al.*, 1998). In particular, Hill *et al.* (2003) found that students want lecturers to be knowledgeable, well-organized, encouraging, helpful, sympathetic, and caring to students' individual needs. Sander *et al.* (2000) found that students at the beginning of their university life desire lecturers who have good teaching skills and who are approachable, knowledgeable, enthusiastic, and organised. According to Lammers and Murphy (2002), students regard highly lecturers who are enthusiastic about their subject, inspiring, knowledgeable, and helpful. Similarly, Shevlin *et al.* (2000) mention "lecturer charisma" and Andreson (2000) points out that students desire lecturers who are caring, enthusiastic, and strongly interested in the students' progress. Brown's (2004) qualitative study results indicate that competent lecturers know their subject, are willing to answer questions, are approachable, and also have a sense of humour. In addition, they should be flexible enough to explain things in different ways, and to treat students as individuals.

As the size of the circles in the hierarchical value map stands for the frequency respondents brought up a certain concept, expertise is the most important attribute of lecturers. This supports findings by authors such as Pozo-Munoz *et al.* (2000), Husbands

(1998), Patrick and Smart (1998), and Ramsden (1991) who also point to the importance of lecturer expertise. For example, the study results by Pozo-Munoz *et al.* (2000) indicate that competency is the by far most important characteristic of "ideal" teachers. Teachers should have knowledge of their subject and be able to communicate it clearly to their students.

According to Greiml-Fuhrmann and Geyer (2003), who interviewed 40 students at commercial colleges, good teachers should give explanations, answer questions, change their teaching methods, and should be interested in and show concern for their students and their learning progress. Good teachers should also be humorous, friendly, patient, and fair graders. Similarly, students in our study want lecturers to answer their questions ("problem solution"), to choose the most suitable teaching method ("teaching methods"), and to be friendly ("friendliness[2]"). Students, however, students did not express their desire for empathetic lecturers, an attribute that authors like Westermann *et al.* (1998) and Elton (1996) found to be of importance to students.

Finally, authors such as McElwee and Redman (1993) believe that reliability is a factor that has a significant impact on students' perceptions of service performance. Lecturers should turn up to classes on time and keep records of student performance. Students in our sample, however, did not mention this attribute frequent enough to be displayed in the hierarchical value map.

In addition to displaying the most important attributes of lecturers, a hierarchical value map also shows why these attributes are important to students. In this way, it offers a deeper understanding of the attributes of lecturers that teacher education students desire by uncovering the constructs that underlie these desire expectations and graphically illustrating the underlying benefits that students look for.

In this connection, respondents mentioned several consequences and values. Students' desire to learn something ("learning") appears to be the most important consequence and the most important concept of meaning altogether. Students believe that they have to make

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valuable learning experiences at university in general and to acquire skills and methods ("knowledge") in particular, which help them prepare for their profession ("professional qualification"). The linkage between learning and knowledge supports findings in psychological literature that indicate that the learning process builds on existing knowledge and leads to new knowledge (e.g. Schönpflug and Schönpflug, 1995).

As the width of the line in the hierarchical value map reveals, learning is strongly associated with performance. Students want to have valuable teaching experiences to be able to pass tests ("performance"), which are necessary for students to obtain the degree and to start their careers. Students think that they are able to pass their tests if they are motivated ("motivation"). Students who believe that they are able to pass their tests feel freed from doubt and have certainty ("security"). The lecturer's enthusiasm has a positive impact on their motivation. In addition, the lecturers' expertise, enthusiasm, and their teaching skills are associated with "learning". Furthermore, students think that they can perform well if the atmosphere in class is supportive ("atmosphere"), which can be positively influenced by the perceived humour and friendliness of the lecturer. The strong focus on learning and performance supports findings by Rolfe (2002) that suggest that students may increasingly regard their university education as 'instrumental' as they enter higher education mainly for career reasons.

The ability of lecturers to choose the most suitable teaching method from a variety of teaching tools ("teaching methods") is important to students as lecturers can then offer interesting lessons ("interesting lessons"), which results in students being observant and paying attention to what their lecturers are saying ("attentiveness"). This, in return, helps students to learn ("learning"). The lecturer's communication skills also have a positive impact on students' attentiveness.

As stated, students want lecturers to be open to suggestions, criticism, and questions. They should also take time for their students during and after lessons ("approachability"). Lecturers

who are approachable can then provide direction or advice ("counselling") and solve students'
problems ("problem solution"). For lecturers to be able to solve their students' problems, they
have to have sufficient knowledge in their subject fields ("expertise"). The lecturer's
approachability is also indirectly related to students' desire for security and well-being. The
linkage between approachability, counselling and security supports findings by Rolfe (2002)
that indicate that students want lecturers to be available for them, to respond to their requests
and to deal with their concerns. Hill (1995), however, found that for second year
undergraduate students personal contacts with academic staff are less important than for first
year students. Thus, the importance of personal contacts may depend on students' educational
experience, a hypothesis that could be tested in a further study.

The value map also illustrates that the lecturer's friendliness, which is associated with
nonverbal signals like open body posture, forward body lean, and casual smiling
("friendliness"), makes students feel good ("well-being"). Students also think that if they can
save time ("save time"), due to a quick learning process ("learning").

Summary of findings

This paper has described how the means-end chain approach and the laddering technique can be successfully used to investigate service quality in higher education. Laddering allows researchers to reach deeper levels of reality and to uncover structural relationships between attributes of services or individuals ("means"), consequences provided by those attributes, and personal values or goals of students that the consequences reinforce ("ends"). Given the current lack of knowledge concerning student desire expectations an exploratory research study using the laddering technique was carried out to investigate how lecturers should behave and which qualities they should possess from a student's point of view. The Laddering method allowed us to "dig deeper" and reveal the constructs which drive the importance of the desired attributes of lecturers and uncover the benefits that students look for. The exploratory study gave a valuable first insight into the desired teaching qualities of lecturers and revealed the linkages between desired attributes, consequences and values including "security", and "well-being[3]". In particular, the study results indicate that teacher education students want lecturers to be knowledgeable, enthusiastic, approachable, and friendly. They should also possess sufficient communication and teaching skills and to be able to choose the most suitable teaching method from a variety of teaching tools. Students predominately want to encounter valuable teaching experiences to be able to pass tests and to be prepared for their profession. This study also showed that students are mainly concerned about vocational aspects of their studies and are less interested in their subject. The knowledge of student expectations may help lecturers to design their teaching programmes. The introduction of tuition fees in Germany will probably strengthen this "consumerist" approach. Countries such as the UK already witnessed similar developments (Rolfe, 2002). Then, German universities will also have to offer value for money in general and lecturers will have to emphasise the vocational relevance of their courses and modules in particular.

Limitations and directions for further research

The research study has several limitations. First of all, the study was exploratory in nature as it was the first to apply the means-end approach and the laddering technique to the issue of service quality in higher education. Its aim was to give a first valuable in-depth insight into what matters for teacher education students by revealing several important constructs. Further research studies, however, should improve our knowledge of this topic.

Due to the exploratory nature of the study in general and the scope and size of its sample in particular, the results outlined are tentative in nature. As the study involved only a single group of university students from one university, the results cannot be generalized to the student population as a whole. Qualitative researchers, however, can enhance generalisability by carrying out further studies using similar data collection and analysis methods at other research sites. Social scientists have to decide whether the additional research sites should be heterogeneous or homogeneous. As comparable results from heterogeneous research settings will contribute to generalisability, qualitative researchers should prefer these sites to homogeneous locations. By applying research findings to other contexts and by demonstrating existing connections and linkages, qualitative researchers engage in "moderatum generalization" (Bryman, 2004, p. 285). Qualitative researchers, therefore, can demonstrate that their findings are valid beyond and outside particular research contexts. However, they also have to be aware of the fact that moderatum generalisations "will always be limited and somewhat more tentative than those associated with statistical generalizations of the kind associated with probability sampling" (Bryman 2004, p. 285). Thus, fellow researchers should carry out further studies using similar data collection and analysis methods at other research sites. While this study was conducted with prospective teachers, who represent a homogeneous group that is necessary for the laddering procedure, fellow researchers should hand out laddering questionnaires to students who have a completely different background. Results from these studies could then be compared and differences could be revealed.

The measurement of service quality in higher education makes it necessary to consider the perspectives of other stakeholders (e.g. the government, employers, students' families) as well (Rowley, 1997). Thus, fellow researchers could examine the desire expectations of other stakeholder groups as well. Further research could for example investigate whether student desire expectations differ greatly from what lecturers believe students want. Bitner *et al.* (2000) suggest that service providers may not always know their customers' service quality expectations. Similarly, Mattila and Enz (2002) found a large gap between customer and employee perceptions regarding service quality expectations. Thus, fellow researchers could hand out questionnaires to both lecturers and their students. The resulting hierarchical value maps could be compared to highlight different views. Insights gained could make lecturers aware of differing perceptions and identify areas for staff training. In the context of service quality in higher education, first research results already indicate that a service expectation gap exists. Shank *et al.* (1995), for example, found that service delivery expectations are lower among professors than among their students.

Botschen *et al.* (1999) point to the fact that the paper-and-pencil version of laddering that was used for this study provides hardly any context information. As a consequence, the development of meaningful categories during content analysis is occasionally difficult to perform, especially if the researcher's pre-laddering knowledge about their respondents' cognitive categories is limited (Grunert and Grunert, 1995). In addition, Botschen *et al.* (1999, p. 55) admit that "little is known about the validity and reliability of the procedure and the comparability of results obtained from traditional laddering interview (soft laddering) and paper-and-pencil laddering". Due to the lack of personal interviewing techniques (e.g. postulating the absence of an object or a state of being or evoking the situational context), an inevitable amount of richness of data is lost. Finally, the researcher has no control over the interviewing process himself (e.g. who really fills in the questionnaire?). Grunert *et al.* (2001, p. 76), therefore, suggest that future research should clarify "under which circumstances it

may be safe to perform hard laddering, and when it appears necessary to employ soft laddering".

The results of the research study indicate that only few respondents were able to reach the highest level of abstraction, explaining the rather lack in codes at the value level. However, in comparable paper-and-pencil laddering studies by authors such as Pieters *et al.* (1998); Botschen *et al.* (1999) and Botschen and Hemetsberger (1998), respondents were also only able to come up with few values like "feeling good", "harmony with yourself", and "satisfaction". Botschen and Hemetsberger (1998) suggest that researchers could conduct in-depth laddering interviews to gather more and deeper information. Thus, fellow researchers should conduct semi-standardized qualitative in-depth one-on-one laddering interviews to learn more about the desired qualities of lecturers.

A hierarchical value map only displays associations beyond a specific "cutoff" level, which means that associations have to be mentioned by a certain number of respondents in order to be graphically represented. However, Grunert and Grunert (1995) rightly argue that neither theoretical nor statistical criteria exist that help researchers decide which cutoff level they should choose. Thus, fellow researchers could try to develop these criteria.

The described difficulties with the means-end approach and the laddering method are both researchable and solvable and authors such as Grunert *et al.* (2001) think that significant progress would be possible within only a few years if fellow researchers could be attracted to these issues.

This paper has focused on the issue of service quality in higher education and by applying a method which has previously not been used in this context, it has hopefully opened up an area of research and methodology that could reap considerable further benefits for researchers interested in this topic. After having shown that the laddering technique can be applied successfully to the issue of service quality in higher education it is hoped that fellow

researchers take up our call and develop further studies to test the application of the laddering

technique in their investigations of service quality in higher education.

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Table 1 - Overview of attributes (cutoff level 5)

Name of Attribute	Number of times mentioned (in ladders)	Characteristics
Expertise	27	Lecturers should have sufficient knowledge of the subject they teach
Approachability	26	Students want lecturers to be open to suggestions, criticism, and questions. They should also take time for their students during and after lessons.
Communication Skills	22	Lecturers should be skilled to use the right words to gain access to the contents of their students' minds in general and to tailor their messages to best suit students' language abilities and preferences in particular.
Teaching Skills	17	This attribute describes the ability of lecturers to select appropriate course contents and give their lessons a logical structure.
Friendliness	14	Lecturers should give positive nonverbal cues and behave in a friendly manner. Friendliness is associated with nonverbal signals like open body posture, forward body lean, and casual smiling.
Enthusiasm	13	Lecturers should transmit excitement and interest for their subject
Humour	8	Lecturers should have the quality of being funny
Teaching Methods	7	Lecturers should be able to choose the most suitable teaching method from a variety of teaching tools

Table 2 - Overview of consequences (cutoff level 5)

Name of Consequence	Number of times mentioned (in ladders)	Characteristics
Learning	48	Learning reflects the extent to which students feel they encountered a valuable teaching experience
Performance	27	Students want to pass tests and stand out from the crowd
Counselling	27	Students want lecturers to provide direction or advice as to a decision or course of action
Professional Qualification	22	Students want to acquire skills and methods to be prepared for their profession
Attentiveness	20	Students are observant and pay attention to what their lecturers are saying.
Atmosphere	19	Students want an atmosphere conducive to studying/learning, a comfortably studious atmosphere
Motivation	18	This stands for the psychological feature that arouses an organism to take action toward a desired goal and the reason for the action
Problem Solution	18	Students want to get the impression that lecturers will answer their questions and solve their problems.
Interesting Lessons	12	Students want varied lectures that are characterised by the lecturers' use of different teaching methods and media tools
Knowledge	12	Knowledge stands for the sum or range of what has been perceived, discovered, or learned.
Save Time	11	Students can solve tasks quicker and have more time for other (leisure) activities.

Table 3 - Overview of values (cutoff level 5)

| Name of Value	Number of times mentioned (in ladders)	Characteristics
Security	16	Students want to have certainty and to be freed from doubt.
Well-being	13	Students want to be in good hands and to feel happy

Table 4 – Extract from implication matrix

```
      IMPLICATION MATRIX           filename= dozIIIim.imp        page= 3
         Laddermap 5.4 Provided by Charles Gengler


   P  \   C  \   A  \   M  \   A  \   P  \   K  \   I  \   S  \
    R  \   O  \   T  \   O  \   T  \   R  \   N  \   N  \   A  \
     O  \   U  \   T  \   T  \   M  \   O  \   O  \   T  \   V  \
      F  \   N  \   E  \   I  \   O  \   B  \   W  \   L  \   E  \
       E  \   S  \   N  \   V  \   S  \   L  \   L  \   E  \   T  \
        S  \   E  \   T  \   A  \   P  \   E  \   E  \   S  \   I  \
         Q  \   L  \   I  \   T  \   H  \   M  \   D  \   S  \   M  \
          U  \   L  \   V  \   I  \   E  \   S  \   G  \   O  \   E  \
           A  \   I  \   E  \   O  \   H  \   O  \   E  \   N  \      \
            L  \   N  \   N  \   N  \   E  \   L  \      \   S  \      \
    ------------------------------------------------------------------
    EXPERTISE     .9    4.4     .2    2.4     .     1.5     .6    2.2     .1
    APPROACHAB    .1   21.21    .     1.2    2.3    .12     .1     .      .3
    COMMSKILLS    .4     .      8.9    .      .      .      1.4    .      .5
    TEACHSKILL    .8     .      1.3    .      .      .      .2    2.2     .1
    FRIENDLINE    .3    1.1     2.2    .     5.5     .      .      .      .
    ENTHUSIASM    .2     .      1.1    7.8    .      .      .1    3.3     .1
    HUMOUR        .      .      1.2    .2    5.5     .      .     2.2     .
    TEACHMETHO    .1     .      1.3    .1     .      .      .1    6.6     .1
    PERFORMANC   6.6     .      .      1.1    .      .      .      .     2.2
    COUNSELLIN    .1     .      .      1.1   1.1   16.16    .2     .      .2
    ATTENTIVEN    .2     .      .      1.1    .      .      .      .     1.4
    MOTIVATION   1.4     .      1.1    .      .      .      .      .      .1
    ATMOSPHERE    .1     .      .1     2.3    .      .      .      .      .
    PROBLEMSOL   1.1     .      .      .      .      .      3.3    .     3.3
    KNOWLEDGE    3.3     .      .      .      .      .      .      .      .
    INTLESSONS   1.2     .      5.5    2.2    .      .      .1     .      .
```

Figure 1 – Paper-and-pencil version of laddering

	I would like the lecturer to be...or to act..	..that is important to me because..	..and that is important to me because..	..and that is important to me because..
1.Important characteristic or behaviour				
2.Important characteristic or behaviour				
3.Important characteristic or behaviour				
4.Important characteristic or behaviour				
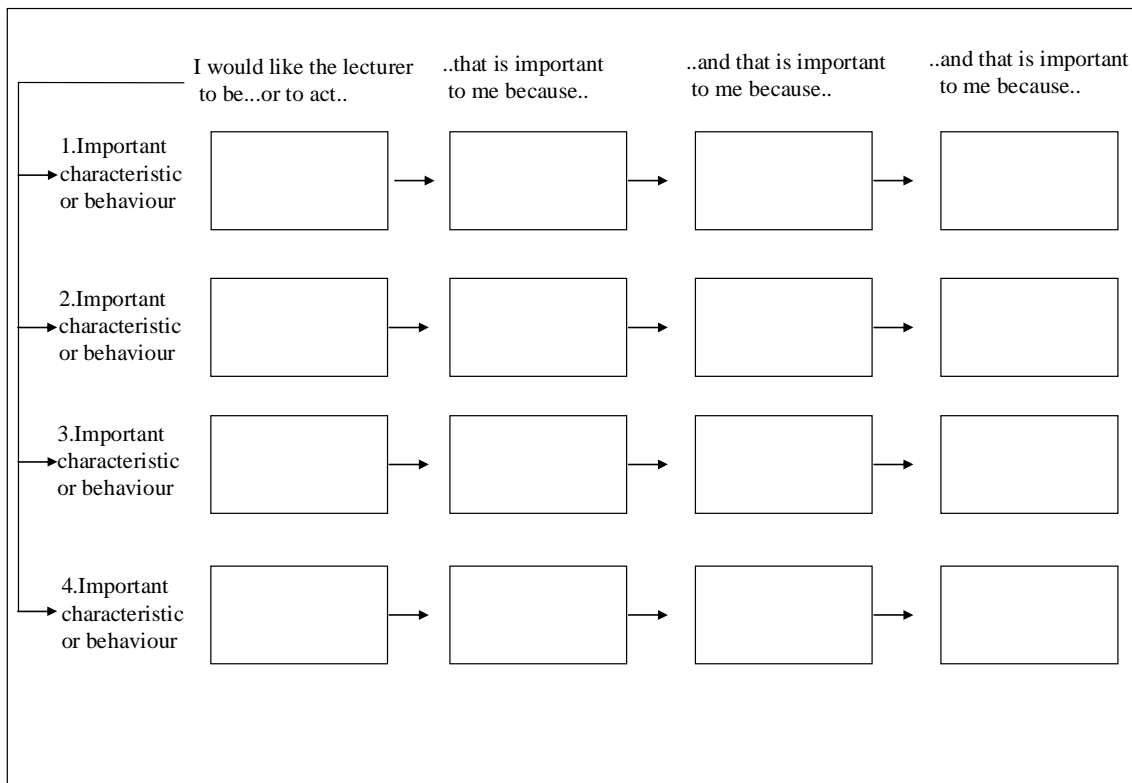
Source: Adapted from Pieters *et al.* (1998, p. 760) and Botschen and Hemetsberger (1998, p. 154)

Figure 2 – Hierarchical value map of teacher education students
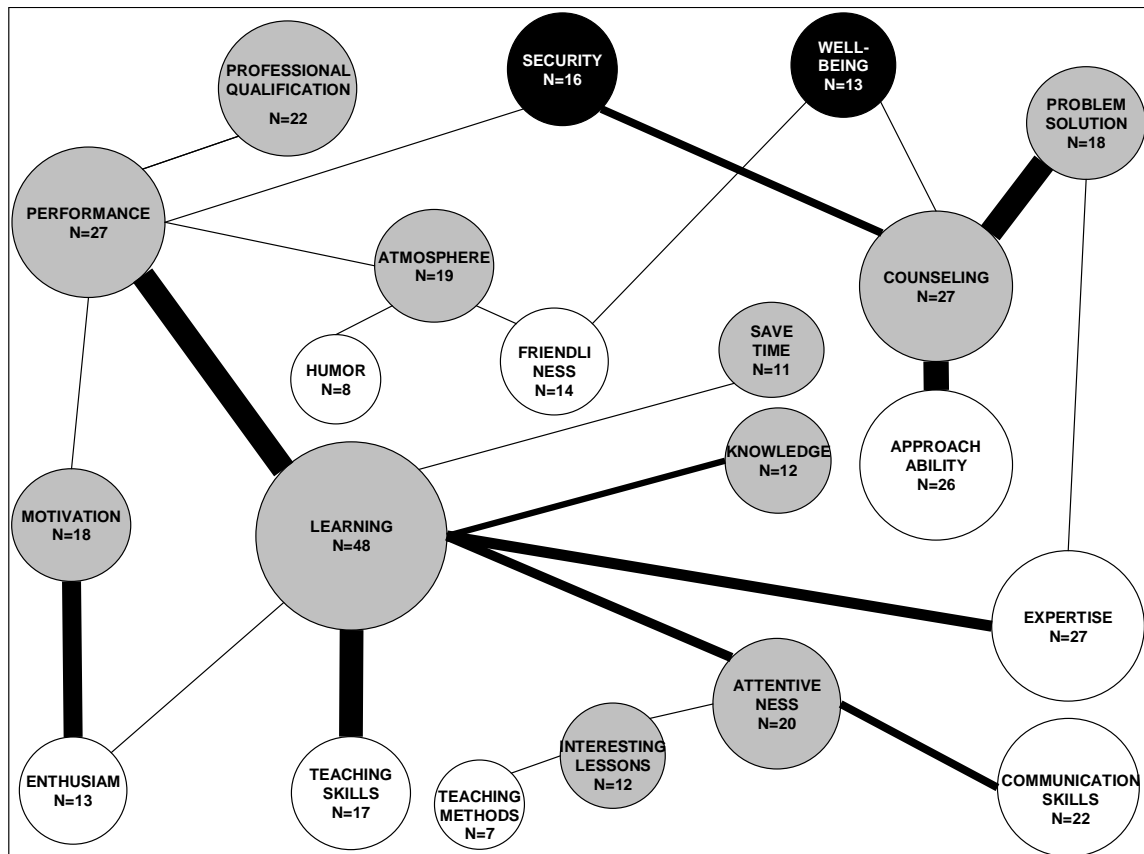
White circles represent attributes, grey circles stand for consequences, and black circles represent values.

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[1] As German universities want their students not only to study for a bachelor but also for a master (recruitment of new students would be more expensive than keeping existing ones), they have to be more service oriented and treat their students more as customers and keep them satisfied (otherwise they would switch to another university). This new service orientation of German universities is definitely a consequence of the new two-cycle system. before that, German students had difficulties with switching to another university as they only had a one-cycle sytem (diploma degree).

[2] Respondents mentioned "fairness" but the attribute does not appear in the corresponding value map due to the chosen cutoff level. Thus, we decided not to mention this attribute here anymore to avoid confusion.

[3] Respondents mentioned "hedonism" but the value does not appear in the corresponding value map due to the chosen cutoff level. Thus, we decided not to mention this value here anymore to avoid confusion.