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### Successful law students as models for beginner students?

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## Successful law students as models for beginner students?

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The aim of the present study is to gain information to be used for student counselling by comparing first-year students' ( $n=243$ ) spontaneous descriptions of their learning activities at the beginning of their legal studies with fast study pace law students ( $n=14$ ) who have already finished their first year. Both groups of students mentioned many of the same generative and non-generative strategies, but the use of the strategies was more versatile among the fast study pace students. It was characteristic of the beginner students to mention modes of learning whereas the fast study pace students emphasised elements of organised effort in studying. The fast study pace students' descriptions may be seen as a model of best practices in studying law and may be considered as valuable peer exemplifications for first-year students.

**Keywords:** higher education; student learning; novices; counselling; peer exemplification

### Introduction

#### *From presage to process*

Students' previous experiences, prior knowledge, interest in topics and approaches to learning have an influence on their learning in new teaching-learning environments (Biggs, 1993a, 2001, 2003). These student-based presage factors influence students' learning activities and processes during learning (Biggs, 1993a, 2001, 2003). Research on student learning differentiates between two qualitatively different approaches to learning (Biggs, 1987, 1993b, 2001; Entwistle, 1997, 2009; Entwistle & Ramsden, 1983; Marton & Säljö, 1976, 1997). In the deep approach, students concentrate on understanding a text as a whole as well as on structuring knowledge and relating ideas into their previous knowledge (Biggs, 2001; Svensson, 1976), and are engaged in strategies that search for the meaning of the task (Biggs, 1988, 2001). On the other hand, students who apply a surface approach try to cope with the course requirements, and therefore, concentrate on the passing of exams and on routine fact memorisation (Biggs, 1993b). Along with these two main approaches, other approaches to learning, such as achieving (Biggs, 1987), strategic (Tait & Entwistle, 1996), organised studying and effort management or organised effort in studying (Entwistle, 2009; Entwistle & McCune, 2004), have been identified. The teaching-learning environment has been found to have an influence on

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students' approaches to learning: students change their approaches to learning according to the context (Biggs, 1993b, 2003; Entwistle, McCune, & Walker, 2001; Fyrenius, Wirell, & Silén, 2007).

Students use different strategies to achieve their learning goals. When students try to reach a deep-level understanding of something, they use generative strategies in information processing (Peper & Mayer 1986), such as creating graphs and summaries (Kiewra et al., 1991; Lahtinen, Lonka, & Lindblom-Ylänne, 1997). On the other hand, if the students' learning task is to memorise and reproduce information, they tend to use non-generative strategies such as underlining, verbatim copying, repetition and simply reading already-generated material (Kiewra et al., 1991; Lahtinen et al., 1997). Non-generative strategies can be considered as lower-level and generative strategies as higher-level cognitive learning activities (Biggs, 2001).

First-year students have been shown to have difficulties in interpreting course requirements to the levels expected by the faculty, which may cause problems in their studies (Pintrich, 2000). Furthermore, they are not necessarily aware of the discipline's specific demands for academic thinking skills (Pintrich, 1995). Therefore, students should be encouraged to reflect on their ways of studying in relation to their learning environments (Biggs, 1987). Even though all general knowledge on learning skills and study strategies is useful to students, information about effective and functional study strategies from more advanced students in the same discipline is particularly helpful (Entwistle & Tait, 1995).

### *The learning environment of law students*

Students to the Faculty of Law at the University of Helsinki are selected through discipline-specific entrance examination and on the basis of their National Matriculation Examination grades. Each year, approximately 20% of applicants are admitted to the Faculty. However, most of the students entering the Faculty have no previous experience of studying at the university level, and law is not studied in upper secondary school.

The learning environment at the Faculty of Law is very demanding, and studying for a Bachelor's degree is mainly based on independent work. Most Bachelor-level courses are organised as mass lectures for the whole cohort (250 students). Summative assessments with written examinations are mainly used, and in some courses the examinations are extensive (involving up to 1900 pages to study). This demands very good study strategies and self-regulation skills on the part of the students. The majority of law students (90%) graduate as Masters of Law and their dropout rate is one of the lowest at the University of Helsinki. However, the length of time required by students to graduate has increased in recent years, and some students face problems in their studying (Lindblom-Ylänne, 2004). On the other hand, the law students with good self-regulation skills were found to have made excellent study progress (Haarala-Muhonen, Ruohoniemi, & Lindblom-Ylänne, 2011).

### *Aims of the study*

Firstly, the aim is to explore first-year students' spontaneous descriptions of their learning activities. Because the data collection took place at the beginning of university studies, it was expected that the beginner students would describe the activities they had adopted during their previous studies. To make comparisons,

the learning activities and experiences of successful study practices described by the fast study pace students who had finished their first study year are explored. The overall aim is to create tools for counselling and to develop students' learning activities in the context of law by comparing these activities and identifying the main differences between the two groups.

## **Methods**

The data were collected in autumn 2006 from the two groups of law students: beginner students and the fast study pace students who had finished their first year.

### ***The beginner students***

#### *Participants*

Altogether, 243 beginner students commenced studies and of these, 229 (94.2%) returned an open-ended personal study plan (PSP).

#### *The open-ended question in the PSP*

The data were collected through an open-ended question in the PSP at the beginning of studies. The PSP is an instrument used for study counselling, planning university studies and to support faster completing degrees. It is divided into two parts: narrow and open-ended. The open-ended PSP includes elements of reflecting on study skills, career prospects and study motivation. All students must write and maintain the PSP during their studies.

The question was sent electronically, and the study question was 'What is the best way for you to learn?'. The PSP process at the Faculty of Law began with a lecture during which students were given information about the aims, objectives and completion of the PSP. The lecturer (First author) encouraged the students to think over and reflect on their studying and learning. After the lecture, the students were able to receive study counselling from the lecturer. The students also received support material through the internet, for example links to different self-evaluation material. The students had three weeks to complete the PSP. If a student had problems doing so he or she was able to contact student tutors and study counsellors.

### ***The fast study pace students***

#### *Participants*

A total of 14 fast study pace law students were interviewed. The data were collected on a voluntary basis from the students whose study pace had been the fastest, more than 70 ECTS credits earned, in the academic year 2005–2006. These students represented 70% (14/20,  $N=247$ ) of the overall fast study pace students. First-year students are expected to gain 60 ECTS credits by the end of their first study year. The fast study pace students' mean ECTS was 89 (range 71–132) and their mean grade point average (GPA) was 3.4 (range 2.8–4.6; range of grades 1–5).

#### *Interviews*

The interviews were conducted at the beginning of the students' second study year. The interviews were semi-structured and the following themes were discussed:

(1) students' learning activities and (2) their recommendations and instructions for beginner students. The interviews were a part of another study (Haarala-Muhonen et al., 2011) in which self-regulation, the physical learning environment and team learning were found to be important components of students' study pace. In the present study, students' learning activities are explored in more detail and new data, such as peer recommendations, are presented.

### ***Data analyses***

The beginner students' answers and the fast study pace students' interviews were analysed separately using the qualitative content analysis method (Silverman, 2006). The beginner students' answers to the question 'What is the best way for you to learn?' and the fast-study pace students' descriptions of their learning activities and recommendations for beginner students were transferred to an Atlas.ti computer program for a qualitative content analysis.

#### ***Beginner students***

The analysis of the beginner students' descriptions was conducted by the first and second authors independently. The first author delineated all of the variations in the students' descriptions of their concrete learning activities, and one learning activity was the unit of analysis. Then, the first and second authors discussed the initial categories until reaching full agreement. In the second phase, the first and second authors grouped the initial categories into larger categories and discussed these also until reaching full agreement. These categories indicate a qualitative variation in students' learning and illustrate the level of learning activities.

#### ***Fast study pace students***

The analysis of the interview transcripts of the fast study pace students was conducted by the first and third authors independently. The first and third authors first read the interview transcripts. After thoroughly familiarising themselves with the interviews, the authors independently delineated and then categorised the students' descriptions of their learning activities. The analysis was driven by the unit of one learning activity. The first and the third authors then discussed the initial categories and grouped them according to the level of learning activities into broader categories until full agreement was reached. The inter-rater agreement between the first and third authors was high (95%). The authors independently captured all of the variations in the students' recommendations and instructions for beginner students, and then discussed the topics that the students considered important until full agreement was reached.

## **Results**

### ***Beginner students***

The 229 beginner students gave in total 576 descriptions of concrete learning activities. These were divided into three categories (Table 1). A fourth category consisted of students ( $n=5$ ) who did not understand the question or stated that they could not answer it.

Table 1. The beginner and fast study pace students' learning activities classified into four categories.

Category Learning activities	Beginner students ( $n=224$ )		Fast study pace students ( $n=14$ )	
	Number of students using the learning activity	Percentage of students using the learning activity	Number of students using the learning activity	Percentage of students using the learning activity
<i>I Generative study strategies</i>				
Writing in one's own words	41	18.3	7	50.0
Drawing concept maps	33	14.7	6	42.9
Reasoning	33	14.7	7	50.0
Discussing with peers	31	13.8	12	85.7
Explaining to oneself	13	5.8	4	28.6
Constructing a general picture	12	5.4	13	92.9
Outlining	9	4.0	3	21.4
Teaching other students	7	3.1	1	7.1
Constructing examples	2	.9	5	35.7
Applying	1	.4	5	35.7
Revision			11	78.6
Connecting knowledge			6	42.9
Asking questions oneself			5	35.7
Searching for examples			3	21.4
Problem-solving			2	14.3
Searching for background information			1	7.1
<i>II Non-generative study strategies</i>				
Making notes	50	22.3	8	57.1
Repetition	40	17.9	2	14.3
Underlining	19	8.5	7	50.0
Doing exercises	16	7.0		
<i>III Elements of organised effort</i>				
Prioritisation			10	71.4
Help seeking			6	42.9
Using other students' notes			3	21.4
Using former exam questions			2	14.3
Using existing examples			2	14.3
Reading other students' summaries			2	14.3
<i>IV Modes of learning</i>				
Reading	143	63.8		
Listening	104	46.4		
Writing	14	6.3		
Learning by doing	8	3.6		

Category I consisted of high-level activities which aimed at understanding. This (second-largest) category was entitled generative study strategies (Table 1) and included note-taking, which students did in two different ways: writing things down in their own words and drawing different types of graphs. Some students felt that

mind maps were very useful and important; however, others specifically reported that they disliked mind maps and felt them to be useless. Furthermore, some students mentioned study strategies that involved collaborative elements, such as discussing things with peers and teaching other students. The students who mentioned these considered interaction to be extremely important for their learning. Students also formed relations between different parts of the learning material by, for example, reasoning something out and constructing a general picture. More than half the students (50.4%) mentioned at least one generative study strategy. The following extracts show the degree of variation in the beginner students' answers describing their learning activities. The first extract is one of the most detailed and reflective, and consisting mainly of descriptions of generative study strategies.

I learn best by thinking over these things [new knowledge] and trying to understand. I always try to connect things to some context. In general, discussing the subject helps me to understand and presents many views of it. I have a visual memory and therefore going through the pages of textbooks and repeating things helps me to remember. I have also noticed that lectures are useful for motivation and for [understanding] major themes [of the subject]. Studying on one's own complements the lectures, but this should not mean only memorising things, but really understanding the subject matter and thinking it over. This might be one reason why I am a slow reader, because thinking about the subject takes time. (Student B179)

The second extract is an example of a short description of generative study strategies:

I learn best by organising learning material. I find that drawing mind maps, different exercises and group work are natural ways for me to revise and analyse information. (Student B2)

Category II consisted of descriptions of learning activities which aimed at reproducing text. This (smallest) category was entitled non-generative study strategies and included four activities: making notes, repeating, underlining and doing exercises. The following extract provides an example of how non-generative study strategies were described:

Copying notes and underlining text. (Student B119)

There were also descriptions of learning activities in which the nature of the student's effort in learning was unclear. These students described their learning only with single words: writing, reading, listening and learning by doing. These descriptions fell under the category modes of learning (Category IV). Close to a fourth (24.1%) of students mentioned only modes of learning. The last extract is typical descriptions of modes of learning:

Reading and writing. Alone. (Student B120)

Nearly half of the students (46.0%) mentioned only one or two learning activities. Almost as many students (43.3%) mentioned three to four learning activities. Only a few students (5.4%) stated that they used a variety (6–8) of learning activities.



### ***Fast study pace students***

The fast study pace law students mainly used learning activities which aimed at better understanding, and they described various generative study strategies. They mentioned strategies intended to generate connections between different parts of the learning material, such as applying, problem-solving, asking questions oneself and revising (Table 1). The most typical study strategies included constructing a general picture, discussing with peers and revising.

The fast study pace students mentioned only a few non-generative study strategies. Half of these students used underlining while reading texts, but most mentioned it together with generative strategies such as constructing a full picture and revision, as the following extract shows:

I underline, even in library textbooks. I love finding a text someone has already underlined. I have a visual memory and it helps me to remember. I read once very properly and then I might go back and revise. From the underlined text I can form a general picture. It helps when I glance at the book when reviewing. I absorb the main things. (Student F4)

In addition, these students mentioned several elements of organised effort in studying (Category III). For example, while reading, they prioritised the most important topics. They also used existing examples, previous examination questions and other students' summaries of books, as described in next extract:

First I look at old examination questions and analyse what had been emphasised in them. This helps me to recognise what might be important. (Student F2)

Each of the fast study pace students mentioned about using from 6 to 12 different learning activities. Furthermore, none of their descriptions comprised a learning mode.

The fast study pace students showed an awareness of their learning activities and described them coherently. Most of the students identified three different phases in their learning: (1) constructing a general picture, (2) studying the contents and (3) revising for exams. In the first phase, they emphasised the importance of constructing a general picture, and most made use of the table of contents of textbooks. Some students formed the general picture using a 'glancing method', i.e. concentrating on titles and browsing through the text. The following extract provides insight:

I read the table of contents and I make a copy of it and then I make my own notes on it and then I use it for revising. That's the minimum I do. (Student F4)

In the second phase, during the actual studying, the students showed clear preferences: some felt that writing in their own words or drawing graphs were the most useful study strategies, whereas others thought this was time consuming and concentrated rather on creating their own examples. This is clearly illustrated in the following examples:

Then I make a lot of notes ... mainly about the main topics. I list the most important things. Normally I first write down the title and then under it I put subtitles and after that I write down the most important things. Finally I draw mind maps. (Student F6)



When I am reading, I try to think what it really means. ... I try to concretise it in my mind. Usually I create my own [law] cases. I have never used notes or underlining. It's not my style. (Student F1)

The third phase, revising for exams, was felt to be important, and students were ready to apply time and effort for it. This is clearly illustrated in the following excerpt:

Revising for exams is important. For that I have a routine: I wake up early in the morning of the exam. I don't get enough sleep, in this way I feel more confident. (Student F8)

### ***Comparison between beginner and fast study pace students***

Several of the same generative and non-generative study strategies were found among the beginner and fast study pace law students. Thus, the differences between these groups were not in the level or quality of the study strategies applied. However, the fast study pace students clearly used a richer variety of learning activities than the beginner students. On average, the former mentioned 10 learning activities, of which 7 were generative study strategies, while the latter used on average 3 learning activities, of which 1 was a generative study strategy. Therefore, the differences in the study strategy use between these groups were found in the volume of the learning activities. Furthermore, both groups had their own characteristics. The beginner students commonly mentioned the use of modes of learning, whereas the fast study pace students emphasised elements of organised effort in studying (Table 1).

### ***Recommendations and instructions for beginner students***

In the interviews, 13 of the 14 fast study pace students gave recommendations and instructions to the beginner students. In these recommendations, the students addressed the importance of finding learning activities which fit oneself. In addition, they emphasised motivation, planning and time-management skills, target-orientated learning, taking care of one's well-being, active participation in lectures and knowledge of one's own teaching-learning environment. The following recommendation of one student highlights some of the main points:

Design a timetable that suits you. It is worthwhile to reserve the textbooks in advance, many students do not prepare for this and it takes time. Reading depends on your own interest. Those who are interested in reading stay at the library [of the Faculty]. Motivation is important and it is worthwhile maintaining it. It is important that you are aware of your own learning strategies when you are reading. If they are not working, you should try another way. To me it would be ideal if I could discuss these contents of books with somebody at work or ask some mates here [at the Faculty]. And at the library I could discuss the content even if the other person is not reading the same [textbook]. I am looking for examples from real life with my eyes open. When I am going home from the library, for example, on the way to the railway station I notice and consider all sorts of juridical issues around me. For instance, when I was reading for criminal law [exam] I was walking on street and was going to step onto zebra crossing and considered that if I now jump onto the road and a car runs over me, so would it be that [the driver of car] acted negligently or myself. And when I am travelling by train, when I buy a ticket and use it, it is a matter of private law.

It's the same thing when you are watching TV, you can always create cases which you can discuss in terms of how a case should go. Looking with one's eyes open means that learning is more than reading for exams and then forgetting it. With some imagination this can be fun. These things [subjects] should be connected to real life. (Student F14)

## Discussion

In the present study, the beginner law students were asked to describe and evaluate the ways in which they learn best in their new teaching–learning environment without necessarily being aware of the accompanying demands. In addition, the learning activities of the beginner students were compared with those of fast study pace students. Furthermore, we were interested in the kinds of recommendations that the fast study pace students were able to give to the beginner students.

The results showed that nearly half of the beginner students mentioned only non-generative study strategies or modes of learning and a few students could not define they learn best. According to Lahtinen et al. (1997), students who do not use generative strategies perform poorly. Law has been identified as a discipline in which understanding and applying theory or knowledge to practical processes and solutions is typical (Neumann, 2001; Neumann, Parry, & Becher, 2002). Therefore, it seems that these students did not use learning activities that would be effective and functional in the context of law. Furthermore, this may indicate that a substantial number of beginner students lacked an awareness of their learning activities and self-regulation skills. This interpretation is in line with a study by Lindblom-Ylänne (2004), which showed that some law students experienced severe difficulty in studying, such as problems with applying effective study strategies and problems related to self-regulation. In general, the beginner students described their learning activities quite briefly and mainly without reflection. This may, however, be partly explained by the study question ‘What is the best way for you to learn?’ which might have led them to describe only their very best learning activities.

The fast study pace students typically used a combination of generative study strategies and elements of organised effort in studying. In previous studies, a combination of deep and strategic approaches (Entwistle, 2009; Entwistle et al., 2001) as well as a deep-achieving combination (Biggs, 1988) has commonly been found in successful students. Interestingly, the study process of most fast study pace students was similar. These students considered the three study phases to be necessary and beneficial, but to a different extent and with different preferences.

Biggs (2001, 2003) and Entwistle (2009) have found that the content and context have an influence on students' approaches to learning and on their study strategy use. Therefore, beginner students need to be informed about the demands of the new teaching–learning environment and of the most functional learning activities, which fit best and are needed for successful studying. When the fast study pace students were asked to give their recommendations to the beginner students, along with the generative study strategies and elements of organised effort in studying, they mentioned aspects, which represent elements of self-regulation skills. It is typical for self-regulated learners to have appropriate learning activities and to be able to control these activities according to the learning environment (Pintrich, 2000).

The different phases of learning activities and aspects of self-regulation skills, mentioned by the fast study pace students, may be seen as a model of best practices in studying law at the Faculty. These recommendations of peer students might help

the transition of the beginner students in developing their own effective study strategies and in supporting the development their self-regulation skills. The beginner students who only applied few generative strategies probably need to broaden the selection of effective learning activities in the context of Law. However, the experiences of fast study pace students would be valuable not only to the beginner students but also to other students who are seeking help for study problems, which are in line with Entwistle and Tait (1995).

The best practices of fast study pace students have been used at the Faculty to increase beginner students' awareness of themselves as learners and of their capacity to control their learning. They have been encouraged in association of PSP process to compare their previous learning activities and self-regulation skills to the model of best practices, to reflect on these and to try to find ways to improve their learning skills, if necessary. Feedback for learning skills has been shown to increase meta-learning skills (Meyer, Ward, & Latreille, 2009). In the future, it would be useful to arrange more systematic peer-assisted study sessions by successful students for the beginner students to support their transition to the Faculty. Furthermore, there is also a need to develop the teaching–learning environment towards being more supportive of students in their process of becoming familiar with the disciplines.

### Notes on contributors

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### References

- Biggs, J. (1987). *Students' approaches to learning and studying*. Burwood, Victoria: Brown Prior Anderson.
- Biggs, J. (1988). Approaches to learning and essay writing. In R.R. Schmeck (Ed.), *Learning strategies and learning styles* (pp. 185–228). New York, NY: Plenum Press.
- Biggs, J. (1993a). From theory to practise: A cognitive systems approach. *Higher Education Research and Development*, 12, 73–85.
- Biggs, J. (1993b). What do inventories of students' learning processes really measure? A theoretical review and clarification. *British Journal of Educational Psychology*, 63(1), 3–19.
- Biggs, J. (2001). Enhancing learning: A matter of style or approach. In R.J. Sternber. & L. Zhang (Eds.), *Perspectives of thinking, learning, and cognitive styles* (pp. 73–102). Mahwah: Lawrence Erlbaum Associates.
- Biggs, J. (2003). *Teaching for quality learning at university: What the student does*. Ballmoor, Buckingham: Society for Research into Higher Education, Open University Press.
- Entwistle, N. (1997). Contrasting perspectives on learning. In F. Marton, D.J. Hounsell, & N. Entwistle (Eds.), *The experience of learning* (2nd ed., pp. 39–58). Edinburgh: Scottish Academic Press.

- Entwistle, N. (2009). *Teaching for understanding at university*. Hampshire: Palgrave Macmillan.
- Entwistle, N., & McCune, V. (2004). The conceptual bases of study strategy inventories. *Educational Psychology Review*, 16, 325–346.
- Entwistle, N.J., McCune, V., & Walker, P. (2001). Conceptions, styles, approaches within higher education: Analytic abstractions and everyday experience. In R.J. Sternberg & L.F. Zhang (Eds.), *Perspectives on thinking, learning, and cognitive styles* (pp. 103–136). London: Lawrence Erlbaum Associates.
- Entwistle, N., & Ramsden, P. (1983). *Understanding student learning*. London: Croom Helm.
- Entwistle, N., & Tait, H. (1995). Approaches to studying and perceptions of the learning environment across disciplines. *New Directions for Teaching and Learning*, 1995, 93–103.
- Fyrenius, A., Wirell, S., & Silén, C. (2007). Student approaches to achieving understanding – approaches to learning revisited. *Studies in Higher Education*, 32, 149–165.
- Haarala-Muhonen, A., Ruohoniemi, M., & Lindblom-Ylänne, S. (2011). Factors affecting the study pace of first-year law students – in search of counselling tools. *Studies in Higher Education*, 36, 911–922.
- Kiewra, K.A., DuBois, N.F., Christian, D., McShane, A., Mayerhoffer, M., & Roskelley, D. (1991). Note-taking functions and techniques. *Journal of Educational Psychology*, 83, 240–245.
- Lahtinen, V., Lonka, K., & Lindblom-Ylänne, S. (1997). Spontaneous study strategies and the quality of knowledge construction. *British Journal of Educational Psychology*, 67, 13–24.
- Lindblom-Ylänne, S. (2004). Raising students' awareness of their approaches to study. *Innovations in Education and Teaching International*, 41, 405–422.
- Marton, F., & Säljö, R. (1976). On qualitative differences in learning, I – Outcome and process. *British Journal of Educational Psychology*, 46, 4–11.
- Marton, F., & Säljö, R. (1997). Changing conceptions of learning and research. In F. Marton, D. Housell, & N. Entwistle (Eds.), *The Experience of learning implications for teaching and studying in higher education* (pp. 211–236). Great Britain: Scottish Academic Press.
- Meyer, J.H.F., Ward, S.C., & Latreille, P. (2009). Threshold concepts and metalearning capacity. *International Review of Economics Education*, 8, 132–154.
- Neumann, R. (2001). Disciplinary differences and university teaching. *Studies in Higher Education*, 26, 135–146.
- Neumann, R., Parry, S., & Becher, T. (2002). Teaching and learning in their disciplinary context. *Studies in Higher Education*, 27, 405–417.
- Peper, J., & Mayer, R.E. (1986). Generative effects of note-taking during science lectures. *Journal of Educational Psychology*, 78, 34–38.
- Pintrich, P.R. (1995). *Understanding self-regulated learning*. San Francisco, CA: Jossey-Bass.
- Pintrich, P.R. (2000). The role of goal orientation in self-regulated learning. In M. Boekaerts, P. Pintrich, & M. Zeitzner (Eds.), *Handbook of self-regulation* (pp. 451–502). San Diego, CA: Academic Press.
- Silverman, D. (2006). *Interpreting qualitative data: Methods for analysing talk, text and interaction* (3rd ed.). London: Sage.
- Svensson, L. (1976). *Study skill and learning*. Göteborg: Acta Universitatis Gothoburgensis.
- Tait, H., & Entwistle, N. (1996). Identifying students at risk through ineffective study strategies. *Higher Education*, 31, 97–116.