



Educational Process: International Journal

ISSN: 2147-0901 | e-ISSN: 2564-8020 | www.edupij.com

Educational Process International Journal • Volume 7 • Issue 2 • 2018

The Role of Interest and Enjoyment in Determining Students' Approach to Learning

Andrew G Holmes

To cite this article: Holmes, A. G. (2018). The Role of Interest and Enjoyment in Determining Students' Approach to Learning. *Educational Process: International Journal*, 7(2), 140-150.

To link to this article: <http://dx.doi.org/10.22521/edupij.2018.72.4>

Andrew G Holmes, University of Hull, United Kingdom. (e-mail: a.g.holmes@hull.ac.uk)

The Role of Interest and Enjoyment in Determining Students' Approach to Learning

ANDREW G HOLMES

Abstract

This paper provides information about findings from a recent research project that provides a new insight into how students' approaches to learning may be impacted by their level of interest in and enjoyment of the topic being studied. The data from this research suggests that for contemporary students, interest and enjoyment play an important role in determining their approach to learning. As such there are implications for all educators who may wish to encourage their students to use a deep approach to learning.

Keywords: approaches to learning, assessment, interest and enjoyment, surface and deep approaches to learning.



DOI: 10.22521/edupij.2018.72.4

EDUPIJ • ISSN 2147-0901 • e-ISSN 2564-8020

Copyright © 2018 by ÜNİVERSİTEPARK

edupij.com

Introduction

Conceptions of learning, perceptions of the learning environment, and approaches to learning have constituted a solid body of research around pedagogy and assessment in higher education for almost 40 years (Case, 2007; Case & Marshall, 2012; Richardson, 2000). There is a strong argument that the theory of “approaches to learning” is central to understanding how students learn, and how universities can improve teaching and learning. Ramsden argues that the theory is a “pivotal concept” in education (Ramsden, 2003, p. 40). Gibbs, whose work has been highly influential in informing higher education pedagogy, argues that “all learning phenomena...take place in a context mediated by the perceptions of students and their teachers involving their conceptions and approaches” to learning (Gibbs, 1995, preface).

Approaches to learning are the strategies adopted by students in order to succeed at learning (Jackson, 1994). The term approach identifies both how the learner processes information and their intention. The approach students take to their studies involves “either an intention to make sense (a deep approach) or an attempt to reproduce (a surface approach)” (Gibbs, 1995, preface). Although these references are over 20 years old they are still appropriate.

Conceptions of learning describe what a person understands by the term “learning,” that is, their understanding of the process and the differing conceptions people hold about it (Entwistle & Peterson, 2004). Perceptions of learning refer to how a student sees the requirements of a learning task, primarily, how they perceive the requirements of an assessment task (Marton & Säljö, 2005). The perception of learning draws attention to assessment as dominating learning tasks. Together, conceptions, perceptions and approaches constitute the theory of approaches to learning.

The theory has a solid research base, with its distinction between surface and deep learning built upon “an extensive body of evidence on the effects of teaching and assessment on student learning” (Entwistle, 1997 p. 215), that derives from “a coherent body of empirical evidence which can be used to inform thinking about teaching and learning” (p. 217). Yet it can be conceptualized as a simple theory, and there is an argument that it might have gained greater prominence than, perhaps, it deserves (Richardson, 2000). The theory has also been criticized as being a cliché (Sadlo & Richardson, 2003; Webb, 1997), as being ethnocentric, overemphasizing Western perspectives of learning which may prioritize and value understanding over memorization (Ryan & Louie, 2007), as being elitist (Haggis, 2003, 2004), and as only having helped teachers to reduce poor, rather than informing good, pedagogical practice; helping educators to identify what *not* to do to encourage a deep approach, not necessarily what *to* do (Joughin, 2009). This paper does not address criticism of the theory, its focus is on the role of interest and enjoyment as factors in students’ approaches to learning. The paper initially provides a historical overview of the research on approaches to learning, before reporting on the findings from a recent research project.

The genesis of the approaches to learning theory and the distinction between surface and deep approaches

The theory of deep and surface approaches originated with work by Marton and Säljö (1976) which, along with later work by Biggs (1987) and Entwistle (Entwistle, 1988, 1989; Entwistle & Waterson, 1988) established the theory in the field of education. Marton and Säljö set out to “explore qualitative differences in what is learned and to describe the functional differences in the process of learning” (Marton & Säljö, 1976, p. 10) which led to qualitative differences in learning outcomes. Their research summarized a series of studies with students. They categorized students as two distinct groups; those who tried to comprehend the whole of a piece of work and those who tried to remember the facts and identify what they anticipated, or believed, they would be tested on. The two categories were labelled as “*deep-level* and *surface-level processing*” (Marton & Säljö, 1976, p. 7, emphasis original).

Harlen and James (1997) identified that a deep approach means that something is:

Actively understood and internalised by the learner. It makes sense in terms of the learner’s experience of the world and is not simply a collection of isolated facts which have been memorised...it is linked to previous experience and so can be used in situations different from that in which it was learned. (p. 368)

Surface-level processing involved using reproductive conceptions of learning where the student was “more or less forced to keep to a rote-learning strategy” (Marton & Säljö, 1976, p. 7). Deep-level processing involved the student being directed towards the intentional concept of the material, that is, to comprehend and understand what the author was saying, rather than memorizing. Marton and Säljö equated process and learning strategy, that is, the process was demonstrated by what the student *did* to learn. Where a surface approach was used, the student had little, or no, personal engagement with the work, seeing it as an external imposition. Deeper approaches came from the students’ intention to understand, and led to better quality learning outcomes (Marton, 1975).

The term “approaches to learning” was introduced to signify how both process and the learner’s intention were combined (Entwistle & Peterson, 2004). Further studies by Säljö (1975, 1979) found that students tried to adapt their learning to the demands implicit in the assessment questions asked, that is, their approach was influenced by the assessment task, when given questions requiring factual answers, they responded by adopting a surface approach; yet, when provided with questions requiring answers indicating understanding, a deep approach was not always employed. Some used one; whereas some did not.

Although the students’ approach was influenced by the assessment task, it was easier to induce a surface approach than a deep one (McCune & Entwistle, 2011). Students with a general intention to understand, would use surface approach when the curriculum had a heavy workload or a high number of assessments (Gibbs ,1992, 1994; Gow, Kember, & Cooper, 1994) or when they perceived that an assessment task was irrelevant or induced anxiety (Fransson, 1977).

Building on the work, Säljö (1979) identified five conceptual approaches to learning. These were presented as a hierarchy through which learners could progress, and is shown in Table 1.

Table 1. Säljö's hierarchy of learner progression

1. A quantitative increase in knowledge	Surface
2. The memorizing of facts	Surface
3. The acquisition of facts and methods which were retained and used as necessary	Intermediate
4. Abstraction of meaning	Deep
5. An interpretive process aimed at understanding reality (seeing something in a different way)	Deep

Table 1 offers a hierarchical representation of *conceptions* of learning through which students may progress; they were seen as being qualitatively different stages. They did not describe cognitive developmental stages, a learner could use a deep approach in one context or task and a surface in another (Marshall & Case, 2005), yet students typically had a *general* intention to either understand or to memorize, based on their conception of what learning involved. Two clear approaches to learning had been identified; surface, a quantitative memorization and acquisition of facts, and deep, the intention to understand the meaning of the material (Biggs, 2003). Deep approaches usually, though not always, led to better achievement by students and the theory assumes that a deep approach to learning is preferable to a surface one and should be encouraged.

The importance of student perception

Laurillard (1979) confirmed Marton and Säljö's research, finding clear evidence that how students approached a learning task could be classified according to whether they adopted a surface or deep approach. Students whose conception was that learning involved increasing knowledge and memorizing facts, set out to do that, adopting a surface approach. Those whose conception involved understanding, typically set out to do that, adopting a deep approach. Yet their strategies were context dependent, based on perception of the context (Houghton, 2004; Richardson, 2005). Students would change their approach dependent upon their perception of the assessment task (Van Rossum, Dejkers, & Hamer, 1985; Van Rossum & Schenk, 1984). If they believed memorization was required, a surface approach would be adopted, if they believed understanding was required, a deep approach was taken. Within the same task approach was consistent, but different tasks were approached in different ways, because they perceived the requirements to be different.

Students' perception of how a learning task was assessed were inherently linked to the learning approach they took. Yet this worked both ways, as Struyven, Dochy, and Janssens (2002) explained:

Students' perceptions about assessment, have considerable influence on students' approaches to learning. Yet, vice versa, students' approaches influence the ways in which students perceive assessment. (p. 1)

Students had a *general* tendency to adopt a surface or deep approach, yet it was their *perception* of the summative assessment requirement that determined their approach to a specific learning task, not the actual requirement (Meyer & Parsons, 1989; Meyer, Parsons, & Dunne, 1990). Ramsden summed this up by stating that “Variability in approaches...coexists with consistency” (Ramsden, 2003, p. 51). The implication for educators is that if a student misunderstands the requirements of an assessment task, perceiving that memorization is required rather than understanding, they may use a surface approach when a deep one is actually required. Later work by Richardson confirmed that approaches varied across different parts of a program of study and may depend on students’ level of interest (Richardson, 2007). This is important because the literature rarely considers the role of interest as a factor in students’ approaches to learning.

A key point is that both conceptions and approaches are seen to be linked to the way that the student *perceived* the context of learning (Case & Marshall, 2012; Haggis, 2003; Marshall & Case, 2005). The linked phenomena of conception of and approach to learning, together with perception of the learning environment were linked to the outcome of learning. Deep approaches usually, but not always, lead to better quality outcomes and higher grades (Ramsden, 2003). Surface approaches were more strongly linked to poor learning than deep ones to effective learning. The reason for this being that a surface approach usually prevents a student from achieving outstanding work, whereas a deep approach does not *guarantee* work will be outstanding, because grades, marking and degree classification systems are not always reliable indicators of learning and understanding (Ramsden, 2003). Although the claim that a deep approach leads to better student achievement has not always been confirmed (Crawford, Gorden, Nichols, & Prosser, 1998; Trigwell & Prosser, 1991; Zeegers, 2001). It would seem that the varied findings as to whether or not a deep approach leads to better student achievement may relate to the discipline and depend on the type of assessment used (Gijbels, Van de Watering, Dochy, & Van den Bossche, 2005), with the natural science subjects, medicine, and law typically tending to require greater use of memorization.

The defining features of approaches to learning are now broader than Marton and Säljö’s original work and have emerged from an interplay between both qualitative and quantitative interview studies and quantitative questionnaire surveys (Aiskainen & Gijbels, 2017; Entwistle, 1997). The term “surface approach,” which the early research labelled as being one restricted to using rote learning, has subsequently been taken to include students who narrowly focus on the syllabus, to learning without personal engagement or reflection, a course being regarded as separate pieces of unrelated information, and routinely memorizing facts without contextualizing them (Entwistle & Peterson, 2004).

The research

This research project involved 20 undergraduate BA (Hons.) third and first year students studying in the field of Educational Studies at two contrasting universities located in northern England. Because much of the work on approaches to learning was conducted some time ago, the primary aim was to investigate contemporary students’ perceptions of learning, their approach to learning and the role that assessment played. Data was collected via individual semi-structured interviews in 2015 and was analyzed using a process of thematic analysis (Braun & Clarke, 2006, 2012, 2013; Guest, MacQueen, & Namey, 2012).

As would be expected from the foundational research, students' perceptions of the assessment requirement were found to play a key role in determining their approach to learning. Yet, quite unexpectedly, students' interest in and enjoyment of the topic were found to also be important factors influencing their approach to learning and their study practices.

The research found that students' interest in, and enjoyment of, the topic studied were important and impacted on the approach to learning, with a deep approach more likely to be used where they are present. Of the 20 students interviewed, every one mentioned interest and enjoyment as being factors in their approach. Where a student had an interest in and enjoyed studying the topic they were more likely to use a deep approach. Where they had no, or little interest or enjoyment, they were more likely to use a surface approach.

This adds a thought-provoking dimension to previous research on approaches to learning; one that is rarely considered in the literature. Although interest has been explored from psychological perspectives on learning in relation to motivation (see Schiefele, 1991), there appears to be little substantive discussion of interest as a factor in the literature on approaches to learning. Biggs (1987) identified that without interest, students were more likely to adopt a surface approach, and Richardson's (2007) work briefly mentions that the approach *may* depend on the level of interest. The data in this research project concurs with, reinforces and advances both Bigg's and Richardson's positions. Students' approach to learning *does* depend on the level of interest and enjoyment.

Students indicated that their *general* learning intention was to understand what they were studying, (that is, use a deep approach) yet where interest and enjoyment were lacking, they may use a surface approach. An initial lack of interest in a topic may be explained by a student's lack of understanding of it. The data indicated that it is not only students' perception of the assessment, but also their interest and enjoyment and, to an extent, their current level of understanding of a topic that may determine their approach. As students commence studying a topic they may not initially understand elements of it, and correspondingly show minimal interest. As their understanding develops over time, then so will their interest, which reinforces their understanding, which leads to greater interest in and enjoyment of the topic, which leads to further understanding and greater enjoyment and so on. This is aptly illustrated by the comment from one student:

...often you don't like a subject, because you've got very little understanding of it, but as you get some then you become more interested, and as you get more interested you want to understand more, and as you do that then you get more interested.

Similarly, another stated:

Often you don't like [enjoy] a subject, because you've got very little understanding of it, but as you get some then you become more interested, and as you get more interested you want to understand more.

Students also indicated that where they lacked interest they had to “force” themselves to be interested, to persevere, because they recognized that they needed to demonstrate their understanding in order to achieve successfully in an assessment task. Where students had to force themselves to be interested it is unlikely that the depth and breadth of understanding would be the same as for topics in which they were interested and/or enjoyed studying. This is illustrated by the following quote from a student (emphasis original):

If you’re not interested and don’t enjoy it then you are not going to understand it as much as if you were really interested in it. I mean if you are not interested in it you’re not going to understand it.

Of concern is that all 20 students interviewed indicated that at some point during their degree they had studied topics in which they were not interested. One final-year student indicated that they had not been interested in the majority of what they had studied during their degree. The implication is that unless students are able to develop interest and enjoyment then they will be less likely to use a deep approach to learning, and consequently may not achieve as highly in assessment tasks as they may be capable of.

Implications for practice

Although the research did not set out to produce definitive findings that may be applied throughout higher education, there are potential implications both for individual practitioners and for institutions. With qualitative research, it is important to be mindful that it is not necessarily generalizable, although, given certain conditions some generalizability may be possible. Flyvbjerg (2004), for example, argued that a single case study can be used to generalize, depending upon the case and how it is chosen. This position is broadly supported by others (e.g. Donmoyer, 1990), whilst Lincoln and Guba (1985) argued that generalization and transferability are directly related to the similarity of the different contexts under consideration. Where two contexts are sufficiently congruent, what they label as being “fittingness” (i.e. the degree of transferability being a direct function of the similarity of the two contexts) then a working hypothesis from the first context may be applicable to the second. That requires other researchers and practitioners in higher education to make such connections.

The findings suggest that if universities wish to encourage students to use a deep approach to learning, then they should be encouraged to study topics in which they are interested, and may enjoy. There are two implications that stem from this.

Firstly, students should, where possible, be allowed greater choice in deciding the topics that they study for a university module. Although there will necessarily be disciplinary requirements to study specific content, pre-specified learning outcomes, if used as per their original intention of taking emphasis away from prescribed content; allowing students to negotiate both content and method of assessment (Otter, 1992), should be articulated in ways that remove the emphasis from specific content. If written in such a way, allowing students to construct assignments that follow their specific areas of interest, this may allow them to develop a greater personal connection with, interest in, and enjoyment of, what they are studying. This in turn would generate the conditions that would allow and

encourage a deep approach to learning. In order to do facilitate this process students may require support and coaching to help them choose appropriate topics.

Secondly, these findings suggest that more time could be devoted to explaining to learners, during the application process for entry to higher education, about the topics they will study during their time at university. If students find that a substantial amount of their degree comprises material in which they are lacking interest then it is perhaps not surprising that they will be more likely to use a surface approach to learning, or may become disengaged from studying. If universities wish to maximize student retention, then greater attention could be given to ensuring potential students apply for the degree that is of greatest interest to them and one which they may enjoy studying. In the current mass higher education system (Trow, 1973) universities frequently compete with each other to recruit students; it is therefore perhaps unlikely they will wish to deter applicants with the appropriate entrance grades, despite the degree having content that may not hold interest for them. Yet, it is suggested, that the importance of interest and enjoyment should be taken into account where possible.

Conclusion

If universities wish to encourage students to use a deep approach to learning then this research suggests that it is important to ensure that they are interested in and enjoy what they are studying. This may be facilitated both by ensuring that during the process of applying to university, students are provided with sufficient information to allow them to choose degrees that are of greatest interest to them, and by allowing greater flexibility in student choice of topic when producing assessed work.

References

- Aiskainen, H., & Gijbels, D. (2017). Do students develop towards more deep approaches to learning during studies? A systematic review of students deep and surface approaches to learning in higher education. *Educational Psychology Review, 29*(2), 205-234.
- Biggs, J. (1987). *Student Approaches to Learning and Studying*. Burwood, Victoria: Australian Council for Educational Research.
- Biggs, J. B. (2003). *Teaching for quality learning at university*. Buckingham: Open University Press/Society for Research into Higher Education.
- Braun, V., & Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative Research in Psychology, 3*(2), 77-101.
- Braun, V., & Clarke, V. (2012). Thematic analysis. In H. Cooper, P. M. Camic, D. L. Long, A. T. Panter, D. Rindskopf, & K. J. Sher (Eds.), *APA handbook of research methods in psychology, Vol. 2: Research designs: Quantitative, qualitative, neuropsychological, and biological* (pp. 57-71). Washington, DC: American Psychological Association.
- Braun, V., & Clarke, V. (2013). *Successful Qualitative Research; a practical guide for beginners*. London, Sage.
- Case, J. (2007). Alienation and engagement: development of an alternative theoretical framework for understanding student learning. *Higher Education, 55*(3), 321-332.

- Case, J. M., & Marshall, J. D. (2012). Approaches to Learning. In M. Tight, K. H. Mok, J. Huisman, & C. Morphey (Eds.), *Routledge International Handbook of Higher Education* (pp. xx-xx). London, Routledge.
- Crawford, K., Gorden, S., Nichols, J., & Prosser, M. (1998). Qualitatively different experiences of learning mathematics at university. *Learning and Instruction*, 8(5), 455-468.
- Donmoyer, R. (1990). Generalisability and the Single-Case Study. In R. Gomm, M. Hammersley & P. Foster (Eds.), *Case Study Method* (pp. 45-68). London: Sage.
- Entwistle, N. (1989). Approaches to studying and course perceptions: the case of the disappearing relationship. *Studies in Higher Education*, 14(2), 155-161.
- Entwistle, N., & Waterson, S. (1988). Approaches to studying and levels of processing in university students. *British Journal of Educational Psychology*, 58(3), 258-266.
- Entwistle, N. J. (1988). *Styles of Learning and Teaching*. Abingdon, Oxon: Routledge.
- Entwistle, N. J. (1997). Reconstituting approaches to learning: A response to Webb. *Higher Education*, 33(2), 213-218.
- Entwistle, N. J., & Peterson, E. R. (2004). Conceptions of learning and knowledge in higher education: Relationships with study behaviour and influences of learning environments. *International Journal of Educational Research*, 41(6), 407-428.
- Flyvbjerg, B. (2004). Five misunderstandings about case-study research. In C. Seale, G. Gobo, J. F. Gubrium & D. Silverman (Eds.), *Qualitative Research in Practice* (pp. 420-434). London: Sage.
- Fransson, A. (1977). On qualitative differences in learning. IV - Effects on motivation and test anxiety on process and outcome. *British Journal of Educational Psychology*, 47(3), 244-257.
- Gibbs, G. (1992). *Improving the Quality of Student Learning; based on the Improving Student Learning Project funded by the Council for National Academic Awards*. Bristol, Technical & Educational Services Ltd.
- Gibbs, G. (1994). *Improving student learning: theory and practice*. Oxford: Oxford Centre for Staff Development.
- Gibbs, G. (1995). *Assessing student centred courses*. Oxford: Oxford Centre for Staff Learning and Development
- Gijbels, D., Van de Watering, G., Dochy, F., & Van den Bossche, P. (2005). The relationship between students' approaches to learning and the assessment of learning outcomes. *European Journal of Psychology Education*, XX(4), 327-341.
- Gow, L., Kember, D., & Cooper, B. (1994). The Teaching Context and Approaches to Study of Accountancy Students. *Issues in Accounting Education*, 9(1), 118-130.
- Guest, G., MacQueen, K. M., & Namey, E. M. (2012). *Applied Thematic Analysis*. London, Sage.
- Haggis, T. (2003). Constructing Images of Ourselves? A Critical Investigation into 'Approaches to Learning' Research in Higher Education. *British Education Research Journal*, 29(1), 89-104.
- Haggis, T. (2004). Meaning, identity and 'motivation': expanding what matters in understanding learning in higher education? *Studies in Higher Education*, 29(3), 335-352.
- Harlen, W., & James, M. (1997). Assessment and learning: differences and relationships between formative and summative assessment. *Assessment in Education*, 4(3), 365-379.

- Houghton, W. (2004). *Engineering Subject Centre Guide: Learning and Teaching Theory for Engineering Academics*. Loughborough: HEA Engineering Subject Centre.
- Jackson, B. (1994). Assessment practices in art and design: a contribution to student learning? In G. Gibbs (Ed.), *Improving Student Learning: Through Assessment and Evaluation* (pp. xx-xx). Oxford: The Oxford Centre for Staff Development.
- Joughin, G. (2009). Assessment, Learning and Judgement in Higher Education: A Critical Review. In G. Joughin (Ed.), *Assessment, Learning and Judgement in Higher Education* (pp. 13-27). Dordrech, Netherlands: Springer.
- Laurillard, D. (1979). The Processes of Student Learning. *Higher Education*, 8(4), 395-409.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Newbury Park, CA: Sage.
- Marshall, D., & Case, J. (2005). Approaches to Learning research in higher education: a response to Haggis. *British Education Research Journal*, 31(2), 257-267.
- Marton, F. (1975). What Does it Take to Learn? In N. Entwistle & D. Hounsell (Eds.), *How Students Learn* (pp. 125-138). Lancaster: University of Lancaster Institute for Research and Development in Post-Compulsory Education.
- Marton, F., & Säljö, R. (1976). On Qualitative Differences in Learning: I-Outcome and Process. *British Journal of Educational Psychology*, 46(1), 4-11.
- Marton, F., & Säljö, R. (2005). Approaches to Learning. In F. Marton, D. Hounsell & N. Entwistle (Eds.), *The experience of learning: implications for teaching and studying in higher education* (3rd [Internet] ed.) (pp. 39-58). Edinburgh: University of Edinburgh, Centre for Teaching, Learning and Assessment.
- McCune, V., & Entwistle, N. (2011). Cultivating the disposition to understand in 21st century education. *Learning and Individual Differences*, 21(3), 303-310.
- Meyer, J. H. F., & Parsons, P. (1989). Approaches to studying and course perceptions using the Lancaster inventory - a comparative study. *Studies in Higher Education*, 14(2), 137-153.
- Meyer, J. H. F., Parsons, P., & Dunne, T. T. (1990). Individual study orchestrations and their association with learning outcome. *Higher Education*, 20(1), 67-89.
- Otter, S. (1992). *Learning Outcomes in Higher Education*. London: DfE, UDACE.
- Popper, K. R. (1963). *Conjectures and Refutations: The Growth of Scientific Knowledge*. London: Routledge & Keagan Paul.
- Ramsden, P. (2003). *Learning to Teach in Higher Education*. London: Routledge Falmer.
- Richardson, J. (2000). *Researching Student Learning*. Buckingham: Open University Press.
- Richardson, J. T. E. (2005). Students' Approaches to Learning and Teachers' Approaches to Teaching in Higher Education. *Educational Psychology*, 25(6), 673-680.
- Richardson, J. T. E. (2007). Mental models of learning in distance education. *British Journal of Educational Psychology*, 77(2), 253-270.
- Ryan, J., & Louie, K. (2007). False Dichotomy? 'Western' and 'Confucian' concepts of scholarship and learning. *Educational Philosophy and Theory*, 39(4), 404-417.
- Sadlo, G., & Richardson, J. T. E. (2003). Approaches to studying and perceptions of the academic environment in students following problem-based and subject based curricula. *Higher Education Research and Development*, 22(3), 253-274.
- Säljö, R. (1975). *Qualitative differences in learning as a function of the learner's conception of a task*. Gothenburg: Acta Universitatis Gothoburgensis.

- Säljö, R. (1979). *Learning in the Learner's Perspective. I. Some common-sense conceptions*. Reports from the Department of Education. Report 76. Goteborg: University of Goteborg.
- Schiefele, U. (1991). Interest, Learning and Motivation. *Educational Psychologist*, 26(3-4), 299-323.
- Struyven, K., Dochy, F., & Janssens, S. (2002, August). *Students' perceptions about assessment in higher education: a review*. Paper presented at the Joint Northumbria/Earli SIG Assessment and Evaluation Conference; Learning communities and assessment cultures. Newcastle, University of Northumbria.
- Trigwell, K., & Prosser, M. (1991). Improving the quality of student learning: the influence of learning context and student approaches to learning on learning outcomes. *Higher Education*, 22(3), 251-266.
- Trow, M. (1973). *Problems in the Transition from Elite to Mass Higher Education*. Berkeley, CA: Carnegie Commission on Higher Education.
- Van Rossum, E. J., Deijkers, R., & Hamer, R. (1985). Students' Learning Conceptions and their Interpretation of Significant Educational Concepts. *Higher Education*, 14(6), 671-641.
- Van Rossum, E. J., & Schenk, S. M. (1984). The relationship between learning conception, study strategy and learning outcome. *British Journal of Educational Psychology*, 54(1), 73-83.
- Webb, G. (1997). Deconstructing deep and surface: Towards a critique of phenomenography. *Higher Education*, 33(2), 195-212.
- Zeegers, P. (2001). Student learning in science. A longitudinal study. *British Journal of Educational Psychology*, 71(1), 115-132.