

**LEARNING ENTREPRENEURSHIP
BY
ENTREPRENEURIAL LEARNING?**

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Abstract

That entrepreneurship and entrepreneurial education is a relevant topic nowadays is evident (van Praag, 2006; van der Sluis, 2007; The Oslo Agenda for Entrepreneurship Education in Europe, 2006). This is confronting universities of applied sciences in the Netherlands with a great challenge, namely to educate more and better entrepreneurs. Main goal of universities of applied sciences is to prepare students to become successful in their profession. Specific for entrepreneurial education programmes we can state that it is their purpose to prepare students to become successful entrepreneurs. From literature it seems that motives and competencies are the most important objectives for educators to focus upon. But are they achieving these goals? Are students, after attending an entrepreneurial education program, more motivated to become entrepreneurs and are they more competent to become successful than before? This research intends to answer the questions whether there is an effect on the development of relevant motives and competencies, whether there is an influence of the learning environment on these effects and whether there are certain causes for the reason that one program has minimum or no effects and other programs have greater effects. For answering these questions every entrepreneurial program will be positioned in a didactic model and all students of the entrepreneurial programs will be asked to make a self-assessment before and after attending the program. After this it should be clear what kind of educational programs are more effective than others. For answering the final question, which are the causes of the differences in effects of the different kinds of program, it will be necessary to interview the responsible developers and teachers.

Introduction

Why are so few people choosing to become entrepreneurs and starting their own business after leaving school? In conversations many people say they have a latent desire to become self-employed. Because then you can do what you love to do without suffering from a boss or organization who is telling you what to do and in what way you should do it (previous research at Saxion University of Applied Sciences shows that 55% of their students is interested in becoming an entrepreneur). Ultimately, only a very small percentage actually take the step towards an entrepreneurial life (previous research at Saxion University of Applied Sciences shows that only 4% of the students can be regarded as a student-entrepreneur).

And if chosen for a life as entrepreneur it then appears that only a small part of them is becoming really successful. Much of these newly started entrepreneurs are stopping after a shorter or longer time (whether because of bankruptcy or for other reasons) and a lot of others are not becoming successful at all. So *why does one entrepreneur succeed and does another fail?*

The first question (*why are so few people choosing to become entrepreneurs*) has much to do with motives that people have to (continue to) do what they ultimately are doing and with their creativity, self-confidence and willpower. Maybe starters do have motives that non-starters do not have or in a lesser extent.

The second question (*why does one entrepreneur succeed and does another fail*) has a lot to do with durability, and hence the strength of the motives. Are these motives stay intact throughout the lifetime of the business start-up or are their other motives which are working against the urge to stay in business? Also this second question has something to do with the degree of skills necessary to perform successful entrepreneurial behaviour.

If one wants to encourage more people to start their own business and one wants to ensure that it can be a successful business, one should be trying to stimulate and develop relevant motives and competences.

That entrepreneurship as a theme is relevant to the development of society and economy seems to be obvious. Research shows that entrepreneurship is important for economic growth, dynamism, innovation, employment and welfare in general (van Praag, 2006; van der Sluis, 2007). Some claim that entrepreneurship in the Netherlands is lagging behind and that no entrepreneurial culture prevails (Westhof, 2005; van Praag, 2006). Westhof and van Praag believe that it is of great importance to stimulate entrepreneurship. But how to stimulate entrepreneurship? It is obvious that a connection is made with the development of motives and competences, or in other words, with education. It is therefore not surprising that entrepreneurship and entrepreneurship education are high on the agendas of policy makers and researchers as is illustrated by “The Oslo Agenda for Entrepreneurship Education in Europe” (2006). The call for more and better entrepreneurs is nowadays louder than ever before. This means a major challenge for Universities of Applied Sciences in the Netherlands to actually educate more and better entrepreneurs.

It can be argued that the general objective of Universities of Applied Sciences is to prepare students to successfully perform their later working life. Specifically for entrepreneurship education the objective is to prepare students to successfully perform the entrepreneurial tasks. In addition to this primary objective there is the desire to stimulate more students to choose for the entrepreneurial life.

Important questions for Universities of Applied Sciences are: what determines whether a person chooses a life as an entrepreneur and what determines whether someone can perform the entrepreneurial tasks successfully. The first question is about the motives that makes someone wants to become an entrepreneur. The second question is about the competences that makes someone able to perform the entrepreneurial tasks successfully.

As shown from the literature motives and competences are determining the entrepreneurial intention and the entrepreneurial success.

Motives

When talking about motives, we are talking about how strong your wish is to become and stay an entrepreneur. Motives can be divided into internally and externally driven motives.

Internally driven motives to become an entrepreneur comes from within. The following internally driven motives are the most important ones according to literature (Shane and Venkataraman, 2000; Driessen, 2005; Shane, 2003; van Auken, 2006; Stigter, 2001; Mitchell, 2004; Snel, 2004; Gibb, 2005; Snel, 2006; Benz, 2006): Need for Achievement / Ambition, autonomy, recognition, more opportunities to develop and use ones own competences, more opportunities to use ones own creative talents in the realization of something new or of their own ideas, and the desire to have interesting work. The choice to become an entrepreneur can also be motivated by externally driven motives. Most important externally driven motives according to literature (Driessen, 2005; van Auken, 2006; van Praag, 2006) are: (the threat of) unemployment, job dissatisfaction, working life / family life – balance, favourable economic conditions, market niche, personal assets and income. Because internally driven motives are much more stronger than externally driven motives (Choo; Guerrero, 2006) and because education at Universities of Applied Sciences have only little or no influence on the latter, only the internally driven motives will be part of this research.

Motives play a role not only in entrepreneurial intention but also whether one becomes successful after the launch of the company. The afore mentioned motives that serve as food for entrepreneurial intention are staying important during the entire duration of the company. Once these motives weaken or disappear also the intention of continuing will decline and hence the chance of success.

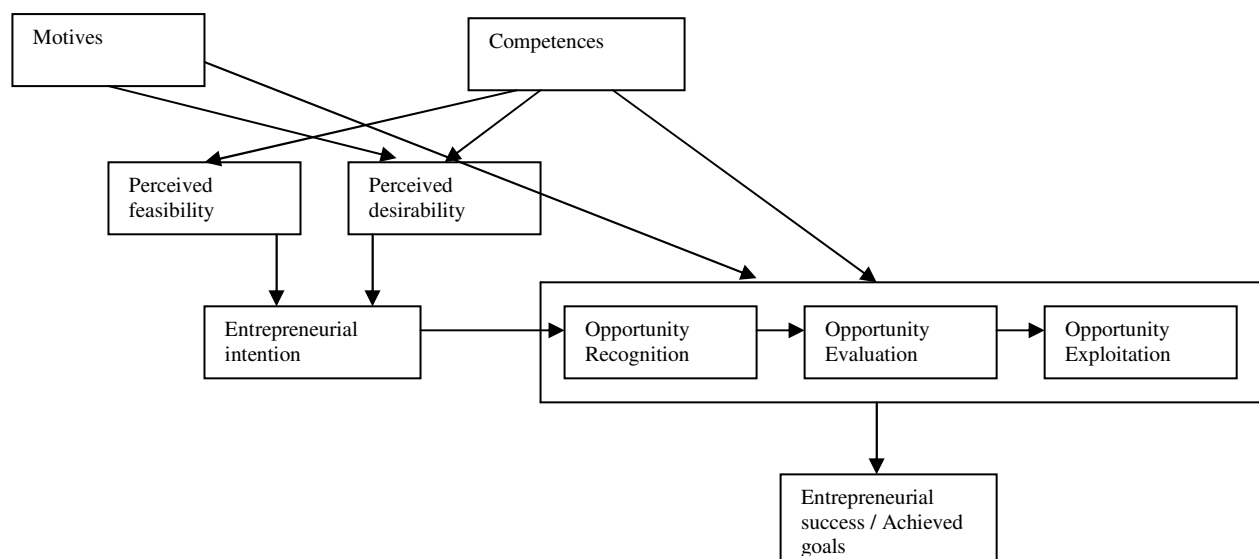
Competences

Also the presumed and required competences have a positive impact on the perceived desirability and the perceived feasibility (and hence the entrepreneurial intention and the entrepreneurial success) to starting a business. The following skills and knowledge are important according to literature (Shane, 2003; Gibb, 2005; Guerrero, 2006; Zampetakis, 2006; Linan, 2008): ability to recognize opportunities, the ability to solve problems using creativity, leadership skills, ability to think strategically, ability to take intuitive decisions in uncertain situations, communication skills, ability to develop new products and services, sales skills, ability to be convincing, negotiation skills, planning skills, ability to function in a team, ability to handle conflicts, and networking skills, and knowledge and understanding of (market)environment, people, production, marketing and finance.

The Entrepreneurial Model

Motives and competences have, in addition to the influence from the environment, a major influence on both the entrepreneurial intention and the entrepreneurial success. An entrepreneurial education program at Universities of Applied Sciences should therefore aim, at a greater or lesser extent, for the achievement of a positive development of these motives and competences as learning outcomes.

The above discussion is leading us to the following Entrepreneurship Model



The educational model

Besides the substantive focus on the various aspects of entrepreneurial motives and competences, it is also didactics that play a key role in achieving the main objectives of entrepreneurial education programs at Universities of Applied Sciences. The applied didactics can be distinguished by their structure and their focus.

Learning environment and learning outcomes

The above raises the question whether and in what way the entrepreneurial motives and entrepreneurial competences can be best educated at Universities of Applied Sciences. About this, people can have very different opinions. First it can be questioned whether motives could be influenced through education along with the question whether it is desired to do so. This may lead to the situation that one program is aiming at developing both motives and

competences, while another program is limited to aiming at developing competences. Second it can be questioned, because different educators can have different preferences for certain didactics. This may lead to the situation that one program is targeting a more traditional educational design with a focus on knowledge reproduction, while another program is focusing on a more constructivist educational design with a focus on knowledge construction. Whatever choices are made, the question remains whether the intended learning outcomes are achieved.

Entrepreneurial education

That entrepreneurship can be taught and developed, under the condition of a proper environment, is, according to Gibb (2005) now widely accepted. Also Lobler (2006) comes up with the same view, and presents a constructivist learning theory as a basis for designing entrepreneurship education. Both authors are choosing for a constructivist approach to entrepreneurship education as an ideal didactic model. Learning by doing, experiential learning, authentic tasks, trial and error and especially starting up one's own business are used as examples of effective ways to educate and learn entrepreneurial behaviour, skills and knowledge.

From literature it seems that the combination of the traditional learning model with a focus on knowledge reproduction, and the combination of the constructivist learning model with a focus on knowledge construction, are most common. And it seems that the latter combination is most suited to entrepreneurship education. But from literature it is also known that this not necessarily have to be the case. Maybe it will be quite possible for other combinations to be designed and implemented.

The question remains whether there are multiple ways that are leading to the achieved objectives. Are all existing and various programs leading to the achieved objectives? And if not, what makes one program better than another? Several causes can be mentioned for this. For example the didactics (or the lack thereof) and the context within the designed program should be implemented in (frameworks, bureaucracy, teacher qualities, etc.).

Problem definition

Main goal of Universities of Applied Sciences is to prepare students to become successful in their profession. Specific for entrepreneurial education we can state that it is the main objective to prepare students to become successful entrepreneurs. From literature it seems that motives and competencies are the most important goals for educators to focus upon. But are they achieving this goals?

Research questions

First question is whether, and to what extent, the learning environment (didactic principles) has influence on the learning results (effects on the developing of motives and competencies)? Following question is whether the differences between the original program design, the perceived program by students, the perceived program by teachers and the desirable program, are influencing the learning results (effects on the developing of motives and competencies)? Finally it is important to find out what are the causes of the differences mentioned above.

Theoretical framework proposition

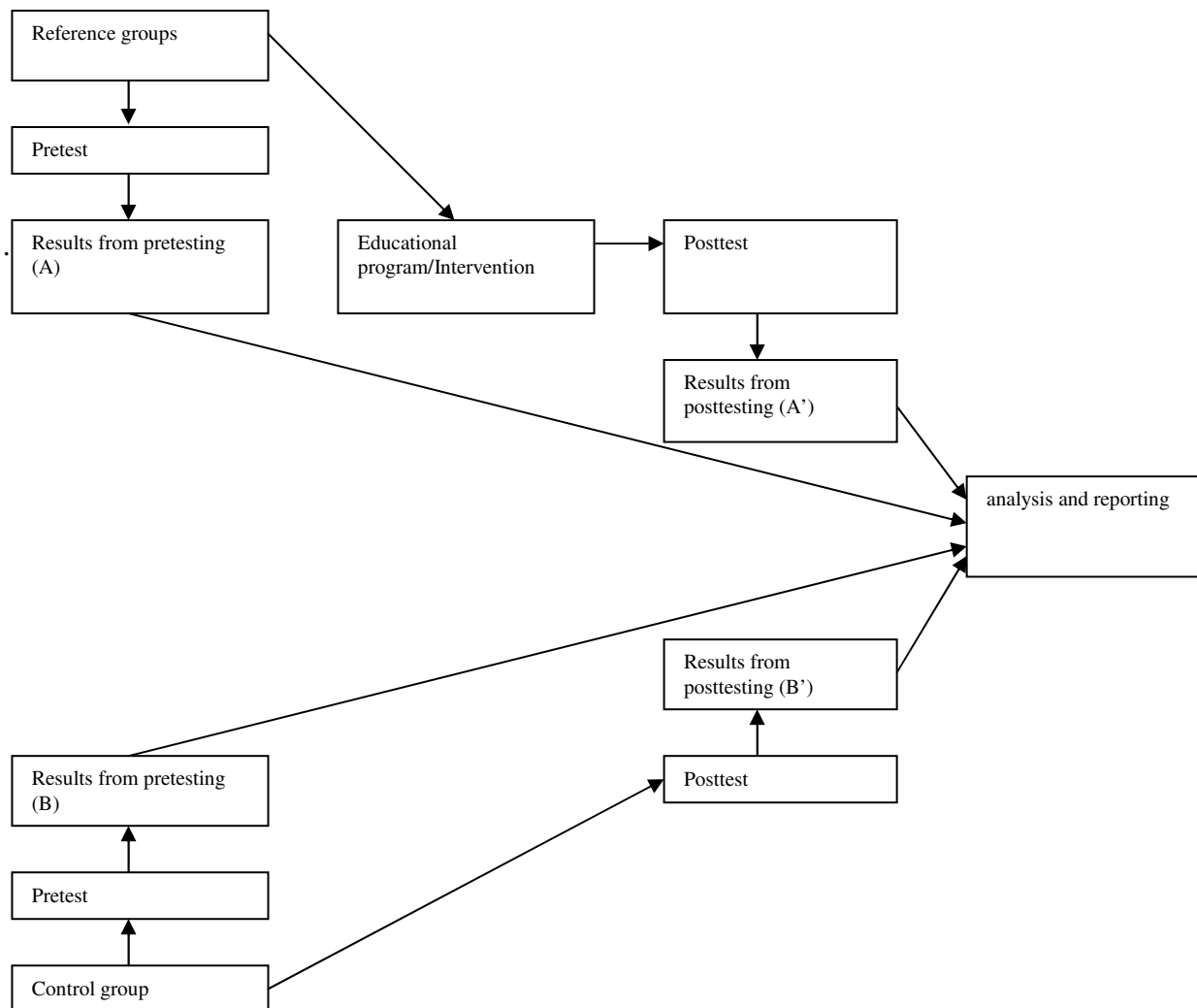
For answering the first question it is necessary to make a selection of relevant educational programs (that is, programs which are aiming at developing relevant entrepreneurial motives and entrepreneurial competencies) and position them into a didactic framework. After this it is necessary to measure the effectiveness of the different programs using an student-selfassessment before and after attending the program.

For answering the second question it will be necessary to let students, teachers and developers position the program afterwards.

The third question will be answered after interviewing the responsible developers/teachers afterwards.

Research design

To answer the effects-question it will be necessary to make use of a quasi-experimental research where there is a measuring before and after the program among students of the treatment programs and students of control programs.



Supervision

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Phase

After completing literature research the research is now in the phase that I am searching for relevant entrepreneurial education programs and studying statistics and methodology literature in favour of using the right tools to perform this research.

Contribution to the body of research

This research is contributing to the body of research on entrepreneurial education. Main achievement will be a clear insight in the relationship between didactics, educational environment and the effectiveness of different entrepreneurial education programs. This can be the start of further research but above that it can give educators knowledge and tools to develop more effective entrepreneurial education programs.

References

- Ajzen I.; 1987; *Attitudes, traits, and actions: Dispositional prediction of behavior in social psychology*; Advances in Experimental Social Psychology, 20, 1-63
- Ajzen I.; 1991; *Theory of planned behaviour*; Organizational Behavior and Human Decision Processes, 50, 179-211
- Auken van H., Fry F.L. and Stephens P.; 2006; *The Influence of role models on entrepreneurial intentions*; Journal of Developmental Entrepreneurship, 11(2), 157-167
- Auken van H., Stephens P., Fry F.L. and Silva J.; 2006; *Role model influences on entrepreneurial intentions: A comparison between USA and Mexico*; International Entrepreneurship and Management Journal, 2, 325-336
- Bandura A.; 1986; *The Social Foundations of Thought and Action*; Englewood Cliffs: Prentice Hall
- Baron, R.A. en Markman, G.D; 2000; *Beyond social capital: How social skills can enhance entrepreneurs' success*; Academy of Management Executive, 14, 106-116
- Benz M.; 2006; *Entrepreneurship as a non-profit-seeking activity*; International Entrepreneurship and Management Journal
- Bosma, N., Praag van M. and Wit de G.; 2000; *Determinants of Successful Entrepreneurship*; Zoetermeer; Scales
- Bosma, N., Jones K., Autio E. and Levie J.; 2007; *Global entrepreneurship monitor: 2007 Executive Report*; Babson College and London Business School
- Brysbaert M.; 2006; *Psychologie*; Academia Press, Gent
- Chattopadhyay R. and Ghosh A.; 2002; *Predicting Entrepreneurial Success: A Socio-psychological Study*; Journal of Entrepreneurship, 11, 1
- Choi Y.R. and Shepherd D.A.; 2004; *Entrepreneurs' Decisions to Exploit Opportunities*; Journal of Management, 30, 377-395
- Choo S. and Wong M.; *Entrepreneurial Intentions: Triggers and Barriers to New Venture Creations in Singapore*; Singapore Management Review, 28(2), 47-64
- Ciavarella M.A, Buchholtz A.K., Riordan C.M., Gatewood R.D. and Stokes G.S.; 2004; *The Big Five and venture survival: Is there a linkage?*; Journal of Business Venturing, 19 (2004), 464-483
- Dierick S., Dochy F. and van de Watering G.; 2001; *Assessment in het hoger onderwijs, over de implicaties van nieuwe toetsvormen voor de edumetrie*; Tijdschrift voor Hoger Onderwijs, 19 (1), 2-18
- Douglas E.J. and Shepherd D.A.; 2002; *Self-Employment as a Career Choice: Attitudes, Entrepreneurial Intentions, and Utility Maximization*; Baylor University; Entrepreneurship Theory and Practice, 81-90
- Driessen, M.P.; 2005; *E-Scan Ondernemerstest, beoordeling en ontwikkeling ondernemerscompetentie*; 's-Graveland; Entrepreneur Consultancy BV
- Entwistle N.J.; 1991; *Approaches to learning and perceptions of the learning environment; introduction to the Special Issue*; Higher Education, 22, 201-204
- European Commission; 2006; *The Oslo Agenda for Entrepreneurship Education in Europe: Fostering Entrepreneurial Mindsets through Education and Learning*; Oslo

Gatewood E.J., Shaver K.G. and Gartner W.B.; 1995; *A longitudinal study of cognitive factors influencing start-up behaviors and success at venture creation*; Journal of Business Venturing, 10, 371-391

Gibb A.; 2005; *Towards the Entrepreneurial University*; National Council for Graduate Entrepreneurship, policy paper 003

Guerrero M., Rialp J. and Urbano D.; 2006; *The impact of desirability and feasibility on entrepreneurial intentions: A structural equation model*; International Entrepreneurship and Management Journal

Hansemark O.C.; 2003; *Need for achievement, locus of control and the prediction of business start-ups: a longitudinal study*; Journal of Economic Psychology, 24 (2003), 301-319

Kaldeway J.; 2004; *Leerstijlen: een poging tot synthese*; Tijdschrift voor Hoger Onderwijs, 22 (1), 26-37

Kaldeway J.; 2005; *Leerstijlen in wisselwerking met omgevingsvereisten: een habitusveldbenadering*; Tijdschrift voor Hoger Onderwijs, 23 (4), 205-220

Kirschner P.A., Sweller J and Clark R.E; 2006; *Why Minimal Guidance During Instruction Does Not Work: An Analysis of the Failure of Constructivist, Discovery, Problem-based, Experiential, and Inquiry-Based Teaching*; Educational Psychologist, 41(2), 75-86

Klyver K., Hindle K. And Meyer D.; 2007; *Influence of social network structure on entrepreneurship participation – A study of 20 national cultures*; International Entrepreneurship and Management Journal

Krueger N.; 1993; *Impact of Prior Entrepreneurial Exposure on Perceptions of New Venture Feasibility and Desirability*; Entrepreneurship Theory and Practice, 18(1), 5-21

Krueger N.F. and Brazeal D.V.; 1994; *Entrepreneurial Potential and Potential Entrepreneurs*; Baylor University

Krueger JR N.F., Reilly M.D. and Carsrud A.L.; 2000; *Competing models of entrepreneurial intentions*; Journal of Business Venturing, 15, 411-432

Kuhn D.; 2007; *Is Direct Instruction an Answer to the Right Question?*; Educational Psychologist, 42(2), 109-113

Linan F.; 2008; *Skill and value perceptions: how do they affect entrepreneurial intentions?*; International Entrepreneurship and Management Journal, 4, 257-272

Lobler, H.; 2006; *Learning entrepreneurship from a constructivist perspective*; Technology Analysis & Strategic Management, 18, 19-38

Lobler, H., Maier M. and Markgraf D.; 200x; *Evaluating the constructivist approach in Entrepreneurship Education*; University of Leipzig, Department of Marketing

Meer, J.D. van der; 2007; *Kennisinnovatief ondernemerschap,; stabiliteit, dwarsverbanden en vijfnafstemming*; lectorale rede Saxion Hogescholen

Mitchell B.C.; 2004; *Motives of Entrepreneurs: A Case Study of South Africa*; Journal of Entrepreneurship, 13, 2

Nandram, S.S. en Samsom, K.J.; 2000; *Succesvol Ondernemen: eerder een Kwestie van Karakter dan van Kennis*; Breukelen; Universiteit Nyenrode

Parry, S.B.; 1996; *The quest for competencies*; Training, July, 48-56

Praag van M.; 2006; *Entrepreneurship and Human Capital*; Amsterdam Center for Entrepreneurship, University of Amsterdam

Raposa M.L.B., Ferreira J.J.M., Paco do A.M.F. and Rodrigues R.J.A.G.; 2008; *Propensity to firm creation: empirical research using structural equations*; International Entrepreneurship and Management Journal

Shane S.; 2000; *Prior Knowledge and the Discovery of Entrepreneurial Opportunities*; Organization Science, 11(4), 448-469

Shane S. and Venkataraman S.; 2000; *The promise of entrepreneurship as a field of research*; Academy of Management Review, 25(1), 217-226

- Shane, S., Locke E.A. and Collins C.J.; 2003; *Entrepreneurial motivation*; Human Resource Management Review, 13, 257-279
- Simons P.R.; 2007; *Leren en instructie: in de ban van het nieuwe leren*; Tijdschrift voor Hoger Onderwijs, 25 (3), 187-197
- Sluis van der J.; 2007; *Successful Entrepreneurship and Human Capital*; Amsterdam; no. 402 of the Tinbergen Institute Research Series; Universiteit van Amsterdam
- Snel D. and Bruins A.; 2004; *Oudere versus jongere starters*; Zoetermeer; EIM Onderzoek voor Bedrijf & Beleid
- Snel D. and Meijaard J.; 2006; *Met ervaring aan de start: over debutanten, weerondernemers en meerondernemers*; Zoetermeer; EIM Onderzoek voor Bedrijf & Beleid
- Stigter H.W.; 2001; *Het voorbereidingsproces: van start tot finish?: onderzoek naar de overeenkomsten en verschillen in het voorbereidingsproces van starters, potentiële starters en stoppers*; Zoetermeer; EIM
- Struyven K.; 2005; *The effects of student-activating teaching/learning environments on students' perceptions, student performance and pre-service teachers' teaching*; proefschrift Katholieke Universiteit Leuven
- Struyven K., Dochy F. and Janssens S.; 2006; *Leidt de activerende onderwijssetting tot diepere leerbenaderingen bij studenten? Studentactiverende versus leerkrachtgestuurde instructie*; Tijdschrift voor Hoger Onderwijs, 24 (1), 34-46
- Trigwell K. and 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, 251-266
- Veciana J.M., Aponte M. and Urbano D.; 2005; *University Students' Attitudes Towards Entrepreneurship: A Two Countries Comparison*; International Entrepreneurship and Management Journal, 1, 165-182
- Westhof F.M.J.; 2005; *Aandacht voor ondernemerschap in HAVO en VWO*; Zoetermeer; EIM Onderzoek voor Bedrijf & Beleid
- Zampetakis L.A. and Moustakis V.; 2006; *Linking creativity with entrepreneurial intentions: A structural approach*; International Entrepreneurship and Management Journal, 2, 413-428