

Entrepreneurship Education and the “Study Cooperation”- Approach – Results from a Quantitative Empirical Analysis

**Prof. Dr. Kai-Ingo Voigt, Full-Professor
University Erlangen-Nuremberg**

**Alexander Brem, Dipl.-Kfm., Senior Research and Teaching Assistant,
University Erlangen-Nuremberg**

**Christian Scheiner, Dipl.-Kfm., Senior Research and Teaching Assistant,
University Erlangen-Nuremberg**

Chair of Industrial Management
Prof. Dr. Kai-Ingo Voigt
Lange Gasse 20
Germany - 90403 Nuremberg
www.industriebetriebslehre.de

Entrepreneurship Education, Study Cooperation, Business Foundation Atti-
tude, Entrepreneurial Motive Structure

Entrepreneurship Education and the “Study Cooperation”- Approach – Results from a Quantitative Empirical Analysis

ABSTRACT

After decades of almost neglecting the importance of entrepreneurship education in Germany, a process has started in the late 90s in which several approaches were developed at German universities concerning this topic. The general effects of entrepreneurship for the economy are widely discussed and recognised.

Within this paper, the study cooperation “Unternehmensgründung & Entrepreneurship” at the Friedrich-Alexander-University Erlangen-Nuremberg (FAU) will be introduced. Therefore, the model of Klofsten (2005) will be developed further to portray the activities of the study cooperation. Therein, the network of the study cooperation with the external partners will be illustrated. Furthermore and in specific, the impact of entrepreneurship education on students of our university will be presented. A survey conducted by the Chair of Industrial Management with more than 300 students participating serves as basis. Three hypotheses will be tested:

- Hypothesis 1: Entrepreneurship-students at the FAU possess a higher attitude toward a business foundation than non-entrepreneurship-students.
- Hypothesis 2: The entrepreneurship-education-programme at the FAU has a positive influence on the attitude toward a new venture creation.
- Hypothesis 3: The motive structure toward an own business foundation of entrepreneurship-students and non-entrepreneurship-students at the FAU is influenced differently by fostering and inhibiting factors .

In conclusion entrepreneurship-students at the FAU differ from non-entrepreneurship-students in their affinity toward business foundation. As the analysis will show, entrepreneurship-students tend to have a more positive attitude toward starting a business. The analysis will, furthermore, identify the influence of fostering and inhibiting factors on the motive structure of entrepreneurship-students. Although the influence on the motive structure differs not in case of the fostering factors, remarkable distinctions exist in case of inhibiting factors. Hence, entrepreneurship-students perceive existing burdens as less problematic while non-entrepreneurship-students would rather abandon the idea to found. The influence on students attending the entrepreneurship-programme is positive concerning a new venture creation. Further areas of research will be suggested.

INTRODUCTION

Almost since decades, there are rapidly growing numbers of professorships, academic organisations, journals and other publications, especially in the United States in the area of entrepreneurship Robinson (1991, p. 41). Compared to other disciplines in the field of business administration and economics, entrepreneurship is a relatively young and emerging subject. While in the United States, the focus is on readings, case studies and lectures, in Europe the majority of programs with a practical approach can be observed.

Within Europe, there is a heterogeneous situation. While in Great Britain, Spain and the Netherlands are offering a relatively broad range of activities, there is almost no incentive for entrepreneurial education in Italy and France. Germany, Austria and the Switzerland did noteworthy efforts in order to establish entrepreneurship education at

universities. Nevertheless, the first chair of entrepreneurship in Germany was recently established in 1997 (Klandt, 2005, p. 5). Since 1997, there is a growing number of entrepreneurship-professorships, nowadays 56 (Moog, 2005, p. 4). But, there is still a need for improvement, especially for the long term strategy (Moog, 2005, pp. 146-7).

Moreover, there is an alternative approach which suggests no specific professorships, but the creation of specific study cooperation. The goal is to use the wide scope of existing education offers and the competence of different chairs combined with a central coordination unit, supplemented with additional education elements, in order to form a generalist entrepreneur. The advantage is to keep the bureaucratic costs relatively low while offering a high level of qualitative education.

The study cooperation "Business Start-up and Entrepreneurship" from the Friedrich-Alexander-University Erlangen-Nuremberg illustrates such an approach and will be presented within this paper. To structure the activities of the study programme a business foundation model of Klofsten (2005), who describes the business foundation process along the idea realisation, will be. Furthermore, the results of a quantitative study based on an empirical research, conducted by the chair, will be presented. Three hypotheses will be tested.

IMPORTANCE OF ENTREPRENEURSHIP EDUCATION

Although many universities are offering an entrepreneurship education program and the number is still growing, no common approach exists how to educate entrepreneurs efficiently. A basic approach is to understand the term entrepreneurship as learning about entrepreneurship as a phenomenon and learning useful skills in order to become an entrepreneur (Rasmussen, 2005, pp. 185-6). In order to stimulate this entrepreneurship by study programmes, Klofsten (2000, p. 338) argues that three basic activities should be taken into consideration:

- Creation and maintenance of an entrepreneurship culture throughout all university activities
- Courses in entrepreneurship with the focus on theoretical issues like start-up financing etc.
- Specific training programs to support individuals who wish to start their own business.

To fulfil these requirements, a clear view on the aspects of an entrepreneur is needed. Lazar (2002) defines entrepreneurs as "individuals who are multi-faceted. Although not necessarily superb at anything, entrepreneurs have to be sufficiently skilled in a variety of areas to put together the many ingredients required to create a successful business. As a result, entrepreneurs tend to be more balanced individuals" (p. 34). Therefore, Kirschbaum argues (1990, p. 83) that the aim of entrepreneurship education is to create a generalist more than a specialist. This can be done by focusing on a broad educational program which addresses the relevant aspects of starting a new business in theory and practice Klofsten (2000, p. 341-342). Common instruments are seminars, business games and business plan competitions (Winand, 1990, p. 107). Another important factor is to integrate external experts like successful entrepreneurs Hopkins (1989, p. 28-40).

A general orientation framework for entrepreneurship education activities is given by Klofsten (2005, p. 116-8) who describes the initial phase of the business foundation

as a 4-ary process along an idea development process (see Figure 1). Therein, he distinguishes two different stages – the pre-commercialization stage and a commercialisation stage. The first stage is characterised by the idea to start a new venture and an actor who is willing to invest resources. In the second stage a milestone lays in the attainment of a business platform.

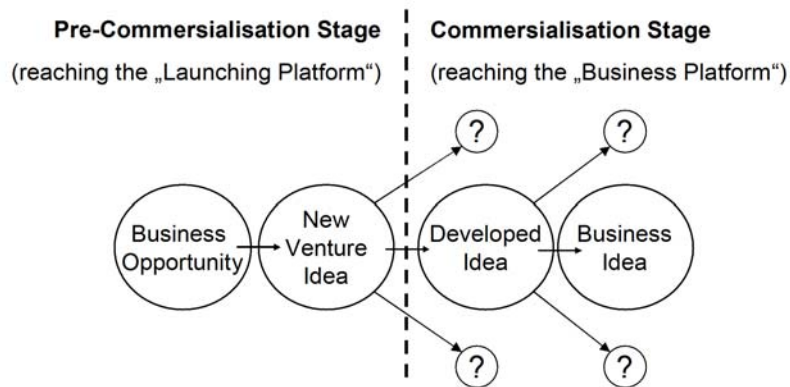


Figure 1: Idea development process (Klofsten 2005, p. 117)

Following this approach serves as basis to portray the study cooperation concept at the Friedrich-Alexander-University Erlangen-Nuremberg (FAU).

THE “STUDY COOPERATION”- CONCEPT

background and implementation

The Faculty of Economics and Social Sciences is the biggest institution within the Friedrich-Alexander-University Erlangen-Nuremberg. With approximately 5000 students and 35 chairs the university is one of the largest in southern Germany. The wide range of teaching consists of over 50 courses of study and is strongly influenced by the interdisciplinary cooperation with other faculties and external institutions.¹

In 2000, the faculty of business administration and economics decided to offer a study programme with emphasis on entrepreneurship and founding a company. After comparisons of possible models a study cooperation concept was chosen which was named “Unternehmensgründung & Entrepreneurship” (“Business Start-up and Entrepreneurship”).² Hence, the competence of the existing 35 chairs could be pooled for the entrepreneurship-education by integrating their specific knowledge in a variety of lectures, seminars and events. Essential is, thereby, the scope for the development of own business ideas within the programme. The study cooperation concepts is composed of three columns.

The first column represents the lectures and seminars offered. Students can major in entrepreneurship, in which every student has to attend a core programme consisting

¹ See www.wiso.uni-erlangen.de

² Following entrepreneurship will used as short form for “Business Start-up and Entrepreneurship”.

of seven lectures and seminars (Theory and Process of Entrepreneurship, Business Plan Seminar, Start-Up Financing, Quantitative Management Techniques, Legal Identity and Taxation, Foundation and Development of Technology Companies). The key course is the business plan seminar in which students have to write a business plan for an own-developed idea within a team. Recently, the seminar was prized with 2000 Euro from a financial institution for the most innovative teaching course in 2005.

In addition, students have to choose from subject groups dealing with E-Business, Logistics, Marketing, National and International Accounting, Cost Calculation and Accounting, Controlling, Law, Business Management, Organisational and Social Psychology, Auditing, Mobile Engineering and Management and International Management. Dependent on the specific interest and needs of the scholar, diverse combinations are possible. Hence, students choose out of 35 lectures or seminars. Moreover, excellent students have the chance to apply for an international Entrepreneurship Camp which is held once a year and took place already at the Boston University and the Tongji University in Shanghai. At the end of the studies, every student has to write a master thesis with a focus on Start-Up, Entrepreneurship and/or Innovation Management.

The concept of the study cooperation furthermore integrates, as second column, practitioners, entrepreneurs and experts in the entrepreneurship education to enable the students to gain from their practical knowledge and experience. Hopkins and Feldman (1989) argue in this context that this approach can improve the entrepreneurship-education substantially. The seminar "Start-Up Financing" for example is held by an external professional expert from a bank, who is responsible for the department "New Venture Foundation and Seed Financing". A business angel gives the lecture "Foundation and Development of Technology Companies". He also supports business ideas from students in the realization process. Within the business plan seminar, successful entrepreneurs are invited to teach the students how to write a "real" business plan.

The third column is to create an effective networking platform to forge links between students with a business idea and incubators or supporting organisations. Students are for example motivated to take part in an interdisciplinary business plan competition which is organized by the organisation "Netzwerk Nordbayern"³. To create furthermore a useful network between the entrepreneurship-students an online Alumni forum was established to offer students job vacancies, internships and field report. To bring the idea of building up a business and Entrepreneurship into schools, there is an initiative called "Entrepreneur of tomorrow" and focuses on pupils in their last school year before the A-level test.

In summer 2001, the first students could choose the new study branch. At the beginning, there were about 20 students participating. Currently there are approximately 70 students in a whole who are studying entrepreneurship.

Figure summaries the activities of the entrepreneurship study cooperation and combines it with the business foundation process of Klofsten (2005). The role of the study cooperation lays mainly in the pre-commercialization-part. Hence, awareness shall

³ This organization acts like a as service provider and networking forum for business entrepreneurs and growth companies in this region. The goal of the organization is and to provide a comprehensive range of services designed to promote the growth of companies In the areas of business planning, financing and training, Netzwerk Nordbayern offers a number of support services in the form of seminars, coaching, financing and, not least, assistance in building up useful contacts.

be created by entrepreneurship education and students shall be guided through the idea development process.

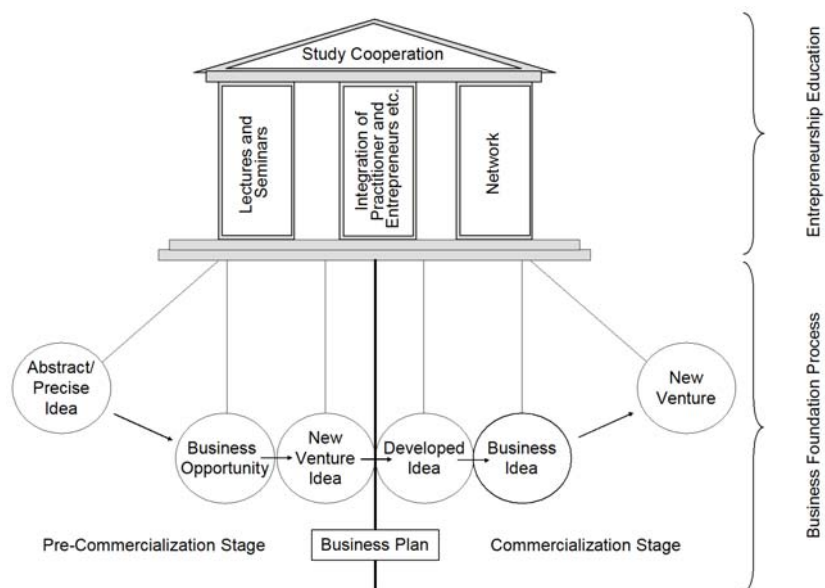


Figure 2: The entrepreneurship activities at the FAU in accordance to Klofsten (2005)

An example for a success story is a company for IT-Security. It all began that a student of the study cooperation took part in the FAUnders Camp where she developed a business idea of her father, who is patent owner in the high-tech sector, together with a new formed team. After developing the idea at the seminar in Boston, they took part in the business plan seminar, where they elaborated a business plan for their idea. With the final plan they contacted the Netzwerk Nordbayern and attended the Business Plan Competition where they achieved the second place and a lot of business contacts to potential investors. The current status is that the student is finishing her master thesis in “Marketing for Technology-Start-Ups” and is planning to build up a company together with her family and some former team members. This example shows the possible way from a student with an idea to a CEO of a successful high-tech start-up and the targeted networking of business incubators.

ENTREPRENEURSHIP-STUDENTS AT THE FAU – RESULTS FROM THE QUANTITATIVE RESEARCH

Although the study of psychological characteristics of entrepreneurs is one of the most researched area in entrepreneurship, it is as well least understood (Sexton/Bowman, 1983, p.408). Most of the studies conducted focus on successful entrepreneurs and found that entrepreneurs have significantly higher values in characteristics like achievement, autonomy, self-development, strive for performance, need for achievement, tolerance for ambiguity and independence (e.g. Corsten, 1980, Schere, 1982; Klandt, 1990, Collins/Moore, 1964; Hornday/Aboud, 971; DeCarlo and Lyons, 1979; Galais, 1998; Grulms, 2000; Kirschbaum, 1990, p. 80; Kussmaul, 2000). Regarding the question whether entrepreneurs possess these characteristics already during their study and hence, before the initial phase of the business foundation little research has been conducted (Sexton/Bowman, 1983, p. 409). If ever, former research primarily analysed the general attitude toward a new venture creation of stu-

dents (e.g. Möller 1998, Franke 2002). Therefore, the following part of the paper will focus on the difference of entrepreneurship and non-entrepreneurship-students at the FAU to examine whether there is already a difference between both groups during the major study of period. Herein, three hypotheses will be tested which will be described later in detail. Primary data serves as basis for this analysis.

questionnaire construction

The research process consisted of a 4-ary procedure which is orientated on an approach suggested by Kinnear and Taylor (1991, p. 339). First, the identification and concretion of the research objective was done which is to examine the attitude of students of the business administration faculty of the University Erlangen-Nuremberg to start an own business. Second, a written standardized questionnaire was compiled. Hence, all participants have the same questions in the same order and with the same wording (Schnell/Hill/Esser, 1995, p. 301). Closed-ended questions were chosen, so that the respondents had to choose between reply alternatives given (Schnell/Hill/Esser, 1995, p. 308). Therein, verbal scale rating answers were used. Furthermore, the questionnaire was designed in a manner to fulfil necessary requirements regarding clarity, clearness and simplicity of the questions. Therefore, the structure of the questions was orientated on a procedure suggest by Zikmund (1982, p. 355-6) and Proctor (2000, p. 166) which sees general and easy questions at the beginning and sensible or rather difficult questions at end of the questionnaire. Thereby, the reply will be eased as the respondent can get a general idea of the questionnaire's content (Churchill 1991, p. 390-1). Moreover, each topic is treated separately which supports this effect (Proctor 2000, p. 166). The questionnaire consists of five parts and has a length of four pages. It focuses on demographical characteristics (e.g. age), university-related characteristics (e.g. academic year, major field of study), working experience, entrepreneurship-education-related topics and motives for and against an own business formation. The selection of the topics covered and the formulation of questions are based on literature research concerning similar surveys and analysis in this field of study (e.g. Möller, 1998; Schmude, 1994; Klandt, 1984). In this respect however, adjustments were necessary, as the focus of this paper lies on business students in the advanced major period and is thus, not congruent with the other survey samples. Third, test interviews were conducted to improve the questionnaire. Therein, the debriefing method and the protocol method were used (Proctor 2000, p. 169-70). Test persons were students from the business faculty as well as senior research assistances from marketing and statistical chairs at the university. To ensure that also exchange students would be able to answer the questions, also non-German-native-speakers were members of the test group. Following and fourth, the survey was conducted from February till March 2006 at the business faculty of the University Erlangen-Nuremberg.

sample

The student body at the Friedrich-Alexander-University Erlangen-Nuremberg comprises almost 5000 students from which approximately 2000 students are in their major period of study. Out of this group the sample of 307 students was drawn as main-sample. Following, two sub-samples were built. The distinguishing criteria was whether the students had entrepreneurship as their major study ($n=37$; $N=70$) or not ($n=170$). Hence, it is possible to compare the attitude toward business foundation between these sub-samples, to draw conclusions concerning the impact of the entrepreneurship education at our university and to show differences in the motive structures of both groups.

findings and implications

The median student was in his/her seventh academic semester and 26 years old. The majority of students studied with 61,8% of all students business administration, following with business engineering with 16,8% and “Wirtschaftspädagogik” (vocational school lecturership) with 13,2% (see Figure 3). Furthermore, 183 male and 121 female students took part at the survey.

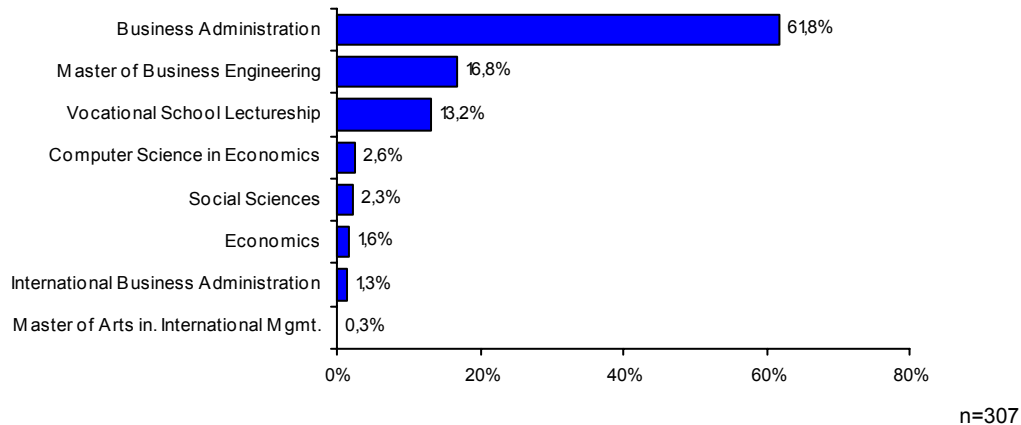


Figure 3: Major subject distribution of students at the FAU

Hypothesis 1: Entrepreneurship-students at the FAU possess a higher attitude toward a business foundation than non-entrepreneurship-students

The term “attitude toward business foundation” is a theoretical construct which cannot be observed directly. Moreover, the term can be interpreted differently, dependent on the item-centered point of view Buttler (1998, p.15). According to this fact and following other authors (e.g. Görisch (2002, p. 17), Backes-Gellner (2002, p. 8), Voigt (2004, p. 8-10)) the attitude will be determined for this analysis within four groups (see Figure 4). In general, the attitude toward a business foundation will be defined as the individual-related occurrence probability of founding a business within a team or alone, combined with the attitude to found a company in contrast of being not self-employed.

<p><i>Non-Founder</i></p> <p>These persons cannot imagine to found a business at all, thought about it and discarded it or already tried and failed.</p>	<p><i>Possible Founder</i></p> <p>People of this group can imagine to found a business within a certain period of time, but have not started yet.</p>
<p><i>Potential Founder</i></p> <p>Members of this category already have precise conceivabilities about being a founder or have even decided to do so.</p>	<p><i>Founder</i></p> <p>People who found a business already.</p>

Figure 4: Founder types

To examine the attitude toward business foundation students were asked whether they could imagine to found a business and to build up self-employed entrepreneurial existence respectively. The students could choose between the seven answer alternatives. Figure 5 shows the general results separated between entrepreneurship-students and non-entrepreneurship-students.

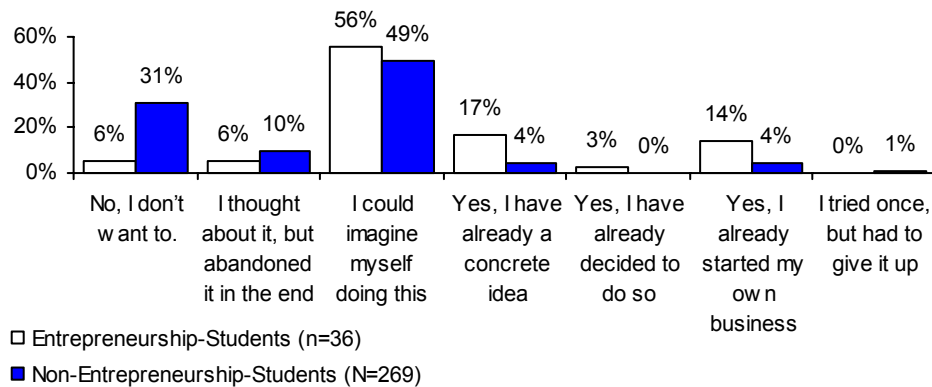


Figure 5: Could you imagine to build up a self-employed entrepreneurial existence?

For the further analysis the data were aggregated so that four groups could be allocated to the four groups “Non-Founder”, “Possible Founder”, “Potential Founder” and “Founder”. The non-founder group comprises of students who did choose the answers: “No, I don't want to”, “I thought about it, but abandoned it” and “I tried once, but had to give it up”. Students, however, who chose either the answer “Yes, I have already decided to do so” or “Yes, I have already a concrete idea” were pooled to the group “Potential Founder”. “Possible Founder” are those who could imagine to start a business while “Founder” did it already. According to this categorization Figure 6 illustrates the survey results.

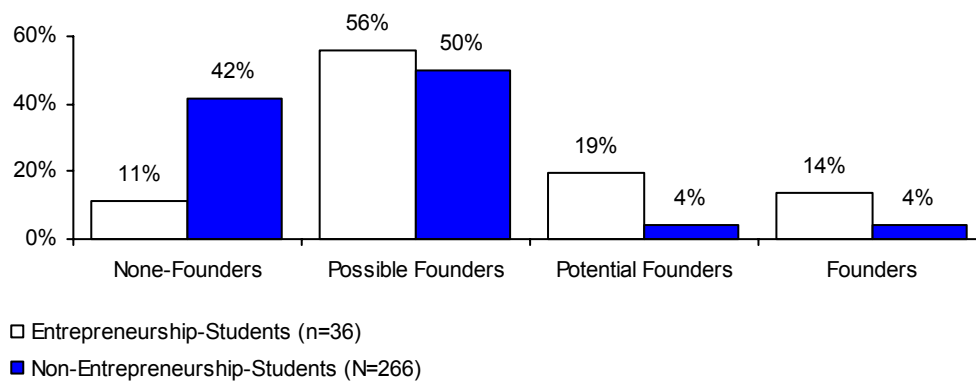


Figure 6: Business foundation attitude regarding to founder-types

Although, the majority of both groups has chosen the answer option “I could imagine myself doing this”,⁴ students differ in the attitude toward an own business creation depending on their major subject. So tend non-entrepreneurship-students to be less affine to start an own business. 42% excluded this option at all. This descriptive finding is confirmed by the significance test and the chi-square distribution test. With the 0,000 the test shows a high significance with a small negative correlation to Spearman with -0,258. Hence, entrepreneurship-students and non-entrepreneurship-students are samples from different populations and they behave differently concerning the attitude toward business foundation. The chi-square distribution test according to Spearman and the Likelihood-quotient shows with a significance value of 0,000 that the variables “(non-)entrepreneurship-student” and “attitude toward new venture creation” are dependent. The reliableness of the findings, however, are partly restricted as 25% of the cells have an expected frequency lower 5. Nevertheless, the confirmation of the hypothesis can be abided as the reason for this lies in the small number of 36 entrepreneurship-students in this survey.

Hypothesis 2: The entrepreneurship-education-programme at the FAU has a positive influence on the attitude toward new venture creation

The former researcher of the Massachusetts Institute of Technology David L. Birch, who laid a milestone in entrepreneurship in the late seventies by stating that 82% of all new ventures are created by small businesses, argued in an interview in the Academy of Management Learning and Education in 2004 that it is not possible to teach people to be entrepreneurs (Aronsson 2004). Lee (2003, p. 349), however, found that there is a positive correlation between entrepreneurship-education and founding a business.

Therefore, it was interesting to examine if the entrepreneurship education motivates entrepreneurship-students to start a business at the Friedrich-Alexander-University Erlangen-Nuremberg. Basis for this analysis represents the question, whether the study motivates to found an own business. The respondents could choose from a verbal rating scale ranging from “I totally agree” to “I totally disagree”. Figure 7 illustrates the results of the survey.

⁴ The results of this survey correspond with an earlier conducted survey by Iris Möller (1998) at the Friedrich-Alexander-University Erlangen-Nuremberg. Although she did not distinguish entrepreneurship-students and non-entrepreneurship-students a similar pattern can be identified. The biggest group in her survey with ca. 50% could imagine to found a business followed by 17% who where looking for an employment on a salary. The main difference between the surveys conducted is the group of self-employed persons which was with 6% two percent higher than in our survey. The reason for this could lie in better macro-environmental ramifications in Germany at this time.

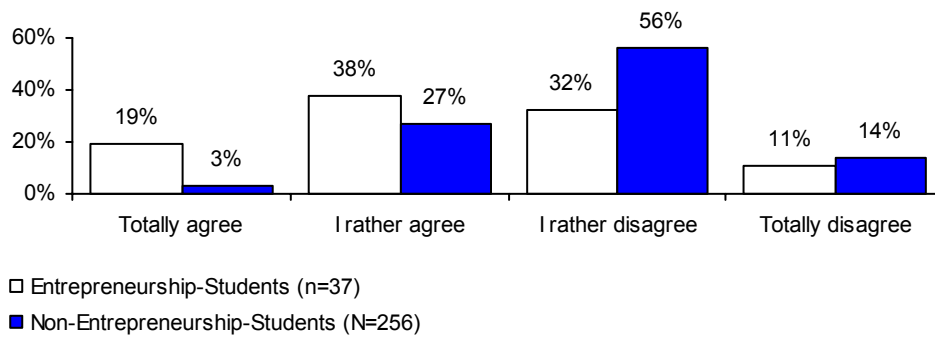


Figure 7: The study motivates to found a business

While entrepreneurship-students tend to agree with that statement, the majority of non-entrepreneurship-students contradict it. The statistical analysis corroborates the descriptive findings.⁵ The chi-square-test shows furthermore a dependency of the variables “entrepreneurship-student” and “study motivates to found a business”.⁶ Hence, the hypothesis 2 can be confirmed that the entrepreneurship-education-programme at the university has a positive impact on students toward a new venture creation in motivating them, even if the influence is very small, to found a business.

Hypothesis 3: The motive structure toward an own business foundation of entrepreneurship-students and non-entrepreneurship-students at the FAU is influenced differently by fostering and inhibiting factors

In this context, it is necessary to examine the motives for and against a new venture creation. Figure 8 gives an overview of fostering and inhibiting factors asked in the questionnaire. Figure 9 illustrates the statistical findings in this subject.

Fostering Factors	Inhibiting Factors
Self-realisation Higher independency Put studied into action Higher autonomy of decision Good economic climate Realize idea/ Pursue own business idea Gain experience Bear responsibility Higher prestige/ social status Higher income Potential profit Continue family business Motivation by friends and family	Missing business knowledge Missing concrete business idea Missing seed capital Insufficient practical experience General missing interest Missing founding partner /team Missing business network Missing market knowledge Missing market transparency Spouse or partner disapproves idea High financial risk Low income Too much work for too less money Too much work and too less spare-time Bad economic climate Bound to the own company Risk of failure Missing social appreciation

Figure 8: Influential factors toward a business foundation

⁵ Significance test: Spearman-Rho correlation value = 0,208; p = 0,001

⁶ Chi-square test: Chi-square according to Pearson 22,769; p = 0,000
Likelihood-quotient of 16,889; p = 0,000

First, motives for a new venture creation will be analysed.⁷ Both entrepreneurship-students and non-entrepreneurship-students rank the factors for starting a new business in the same way. These findings are supported by a study of Corsten (2002, p. 25) who identified a neutral meaning for similar fostering factors concerning the business foundation decision. Both groups only differ not surprisingly from each other relating the motive "Possibility to put the learned into action" and can be attributed to the specific lectures offered concerning the business foundation.

		Entrepreneur	
Put studied into action	Correlation coefficient ^x	0,12*	** The correlation is significant on the level of 0,01 (two-sided)
	Sig. (2-sided)	0,041	* The correlation is significant on the level of 0,05 (two-sided)
	N	293	
	Chi-square (Pearson) ³	8,206 ^{ooo}	o The asymptotic significance is $p \leq 0,01$
Missing business knowledge	Likelihood-quotient	10,898 ^{oo}	oo The asymptotische significance is $0,01 < p < 0,05$
	Correlation coefficient ^x	-0,191**	ooo the asymptotic significance is $0,05 < p < 0,1$
	Sig. (2-sided)	0,001	
	N	296	¹ 0 cells (,0%) have an expected probability lower 5
General missing interest	Chi-square (Pearson) ¹	10,934 ^{oo}	² 1 cell (10%) has an expected probability lower 5
	Likelihood-quotient	12,391 ^o	³ 2 cells (20%) have an expected probability lower 5
	Correlation coefficient ^x	-0,214**	
	Sig. (2-sided)	0	^x Spearman-Rho
Missing business network	N	296	
	Chi-square (Pearson) ²	14,006 ^{ooo}	
	Likelihood-quotient	16,372 ^o	
	Correlation coefficient ^x	-0,173**	
Risk of failure	Sig. (2-sided)	0,003	
	N	294	
	Chi-square (Pearson) ¹	9,324 ^{ooo}	
	Likelihood-quotient	9,214 ^{ooo}	
Risk of failure	Correlation coefficient ^x	-0,157**	
	Sig. (2-sided)	0,007	
	N	298	
	Chi-square (Pearson) ¹	10,727 ^o	

Figure 9: Statistical Findings

Second, motives against a new venture creation will be examined. Within this study from the 18 influential factors four showed a statistical significance. The first factor refers to the interest in starting an own business. In this regard, the tendency of non-entrepreneurship-students to found a business is slightly lower.

An insufficient business knowledge illustrates the second inhibiting factor. A study of the Centre for European Economic Research (2003, p. 108) found in this context that an insufficient business knowledge and qualification in the initial phase were perceived by 20% of the ventures analysed as an inhibiting factor. A study of the Fraunhofer Institut and the Söstra Forschung GmbH supports this finding as in their study missing or insufficient business knowledge were identified as the most hindering factor in the business foundation process (2005, p. 23). Within this survey, non-entrepreneurship-students do not believe to dispose of the required business knowledge while entrepreneurship-students tend to be more convinced to possess it.

The risk to failure represents the third inhibiting factor. Klandt (1990, p.31-2) found that entrepreneurship-students and non-entrepreneurship-students differ only slightly regarding the attitude toward risk of failure. The findings of this study support Klandt's

⁷ Following, the statistical findings are illustrated in figure 9.

observations as non-entrepreneurship-students tend to see the risk of failure more problematic and hindering.

Achleitner and Engel (2001, p. 19-20) have drawn attention to the fact, that only a minority of founders have a business network and that a business network is highly valuable for newly founded businesses. Pleschak and Werner (1999) found in their study that the existence of a business network is an essential success factors for new venture and hence a inhibiting factor if missing. Entrepreneurship-students seem to have a better business network than non-entrepreneurship-students, wherefore non-entrepreneurship-students perceive this factor more as a hindering factor in the new venture creation decision.

On this basis it may be inferred that the motive structure of entrepreneurship-students - already at this early age and before the initial phase of the business foundation - is influenced differently by fostering and habiting factors as by non-entrepreneurship-students. Although the influence on the motive structure differs not in case of the fostering factors, remarkable distinctions exist in case of inhibiting factors. Here, entrepreneurship-students see less problematic thresholds to overcome.

CONCLUSION

In conclusion, entrepreneurship-students at the FAU differ from non-entrepreneurship-students in their affinity toward business foundation. As the analysis has shown, entrepreneurship-students tend to have a more positive attitude toward starting a business. The influence on students attending the entrepreneurship-programme was also positive concerning a new venture creation. It has to be stated, however, that, even if the analysis showed that entrepreneurs have a higher affinity to start a business and that the study motivates to found a new venture, a variety of factors play an important in the decision to found and to realise the idea. The analysis, furthermore, identified that fostering and inhibiting factors have a different effect on the motive structure of entrepreneurship-students. Although fostering factors are perceived almost similar, remarkable distinctions exist in case of the inhibiting factors. Hence, entrepreneurship-students perceive existing burdens as less problematic while non-entrepreneurship-students would rather abandon the idea to found.

Thus, the study cooperation seems to be a successful approach in entrepreneurship-education. Still, a continue improvement concerning the integration of internal and external partners into the network is necessary. Therein, it will be crucial to lay the emphasis on the combination of theoretical knowledge taught by academic lecturers and practical knowledge, tacit knowledge as well as experience taught by entrepreneurs and practitioners.

Future research could analyse not only the attitude toward business foundation of students, but also the affinity of young adults during their last year at school. Hence, it would be possible to identify whether future entrepreneurs posses already at this stage a different motive structure or whether they develop these characteristics later. Moreover, a research could be conducted which would analyse the entrepreneurship-sample after the study was completed to see whether they are entrepreneurs or are employed by salary. Future research could also examine the behaviour over time. Therewith, it would be possible to survey if the identified characteristics of entrepreneurship-students are stable over time or if they change combined with an examination of influential factors in this process and if there are gender specific differences.

REFERENCES

- Achleitner, A.K.; Engel, R. (2001). Der Markt für Inkubatoren in Deutschland. Oestrich-Winkel.
- Aronsson, M. (2004). Eduaction Matters – But Does Entrepreneurship Education? An Interview with David Birch. *Academy of Management Learning and Education*, Vol. 3 Issue 2, p. 289-292.
- Backes-Gellner, U., Demirer, G.; Sternberg, R. (2002). Individuelle und regionale Einflussfaktoren auf die Gründungsneigung von Hochschülern. Jürgen Schmude & Robert Leiner (Eds.), p. 63-96. Regensburg.
- Churchill, G. (1991) *Marketing Research – Methodological Foundations*. 5th Edition. Chicago.
- Corsten, H. (2002). Unternehmensgründung – Eine theoretische und empirische Untersuchung. Schriften zum Produktionsmanagement. Lehrstuhl für Produktionswirtschaft. Kaiserslautern.
- Egeln, J., Gottschalk, S.; Rammer, C. Spielkamp, A. (2003). *Spinoff-Gründungen aus der öffentlichen Forschung in Deutschland*. Baden-Baden.
- Fallgatter, M. (2002). Theorie des Entrepreneurship – Perspektiven zur Erforschung der Entstehung und Entwicklung junger Unternehmen. Wiesbaden.
- Franke, N. (2002). Gründungsneigung von StudentInnen der Uni Wien. Wien
- Galais, N. (1998). Motive und Beweggründe für die Selbständigkeit und ihre Bedeutung für den Erfolg. In: M. Frese et al. (Eds.), *Erfolgreiche Unternehmensgründer* (p. 83-98). Göttingen.
- Garavan, T. ; O`Cinneide B. (1994). Entrepreneurship Education and Training Programmes. *Journal of European Industrial Training*, Vol. 18 Issue 11, p. 13-21.
- Görisch, J. (2002). Studierende und Selbstständigkeit. Ergebnisse der EXIST-Studierendenbefragung. Bundesministerium für Bildung und Forschung. Bonn
- Grulms, M. (2000). Marketing in neu gegründeten Unternehmen. Eine empirische Analyse des Existenzgründer-Trainings „ExTra!“. Lohmar/Köln.
- Hopkins, T.; Feldman, H. (1989). Changing Entrepreneurship Education: Finding the Right Entrepreneur for the Job. *Journal of Organisational Change Management*, Vol. 2 Issue 3, p. 28.
- Kinncar, T.; Taylor, J. (1991). *Marketing Research – An Applied Approach*. 4th Edition. New York.
- Kirschbaum, G. (1990). Gründungsmotivation. In: *Entrepreneurship – Innovative Unternehmensgründung als Aufgabe*, p. 79-87. Stuttgart.
- Klandt, H. (1990). Zur Person des Unternehmensgründers. In: Dieterle, W.; Winckler, E. *Unternehmensgründung, Handbuch des Gründungsmanagements*. Munich.
- Klandt, H. (2004). Entrepreneurship Education and Research in German-Speaking Europe. in: *Academy of Management Learning & Education*, Sep2004, Vol. 3 Issue 3, p. 293-301.

- Klandt, H.; Koch, L.; Knaup, U. (2005). FGF-Report Entrepreneurship Professuren 2004. Eine Studie zur Entrepreneurshipforschung und –lehre an deutschsprachigen Hochschulen, Januar 2005. Retrieved 20 April, 2006 on <http://www.fgf-ev.de/>
- Klofsten, M. (2000). Training Entrepreneurship at universities: a Swedish case. *Journal of European Industrial Training*, Vol. 24 Issue 6/7, p. 337.
- Klofsten, M. (2005). New venture ideas: an analysis of their origin and early development. *Technology Analysis & Strategic Management*, March 2005, Vol. 17 Issue 1, p. 105-119.
- Kussmaul, H. (2001). Betriebswirtschaftslehre für Existenzgründer. Grundlagen mit Fallbeispielen und Fragen der Existenzgründerpraxis (3rd ed.). Munich/Wien.
- Lazear, E. (2000). *Entrepreneurship*. Working Paper 9109 of the National Bureau of Economic Research. Retrieved 25. April, 2006, from: <http://www.nber.org/papers/w9109>.
- Lee, L.; Wong, P.-K. (2003). Attitude towards Entrepreneurship Education and New Venture Creation. *Journal of Enterprising Culture*, Dec2003, Vol. 11 Issue 4, p. 339-357.
- Moog, P. (2005). Good Practice in der Entrepreneurship-Ausbildung – Versuch eines internationalen Vergleichs, August 2005. Retrieved 22. April, 2006 from www.fgf-ev.de.
- Murphy, G., Trailer, J.; Hill, R. (1996). Measuring Research Performance in Entrepreneurship. *Journal of Business Research*, Vol. 36 Issue 1, p. 15-23.
- n.n. Erfolgsfaktoren für Unternehmen aus der Wissenschaft [Success-factors for University-Spin-offs] (2005), Fraunhofer Institut System- und Innovationsforschung/ Söstra Forschungs GmbH. Berlin.
- Pleschak, F.; Werner, H. (1999). Junge Technologieunternehmen in den neuen Bundesländern. Chancen und Risiken der im Modellversuch TOU-NBL geförderten Unternehmen. Abschlußbericht für das Bundesministerium für Bildung, Wissenschaft, Forschung und Technologie. Stuttgart.
- Procter, T. (2000). *Essentials of Marketing Research*. 2nd Edition. Essex.
- Rasmussen, E.; Sørheim, R. (2006). Action-based entrepreneurship education. *Technovation*, Feb. 2006, Vol. 26 Issue 2, p. 185-194.
- Schnell, R.; Hill, P. Esser, E. (1995). *Methoden der empirischen Sozialforschung*. 5th Edition. Munich.
- Timmons, J. (1978). Characteristics and Role Demands of Entrepreneurship. *American Journal of Small Business*, Vol. 3 Issue 1, July 1978.
- Voigt, E. (2004). Gründungsbereitschaft und Gründungsqualifizierung – Ergebnisse der Studentenforschung an der TU Ilmenau. Ilmenau.
- Voigt, K.-I.; Brem, A. (2006). Die Person des Gründers als Determinante des Unternehmenserfolgs – Ergebnisse einer qualitativen Metastudie. In: Merz, J. (Ed.), *Fortschritte in der Mittelstandsforschung*. Münster (in Press).
- Winand, U.; Nathusius, K. (1990). Professionalisierungsprogramm für Unternehmensgründer. In: *Entrepreneurship – Innovative Unternehmensgründung als Aufgabe*. (p. 99-109). Stuttgart.
- Wippler, A. (1998). Innovative Unternehmensgründungen in Deutschland und den

USA. Wiesbaden.

Zikmund, W. (1982) Exploring Marketing Research, Chicago.