ISCE 2006

German Survey on Collegiate Entrepreneurship

Entrepreneurship amongst German university students

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Foreword from the authors

The present study, the German Survey on Collegiate Entrepreneurship 2006 (GSCE), is part of the International Survey on Collegiate Entrepreneurship (ISCE 2006) and provides insights into selected German universities and tertiary institutes. The central questions of the study focus on the students' entrepreneurial ambitions and activities and analysing the current environment. When compared to the international study (www.isce.ch), German students' entrepreneurial ability must be regarded as below average. Closer examination reveals some major differences between the German universities in the survey. Almost three quarters of all students surveyed aim for salaried employment after completing their studies. In the students' opinion, this proportion will reduce to 40%, in favour of self-employment, after some years of employment experience. Of the students surveyed in Germany, 2.5% can already be described as having started a business. A further 40% can be identified as potential entrepreneurs. Even though half of those identified as potential entrepreneurs have not yet done anything specifically entrepreneurial, they are making moves towards professional independence. The most frequent barriers to launching a business are lack of finance and a reluctance to take risks. Those involved in training and further education are therefore faced with the challenge of leading students to become "bold, creative 'action people' with solid expertise".

We would like to record our thanks to Kultquartett (www.kultquartett.de), a card game company, for sponsoring the incentive prizes. Thanks also to the two companies who sponsored the whole project internationally: Information Factory GmbH and the Research Committee of the University of St. Gallen in Switzerland. Without the specific support of these three sponsors, the project could not have been achieved in its present form. In conclusion, we hope to see an increase in entrepreneurial abilities and activity amongst students, along with greater willingness to take risks. We hope you will find reading this report a stimulating and motivating experience and we look forward to receiving your feedback.

Oestrich-Winkel, November 2006

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1. Introduction

1.1 Problem and Initial Situation

Entrepreneurship is a watchword that has become part of the fabric of our lives. Demands for increasing entrepreneurship are becoming in those areas of the economy where, due to globalisation, there is a danger of valuable expertise being drawn off to other countries and where the production locations in our own country are under threat.
The federal government has introduced various different measures and projects to stimulate the expansion of entrepreneurial activities in Germany. A stated goal is the promotion of innovative business ideas, leading to businesses being established. The idea is to attempt to support the transfer of the great innovative energy that is believed to be present in universities and tertiary institutes into the real world. The goal is to develop products and services that will ensure that Germany remains competitive in the long term. As well as promoting research and good ideas, this also involves providing support for students in the form of easier access to knowledge about entrepreneurship.
This both aims to support potential entrepreneurs, so that their business ventures are successful and not doomed to premature failure due to ignorance, and to create in the students and overall positive view of entrepreneurship and the possibilities it offers.
The ISCE 2006 international study shows that German students demonstrate below average activities and intentions in relation to entrepreneurship - represented as entrepreneurial ability - compared to those in other countries. Looking at all students of business and economics related courses, Germany comes third to last (cf. Fig. 1, Page 1).

The present report therefore has as its goal to study each of the features of the German situation in detail, in order to come up with some recommendations for action.

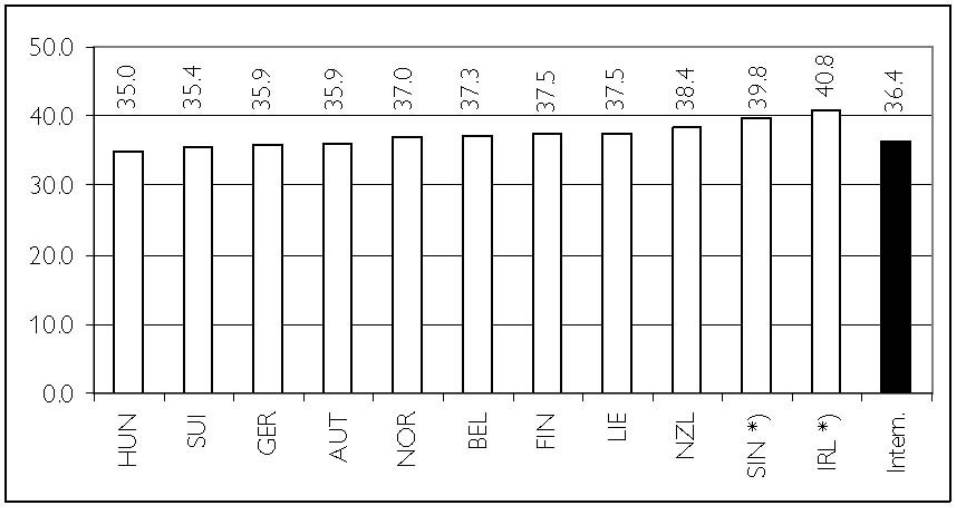

Fig. 1: Indexed entrepreneurial ability of students compared to international figures (in %)
Note: N=37,412

1.2 Goals and Procedure

One of the goals of the present study is to compare the entrepreneurial activities and intentions of students at selected universities and tertiary institutes across Germany. The entrepreneurial ability of students in different countries is presented after the introduction, in the second section of the results.

The study first discusses the students' vocational preferences, then investigates how many students have already started a business or are interested in doing so. The quality of their companies is then examined in more detail.
The third and fourth sections analyse the barriers the students experience and the students' motives for starting a business. The fifth section examines the requirements at the various universities and tertiary institutes in Germany and discusses the implications for practice and research.

1.3 Project Organisation and Methodology

The ISCE Research Team prepared the questionnaire for this study and made it available for the national survey. The Project Team from the Endowed Chair of Commerce for Entrepreneurship at the European Business School was responsible for getting the universities and tertiary institutes in Germany involved.
Students were sent an email that contained a link to the questionnaire so that they could answer the questions on a website. In order to ensure a good response, we arranged a draw of attractive prizes for participants. These were provided by our national sponsor, www.kultquartett.de .

1.4 Validity of the Study

In the following, our intended survey group was all students registered for study in the 2006 year. The response rate from the universities averaged 2.9%.

The random sample upon which this survey was based comprises 3,189 questionnaires suitable for evaluation. These were completed by students from 25 universities and tertiary institutes. Table 1 shows the distribution of students between the various institutions.

For a "web-based questionnaire" to be successful, it must be easy to reach the students via email. Therefore, the infrastructure of each institution (email accounts for all students) was critical, as was approval from the office of the vice-chancellor for us to email the students. Students from all faculties were surveyed.
Given these circumstances, it is understandable that both the distribution of subjects studied and the depth of the survey, in terms of numbers of students surveyed, varies from institution to institution. Furthermore, some universities and tertiary institutes we approached chose not to participate in the research project.

Table 1: Overview of distribution of students amongst the universities and tertiary institutes

Participating Universities/Tertiary Institutes	No.
Christian-Albrechts University, Kiel	130
Eberhard-Karls University Tubingen, Tubingen	486
European Business School (ebs), Oestrich-Winkel	103
Bonn-Rhein-Sieg University of Applied Sciences, Bonn	192
Deggendorf University of Applied Sciences, Deggendorf	166
Frankfurt am Main University of Applied Sciences	15
Ingolstadt University of Applied Sciences	151
Eichstatt-Ingolstadt Catholic University, Eichstatt and	39
Rheinland Westfalen Technical Institute Aachen, Aachen	11
Ruprecht-Karls University Heidelberg, Heidelberg	24
Dresden University of Applied Sciences, Dresden	1748
Regensburg University, Regensburg	62
Witten/Herdecke University, Witten	19
Other	43
TOTAL	**3,189**

Note: Universities with fewer than 10 participants are listed under 'Other'.
N=3,189

Overview of students

Students from all levels - basic course (first two years of undergraduate degree), advanced course (second two years of undergraduate degree) and doctoral students took part in the survey. Table 2 briefly describes the students using the following attributes: Average year of study, Level of study (basic, advanced or doctoral), Full- or part-time study, Average age, Sex, Subject studied.

Table 2: Brief description of random sample

Year of study (mean)	Basic course	Advanced course	Doctoral level	Full-time	Part-time	Age (mean)	Male	Female
3.23	42.9	52.9	4.2	96.9	3.1	24.0	48.7	51.3

Note: Year in course and age are shown as average values. The other variables are percentages.
N=3.189

More than half (52.9%) of the students were in the advanced phase of their degrees; almost all were studying full-time (96.9%). The average age was 24 and there was a fairly even balance between male (48.7%) and female (51.3%) participants.

Participants were spread over 15 different subjects:

Table 3: Distribution of subjects studied

Subjects	No.	%
Economics	76	2.4%
Business management	654	20.5%
Business/economics informatics	89	2.8%
Law	67	2.1%
Mathematics, informatics, astronomy, physics	318	10.0%
Chemistry, biology, earth sciences, geography	356	11.2%
Medicine and pharmacy	130	4.1%
Construction industry, architecture	145	4.5%
Mechanical and electrical engineering	530	16.6%
Agriculture and forestry	28	0.9%
Theology	26	0.8%
Languages and literature	277	8.7%
History and culture	115	3.6%
Psychology, sociology and associated subjects	371	11.6%
Physical education/human performance	7	0.2%
Total	**3,189**	**100.0**

Note: N=3,189

The greatest proportion of students was studying business administration (20.5%), followed by mechanical and electrical engineering (16.6%) and psychology/sociology (11.6%).

Representative web-based survey of students

It can be assumed that the easiest way to contact students is via a web-based questionnaire. These days, most students have Internet access at university or at home. They can fill out the questionnaire any time, regardless of when lectures and seminars take place.

Further enquiries with regional representatives confirmed that most students now have their own email address.

The challenge consists in accessing these email addresses. Most universities and tertiary institutes have mail systems that could do this but, for organisational reasons, it is not automatically possible to use them. Some of those responsible for making the decision did not allow us to access the addresses, a choice that must be respected. Some tertiary institutes were not able to complete the approval process for mass emailing of students quickly enough.

Despite small differences between the different institutions with regard to the structure of the samples and the risks of web-based surveys, the present study can definitely claim to be valid. This study uses primarily aggregated statements, which means that no specific information is revealed about individual universities or tertiary institutes.

2. Students' Entrepreneurial Activities

This chapter forms the core of the present report and concerns the students' entrepreneurial activities as such. It looks at the students' overall vocational goals for the period after university but also considers any actual entrepreneurial activities undertaken by the students during their course of study, and their entrepreneurial potential.

2.1 Students' Plans for the Future, in General

Students' vocational aspirations may be very varied. The job they accept immediately after completing a qualification doesn't necessarily bear any relation to the type of job they have several years later. It can be assumed that many students regard their first job as a type of apprenticeship or travel experience, or as an important component of their initial training. That being the case, we henceforth distinguish between two categories. For the first category, we asked students about their hopes for the first five years after university (< 5 years). The second category covers the time after the first years in employment (> 5 years after university). This was designed to capture data from those persons who were interested in self-employment but wanted to get experience in a particular job or sector first.

Table 4: Vocational aspirations immediately and 5 years after university

Desired job	**Immediately after study**		**5 years after study**	
	No.	**%**	**No.**	**%**
Salaried				
Work for a very small enterprise	84	2.6%	30	0.9%
Work for a small company	285	8.9%	108	3.4%
Work for a medium company	517	16.2%	255	8.0%
Work for a major company	676	21.2%	Apr 95	15.5%
Work for a university/technical	476	14.9%	253	7.9%
Public service	258	8.1%	239	7.5%
TOTAL salaried	**2296**	**72.0%**	**1380**	**43.3%**
Independent				
Continue in parents' business	17	0.5%	41	1.3%
Take over an existing company	14	0.4%	51	1.6%
Set up a franchised company	3	0.1%	16	0.5%
Partner in an existing company	73	2.3%	137	4.3%
Continue with a company I established	13	0.4%	38	1.2%
Set up a company	38	1.2%	317	9.9%
Commence self-employment	97	3.0%	255	8.0%
TOTAL independent	**255**	**8.0%**	**855**	**26.8%**
Other:		%		
Concentrate on family	221	6.9%	424	13.3%
Don't know yet	417	13.1%	530	16.6%

Note: N= 3,189

As can be seen in Table 4, the majority of students hope to start out by working for a major company (21.2%), a medium enterprise (16.2%) or as an academic (14.9%). This clearly shows that almost two thirds (72.0 %) of all students look to enter employment as a salaried employee. 13% of the students were unable to state a preference. For almost 7%, thoughts of starting a family were uppermost.
Seen over a longer timeframe (5 years, in this case), major companies and medium enterprises become less significant. The percentages for small and very small enterprises decrease even more noticeably, because these are usually seen merely as a springboard.
Five years after university, the number of people interested in self-employment increases by 8% to 26.8%. With these figures, however, Germany is at the bottom of the table when compared to other countries.
The number of people who wish to remain in salaried employment after five years decreases from 72.0% to 43.3%. The public service is in a unique position, in that it exhibits the smallest decrease over the five-year period (by 8.1% to 7.5%). Apart from that, the road to independence increases for all other options. The greatest increase in the area of self-employment after 5 years is amongst those establishing businesses or franchises. Amongst the most popular types of self-employment, it is noticeable that as well as establishing a company, partnerships and freelance employment are very popular.
Apart from commercial activities, the number of students wishing to start a family increases from 6.9% (> 5 years) to 13.3% after several years' employment. The group of students with no particular wishes regarding employment after the first few years at work increases by 3 percentage points to 16.6%, once they have several years' work experience

2.2 Overview of Actual and Intended Entrepreneurial Activity

Results so far have covered students' general professional goals. The section of the German Survey on Collegiate Entrepreneurship 2006 that follows covers the current situation on the continuum between intending to start a business and conducting establishment activities. Participants were asked the following key question: "Have you personally thought specifically of making a living independently?"
The results of the sample across all of Germany are presented in Table 5. The results show that around 48% of all students have given at least passing thought to the idea of starting a business. On the other hand, 8.5% of students have already got involved in entrepreneurial activities in some way. A similarly high proportion had pulled out before carrying out their plans.
The group of students whose firm intention it is to build a business (5.4%) should be emphasised. 1% of participants have even started while studying, and 1.5% are already independent. A further percentage of those surveyed had been self-employed but had already closed down the business.
By international standards, these results put Germany at the lower end of the rankings in terms business set-up activities and intentions.

Table 5: Intention to set up a business

	Frequency	%
No, never	828	26.0%
Yes, occasionally	1527	47.9%
Yes, fairly specifically	270	8.5%
Yes, but I discarded the idea	275	8.6%
Yes, am determined to become independent	173	5.4%
Yes, have already taken steps to implement it	32	1.0%
Yes, am already independent	47	1.5%
Yes, I was self-employed but am no longer	37	1.2%

Note: N= 3,189

2.3 Business Actually Set Up by Students

The results so far show that 84 of the 3,189 students surveyed in Germany are self-employed. 37 of these are former business founders and 47 are current founders. In this context, interesting questions arise about the businesses in relation to the following criteria: **Length of existence, Size of business, Size of establishment team, Average age of founder**, etc. These criteria serve to describe the business and represent the additional value of new businesses to the economy. Because some of the information is sensitive, willingness to answer the questions varies greatly. Participants often avoid questions about turnover or number of employees.

As can be seen in Table 6, the number of companies founded (84%, i.e. an establishment rate of 2.7%) is not very high. Germany lies in the bottom third of the international comparison. Most businesses in this sample were founded a short time ago. This is not surprising, considering that the people being surveyed are students and therefore very young. After an average of 3.3 years, most of the businesses are still in the growth and establishment phase. The average number of employees (1.9) also reflects the low growth of the companies.

Table 6: Characteristics of the businesses

Description of businesses founded	
Number	84
Establishment rate in %	2.7 %
Established xxxx years ago	39144
Average age of founder (today)	26.0
Number of employees	1.9
Largest establishment team	1.8

Note: N= 84

To evaluate the figures in Table 6 properly, it would be useful to know what type of company it was (full-time, part-time/secondary or acquisition), but unfortunately this is not included in the information from the survey. [DVX1]However, the low numbers of employees and the size of the establishment teams indicate that at least some of these companies are part-time/secondary.

2.4 Businesses Planned to be Set Up by Students

2.4.1 Activities on the Way to Setting Up a Business

So far, only completed business set-ups have been discussed. This section will look more closely at the students who could be regarded as likely to start a business. This means people who are not only interested in professional independence but have also taken some steps in this direction. Almost 62% of the German sample falls into this group. As Table 7 shows, only 38.3% have not yet done anything about setting up a business.
The next step is to shine some light on the specific steps that the students have already taken. A broad temporal distinction can be made between information-gathering and concrete steps towards starting the business. The first category includes tentative steps such as gathering information about setting up a business, attending events and functions on this topic and thinking through and writing down some initial business ideas. 50.2% of students in Germany have taken some of these steps.

As well as this non-committal information gathering, there are much more purposeful, practical steps to be taken. These include activities such as creating a business plan (2.9%), discussions with credit institutions (1.5%), existence of prototypes (2.5%) and setting a launch date (0.8%). People who have completed one or all of these steps are significantly closer to actually setting up a business than those in the previous group.

Table 7: Steps taken towards setting up a business

Steps taken towards setting up a business		
	No.	**%**
Nothing	1221	38.3%
Thought through first business ideas	987	31.0%
Written down first business ideas	229	7.2%
Written business plan	93	2.9%
Obtained information about setting up business	223	7.0%
Attended functions about setting up a business	161	5.0%
Talked to sources of finance	47	1.5%
Set launch date	25	0.8%
Have prototype product or service available	79	2.5%

Note: N= 2,328 (multiple answers possible)

Relatively few students have taken concrete steps towards setting up their business rather than just gathering information.

2.4.2 Possible Establishment Date, Area of Activity and Composition of Team

Having considered the steps taken towards setting up a business, we now look at the desired or possible launch date and the sector in which it will operate.
On average, in Germany, almost 10% of students would consider starting a business either while they are studying or immediately upon completion of their course. However, the majority of those interested in setting up a business would like to gain a few years' work experience before they move into self-employment (57.6%). This finding confirms previous surveys, which also showed that the rate at which businesses are established increases after some years of work experience. Often the business is more successful, thanks to this

experience. The employment experience years are often used for networking and making contacts, as well as for putting money aside to finance the future company. One third of those surveyed are still unsure about when they will launch their business.

Table 8: Planned launch date

At what point would you start the business?		
	No.	**%**
While still studying	121	5.3%
Immediately after graduating	87	3.8%
After graduating and several years' work experience	1326	57.6%
Don't know yet	768	33.4%
Total	**2302**	**100.0%**

Note: N=2,302

The students were then asked which sector they intended to do business in. As could be expected, the services sector dominates in this area, at almost 40%. Table 9 lists the individual sectors and the students' preferences. After the services sector (business-related services, health and social services, personal services), great interest was shown in mechanical engineering and construction (almost 8%), which can be explained by the relatively large number of students from these faculties (Table 3: 16.6%).

Table 9: Planned area of business

In which sector have you started/would you like to start your business?		
	No.	**%**
Agriculture, hunting, forestry, fisheries	29	1.2%
Mining	2	0.1%
Food and beverage / tobacco	32	1.3%
Textiles, textile products, leather, footwear	33	1.4%
Timber, wood or cork products	16	0.7%
Paper, paper products, printing or publishing	11	0.5%
Chemistry, rubber, plastic or fuels	55	2.3%
Other non-metallic mineral products	8	0.3%
Metals and metal products	25	1.1%
Mechanical engineering and facilities construction	190	8.0%
Transport equipment	18	0.8%
Other products, recycling	57	2.4%
Electricity, gas and water utilities	48	2.0%
Construction industry	102	4.3%
Wholesaling and retailing	69	2.9%
Cuisine, hospitality	125	5.3%
Transport and warehousing	72	3.0%
Communications	253	10.6%
Finance, insurance, real estate	109	4.6%
Business services	426	17.9%
Public administration, representation and social insurance	38	1.6%
Continuing education and professional development	176	7.4%
Health and social services	205	8.6%
Other social and personal services	279	11.7%
Total	**2378**	**100.0%**

Note: N= 2,378

A further important question for potential business founders is whether they want to do it alone or with a team. The majority of students are interested in working with a team to establish the business, while only 15% want to do it alone. We asked those who chose team formation where they would recruit team members (Table 10).
The results reflect the dominance of "Friends and own tertiary institute" as places to carry out recruiting. Apparently, participants rate interpersonal values ("the chemistry is right") more highly than specialist knowledge or qualifications. Moreover, the results give little information about any inter-generational business start-ups. With students, the trend seems to be to start a business with fellow students or friends.

Table 10: Team or individual

Recruitment of partners for establishing the business		
	No.	**%**
On my own	365	15.5%
From my university/tertiary institute	989	41.9%
From other universities/tertiary institutes	430	18.2%
From my own family	364	15.4%
From my personal circle of friends	1386	58.7%
Outside university/tertiary institute	251	10.6%
Other	815	10.7%

Note: N= 3,189 (multiple answers possible)

3. Barriers to Setting Up a Business

Starting a business presents not only opportunities, but also risks. Perceived risks or barriers are influenced by different variables: the personality of the potential founder, their family of origin, and the economic climate and climate at their university. To better understand how the students perceive all this, we asked them about potential barriers. They were also asked to rate the barriers on a scale of 1 to 6: 1 = very insignificant barrier, 6 = very significant barrier. As can be seen in Table 11, financial barriers are at the top of the list: financial risk, lack of proprietary capital or borrowed capital. In relation to the actual founding of the company, it becomes apparent that the main problems are lack of a proper business idea, dealing with official red tape and lack of expertise. Fortunately, support from family and friends is regarded as being assured.

Table 11: Evaluation of barriers

	Average	**Standard deviation**
Lack of the right business idea	4.30	1.4
Officialdom/red tape	4.14	1.3
Personal financial risk	4.74	1.1
Lack of courage	3.94	1.4
Lack of suitable partner	3.78	1.3
Lack of proprietary capital	4.68	1.2
Lack of borrowed capital	4.43	1.2
Lack of expertise (legal, tax)	4.12	1.3
Lack of client contacts	4.06	1.2
Exchange rate	3.72	1.2
Economic/political environment	3.63	1.2
Afraid of business failure	3.80	1.4
Support from family and friends	2.51	1.2
Lack of time	3.16	1.3
Lack of entrepreneurial/business	3.79	1.4

Note: N=3,189

For teaching staff, the results show that some of the barriers are easy to overcome, e.g. the lack of a real business idea, which is often regarded as a key problem. One possibility would be to include brainstorming techniques such as a "business set-up idea jam" in the courses offered by universities and to seek closer contact with federal and regional government support agencies and programmes.

4. Motives for Setting Up a Business

As well as considering barriers that prevent students from starting a business, it is worthwhile finding out what motivates them to do so. Motives fall into five different groups, which are evaluated in more detail in the next step.
These groups of motives are: desire for independence; use of leisure time; quest for creativity; solution orientation and security orientation. These were investigated using 21 criteria. The full list of criteria is reproduced in the appendix. The different motives were rated on a scale of 1 (low) to 6 (high).

Participants fall into three groups. Those in the first group aim for a high degree of independence and are therefore well equipped for professional independence. The second group aims for creativity and the chance to live up to their creative potential. These people would do well as freelancers. The third and largest group is strongly security-oriented. Those in this part of the sample will probably gravitate to salaried employment, perhaps even the civil service.

Table 12: Motives

	Average	Standard deviation
Desire for independence	4.50	0.7
Leisure orientation	3.42	0.8
Creativity	4.54	0.8
Solution orientation	3.81	1.0
Security orientation	4.94	1.0

Note: N= 3,189; the criteria are listed in the appendix.

5. Establishment climate in tertiary institutes

Following is a more detailed description of the framework conditions in the tertiary institutions that took part in the survey. The assessments of the establishment climates in the institutions and the range of events and programmes offered in relation to setting up a business are of interest. Last but not least, the students have the opportunity to say what kind of support they would like to receive.

5.1 Business Climate for Setting Up a Business

Students were asked to evaluate the establishment climate at their tertiary institution on a scale of 1 (very poor) to 6 (very good). The overall average rating for Germany was 4.1 and

can be regarded as 'Quite good'. It is likely that there are significant differences between the individual institutions, which do not show up here.

Table 13: Business Climate

	Average	Standard deviation
Very poor	21	0.7
Quite poor	85	2.7
Rather poor	639	20.0
Rather good	1476	46.3
Quite good	756	23.7
Very good	212	6.6
Total	3189	100.0

Note: N= 3,189; the average value is 4.1.

5.2 Business-Oriented Courses

To gain an overview of how the business set-up climate is created, the following evaluations cover attendance at events on the topic of setting up a business. Students have more or fewer opportunities to attend such events, depending on which university they are enrolled at and which course they are taking. This preparation has a significant impact on intentions to start a business and, in the long term, on the success of the business.

Table 14: Entrepreneurship events

	No.	%
No	2379	74.6
Yes	696	21.8
Not offered	114	3.6
Total	3189	100.0

Note: N= 3,189

Almost 22% of the participants had already attended entrepreneurship events, but most of the sample (75%) had not. This can depend, among other things, on what level they are studying at. For example, these events are usually offered closer to the end of a course.

5.3 Desired Courses at Universities and Tertiary Institutes

Finally, students were asked what courses they would like to be offered and/or what type of support they would like, to help them start a business either while studying or immediately after graduation.

Table 15: Desired support

	No.	%
Business plan seminars	1191	38.6
Coaching for setting up own business	1512	48.9
General seminars and lectures on setting up a business	1455	47.1
Game about planning business	1094	35.4
Meetings and discussions with other young entrepreneurs	1042	33.7
Symposia, founders' days, contact exchanges	880	28.5
Information centre for general questions	1499	48.5
Start-up finance provided through university/tertiary institute	760	24.6
Incubator (service centre for early phases)	402	13.0
No other offers	334	10.8
Other	93	3.0

Note: N=3,089 (multiple answers possible)

Right across Germany, the most common request is for coaching while setting up a business (almost 50%), i.e. someone to provide support so that they proceed correctly from the first steps through to successful market entry. Next on the list are a drop-in centre or contact point for general queries (48.5%) and general seminars on setting up a business. These requests reflect the fact that most participants are probably still in the very vague, early phases of establishing a business, which means that most of their potential companies have not yet taken shape but exist only as a "vague idea". Accordingly, there is not as much demand for potential support from the tertiary institute, such as start-up finance (25%), because it is apparently still too early for such support. This finding links back to the perceived barriers, where financial barriers were seen to be the most likely difficulty. Perhaps this result points to a lack of awareness amongst students of potential financial support.

6. Implications and Closing Remarks

The entrepreneurial potential that can be extrapolated from these interesting results of the 2006 GSCE Survey is only partly optimistic and shows in particular that there is considerable room for improvement at different levels in terms of training, research and promotion for entrepreneurship. Companies founded by students deliver important input to the economic wellbeing of a country and should therefore be given as much support as possible.

There is obvious room for improvement in entrepreneur training in relation to the range of relevant courses on offer, especially for students of subject combinations that do not include economics. A lack of courses is very apparent in some places, along with a great need for specific coaching on how to start a business.

The study also shows that students see setting up a company as an interesting employment option, but do not aspire to it immediately after university. Many students want to get a few years' experience in a job before taking the plunge into self-employment. More attention should be paid to this time-lag factor in relation to students' business aspirations, in research and promotion, but especially in training for setting up a business. Tertiary institutes need to consider how they can stay in touch with students interested in setting up a business

throughout - and beyond - their time in salaried employment, so that the students have a contact point when their business plans start to take shape. They also need to consider whether training courses for potential business start-ups could successfully be offered at a point after graduation.
This aspect is closely related to provision of information and infrastructure for setting up a company, which are both important.

This study, therefore, has highlighted the key point that although many young people are interested in starting a business, there is a general lack of concrete steps and targeted provision of information. The universities come into play here: there is a need for special lectures, business set-up organisations linked to the university or other agencies and various other measures to make access to the necessary information easier for students during and after their course of study.

Contact with students interested in setting up a business makes it possible for universities and other business set-up research institutes to direct their research towards aspects of interest in this survey. The effect of lectures and the correlation between entrepreneurship courses and the rate of new businesses being set up/potential set-ups could, for example, serve as the basis for answering the question as to what extent entrepreneurs can be "made". The answer will have a great effect on the way business is seen by educators and the type of planning carried out by educational institutions as a consequence.

As far as promotion is concerned, this study clearly shows that there is a great need for new promotional methods that will assist students to make the move into self-employment. For the majority of students in the survey, personal financial risk and access to proprietary and borrowed capital present the most significant barriers to setting up their own business.

In line with the goals of the present 2006 GSCE study, the information gathered and the evaluations illustrated represent a good starting point for comparing students' entrepreneurial activities and intentions.
Our goal is to contribute to promoting the entrepreneurial spirit within academia and to offer students, trainers, researchers and other interested service providers interesting suggestions as they continue to reflect on the topic of "collegiate entrepreneurship". We welcome discussion of the material presented and further research in greater depth, and we are already very much looking forward to the next survey in 2008.

Appendix

Motives

How do you imagine your working life to be once you graduate? Please rank these aspects according to their importance.

	very important (6)	rather important (5)	quite important (4)	quite unimportant (3)	rather unimportant (2)	not important at all (1)
Independence						
1) Freedom						
2) Fulfil your dreams						
3) Be your own boss						
4) Independence						
5) Freedom to make decisions						
6) Influence my own income						
Leisure orientation						
7) Sufficient leisure						
8) A less stressful workplace						
9) Not too much overtime						
10) Fixed, regular hours of work						
(11) Straightforward duties						
Creativity						
(12) To create something						
(13) Make the most of your creative potential						
(14) Challenging work						
Solution orientation						
(15) Improve the degree of detail of existing solutions						
(16) Optimise existing products / services						
Safety orientation						
(17) Job security						
(18) Stable relationships in the workplace						