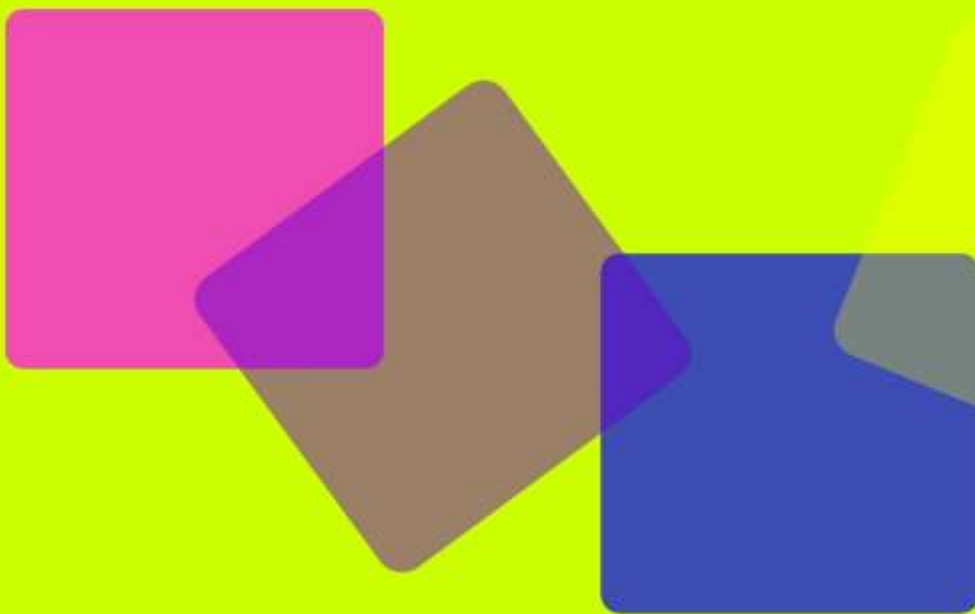


**SAXION**

*Innovation*  
**& Entrepreneurship**

**Conference proceedings  
of the 1st Regional Innovation & Entrepreneurship Conference**



**Edited by J.C. Bazen & M.H.M. Hammer**



*Conference proceedings of the 1<sup>st</sup> Regional Innovation &  
Entrepreneurship Conference*

*Colophon*

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## Editorial

The link between entrepreneurship and regional economic development is an interesting and much debated one. The publication that you are reading now tries to add some thoughts to this debate, by combining some lectures and papers presented at the 1<sup>st</sup> Regional Innovation and Entrepreneurship Conference at Saxion University of Applied Sciences in Enschede, on 19 March 2014.



The conference consisted of two key-note speeches, in the first one, **Kees van der Meiden** explored together with the participants the role of the cultural institutions in the region and how these cultural institutions contribute to the cultural but also social and economic capital of the region, for example by giving young creative entrepreneurs a platform for demonstrating their products. A similar idea for supporting young entrepreneurs, but with a different point of view can be read from the second key-note speech of **Marjan Weekhout**, manager at the Kennispark foundation, the Business and Science park development in the city of Enschede. Marjan Weekhout explains how the “ecosystem”, the extensive support system of the foundation helps to make young entrepreneurs, especially when active in high-tech, more successful in starting their own business. She also demonstrated statistics about the amount of start-ups and the amount of workplaces that have been generated by them.

The second part of the conference consisted of presentations in smaller working groups, where researchers in their own specific field of study could discuss with each other about

their research and think together about possible future research and/or education projects. In this publication you can find conference papers in which a similar approach to entrepreneurship is visible as was presented during the keynote speeches. **Adam Oleksiuk** stresses in his article the need for developing these types of ecosystems to really establish a sustainable regional “ecosystem” for innovation. Without cooperation innovation remains scattered and non-effective. One of the approaches to build these entrepreneurship cooperation and support models is to develop a system of coaching and support, a question dealt with in the article by **Ruud Koopman**, from a more theoretical approach and by **Nico Vloon, Matthijs Hammer and Nathalie Brahimi** in their article as well, but from a more practical approach with the focus on the application of the concepts defined by Ruud Koopman. Another example of how these concepts can be translated into a practical study program aimed at developing the entrepreneurial competences of the students is the presentation of **Irina Petrova and Jacques Bazen** about the Dutch – Russian Autumn Business School and how the students are stimulated to develop creative thinking as well as developing proper project management skills to bring the assignment to a good end.

Another approach to regional innovation and the development of entrepreneurship is the focus on special target group within the region. In her statement, **Éva Gajzágó** explains about the largely untapped resource of entrepreneurship among international students. Developing entrepreneurial programs for this group may very well mean an increase in students that remain in the region where they study, also after graduation. And finally, **Paul Bijleveld and Jacques Bazen** also take the time perspective into consideration, whereas the development of entrepreneurship is explained as a result of a long term support process, which can and probably should begin already at primary school level to maximize the effectiveness of the entrepreneurship training.

Enschede,  
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## Introduction

### Internationalization? Imperative for a future-proof professional!

Every now and then it still happens that I'm being asked why internationalization is so important for universities of applied sciences. In this short introduction I would like to discuss this question, but start already right away with my personal preposition, which is that we should educate professionals who know for themselves that the world is bigger than that part of it which they can see from their own window. For me as research director of Saxion it is not a question whether internationalization is important or not. What I'm busy with is which place this topic has in the policy of this institute and how we can find concrete applications of international cooperation for our education and research.

The Dutch Scientific Council for Government Policy (in Dutch: Wetenschappelijke Raad voor het Regeringsbeleid) presented its report: "Towards a learning economy" on 4 November 2013. In this report the necessity to develop links with educational institutions abroad for Dutch higher education institutions has been written down very clearly. Especially the Universities of Applied Sciences are in this report considered to be delivering the bulk of the future higher educated professionals and are in that sense of major importance for future economic growth. In May 2014 the Dutch Community of Universities of Applied Sciences and the Community of Research Universities together published the policy paper: "Common International Vision" (In Dutch: Gezamenlijke Visie Internationaal) and also in that publication, there is not a shred of doubt in their argumentation about the importance of internationalization for the entire Dutch higher education sector.

Especially when looking at the ambition of the Netherlands to improve its position in the ranking of innovative knowledge economies, then the connection with higher education institutions abroad is important. In all these reports, the importance of the Universities of Applied Sciences in strengthening the regional economy and employment growth is mentioned. More and more a global economy develops, which means that borders are disappearing and markets are increasingly accessible without any barriers. We have to educate professionals who are prepared to work in such an environment which is rapidly globalizing and changing. It is because of the strong demand from companies in the region that we have to focus on delivering professionals that can function in these globalized international environments and are able to deal with all kinds of different business cultures.



This context of delivering new types of professionals has a large influence on how we are designing our education. Of course it has to be integrated into the bachelor and master education programs that we are offering, but also we need to work on designing our organization in a different way itself, how we can work together with partners from the region and in this way are firmly embedded into regional structures. In earlier times it was easier to sort of live on an island as educational institution and design our education in such a way that we thought it would be best. Nowadays, we feel that we are more and more part of a wider network of partners in the first place from our region, but also with links to outside of our region and international. One of the consequences is that we will have to change our organization and way of work into being a more “demand driven” knowledge institution. We need to be aware of and have a response to questions from companies, NGOs, the government and have to realize ourselves which effects this has on ourselves but also on the students we educate.

All of this also has an effect on the demands for competences of the students that we deliver to the labor market. But apart from the changing job-specific competences, there are also more general competences that we need to develop more and more: innovativeness, entrepreneurial behavior and professional curiosity to name a few. These more general competences require us to develop more flexible educational structures and teaching plans in which we can develop our education in a flexible way and are able to respond adequately to questions that come towards us. To reach these goals, we need a more integrated approach to education and research, since we do not just want to deliver professionals to the labor market who have good knowledge and skills about their future job, but are also able to constantly think about their working environment about which things could be changed to improve all sort of products and processes. We need to deliver so called “Reflective professionals”. It is imperative that our knowledge institution is part of a wider network, consisting of governments, companies and other higher education institutions. These networks can vary as well, according to the given circumstances and require the necessary flexibility as well.

Looking at the new European programs like Erasmus+ and Horizon 2020, then it becomes clear that the EU is also stressing the importance of international strategic partnerships and knowledge alliances. One could say that for the coming decade the participation in networks and the existence of a strong network with regional partners and beyond will be a necessary precondition for a successful development as higher education institution. I am convinced that with this development, we bring our students and the professionals working for our institution a very interesting “learning community” in which he/she experiences and feels what will be expected in terms of personal competences. Our colleague Leonard Geluk, chairman of The Hague University of Applied Sciences said at the opening of the Academic Year 2014/15: “It is our assignment to educate world citizens and this can only be done by focusing on internationalization”. If that is implemented in the educational programs, then learning becomes a real education and will deliver professionals which experience in an in-depth way that the world is larger than what they see when looking out of their window.

Enschede,  
Drs. Frans G.M. Pol  
Director Research Strategy Programme  
Saxion University of Applied Sciences

## Key-note speeches

Kees van der Meiden  
*TwentseWelle Museum, Enschede, Netherlands*

## There is a Blue Ocean we can meet!

Ladies and Gentlemen,

My name is Kees van der Meiden, I'm director of one of the new museums from Enschede, which was founded after a very tragic disaster in this city, the Enschede Fireworks disaster of Saturday 13 May 2000. After this disaster a lot of money came to the town, that's why it was possible to found a new museum. It was made by merging 3 smaller museums together. At



that time two things were in place: there was money and at the same time there was the will of people to merge these museums. It is quite a job to merge institutions in The Netherlands. It always gives problems because of their organizational culture. It is actually a rather unique situation in this country that museums successfully merged. But so far about the context of the museum.

I called my story "There is a blue ocean where we can meet", I will begin and end with it. Maybe I have to explain this curious title a bit to you. I was inspired to use this title of my presentation by reading the famous book of Mr. W. Chan Kim and Ms. Mauborgne. Probably you heard about it or know it as well: "Blue Ocean Strategy", if you don't know it, please buy it or download it, I very much recommend it, for me it's like a kind of Bible. Very often I just read a chapter of this book and it inspires me to look across the borders and do "out of the box thinking". It stimulates me, and so I do recommend it very much to you as well. The purpose of this book to draw attention to this so called out of the box thinking, and I think we need it in these times. I think we live in rather curious, on the one hand difficult to understand but also very inspiring times. A lot of things are changing, old structures are broken down and the way of working is a lot different than it used to be even a few years ago. It's not just doing the work step by step anymore, but it's looking around continuously 360 degrees and always be aware that if necessary, be prepared to change your plans. I like this approach to work, I am 56 year old, and I still like it very much. But, I must admit, I think I am a kind of exception in my area of museum directors. But I think that will change and I hope more and more people will have a lot of fun from this out of the box thinking and way of working.

There are a lot of possibilities for unconventional cooperation, probably much more than we are aware of. For myself, every day I recognize this. And in this region especially, we are forced to think out of the box. Being a border region, the region of Twente has some specific problems: Many people who study here at the University of Twente or Saxion, when they finish their studies, they go to Amsterdam or abroad. They don't stay in this region and they don't come back. It is a problem, the average age of people gets higher and higher in this region. When you look at the nature and landscape, this region is rather attractive, but when you look at culture and art and all kinds of other things, it's not very attractive for older

people at the moment. So we have to do a lot of out of the box thinking and doing unconventional cooperation together.

It is my conviction that when we want to make this region a very popular region in the world we have to combine different things. I think that a cooperation between the world of business, especially technology business and the world of art and culture from this region is a promise for the future to attract a lot of people and stimulates a lot of students to come back and work here. I would like to explain you how I try to do this in my work, first let me tell you a bit about my museum.



*Fireworks disaster Enschede, 13 May 2000. 23 people perish. Photo: ANP*

On the picture you can see the huge explosion of a fireworks depot located in this town in the neighbourhood of where is now the museum. It happened on Saturday 13 May in the year of 2000. It was a huge explosion and it was very lucky that a lot of people were on holiday, shopping or otherwise enjoying the good weather in the city centre. If it would not have been good weather and if it was not holiday time, there would be a lot more casualties than we had now: 23. The entire neighbourhood was destroyed, and during the reconstruction of the neighbourhood, it was decided that my museum would be built in this new neighbourhood in one of the old still standing textile factories. Without this terrible disaster a now truly unique neighbourhood in the Netherlands never would have built up again. If anyone of you has a chance to look at this neighbourhood, you should certainly do so. It was designed together with the people who lived there, and many good architects coordinated by a very well-known architect in the Netherlands, who designed the Parliament Building in The Hague, the architect Pi de Bruijn.

It was a unique thing which happened after such a nasty disaster. And without this disaster my museum would have not existed. It is called museum TwentseWelle. It is the result of a

merger of a national history institution and 2 cultural institutions. I show you a few pictures so you have an impression of what I am talking about.



*TwentseWelle. Photo: Municipality of Enschede*

This is an old textile factory. A part of the factory was destroyed by this disaster. There was already a plan developed that the textile factory should be broken down, but after this disaster there was a kind of recognition that we should keep as much as we still have of these in our town. So it was a few new things in the neighbourhood, the tower was added to the building. It's a very special building to be in, the building is attractive enough to consider a visit. And we have a lot of activities. This picture is about what we call the Museum night. So we have a lot of art outside the museum and you can see most of them until 2 o'clock in the night or something like that.



Foto's: TwentseWelle

The museum is located in a large factory hall, 130 m long and in this huge hall we have the largest museum glass case in Europe, it runs over the entire length of the factory and so is also 130 meter long, it's very impressive.

What we do besides our standard collection, is temporary exhibitions. When I talk about unconventional types of cooperation in our region, we did an exhibition together with a broadcasting company, which had a series on television about explorers from the 19th century and we did an exhibition about all these 30 or 40 adventures, and after the television part was over the exhibition started. So, it's kind of working together which is a first example of unconventional cooperation. To start with this kind of unconventional cooperation, first you have to be very clear about your own identity. You have to ask yourself the question what is a museum. In my opinion museums are memories of our society, tangible and intangible. Without museums we forget, without museums maybe we make the same mistakes again that we made in the past. Because we don't know about it, we are not inspired by tangible and intangible collections from both the distant and recent past. Of course, you think about collections and exhibitions, and about a lot of money as well, of course, museums are very expensive as institutions. Museums are not factories which make products which everybody want each and every day. You should not compare it to other things. But that's a museum in my opinion: an institutions which is part of the memory of society.

What does a museum collect? Museums collect very different things. But when I talk about my museum, of course it's very difficult with these 3 very different institution that merged together. So we decided to start with a museum which focuses on the history of the region,

with a clear outlook to the rest of the world, as the region is firmly embedded in larger structures. We are now 5 years after we opened in 2008, so it is still a very young museum. But we did a lot of research about our new direction and we talked with a lot of people. At the moment we have around 50,000 visitors a year, for a border region like Twente that is very much. But, I don't think it is enough, I want more. Because of low funding, our visitors are a very important source of income, of course.

What we found out is that people have the association that we are a small regional museum, which is focusing on the history of Twente. That is a situation that I don't like: We should tell the story about the human adventure. There are a lot of stories about human adventure, and we would like to tell these, with a focus on the region of Twente, but just Twente, that is not enough. What we would like to focus on is the story of human invention, about man as an adventurer, as a designer, as a researcher we should put that in a glass case of our museum and it should be the first thing that people should say about our museum. And that is what is happening now. This exhibition about this 19th century explorers I mentioned before, is a great example of this ability of mankind to make the world a little bit better. Of course with many pitfalls and many disappointments, but when you look at our history from century to century you should admit at least in most places, that the world became a little bit more pleasant place to live. Maybe you disagree with me about this, but I am really convinced that this is true.

So, what does the museum collect? What they collect is the inventions of men, from the beginning until now. And that is why it gives our museum the possibility to cooperate for example with Kennispark Twente, an organization which collects new inventions of entrepreneurs from the region. We would like to put these inventions in our collection and tell the stories of these inventions. This is what the museum collects and what I like to focus on, man as an inventor, as an explorer and as a designer.

What does the museum actually do? I would say working with memory as well as material, because our collections tangible and intangible, they are the memory of people and with their memory in material form we want to inspire people, we want to show the reason for the existence of mankind, and we want to stimulate in our visitors the longing for the future, because I think we live in a rather negative time, people are complaining a lot in this country about the future. You know this feeling that nothing is good and everything is bad. That's what museums do, stimulating people with longing for the future, because we have a lot of examples of the past that show what people can and have done to improve their situation.

When you think about a museum cooperating with the world of business, try to think of an economy without art and culture. In my opinion without museums the economy is weaker than with them. I dare to say even that it is a fact, not a hypothesis! A museum is a platform for developing skills. We are working a lot together with Saxion University of Applied Sciences, too. Quite a lot of students are working with us, and doing practical projects with us, even though they end up with their own company. Recently, we worked together for an exhibition with one of those companies which is a spin-off of Saxion. I can say that we work very closely together. For them, my museum is a platform for developing their skills and a platform for doing experiments. To stimulate these collaborative way of thinking, sometimes we go with a few entrepreneurs from the city to for example Hamburg or Cologne or another city to investigate the possibilities. For example: I said to one of these guys from a small

starting technical company: “You are developing a new light technique. If you do this the traditional way, you will explain your new technique during a conference or trade fair to your colleagues and/or potential customers and then you talk about it and everybody says: “nice, nice”, and you go your own way. But what about testing this technique in an exhibition at a museum? And show what it can do?” It has a lot more impact. It’s much more impressive than a PowerPoint presentation during a conference. This way of thinking opens up a lot of possibilities for cooperation in the region but also on an international level.

A few more examples: I have told you about our cooperation with students from Saxion. We often work with the Academy of Creative Technology and some of them have made a project a few years ago, called 100%FAT, it means Future of Art and Technology. We did a lot of experiments with these guys, and they made a beautiful technique with which we could make our exhibitions and activities more interesting and more emotional.



This picture is an example of the first project we did. And what happens is that sometimes during the evening there is a presentation technique by the guys of this company and they forward their results to other companies and they use the museum as kind of platform for promoting their own business. And I don’t mind, because I am an institution that cost a lot of money and I have a task in society and I have a task to stimulate these new entrepreneurs. I am very glad I am able to do this. This was the first example, I have another example, which you can see on the next picture.



What we did was that we made a programme for students from the ROC Van Twente, vocational training college, where people study for example Fashion and design. Please understand me well: Fashion and design on very practical level, so not very modern, but absolutely very usable. We set up a cooperation structure between a fashion company, this ROC College and the museum. And now we do it for the fifth year, it starts tomorrow again and students have lessons at our museum, because we have a lot of collections with textile and textile design. Enschede used to be a major textile producing centre in Europe. They get courses from us and they are inspired from these designs from the past. Then they will get the task to design something new, which is wearable for a lot of people and cheap. Every time it ends with a catwalk, with a fashion show and the winning design is taken into production.

It's a very nice example of a cooperation between three different parties. It is a cooperation which makes a difference, it is a very useful practical type of education for young people. In the beginning, the teachers of the College were complaining that "it costs a lot of time, and we are so busy, and we are not able to do it now, but we'd love to do it." So, I am very proud of it, it does indeed cost a lot of time, and you must imagine that it's not very easy when you want to change things. If you want to make your museum usable for Colleges, you have to work very, very hard. You have to be convincing, calm and patient, but I think that's my work and I like it.

Another example from this Saxion spin-off company I was talking about.



Anyway, we should have more companies like them, which cooperate with cultural institutions. So what you mostly at this kind of exhibitions are very interesting but very not flattering.

This is a very new one, Just look at the picture.



We developed this setup last November and it's called "Home". It is a small room in the museum where we present different people from different cultural backgrounds living in our region. It is my goal to break through the image of this city Enschede, as a city where only foreigners live who became unemployed after the textile industry collapsed and oh yes, there is also a University, but that's really all there is around. All in all, there are people from 120 different cultural backgrounds in the city, so we can expand this "Home" thing in the future with more and more and more different cultures and personal stories. What we did here is



completely virtual. There is not one museum object in this presentation, but it could be made with new technology that we developed, and we used our connections and we interviewed people themselves that got very emotional, it's so charming to see how people tell their story. It gives a lot of understanding between different cultures, I like this very, very much. It is one of my most favourite projects through the last years from the museum, because we can expand it and we can continue. And all of this is only just yet a start.

On the 2nd of April 2014 our king will open the new Gallery building at Kennispark Twente and as can be seen on this picture, this exhibition in which the products of 18 different high tech companies are presented in an interesting way, we developed together with the same spin-off company which I told you about. And here we made a new way of interaction between object and physical environment. You see here this complete new way of presenting things, which you can do with museum objects, but you can do that with a product of a company as well. And a product of a company can become a museum object of course. We want to have every year a kind of “festival of innovation” in which we will present new objects, the new inventions which are going to be part of our collection. And that is a new and not a very conventional way of thinking in a museum world.

My message to you would be that a thriving art and culture sector in the region, I think especially entrepreneurs should understand this, gives brilliance to society. There was a famous designer in The Netherlands who said that: “*Without culture the society falls into barbarism*”. It is a rather strong sentence, but when you think about it deeply, I think you will realize that it is true. Culture is not only for fun or leisure. When we look around in this Twente region for example, there are many people with technical skills, but besides that the region does not attract many people with other skills. I think, cooperation with our cultural branch will improve the general attractiveness of the region. I told you about the example of the new lighting technology or the development of a new sound design, one can really cooperate with art and culture, which will be very useful in one’s own business.

A museum can stage new technological developments, but also can do other things, of course. A museum can be an inspiration room for activities of all kinds of businesses. We have a restaurant at our museum and we organise special programs for companies, one of the options is that we organise an evening with a so called walking dinner through the museum. It also has some climate problems for some of the exhibitions, we have to be aware of it. But it’s a big success. People have their own “private” activity in the museum as a company during the evening, undisturbed by the regular visitors during the day. Some of them come back and become an investor at the museum. That is another example what we do, it’s not just working together with high tech companies, but also all kinds of other businesses.

So, to conclude, I think that the promotion of this unconventional partnerships gives a total new and interesting edge to museums. At the moment in my museum we are working on a partnership with the regional company collecting the garbage, for example. It is possible even though at first it seems to be really strange. But it is working, and we are going to tell the story of recycling at our museum. We are beginning in the very old ages, with Neanderthal men and ending up now just when we are making gold out of the residues of old mobile telephones. And with the director of this company I have planned an audio tour, spoken in by himself, so he can use also for his own colleagues. But it is a very interesting story to hear, so we are going to work on special audio tours for companies. So every company can make their own audio tour themselves and use it for trainings for example, because our collection is so huge that you can always make your own story. It’s another form of unconventional partnership.

I told you about this walking dinner, I told you about experiences with sound, I told you about new computer techniques testing in the museum, and so on and so forth, I think you can find out yourself a lot of more about these. Why not come and visit the museum and experience for yourself the story which I have just told you? And I invite you to do some creative thinking in your own work environment as well. I told you in the beginning, the end of my speech is: "There is a blue ocean where we can meet".

Thank you for your attention!

Marjan Weekhout  
*Kennispark Twente, Enschede, Netherlands*

## Kennispark Twente, supporting innovation and entrepreneurship in the region

Ladies and gentlemen,

Thank you for the invitation to come here and speak to you about Kennispark. My name is Marjan Weekhout and I am not presenting today about the knowledge and knowledge institutions that we have in the region Twente, but instead about what we do with this knowledge. I am a member of the board of Kennispark Twente, an organization which has been installed to stimulate the entrepreneurship in this region, in order to have more jobs for high educated people. I will tell you something about the region, about the organization, somewhat about ourselves and of course I will take questions whenever they arise.



In this region, we had a lot of textile industry and a high percentage of people working in this industry. In the 1960s and 1970s, the textile industry disappeared. The region suffered from a massive loss in employment, and had to figure out something to cope with this crisis and start development in a new direction. The national government decided to start a third University of Technology in the country. Enschede applied for it, but there were more regions in Holland which wanted to have this third Technical University. Luckily for Enschede, the city won this competition. And therefore, since the 1960s we have a technological University, and that was as well the start of our organization called Kennispark Twente.

### *About Kennispark*

When people ask me: “Kennispark Twente. What is it actually?” Then I always say, we are three things at once:

- we are an ecosystem for stimulation of entrepreneurship,
- we are an organization to develop entrepreneurship
- and we are a physical location for companies to locate to.

So we help to create businesses, we help to grow businesses and we have a location where they can come to do their business. Our goal is to have 10,000 extra jobs for high educated people in this region.



Then a bit about the founders of this organization Kennispark Twente. I have to mention here that we are supported by the city of Enschede, the Province of Overijssel, University of Twente and Saxion University of Applied Sciences. All these organizations have the same ideas about the approach towards the restructuring of the economy of this region. These ideas are translated into the following goals of our organization:

- stimulating start-ups for students and other young people in this region
- helping small and medium sized enterprises, to innovate, to grow the business and to become smarter
- offering an inspiring location for companies, we are very proud and happy we just won the prize for the best location for companies in the Netherlands.

We often use these diagrams as illustration of our story and I would like to do the same today for you. I would like to talk about this little picture, please have a look at it. What we do for our starting companies is that we bring them:

- talent: the students of our universities.
- the ideas they already have.
- capital, they need a lot of capital to start their business.

We do a lot of events to create awareness among students and young people, to create their own business as an opportunity to create their own job instead of working for a company.

We have a business incubator, for more than 30 years now, to help them to start up their business and to grow their business. And then they can rent more space anywhere in the city, while still being connected to the network.

As I said, start-ups have sometimes a lot of tension in the beginning, because of the economic system. The financial aspect is sometimes difficult, because it's very important for entrepreneurs to have some room to operate, so we offer financing possibilities. For every start-up the company is in a different financial position: if it is a very young company, they usually rely on what we call friends, family and fools. They will offer them some starting money, but when they grow bigger and have more ambition, and more technology, there are more opportunities where companies can get their money from. It is our work to bring them in contact with possible investors and to help them with formulating their ambition for growth.

Another thing we do, is that we work with existing small and medium sized enterprises from the region. We have a portal installed in which they can post questions which have to do with innovation. We try to help them by answering their questions. Sometimes it is a professor of the University of Twente, sometimes it is a lecturer from Saxion University of Applied Sciences, sometimes it's a group of students who help the entrepreneur, but it can also be another entrepreneur, because they are using the same technology, and working together might help them in solving some of the issues.

We also do a lot of research, because there is a lot of technology in this region, in which we see that if companies work together and universities support them on research you can have a faster development of this technology and have a competitive advantage. So we have more than 15, what we call "open innovation clusters" in this region, which we have built together with enterprises and universities. An interesting example of such an open innovation cluster is the ThermoPlastic Composites Research Center.

We also have a High Tech Factory, in fact, it is a re-opening of the old clean room, done by the University of Twente, when they built a new one, they re-designed the old one, it is now

called High Tech Factory and more than 20 companies use the facilities of this factory and they can rent and use the machinery, so they don't have to buy it.

### *Portals to Science*

We think that is very important that as many companies as possible have access to knowledge. That means knowledge of the universities, but also knowledge of companies. So we made some portals in which they can post their questions and we try to address these questions as well as we can. I already told you about the portal in which small and medium sized enterprises can post their questions, but we also developed a so-called science shop. We consider it to be very important for that knowledge which is at the university can be reached by common people as well as by companies, which is why we have these portals to help them to get answers.



There are a lot of questions by companies and also by ordinary people and we try to find the best match possible to come up with an answer. On this picture you can see one of the examples, we opened an innovation cluster in which a research group of University of Twente worked closely together with Siemens, to try to have a better understanding about medical imaging. Another example of such an open innovation cluster is the material and manufacturing cluster.

The third part of our Kennispark picture is the events part, to have students and companies meet each other, or companies meet other companies. It is not enough if they sit in the same large conference room in the same place, they have to really meet. To try to arrange this, our own company "Powered by Twente", organizes some 150 events yearly, some small, some big, for people from companies and for students, so that they can meet. And we like that students know which companies are in this region, so they can get to know each other. We hope that they will start to work for those companies, which would be good for this region. There is also another way of looking at it: If students choose to work for very large international companies, it is normal that they start from the bottom and it will take several years before they reach an interesting job. And if they start with practice over here in a smaller company, they very quickly become leaders and have a lot more to say. It will be more interesting for them, because they have a lot to do with the development of the technology of that company.

Organizing 150 events is a lot. We also have a so called Soft Landing license and what we are doing is, as I told you before, there is a lot of research on smart materials in Twente, together with companies and universities we are creating a better value proposition. And this is part of the national policy of the Dutch Government, to help companies to be competitive abroad.

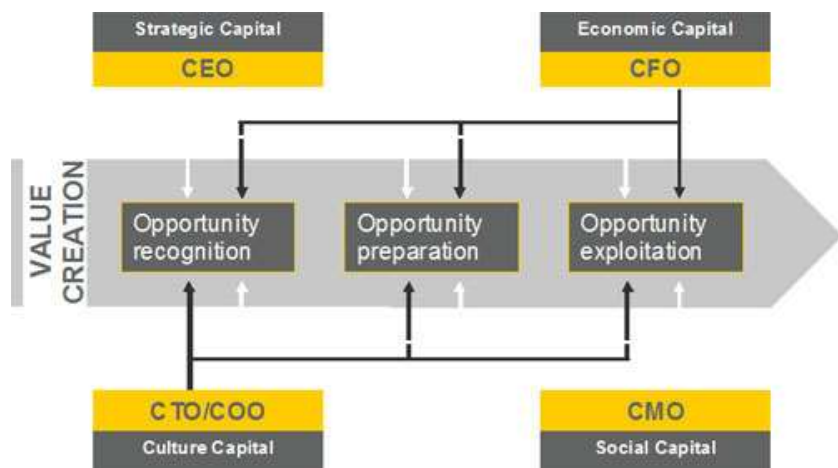
This is our event organization, it used to be part of Kennispark Twente. What we do is that we start off things in our ecosystem, but if these functions do very well and it can be self-supporting, then we sort of create a spin-off out of them. This new company is now very successful, they organize a lot of events on innovation and entrepreneurship in this region and also they share their knowledge via their quite well developed communication channels.



I told you already about the High Tech Factory, we also have a T-XChange Lab, these facilities we have with the universities. Here you can see the SmartXP LAB, for IT innovations. We are trying to have more of these centers in this region and this this year we are going to the Hannover Messe, which is very strong in technology. Next April we are planning to talk with the companies, if there is maybe a need for a TPRC demonstration plant in this region. Our job involves a lot of market research, to better facilitate innovation and entrepreneurship in our region. If we find out that there is a need for such a high tech demonstration plant, then we will make sure that such a demonstration plan will come over here in the region, to be included with our TPRC Center.

### Goals of the Kennispark

This is the complete picture of what we do at Kennispark Twente, the three smaller pictures combined. As I told you before, we are three things: We are an ecosystem, as you see over here on the left, our ecosystem forms the roots of all the organizations that we work together



with. You can see the Chamber of Commerce, the Municipality, the two Universities, Student Unions and all kinds of other organizations that we work together with to stimulate entrepreneurship and to help the companies to grow.

In this picture, you can see our team of specialists who help starting entrepreneurs to meet, connect, help to find finance and coach them. And I dare to say that this was successful: Our goal was to get 10,000 extra jobs in this region in 2020, and at this point halfway there, we already see that 6,000 extra jobs in this region have been created. So in my opinion, we are

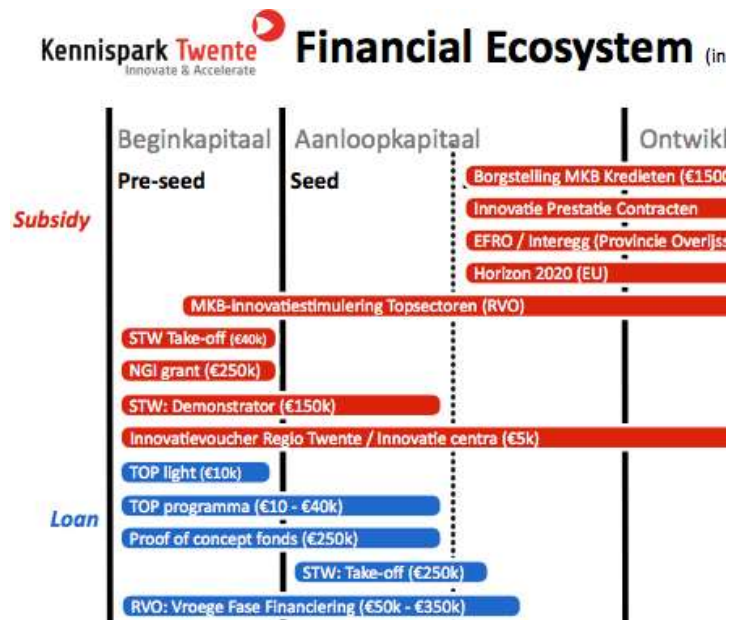
successful in numbers. Kennispark has a combined these specialists in a business development team, which we started 11 years ago. Before that, they existed as well, but formally just worked at the institute of information. We made a team of it and we let them work together. One of their major concerns and tasks is to protect the intellectual property of start-ups. Most of them are using very innovative technology and developed new products. And, as you know, the intellectual property is not so easy to protect. So we have some focus on protection on the one hand on the other hand there is certainly also support for the entrepreneur to become smarter, to grow larger and to become a better company. It doesn't mean we are overprotective: It falls a bit out of the scope of this presentation, but we see two extremes in the technology transfer landscape. In some sectors there are no roadmaps to orient on and the intellectual protection is not so explicit or developed.

### Start of Kennispark

It started when the University of Twente came to this region and when we had several research groups on entrepreneurship. First it started with business development individuals. At each institute these people formed a team. Then they were incorporated within Kennispark Twente, and we see that there is a lot of success, with this approach. This region in the Netherlands has the highest number of start-ups. Sometimes, people think Eindhoven Brainport is the largest and well, there are a lot of large companies over there, but the largest number of start-ups are here in this region and they are also the most successful start-ups from The Netherlands in terms of survival rate. Plus, they tend to win more contests, than could be expected just from the amount of start-ups that are here. So we could say that we are a real start-up region, and a real innovation region.

### Statistics and results

At this moment we have 384 companies with more than 6,000 commercial jobs. The university of Twente and Saxion University of Applied Sciences together have more than 30,000 students. We usually have between 40-50 start-ups every year. 10% of the high-tech companies in The Netherlands are located here. We are proud to have a lot of prize winners here in our business park. Just one of the well-known companies that originated from this region is Booking.com, which you probably use to book hotel rooms during your international trips. It was necessary to restructure the economy and I think we really successfully got ourselves out of the period of the textile industry. The economy of this region now really relies on the tech knowledge of both of our universities and really successful start-up companies that come from this region.



### Why it works?

I always think that one of the most important reasons why Kennispark Twente is successful is because we are an organization which has the goal to stimulate the regional economy. We do that with 5 major partners and nobody of the people who work for Kennispark Twente is on the payroll of Kennispark Twente. So we do not work to ensure the future of the Kennispark structure itself, but we work to ensure the future of companies in this region. That is our main goal. So we are driven to obtain that main goal and do not need to distract our energy by working on the continuity of our own organization. And we can look at what is needed in our ecosystem, then we create it and try to make it into a successful business. We consider projects successful if they can stand on their own.



Just to conclude: this here is a picture of a large building of the University of Twente. It is one of the first buildings on the campus, the old building of the chemical technology study program, we are now giving this building a new life: we are renovating it into a business incubator. This is the building that will be opened on the 2nd of April by our King. It is still in the process of renovation, but when it is finished, it will be the largest business incubator in Europe. To create the largest business incubator is not our goal, but we hope that this new environment will stimulate ever more young people to take up the challenge of starting their own business and in doing so create jobs and a better future for themselves and the region as well.

Thank you for your attention.

## Introduction to the workshops

*Jacques Bazen*

The main part of the conference consists of workshops in which everyone can share their topics of scientific interest and present some of their research. There are three parallel workshops this morning with three topics.

Paul Bijleveld explain in a few sentences to everybody what can be expected in workshop number 1:

### **Paul Bijleveld:**

Well, you saw that Ms. Weekhout showed all kind of numbers, statistics and the like on the results of Kennispark in terms of number of jobs, number of start-ups and number of spin-offs. Of course, behind all this information there is a whole system of measuring this performance. Some of the statistics are easy to get form the national information statistical office. But some of these measurements really are very complex and cost a lot of time to achieve. Especially if you want to say something on the success of innovation. So, in this workshop we will give some examples of how we measure the performance and success of regions, we show how we cooperate also internationally in this. And I will discuss also some of the challenges, especially with some presentations about the difficulties of European benchmarking, and comparing regions in this sense. It is very practical workshop.

The second workshop will be moderated by Matthijs Hammer:

### **Matthijs Hammer:**

The second workshop is about entrepreneurship and education. Of course, when we are talking about universities we talk about education. So this workshop is especially for educators and researchers. We are going to discuss the latest insights about how to create entrepreneurial behaviour, skills and attitude etc.

Workshop nr. 3 is moderated by Maarten van Riemsdijk:

### **Maarten van Riemsdijk :**

We will discuss Human Resource Management. And we do that in a session with a some of you. We have 3 presentations: 1 from Romania, 1 from Belgium and one from The Netherlands. One of the most intriguing questions of the moment which is how going we proceed with the relations in coming years and how we can build international research projects in this field.

## Articles and presentations during the workshops

Adam Oleksiuk  
University of Warmia and Mazury, Poland

## Contemporary concepts of innovative processes in the territorial perspective

**Key words:** innovative, territorial perspective, socio-economic development, smart specializations, public sector

### **Abstract**

*This paper discusses about innovative processes and, first of all, product, process, organizational and marketing innovations generated as their result may be treated as one of the basic factors for increasing competitiveness of the economy of regions. Economic efficiency and social effectiveness of innovations processes is demonstrated with a large delay in time as compared to incurred expenses and depends on numerous demand and supply factors. In addition, there is feedback between the level of socio-economic development and innovation processes both in the economic and the social sphere.*

### **Introduction: New concepts of innovative processes in the territorial perspective**

The process of innovation formation has been the subject of analysis in the Polish and international literature for many years. Recently the paradigm of purely technological innovations is no longer popular and the growth in significance of social innovations, innovations in traditional sectors, innovations related to the so-called silver economy and "soft" innovations, e.g. organizational and marketing ones is demonstrated, and the role of the public sector in supporting innovative processes is redefined. Issues requiring special attention include: the distinction between models of supporting innovativeness depending on their type: breakthrough and incremental. The European Commission (5th cohesion report) classified the Polish economy as an area rather capable to absorb innovations than generate breakthrough innovations. Both types of innovations affect the growth in productivity and competitiveness and, as a consequence, the economic growth, although it is breakthrough innovations that begin new waves of economic development. From the point of view of innovative policy, it is important that both types of innovations are created in different business models and should be supported by in a diverse manner. Breakthrough innovations, just like new thinking currents and breakthrough scientific discoveries, change the ways in which societies function. Incremental innovations created as a result of adaptations and improving breakthrough innovations allow societies to adjust to functioning under new conditions. The economic crisis may prove to be a significant generator of social innovations. The significance of human and social capital. Innovations processes require the presence of individuals with specific personality features in societies, among others, openness to change, determination, extensive knowledge and skills as well as high motivation. The education system should support the development of innovative, enterprising and creative attitudes from the earliest years. An analysis prepared by a Dutch company offering risk capital (Caneval Ventures, 2009) shows that the lack of tendencies to take risk and the willingness to establish enterprises is the most important obstacle in increasing innovativeness and competitiveness in European countries as compared to the USA. The Polish education system, in general, does not develop enterprise, innovative and

creative attitudes as well. Therefore, the innovative policy should include actions aiming at forming innovative culture in the region, in particular by systematic educational campaigns at each level of the education system. The concept of innovativeness is based on the territory (*Innovation ecosystems*) – international literature more and more often mentions territorial innovations (resulting from the territory's features) which originate from previous concept of the innovative environment. These concepts indicate the need for cooperation of entire communities inhabiting a given territory, the formation of relations between companies and the scientific sector with the inhabitants and the formation of values not only in the economic but also the social sense. Innovation as the effect of creating a specific social need is a significant consequence of such state of affairs affecting the thinking about innovations and the development of technology. The cooperation between various territorial subsystems is also significant: the quality of space, socio-economic and institutional processes which form a unique combination of innovativeness factors specific for particular territories.

### **Systematic approaches to socio-economic development**

Previous models of the innovative policy were largely based on the supply part of the innovation formation process and focused on the development of scientific research, particularly used as well as on strengthening relations between the scientific sector and enterprises. The basic measures of the innovativeness level covered expenses for scientific-research activity and, less frequently, the results of this activity. Much less emphasis was placed on strengthening the demand for innovations, including the shaping of demanding and specialized markets. Concentration on the supply of innovations limited the effectiveness of the conducted policy. Meanwhile, effective commercialization of innovations needs to correspond to market needs. The final measure of results of the innovative policy should thus be the share of innovative products and services in the region's GDP. The demand-supply approach was taken into account in the periodical model of innovations (Berkhout, 2000; Rothwell, 1994); New ways of thinking about development and innovations result in the fact that the model of innovative policy changes the objective of which is no longer only increasing the competitiveness of the economy and increasing wealth but also increasing the quality of life, while an effective strengthening of innovations requires influence on the demand and supply part of innovative processes.

In recent years there is an increase in the interest in the development of territories as systems subject to evolutionary changes and ones found in continuous imbalance. Two significant consequences resulting from this approach include emphasis on the dependence of the actual path of the territory's development from independent decisions of numerous different actors (e.g. Allen, 1997 and 2005; Batty, 2008) and on the interdependence of subsystems forming the territory. Both these consequences should be taken into account when development is planned. So far innovation was understood as a mainly economic problem related to nothing more than human social capital. The system approach requires the examination of the influence of changes in the social and spatial subsystems on the economic development, including the economy's competitiveness and innovativeness. In the system perspective, innovative processes go beyond the purely "technological" perspective covering a wide range of domains and business areas. Therefore, this study, on the basis of the literature review, assumes that innovative policy should refer to the economic, social and spatial subsystem recognizing the fact that the interdependence between these subsystems influences the innovativeness and competitiveness of a given territory. A proper functioning of the economic subsystem, namely relevant conditions for conducting business activities, including legal and administrative regulations, the system for financing innovations and

business environment institutions mediating in the commercialization of innovations, is necessary for the functioning of innovative enterprises. A proper functioning of the social subsystem is also necessary: the culture of innovativeness and entrepreneurship in the society as well as the social infrastructure, in particular the education system and the scientific sector matching the needs of a knowledge-based economy. The proper functioning of companies also requires an appropriate quality of physical space (the spatial subsystem), in particular equipment in the basic technical infrastructure (e.g. ensuring transport accessibility) as well as specialized innovative infrastructure (e.g. research laboratories). Transport accessibility as well as the attractiveness of land and natural environment development which are factors affecting the location of companies is also key here.

### **Smart specializations and their role in innovative processes**

New concepts of development focused in terms of the territory as well as the analysis of the effectiveness of previous regional innovation strategies made the European Commission suggest a new approach to the regional innovative policy – the so-called *smart specialization strategies*. The approach is a consequence of changes to the directions of the cohesion policy introduced in documents, such as the report Strategy Europe 2020 and its most representative project the Union of Innovations, Regional policy which will contribute to a smart development of Europe 2020 as well as changes to the EU budget. The concept of smart specialization assumes, first of all, increasing innovativeness and competitiveness on the basis of the potential of endogenous regions and trades already existing in them, while these may be both specializations within one sector as well as intersectoral actions making it possible to achieve a specific competitive advantage. By means of pressure on using the existing knowledge as well as specialized research-development activity matching socio-economic features of a particular area, regions should achieve excellence in a specific domain and the critical mass making it possible to compete on the international stage. At the same time, smart specialization strategies recommend accurate monitoring of results of conducted activities, involving regional actors for the preparation of development assumptions and identifying actual development priorities, separate for particular regions. When searching for innovation areas which could be formed in Poland, it would thus be necessary to take into account new fields of innovation also appearing in trades and domains so far considered traditional but well-developed in particular parts of this area and belonging to the so-called skills rooted in the region. For instance, in the food-agricultural sector this may be *food design* or introducing elements of biotechnology as part of preparing and manufacturing functional food. In the building industry, these are, for instance, new models of work organization for large investment projects which, as a result of using advanced IT tools, make it impossible to manage a large number of small subcontractors and generate savings (such models were prepared, e.g. during the preparations to the Olympic Games in London in 2012. New fields of innovation appearing in traditional sectors make it possible to assume that each company may be innovative. Therefore, support and advisory services making it possible to identify the possibility to introduce innovations of various types should be developed.

The cluster policy focused on strengthening the competitiveness of companies from particular trades may become a significant tool. Cluster initiatives, e.g. in traditional trades, were formed in recent years, particularly in Eastern Poland. These initiatives may become the carrier of positive changes and may be used to develop new fields of innovation. However, it is worth noting that cooperation in clusters positively affects innovativeness, productivity and competitiveness of companies (see e.g. the Copenhagen Declaration) only

if cluster initiatives are developed within areas of actual spatial and trade concentration of companies and are focused on projects of a business and innovative nature, and do not focus only on acquiring external funds. The majority of cluster initiatives in Poland is still in the initial phase of their development and public funds are a factor attracting the majority of their members. Programs for supporting the development of clusters undertaken both at the regional and superregional level should take into account the special character of this type of cooperation as well as lead to the identification of clusters with an actual development potential.

### **The role of the public sector in innovative processes**

Public authorities may have a significant impact on the development of innovative systems by introducing relevant legal, tax regulations as well as a system of incentives stimulating the desired innovative behavior, namely through influencing the conditions for the functioning of companies. Numerous new concepts of innovative systems also emphasize the role of public authorities as the generator of new solutions and the culture of innovativeness through actions performed as part of a number of development and sectorial policies (European Commission, 2003). However, the role of the authorities as the promoter of new innovative solutions in the entire public sector is underestimated. The promotion of innovative public services, on the one hand, generates the demand for innovations since the public sector is an important client, investor and employer within its territory. Another important aspect is promoting new solutions by used processes and technologies as well as shaping innovative and creative attitudes in the educational activity. All system approach and approaches focused in terms of the territory also emphasize the role of a relevant shaping of space since the quality of its management and technical infrastructure affects the investment attractiveness for companies, including high-technology companies (Tyler, 2009). The role of the authorities in creating conditions for the development of the economy and growth in innovativeness may be presented by adapting the so-called Porter's diamond (Porter, 1998) to the innovative system. The authorities thus shape the conditions for the functioning of companies, partially create the market for innovative products as well as shape the technical and social infrastructure. However, it is worth noting that the role of accidental and unplanned events is a significant aspect of territorial development even though it is often not taken into account (Myrdal, 1957). Even the best-planned innovative policy may have only a limited impact on the region's development, although the change in economic, social, political or technological conditions often creates an opportunity for development and makes it possible to change the previous *path of dependency*. In order to use such opportunity, the region needs to have suitable resources, competences and products – the innovative policy should thus affect their creation.

### **Conclusions**

Innovative processes and, first of all, product, process, organizational and marketing innovations generated as their result may be treated as one of the basic factors for increasing competitiveness of the economy of regions. Economic efficiency and social effectiveness of innovations processes is demonstrated with a large delay in time as compared to incurred expenses and depends on numerous demand and supply factors. The concept of innovativeness is based on the territory (*Innovation ecosystems*) – international literature more and more often mentions territorial innovations (resulting from the territory's features) which originate from previous concept of the innovative environment. These concepts indicate the need for cooperation of entire communities inhabiting a given territory,

the formation of relations between companies and the scientific sector with the inhabitants and the formation of values not only in the economic but also the social sense. New concepts of development focused in terms of the territory as well as the analysis of the effectiveness of previous regional innovation strategies made the European Commission suggest a new approach to the regional innovative policy – the so-called *smart specialization strategies*. The approach is a consequence of changes to the directions of the cohesion policy introduced in documents, such as the report Strategy Europe 2020 and its most representative project the Union of Innovations, Regional policy which will contribute to a smart development of Europe 2020 as well as changes to the EU budget.

Public authorities may have a significant impact on the development of innovative systems by introducing relevant legal, tax regulations as well as a system of incentives stimulating the desired innovative behavior, namely through influencing the conditions for the functioning of companies.

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## Towards an integrative approach: teaching entrepreneurial behavior throughout the entire educational career

### **Abstract**

*Most scientists and policymakers around the world believe in the idea that entrepreneurship and entrepreneurial behavior is one of the most important driving forces for economic development. As a result there have been many research studies and support programs to foster entrepreneurship among young people.*

*Many studies have been done about the effect of entrepreneurship support measures for students during their period of study at universities. Less common are studies about the early effect of entrepreneurial training, among secondary and primary school kids. Yet, building a continuous support system from primary school to university education might be one of the key necessities in increasing the number of young people that would like to start their own business. This article deals with some of the (preliminary) research results from Saxion University of Applied Sciences that have come out of a number of projects in this field on primary school kids, and some initiatives for setting up a support system in entrepreneurship development for secondary schools as well as the way project and competence based action learning is implemented at Saxion University of Applied Sciences. The final link in the chain of entrepreneurial training/coaching forms the foundation Kennispark, which fosters high tech start-ups to grow to become larger.*

### **Introduction**

Entrepreneurship support for starting businesses is already a relatively old practice. The first Business Incubator programs have already started at the end of the 1950s in the USA. The concept of helping starting businesses by providing office space and supporting services later spread towards many other countries. The American National Business Incubation association estimates in its factsheet on business incubation on its website that there are now more than 7000 business incubators worldwide (NBIA, 2012). There has been an enormous growth over the last decades in the numbers of business incubators and likewise in the number of companies graduating from these business incubators. This is a positive development, when looking from the viewpoint of regional development, since most entrepreneurs tend to stay in the region where they founded their company. Yet, the number of people actually starting their own business remains rather small. Even in a more or less entrepreneurial nation like the Netherlands, just under 5% of the population aged 15-64 has his or her own business with at least one employee, and around 9% more is working as sole-proprietor or freelancer (CBS, 2012). To further strengthen the development of entrepreneurship in society, and promote especially different forms of high tech or innovative businesses, many programs and initiatives have been established to help students from (technical) universities, to set up their own business. In the region Twente, the University of Twente and Saxion University of Applied Sciences have established in collaboration with the provincial government and the Enschede city government the foundation Kennispark, to

structure the existing business development initiatives into one single organization (Kennispark, 2013). Although the cooperation and structuring of former separate initiatives under the single Kennispark umbrella has certainly made the organization more effective and efficient, yet the question still remains whether the current policies are sufficient to increase entrepreneurial awareness and activity in Twente region. According to several studies it might be worthwhile to invest in teaching entrepreneurial skills to young children. As a result, an entire chain of entrepreneurship education, focusing on different stages of development of children/students is coming into being at the moment.

### **Teaching entrepreneurial skills at primary schools**

The results found in several researches about entrepreneurship support programs turned out to be mixed: some studies found a significant effect, but others not. According to recent research done by the University of Amsterdam, this might be because of focusing on the wrong age group. The researchers suggest that most especially non-cognitive entrepreneurial skills could best be taught during the last years of primary school. In a research into entrepreneurial skills developed in the BizWorld program, Huber, Sloof and Van Praag (2012) found significant effects on non-cognitive skill development among young children participating in this program. Non-cognitive skills like creativity, self-efficacy, risk taking and need for achievement developed significantly during the participation of the BizWorld program. Another finding was that cognitive skills related to entrepreneurship remained largely unaffected. The findings in this study are consistent with the model of technical skill formation developed by Cunha and Heckman (2007), in which they argue that skills are self-productive, have dynamic complementarity and have multiplier effects. Their conclusion is that skills taught at an as early as possible age will persist and can be built upon during later educational programs. Cunha and Heckman further suggest that there are certain ages in which education of certain skills might be most effective, based on the development of the human brain (Cunha & Heckman, 2007). Non-cognitive skills required for entrepreneurship may be most effectively taught during primary school years, waiting with teaching these skills until the age of 20 might be too late (Huber, Sloof & Van Praag, 2012).

### **Secondary school entrepreneurship education**

While during primary school teaching in entrepreneurship skills, the attention will be on non-cognitive skills, during education in secondary school more attention should be put on cognitive skills (knowledge what an entrepreneur is doing and understanding the principles of doing business in a market economy). In the region Twente a network of secondary schools exists, consisting of secondary school teachers, working together with lecturers from Saxion and the University of Twente, to develop new teaching methods on entrepreneurship education and implementing them into the educational programs on their schools. In The Netherlands this is relatively easy to do, as secondary school have a rather large amount of freedom to establish their own educational programs. For the schools it is mainly important to prove that the quality of their educational programs is sufficient. The goal is to establish a community of learners, to help each other in dealing with the educational questions of the 21<sup>st</sup> century. According to many researches and policies by the EU & national government, secondary schools should focus more on teaching students the ability to keep learning instead of just teaching factual knowledge (EU Commission, 2012). According to the EU commission, as written down in the policy document on *Rethinking educational strategy*, students should gain during their education period the ability to contribute to innovation and

entrepreneurship, only then will Europe get stronger out of the crisis and be ready for the 21<sup>st</sup> century (EU Commission, 2012).

Secondary schools in the region Twente are looking for opportunities to add more possibilities into their educational system to let the students experience real business. Saxion participates as one of the project partners in an EU funded LLP-Comenius project with the name IMPULS, to support the development of cross-border educational programs and practical company visits and projects. This program is not just aimed at developing practice based (business) education, but also to include the cross-border perspective into it. More and more the EU member states are becoming one single economic space, and consequently this IMPULS project also deals with international questions related to business and entrepreneurship. The project is currently still running, together with German and Polish partners, but already interesting student exchanges and practical assignments have taken place (IMPULS, 2013). Further planned activities in this project consist of the strengthening of the business partner networks of the secondary schools involved. For students of secondary schools this project offers many opportunities for learning cognitive elements of entrepreneurial behavior, as the students are immersed in the market circumstances of another country, when participating. As a result, Saxion expects to receive more students in the future who have already had some experience with practical business education and have a better and more realistic picture of what it means to start a business. The quality and motivation of students applying for Saxion's entrepreneurship program is expected to rise as a consequence of the attention on entrepreneurship education during secondary school.

### **Saxion University of Applied Sciences, developing an entrepreneurial attitude**

Since 1996 Saxion University of Applied Sciences runs a study program in Entrepreneurship, which is rather different from other Entrepreneurship programs in The Netherlands, since it focuses mainly on competence development and practical action learning. The practical component of the education program consists of real business projects, in which students tackle a problem for a company. This puts the students in the role of a junior business consultant, instead of that of a traditional intern. The student will deliver a research report to the company, in which they suggest solutions to deal with the research problem of the company. The reports themselves are written by the student in cooperation with a lecturer, who is coaching the students, by helping them to ask the right questions, as well as suggesting useful literature on the subject. Another role of the coach is to help the students when they get stuck in the process. To be working as a coach, means that a lecturer has to have a different set of skills: Most important in this educational approach is the shift in paradigm of the lecturers, to be not a lecturer who knows everything, but to accept that business practice can be complex and real life never fits exactly with the situation in the theory from the study books and therefore accepts the fact that he/she has to admit that he/she doesn't always have the right answer for every situation, but instead shifts into a role of asking critical questions about the research process.

The educational model is a concentric one, in which students learn from all subjects in every study year in a more complex way. This is mainly done by letting the students participate in more complex business projects during the course of their study. Typical business projects to start with for 1<sup>st</sup> and 2<sup>nd</sup> year students are projects like a customer satisfaction research or a company (re)location study. More complex programs are reserved for the later projects, which could involve the writing of a financial plan, a marketing plan for a new product or an Human Resource Management plan. After collecting enough credits for projects, students can move on to the graduation phase of the education, which also consists of a practical

project, but it has to be multi-disciplinary and enough complex for students to show mastery in the knowledge, skills and attitude gained during the course of their study program.

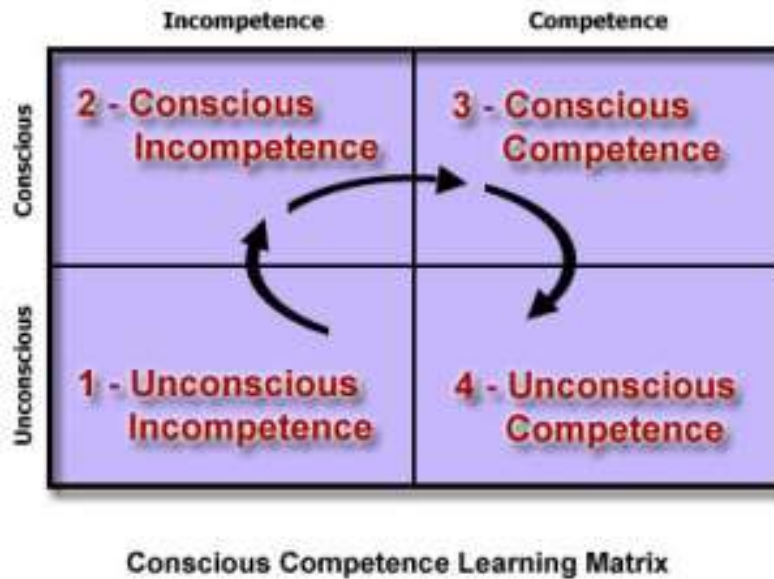


Figure 1: Competence learning matrix

The theoretical background of the educational model is the competence learning matrix (figure 1), attributed to Abraham Maslow. The development of any competence goes through four phases. The first phase is when a student doesn't know how to deal with a problem, but also doesn't know about it. It is the role of the lecturers and coaches to bring the student to the second phase, the realization that a business problem has to be solved and the student realizes he/she cannot do it, because either skills and/or knowledge is missing. This is a confronting situation which Saxion students sometimes describe as: "I felt like the lecturer let me walk with my head into a wall". The realization of the incompetence forces the student to develop knowledge or ask for help, until the students feels he/she has enough ideas how to solve the problem. In this third phase, the student is very aware of his/her limited competence in dealing with the problem, and still often needs help or consulting handbooks. However after more practice, the student will start to show competent behavior in the fourth phase. In this phase the student doesn't need help anymore, he/she automatically applies knowledge and skills to solve this particular problem. The circle will then repeat itself for competences which are on a higher level of complexity. Experience from running the Entrepreneurship program in this form at Saxion has shown that this particular method of education fits best with what Alice & David Kolb (2005) describe as accommodating learning style, also more widely known as "learning by doing" learning style. An example of an international practice based educational program is the Dutch – Russian Autumn Business School, organized mainly as a coproduction of Herzen State Pedagogical University and Saxion University of Applied Sciences, but with involvement of several partners outside both educational institutions. The program was organized together with the company Matel Metaal, World Trade Center Twente, the Federation of women with higher education of Russia and the Dutch and Russian ministries of Foreign affairs, within the framework of the Dutch-Russian bilateral year of 2013. In one of the other presentations in this book, more detailed information of the organization, goals and results of the Autumn Business School can be found.

The idea behind the entrepreneurship program of Saxion University of Applied Sciences is that students will either start their own business upon graduation, or will have the knowledge and skills to operate as an entrepreneurial manager in a Small and Medium sized Enterprise. For the students who seriously consider to start their own business, there are possibilities to get involved into the Kennispark programs for business development, where they can get supporting services and possibly also access to financing of the business idea. The Kennispark is therefore not just a business development program on its own, but a final link in the chain of entrepreneurship development study programs within the region of Twente.

### **Kennispark foundation**

When students or researchers decide to start a company, they can use the support structure, that is offered by the Kennispark Twente foundation. The foundation is a joint initiative of the University of Twente, the City of Enschede, the Region of Twente, the Province of Overijssel and the Saxion University of Applied Sciences. Through Kennispark Twente they share the regional economic development goal of creating 10.000 new jobs for the region. The support of startups is one of its three main activities. The other goals are to stimulate industrial innovation and to create an attractive business climate, for example by developing a science park. These combined efforts will contribute to what is called a 'regional innovation system'. In figure 2, the different elements of the innovation system are divided into four main categories: Entrepreneurship, Innovation, Area Development, and General Support Services. It is must however be stated, that the joint development of all elements is essential to the success of the whole system. The startups can not only benefit from the measures to support entrepreneurship but also from the other supporting activities. The last years Kennispark is more focusing on high tech patent and research spin offs, than academic startups in general.



Figure 2. Elements of innovation system

The support of and entrepreneurial and innovative attitude is regarded as the backbone of the system. It is therefore essential when at least part of the students have developed these skills, when they enter the university system. This process of stimulating entrepreneurial skills at primary and secondary schools was the central theme of this paper. These students will later have a strong inclination to take part at entrepreneurship courses during their masters and bachelor degrees. Both Saxion University and the University of Twente offer entrepreneurship courses, minors, bachelor and master degrees, that are available for all students. Unfortunately, many students in the field of engineering and science are still not

encouraged by their professors to follow these kind of courses. Therefore Kennispark is also organizing specific workshops for PhD engineering students, that would like to become entrepreneur, based on the results of their research.

When students are serious in starting a company there are different opportunities to get coaching, advice, loans, or even temporary office space. The coach or business developer will sign a 'non-disclosure (of information) agreement' with the starting entrepreneur to create an atmosphere of trust. The possibility to get support depends on the type of startup. Kennispark and the universities will only support startups, that supply services or products based on an innovative idea. At least knowledge acquired at the university should be used. Most support and funding is available for innovative high tech products, with a potential for strong growth, and an international scope from the start. Below we give some examples of financial support programs, offered by Kennispark Twente.

Even before the start of the Kennispark foundation in 2005, the University of Twente was offering a tailor-made program for startups since 1982, called the TOP facility. The program is now used by entrepreneurs from the University of Twente and Saxion, but is not exclusively intended for this group. TOP is open to all innovative entrepreneurs in Twente who are looking for a collaboration with the two universities. As a participant in the TOP program, you will have access to different support arrangements. Kennispark will perform a market scan (desk research) for each TOP company to provide you with valuable insights regarding your market. Other specific support include: an interest free loan, coaching and advice regarding legal issues and PR and communications, support from a university regarding the knowledge or innovative part of your product, use of laboratories, office facilities, and access to relevant business networks. Since 1982 approximately 400 startups have been granted a TOP loan and facilities.

Other facilities focus on the acquisition of venture capital for the new company. Masters of the Future is the network for angel investment in Twente. It offers a meeting place for business angels and entrepreneurs looking for funding. During the meetings companies looking for funding will meet wealthy individuals looking to invest in innovative companies. An important decision and process for both the entrepreneur and the potential investor, which means that the presentation of the business case will have to meet high standards. Another example is the proof of concept fund. An idea, proof of principle, technique or patent provides opportunities to create a new product and a new start-up company. Yet, before a first sale can be made, a prototype is needed to prove that a conceptual idea will actually work. This is often an expensive process. Proof of Concept Fund is a revolving fund (total: € 2 million) with a maximum loan per case up to € 250.000. This loan can be used for the development of a technical / technological invention towards a proof of concept/prototype. Besides these financing opportunities, several funds have been developed for high tech companies on a more commercial basis. These are the Twente Technology Fund (investment size 2 million Euro) and the Innovation Fund Enschede. Like in most EU countries Dutch universities are allowed to take a share in the startup, for example in return for intellectual property.

Recently the Saxion Center on urban and environmental studies has made an inventory on the number of startups that were created by students, alumni and research staff of Saxion and the University of Twente. A list of 1400 startups from both universities could be

established, which is an underestimation of the total number. Approximately half of these listed startups have used the facilities of Kennispark, Saxion University, or the TOP program of the University of Twente. In 2012 the list contained 120 companies, that can be regarded as high tech patent based or research based spin offs. Figure 3 is showing the growth rate of this specific type of academic startup. The growth of spin offs has accelerated. This number of high tech spin offs is comparable with European universities, which are regarded as successful in technology transfer, like the university of Leuven in Belgium.

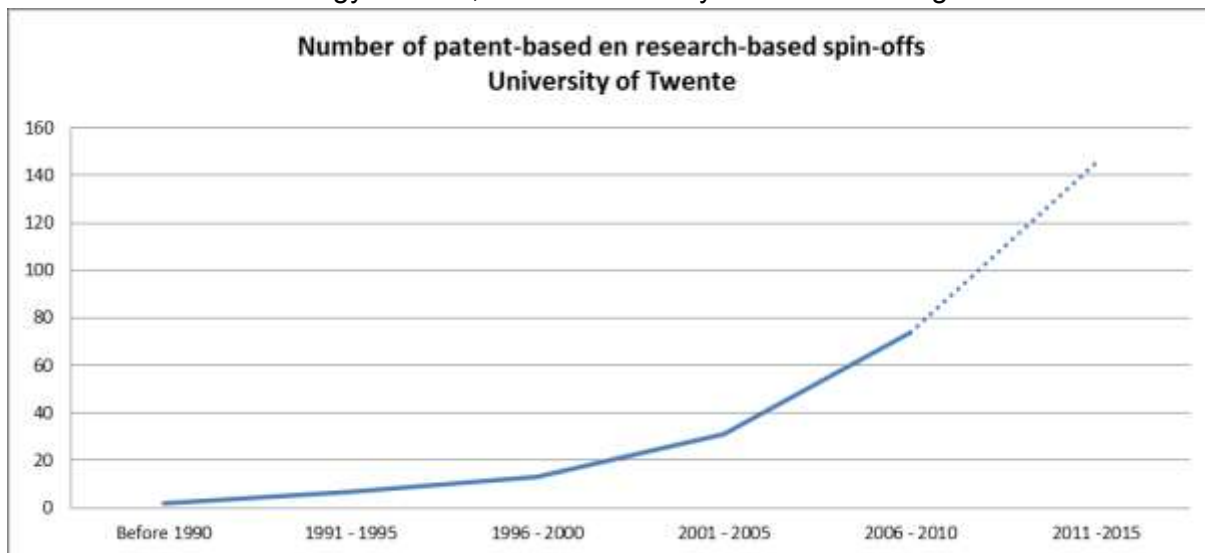


Figure 3: Spin-offs of Twente University

As a concluding remark we can state that the increased complexity and global distribution of the innovative process across a network presents the need for brokers who can enable these vital connections within a region, but also across sectors and continents. Such network brokers can take various forms: an industry association, university incubator, developing agency, or professional services. In innovative regions, professional services have developed specialized services tailored to the unique needs of start-ups and the region's unique industry mix. These services include legal, design, advertising, consulting, accounting, engineering, and testing services as well as venture capital. Within Twente one of the important broker organisations is Kennispark Twente. They perform these tasks on behalf of Saxion University, Twente University and local and regional authorities. Increasingly new firms are launched on a global platform and professional services are expanding their worldwide presence to meet the demands of new and established firms for global networks. It is therefore important that broker organisations cooperate with international peers to be able to keep facilitating properly their future clients.

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## Foreign students' start-ups: some statistical evidence for regional success

OECD countries host more foreign students than they send abroad in tertiary education. In 2009, OECD countries hosted 2.9 foreign students per each student studying outside his or her country of origin. In absolute terms, this accounts for 2.8 million foreign students in OECD countries compared to 987 000 students outside of their OECD country of citizenship. As 93% of OECD citizens study in another OECD country, almost two-thirds of foreign students in the OECD area come from a non-OECD country

### Trends in the number of foreign students enrolled outside their country of origin, by region of destination (2000 to 2009)

*Number of foreign students enrolled in tertiary education outside their country of origin, head counts*

Foreign students enrolled in the following destinations	Number of foreign students									
	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000
Africa	129 430	131 529	124 788	116 404	108 765	108 489	104 452	101 342	94 174	100 031
Asia	395 927	369 397	337 196	316 142	296 768	271 217	237 877	220 887	190 209	197 028
Europe	1 672 422	1 587 988	1 481 430	1 435 435	1 385 763	1 308 596	1 183 742	1 040 900	978 305	918 179
North America	850 966	809 943	728 190	733 051	738 401	712 292	712 296	695 806	576 059	569 640
Latin America & the Caribbean	75 433	58 776	55 813	37 838	37 114	39 760	42 230	35 305	31 950	28 945
Oceania	335 305	298 176	283 573	258 696	251 904	240 531	219 191	202 023	136 728	118 646
<b>Worldwide</b>	<b>3 673 925</b>	<b>3 454 326</b>	<b>3 198 201</b>	<b>3 069 790</b>	<b>2 982 588</b>	<b>2 843 695</b>	<b>2 648 636</b>	<b>2 444 223</b>	<b>2 146 686</b>	<b>2 071 963</b>
OECD countries	2 838 027	2 646 999	2 534 414	2 446 164	2 373 011	2 272 064	2 092 527	1 904 154	1 647 622	1 588 862
EU countries	1 406 887	1 317 541	1 311 333	1 255 879	1 199 825	1 150 604	1 034 876	894 260	842 937	804 716
<i>of which in EU21 countries</i>	1 372 398	1 282 373	1 283 433	1 229 295	1 172 429	1 122 675	1 008 351	868 301	811 781	775 102
G20 countries	3 033 995	2 843 849	2 629 096	2 547 843	2 485 330	2 366 148	2 222 619	2 045 952	1 789 815	1 715 174

The predominance of students from Asia and Europe is also clear when looking at individual countries of origin. Students from France (2.1%), Germany (3.6%), and Korea (4.8%) represent the largest groups of international OECD students enrolled in OECD countries, followed by students from Canada (1.8%), Japan (1.8%) and the United States (1.8%). Among international students originating from non-member countries, students from China represent by far the largest group, with 18.2% of all international students enrolled in the OECD area (not including an additional 1.3% from Hong Kong, China)

A large proportion of foreign students in OECD countries come from neighbouring countries. In all OECD countries, around 20% of all foreign students come from countries that share land or maritime borders with the host country. Higher levels of cross-border mobility not only reveal a particular geographic situation but may also be the consequence of cost, quality and enrolment advantages that are more apparent to students in neighbouring countries. On the other hand, higher percentages of foreign students from countries beyond the immediate borders are seen in countries that have the largest market shares in

international education and in countries, such as Portugal and Spain, which have close historic and cultural ties with other compared to countries further away.

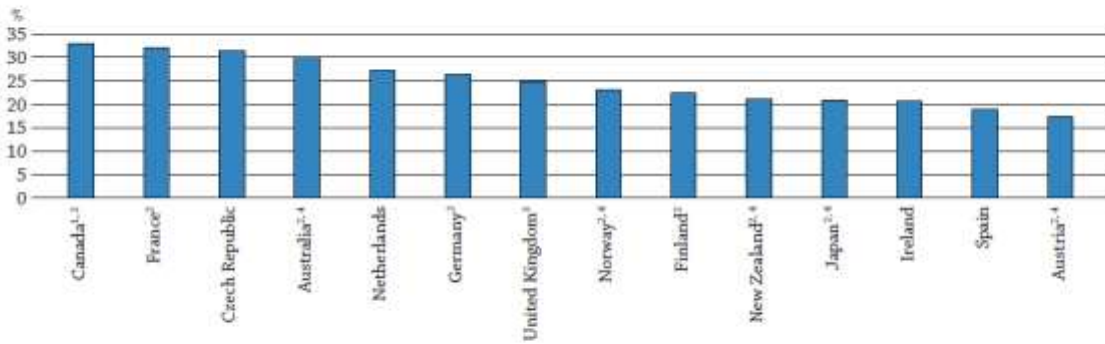
Rationales for an individual to remain in the host country after studying include the different work opportunities compared to the country of origin, integration into the host country, and future career advantages when returning to the country of origin or when moving to a third country. However, insertion into the host country labour market may imply a higher risk of over-qualification for international students than for nationals.

Several OECD countries have eased their immigration policies to encourage the temporary or permanent immigration of international students. Australia, Canada and New Zealand, for example, make it easy for foreign students who have studied in their universities to settle by granting them additional points in those countries' immigration point system. Finland and Norway amended their naturalisation acts and now take the years of residence spent as students into account when they assess eligibility. In France, enrolment of international students in advanced research programmes reduces the period of residence needed to be eligible for naturalisation. In many other OECD countries, working visa and temporary residence procedures have been simplified for international students and graduates. Countries apply other measures to integrate international students. These includes local language courses, as offered in Finland and Norway, and internship programmes or work permits for part-time insertion into the labour market, as offered in Australia, the Czech Republic, Japan, Norway and Sweden. In addition, freedom of movement of workers within Europe as well as national treatment with respect to tuition fees partly explain the high level of student mobility in Europe compared to that among the countries of North America. The North American Free Trade Agreement (NAFTA) does not permit the free movement of workers within a common labour market.

The number of students who remain in the country in which they have studied and the success of policies designed to retain migrants with high skills can be measured by stay rates. The OECD 2011 International Migration Outlook includes an indicator to measure the proportion of international students who shift from student status to another type of residence status, particularly one that allows them to work.

**Chart C3.5. Percentage of international students changing status and staying on in selected OECD countries, 2008 or 2009**

Percentage of students who have changed their status (whether for work, family or other reasons) among students who have not renewed their permits



**Note:** For European countries, covers only students from outside the European Economic Area.

1. Data for Canada include changes from student to other temporary statuses.

2. Year of reference 2008.

3. Student stocks from visa sources.

4. Student stocks calculated from *Education at a Glance*.

Source: OECD (2011a).

StatLink  <http://dx.doi.org/10.1787/888932461598>

The stay rate averaged 25% among international students who did not renew their student permit in 2008 or 2009, and is above 25% in Australia, Canada, the Czech Republic, France, Germany and the Netherlands. In all countries with available data, the stay rate is higher than 17% and reaches 33% in Canada. An average of 74% of students who change their status do so for work-related reasons. This is true for 80% or more of status changes in Canada, the Czech Republic, the Netherlands and the United Kingdom. Since it is likely that a higher proportion of those who stay than those who leave actually graduate, the stay rates in this table can be considered to be the lower bounds for rates based exclusively on students who have completed their studies. These numbers combined with research into the amount of students staying in the study region after starting a business can mean that focussing on entrepreneurship among international students can mean that extra possibilities are generated for students to help build the economy of the region where they attend their study program.

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## Soft Support as a Coherent Set of Teaching Methods

### **Abstract**

*Entrepreneurship support is seen as very important because entrepreneurship has an important impact on economic growth. The theory of entrepreneurship support is rather diffuse. A lot of different terms are used to describe that support, but when using a term it is not clear what is been done. That is why we have developed a model where the different sorts of support can be classified. This soft support model also helps to develop a complete set of teaching methods for entrepreneurship. The AGIL paradigm for social systems describe four different elements that are important for a social system. A company can also be considered as a social system. That makes that those four elements are also important for a company and all four elements should be supported to create a healthy company. There is some research about supporting companies. The support is addressed with a larger variety on terms; coaching, mentoring, counseling, consulting and so on. For the support on entrepreneurship we focus on the terms 'coaching' and 'mentoring'. The descriptions of coaching and mentoring in general have two different aspects. First there is the goal aspect; what should be reached? This can vary from doing your work better to improving yourself (as a person). Second there is the way this support is done. This can vary from a fix or directive way of support to a free or non-directive way of support. From the different aspects of support we designed the soft support model, in which we distinguish four ways to support. The soft support model has also some resemblance with the elements of the AGIL paradigm. From the researchers on entrepreneurship education we also see a distinction in individual and organizational level. The difference in free or fixed education is not made explicit. If we consider soft support as a sort of education to a social system, that difference seems to be logic. The soft support model also gives four elements of education that form a coherent set that can be used to establish a healthy social system; Challenging, Clarifying, Liberating, Empowering. From the support perspective entrepreneurship education should also differ between personal or skills oriented and between free and fixed. When using the AGIL paradigm as a required set for a healthy social system. We see that the soft support model gives the four sorts of entrepreneurship education that are needed. Designing the entrepreneurship education along these elements would give a logical and healthy set of teaching methods.*

### **Introduction**

Entrepreneurship is seen as very important to economic growth (Carree and Thurik, 2010, Glinskiene and Petuskiene, 2011). That is why it is rather obvious that politicians are interested in Entrepreneurship. A lot of entrepreneurship support programs are developed to encourage entrepreneurship and for the success of entrepreneurship (Bøllingtoft, 2012). The research on the successes of different kinds of support is in it's infancy, but is increasing tremendously since the beginning of this century. Most of the support systems (incubators, education, training programs, etc.) claim to be more or less successful (Ratinho et al.,

2010). Very little is known about the reasons of being successful. There seems to be not one specific method that is successful. The model for soft support can be used to get more insight in the support methods and could be helpful to develop a coherent entrepreneurship education program.

### **Theoretical background**

Several researchers have been writing about supporting companies, managers, entrepreneurs, etcetera. This support is addressed with terms like teaching, training, executive coaching, business coaching, personal coaching, life coaching mentoring, peer mentoring, group mentoring, counseling, consulting, intervision, supervision, role model, empowering, encouraging, advising, tutoring, assisting, sounding board, eye-opener, door opener, and so on (Colley, 2002, Roberts, 1998, Bozeman and Feeney, 2007, Kennedy, 2009, Roberts, Sundli, 2007, Crompton, 2012, Walker et al., 2009, 2009, Vansickel-Peterson, 2010). The terms that are most familiar in supporting entrepreneurs are coaching and mentoring. That's why we focus on the terms coaching and mentoring. We started with a search in journals how coaching and mentoring are used in entrepreneurship support, or business support.

Several researchers point out the differences between coaching and mentoring. For example Hahn (2008) says that the difference between coaching and mentoring is that a coach mostly doesn't come with the solution, while the mentor mentions solutions or a path of action. He also suggests that coaching focusses on personal growth, and mentoring on improvement of the skills needed for their job. In general that same difference is seen by others; mentoring is more about guiding and facilitating by a more experienced person, while coaching is more general and not focusing on a specific item (Jones et al., 2009, Busen and Engebretson, 1999, Klofsten and Öberg, 2008). Others use the terms coaching and mentoring interchangeable or make no difference (Liljenstrand and Nebeker, 2008, Wise and Voss, 2002, Gray et al., 2011). On the other hand there are also several researchers that are not looking for the differences between coaching and mentoring. They are not busy trying to defend their territory and not trying to land-grab by definitions, rules and own practices (Clutterbuck, 2008). D'Abate et al. (2003) are one of the first that made an attempt to combine the different ways of personal development. They made matrices with developmental interactions and characteristics (of the relations) on the axes. But at the end they fall into the trap of definitions as they conclude that the findings are useful "to assist researchers in their efforts to form more complete and sound definitions of developmental interactions constructs". This supports the idea that it would be interesting to develop a scheme at which the personal support (of entrepreneurs) can be addressed.

Notwithstanding the attention of a lot of researchers on the differences, there are also a large amount of similarities between coaching and mentoring which some researches already pointed out. In general coaching and mentoring focus on development of the individual or on the solution of problems (Wise and Voss, 2002, De Haan, 2006). What you see when you look at this kind of support is that most times two, or a few people, sit together, where one of them is the supporter (mentor, coach, counselor etcetera) and the other(s) is/are the supported (mentee, coachee, client, etcetera.). There is a certain goal involved in these talks, which can be specific or global, most times contributing to individual and organizational success (Bozer and Sarros, 2012). Researchers generally see individual and organizational as apart poles for the goals of support, which they sometimes also define

as the difference between coaching and mentoring (Hahn, 2008, Klofsten and Öberg, 2008, Jones et al., 2009). The researchers also see variations in the way of support, which even can vary every session. Some of them say that support (coaching) is about asking the right questions (Stober and Grant, 2006), so the session is very open, while others argue that expert knowledge is important to support so guidance or advice can be given (Cavanagh, 2006, Busen and Engebretson, 1999). Hamlin et al. (2009) talk about a more or less directive way of support, which implies that this kind of support can vary.

So we have two main distinctions in the way personal support for entrepreneurs can be given. First there is the focus of the support. This can differ from the business or the problem to the development of the person itself. When focusing on the person in most cases the final goal is to improve the work that is been done by that person, the direct link is not so clear. Second there is the character of the support, which can vary in the amount of steering that is given. In the model of the six categories of counselling intervention (Heron, 2001) there is also the difference in direction of the intervention visible; Authoritative and Facilitative. These directions are also the basis for the coaching behavior model of Andriessen et al. (2010). Béchard et al. (2007) added another dimension to Herons six categories; business vs. personal. Also Berman and Bradt (2006) use two dimensions in their Four-category model of executive coaching. They use the time dimension; targeted or short-term to exploratory or long-term and the business focus to personal focus. Also Ives (2008) uses two dimensions; from directive to non-directive and development-focused to solution-focused. The same goes for D'Abate et al. (2003) who also recognize two categories; characteristics of the interaction or of participants, and the purpose of the interaction. Clutterbuck (1998) also uses two axes to describe a continuum of who is in control of a coaching session and who determines what is discussed.

Fillery-Travis and Lane (2006) use the focus on skills to personal development, which they describe as 'role'. They also use fixed to a free sort of support which they describe as 'agenda'. These models all use the same sort of dimensions. First there is the dimension of the goal of support,

**Figure 1 Soft Support Model**

		Agenda / Function	
		Fixed / Directive	Free / Non-directive
Role	Organisation Skills / organization oriented	Problem solving / Challenging /	Solution oriented / Clarifying /
	Personal development	Focus on insight / Liberating	Personal Focus / Empowering

(Koopman, 2013)

which goes from personal to organization. The other dimension is the way of support, which goes from fixed to free. This leads to the 'soft support model' of figure 1 (Koopman, 2013). This soft support model is designed for supporting (coaching, mentoring) entrepreneurs. Talcott Parsons (1964) developed the AGIL paradigm for social systems. We consider an

enterprise as a social system and use his AGIL paradigm for a healthy organization. Parsons divides a social system into four distinctive elements:

- Adaptation; about the capability to relate with the environment
- Goal attainment; about setting goals for the future and as a result make decisions
- Integration; about the way values and norms are congruent with the whole society
- Latency; about the maintenance of the integrative components of the social system

These four functions can be divided by two axes; Internal vs. External and Instrumental vs Consummatory. This classifies the four elements of the AGIL paradigm as shown in figure 2

**Figure 2 AGIL scheme**

	Instrumental functions / Now	Consummatory functions / Future
External problems	Adaptation Economy	Goal-attainment Political
Internal problems	Latency Value-commitment	Integration Influence

(Parsons, 1964)

As a company can also be considered as a social system we used the AGIL paradigm as results for entrepreneurship support. The dimensions used by Parsons (1964) are similar to the soft support model; internal or personal versus external or organisational and instrumental or fixed versus consummatory or free. If we combine the ‘soft support model’ with the AGIL scheme we get four different sorts of support for a social system (like an enterprise) as shown in figure 3.

**Figure 3  
Soft Support in a Social System**

		Agenda / Functions	
		Fixed / Directive / <i>Instrumental</i>	Free / Non-directive / <i>Consummatory</i>
Role / Problems	Organisation Skills / organization oriented / External	Problem solving / Challenging / Adaptation	Solution oriented / Clarifying /
	Personal development / Internal	Focus on insight Liberating / Latency	/Goal attainment Personal Focus / Empowering / Integration

Enterprise and entrepreneurship education can also be seen as kind of soft support. Blenker et al. (2011) determine also two aspects in entrepreneurship education. First they ask about the value to create and second about the students mindset. This can be seen as the questions about the role needed to support students in entrepreneurship education. The value creation is about the organizational skills, where the students mindset is about the personal development. They also acknowledge that entrepreneurship education “initiative needs to be tailored to the target audience” . That is what Leitch et al. (2012) also conclude,

when they talk about a context-specific approach. They also recognize the organizational skills and personal development if they argue that the specific approach can have impact on the individual level and the organizational level. So it seems rather common to recognize the organizational and personal development as shown in figure 3. Also others recognize that personal support plays an important part in education entrepreneurs (Sundli, 2007, Blenker et al., 2011, Gibb, 2007, Gustafsson-Pesonen and Remes, 2012, QAA, 2012). Abiddin and Turiman (2009) mention six basic roles in supporting entrepreneurs; adviser, guidance, teacher, coach, role model, counsellor. Although it is recognized that entrepreneurship education should be different from 'traditional' business schools (Gibb, 1996, Koopman et al., 2013, QAA, 2012, Leitch et al., 2012, Gibb, 1993, Gordon et al., 2012) it is hard to find examples where this is done in practice. Most of the schools still teach in a more traditional way and teach students by telling them about the organization skills. A research in literature about coaching and mentoring also concluded that in most of the literature the focus is on organizations skills in a directive way and not on personal development (Koopman, 2013).

Considering a business as an social system, would give direction to the different kinds of education needed to design a curriculum for enterprise and entrepreneurship. According to the soft support model there are two axes according which entrepreneurship education should be given. One axis goes from personal development to organizational skills. This means that teaching students is not only about marketing, finance, management, but has also to do with personal issues like creativity, motivation, self-efficacy and perseverance. The other is more focusing on the way the support is given. This can vary from fixed or directive to free or non-directive. So sometimes students should be told how things work, or what is common in the situation and in another situation students should discover themselves in order to learn.

### **Questions**

Using the soft support model and the AGIL scheme results in four types of education needed to cover all the elements of entrepreneurship education. It would be interesting to find out how to use these four types of soft support in entrepreneurship education.

This leads to the following questions:

- 1 How would the four different types of soft support (Challenging, Clarifying, Liberating, Empowering) represent four basic methods of enterprise and entrepreneurship education?**

Although this seems to be logical by theory, there is no research that answers this question. We already found out that using this model makes it better to discuss about what is needed to develop education for entrepreneurship. So it seems to be useful to use these four types of education for entrepreneurship.

Four types of entrepreneurship support does not mean that all four are equally important.

- 2a Are all (four) types of support equally important when designing enterprise and entrepreneurship education?**

While Parsons (1964) declares that all four elements are important it is not clear if that means that looking at an entrepreneurial system they are all equally. It might be logical that the importance of the types of support depends on the context, as already presumed (Blenker et al., 2012, Leitch et al., 2012). So in this case it is interesting to know more about the context, to know how to use the types education.

**2b If the context is influencing the importance of the sorts of support, in what way would the context influence it; what elements of the context are needed to know, to know what the influence will be?**

It's logical to think about culture as an important context, but also the personality and the experience are logical element of that context. There are three graduate outcomes recognized; behaviors, attributes, skills, by the QAA (2012) which can be applied by a variety of delivery types. They distinguish general principles (teaching, learning and assessment), external contexts and developing the individual. The connection between outcomes and delivery types is not so clear.

**3 Would it be possible to define if and how the kind of support can be connected to different enterprising behaviors, attributes and skills? (QAA (2012))**

In this context 'skills' could be connected to 'organization skills', 'attributes' to 'personal development' and 'behaviors' partly to 'organization skills' and partly to 'personal development' (QAA, 2012). While the AGIL paradigm defines four different mechanisms, it would be logical to find their counterparts in entrepreneurial education, as they both could be considered as a social system.

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## Project management education: engagement with entrepreneurial behaviour

### Introduction

The gap between structural work and ad-hoc decision making is the domain of project management. A project manager must be able to handle both: fast changing situations and the basic rules of the business game played. This implies that project management is a serious profession, despite that it often claims not more than one or two modules in a business or engineering curriculum, mostly training knowledge and skills of planning instruments and specific leadership tools (Grit & Gargano, 2008; Nicholas & Steyn, 2012). Apart from guest lectures from experienced project managers, seldom aspects are highlighted about the turbulent dynamics of this job in a structured way. This article has not the attempt to neither condemn the past curriculum designers for missing essential parts of the profession, nor jeopardize the importance of planning and leadership techniques. The aim of this article is to foster the possibilities borrowing educational tools and instruments from other domains of education, dealing with about the same extend of contextual turbulence (Aramo-Immonen & Vanharanta, 2009). Build on prior research on the topic of learning from experts in surviving contextual turbulence (Hammer, 2012), this article muse about 'easy to adapt' concepts, to strengthen the project management learning programs. For this reason the concept of entrepreneurship will be explored, since it is the most scientific published topic in the last decade outside the medical domain. Acting like an Entrepreneur, enterprising, is often seen as an important factor of economic growth. There is also a strong relation between entrepreneurial education and entrepreneurial activity. Apparently there seems to be consensus among policymakers, academics, researchers and economists that Entrepreneurship Education is probably the most effective way to contribute to economic growth (Gibcus, Overweel, Tan, & Winnubst, 2010), as long as these entrepreneurs stay in the region or country. It is argued broadly among scholars that entrepreneurship needs other skills, methodologies and teachers (Koopman, Hammer, & Hakkert, 2013). Despite, or due to the extensive variety of research, it is difficult for educators and curricula designers to make an effective program based on it. In this paper the foundational theory of Dewey (1938) is used as a methodological framework, and therefore it has a design approach. Based on theories, practices and experience, some practical elements for a project management curriculum design are described and elaborated upon.

### The fast changing society

Throughout history, our development and understanding of the world around us has been progressive but slow. Mankind could survive and function well with the knowledge he had

learned from his parents and grandparents. We lived in small communities where everybody knew each other and everybody needed one another. Most of the history of mankind has been like this. Since the scientific and industrial revolution the world became more complex, but especially information remained scarce. Yet, in our current world now connected to internet, with virtually unlimited access to information, our development has shifted rapidly from evolution to revolution. It seems apparent that the technology running our world today has been developed during just one life time. Since 1995 fiber optic has been linking our continents together and giving us access to internet, a huge source of information with no limit. Transistors and powerful small batteries were the major innovations which made this happen.

In former times, just one generation ago in Europe, access to knowledge was exclusive to people who worked in government, councils, churches and schools. It gave them status, power and responsibility. They could use this power for good and for bad. Nowadays anybody connected to the internet has access to data from all around the world. This virtually limitless access to information comes with responsibility: People need to be educated and trained to interpret data, in order to distinguish facts from fake. Developments in social, moral and economic spheres are moving faster than ever before. There is no longer a shortage of information, but instead an overkill of information. People can drown in it. It also means that we must be aware of the global social and economic developments:

- No job for life
- International competition
- Education needs to prepare students for jobs that don't exist yet.
- Students need to be prepared to solve problems we don't know to be problems yet.
- So many and also fast technical innovations that when following a technical education at the university of applied science, facts learned during the second class, will be outdated before graduation.
- The amount of information worldwide doubles every two years: Facts become outdated quickly
- Shortening Time to Market of inventions

Through the development of global competition, the standards expected of young people are changing, providing both opportunities and threats for the individual. The conclusion of the ideas above may very well be that the "learning ability" for individuals and industry is the core competence to achieve sustainable competitive advantage and therefore survival. It invites everyone to adapt Life Long Learning as a way of life. Creativity as problem solving mechanism will also become more and more relevant. The development leads to questions like:

- Does education keep-up with the needs and the revolution of time-shift? And how?
- Which qualities should young people have in order to be able to survive in our rapidly evolving modern society?

Trying to answer those questions we need to distinguish two different types of professions:

- Professions in which merely recapturing skills are needed
- Professions in which merely creative and entrepreneurial skills are needed.

For example, a doctor needs to know the right procedures and practice them in case someone needs instant help. An entrepreneur or project leader however often has to improvise and make decisions based on limited data. Compare the doctor's skill training with raising little ducks against training students for modern life: it is better to be raised by a falcon, continuously looking for new opportunities and flying solo from its nest (strong responsibility for self-development and wellbeing).

### **Characteristics of Entrepreneurship Education**

Acquisition of entrepreneurial competences through a traditional teacher focused educational approach is not possible (Gibb, 1993). Students need to feel and experience (QAA, 2012). It is to be expected that the learning style of an entrepreneur and anybody in practice who sets goals for himself can be characterized as having high Self-Discipline. An effective way to teach or guide that person would be the coaching manner. The learner would take self-responsibility (Koopman et al., 2013). For an optimal effect the design of education programs and the teaching style have to be congruent with the students learning style (Kolb & Kolb, 2005). A maximized effect will be achieved by congruency in the educational style, -system, the programs, the teacher's style, student learning style and goals to be met. For future-proof young professionals, it is an obligation to show and share their value to stakeholders. The developments in project management, ICT and global connectivity need improved ways of showing the available talents. The entrepreneurial learning process can be viewed as a process in which different phases are sequentially passed. Skills and competences can be shown at different levels (Vloon, Hammer, & Brahimi, 2013):

#### 1 to 4, Level A: Applicable

Awakening, Recognizing, Acknowledging, Knowledge are typical phases to pass in gaining a theoretical basis. Methods like attending classes, lectures, seminars, study in the library and research on the internet are all means to gain a theoretical basis.

#### 5 to 8, Level AA: Applicability Approved

Theory used in practice. Students have reached levels like: Being capable, being able to apply and to perform. In practice, students have competence to select appropriate theories for the experienced situation and are able to interpret and apply these.

#### 9-12, Level AAA (pronunciation: "triple A"): Advanced Applicability Approved

Multiple Practice Experienced Levels of overall reflection, competent, innovative and excelling are in reach when one successfully applies theory and practice in several different locations and of situations.

For the description of the qualifications of young professionals, the concept of *Applicability Approval* (short: App) is used (Vloon & Hammer, 2009). An App can have multiple forms and can be gained when demonstrating a skill or competence in an appropriate context. Certificates collected may be helpful in demonstrating that a certain level is reached and therefore can be a valuable app. App's can have multiple forms as certificate, newspaper article, price, formal document, acknowledgement-letter, enquiry results, prototype-product, draft article, publications, described situations of professional achievement, etcetera. The

collection of apps from a student is called an App-store, from which a résumé can be constructed for a specific goal. When applying for a job, it is clear that the resume is the most important document in selection process. Of course the level is determined by the grade of the diploma, but if the competition for a job is more or less between equals, the resume will define the conclusion. It is about what students do know and arguably is even more important, what they can. For example, we tell students; “Do not directly answer questions asked, but solve problems”. In the two cases below, we want to emphasize the difference of these approaches.

#### Case 1

A student was asked; “Due to the production increase, by how many square meters should our stores expand their work floors?” Answer after students research: “Zero, but instead reorganize the production line”. In his resume he wrote:

*At company XX, I performed a logistic study concerning shop floor management. As a result the production flow was improved, resulting in a significant improvement in profitability.*

#### Case 2

A student was asked to carry out an employee satisfaction research. The basis of the questionnaire was drawn up by the company itself. The result of his research was that the questionnaire drawn up by the company did not lead to reliable results. He designed a new survey. The Executive Board loved it and asked him to perform the survey (on a commercial basis) at all the branches in The Netherlands. The results will be used in redefining the Human Resource Management strategy. At his resume he wrote:

*At company YY, I did a successful redesign of the employee satisfaction survey. This new survey has been implemented by the company in all its stores in the Netherlands and led to new insight for the Human Resource Management.*

Besides the Apps, education should be also about the personality of the young professionals: are they stimulated to be enterprising? Therefore our conviction is: “*EAT to succeed*”. Entrepreneurial success starts with Inspiration, Experience and Drive, those can be externally focused factors, but what is really necessary are intrinsically motivating factors such as **Endurance**, **Ambition**, **Talent** to combine with **Effort**, **Affection** and **Time** (you will have to invest).

#### **Conclusion**

Especially in technical fields, most of the knowledge gained by students during their studies would be outdated before their graduation. This is why emphasize that only teaching knowledge cannot be sufficient. The 21<sup>st</sup> century puts everyone under pressure, as things are evolving so quickly. Competences, Entrepreneurial skills need to be developed. This would help everyone to face changes and adapt accordingly. Project management allows such professional skills to be developed. Therefore, instead of preparing students to reproduce facts and answer questions, we teach them concepts such as Life Long Learning (LLL), and problem solving, which support the entrepreneurship education principles. By using this concept, students may develop Applicable Approved Competences. We encourage them to be proactive, ask the right questions, seek for and find answers in theory

but also in practice, assess the answers, conclude the findings and formulate coherent advice. Therefore the adaption of entrepreneurship education elements could strengthen the project management programs in both ways: it extends the time student are working on their development as project manager and it covers the aspect dynamic context survival.

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## Presentation of an individual project: Autumn Business School



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March 2014

**Experiment to improve  
International entrepreneurship education:  
Dutch–Russian Autumn School–2013**

<http://schoolmanag.herzen.spb.ru>

вторник, 25 марта 14 г.



**Идея проекта**

- At S–Petersburg there are more than 100 Dutch companies, with more than 6,000 employees. Interest in the development of new business and the volume of financial investments each year is increasing. This Year was announced as "Russian–Dutch bilateral Year".
- These circumstances were the forerunners of the International Autumn School idea of which is to create an interactive platform of business interaction **aspiring entrepreneurs** with national traditions of business culture in Russia and the Netherlands.

**Идея проекта**

- В С–Пб работает около 100 голландских компаний, на которых трудится более 6,000 человек. Интерес к развитию нового бизнеса и объемы финансовых инвестиций с каждым годом только увеличиваются. Кроме того, именно этот год объявлен "Годом российско–голландского сотрудничества".
- Данные обстоятельства стали провозвестниками международной осенней школы идея которой состоит в создании площадки интерактивного делового взаимодействия начинающих предпринимателей с национальными традициями и особенностями деловой культуры России и Нидерландов.

вторник, 25 марта 14 г.



International Autumn School

## "Entrepreneurship and business engineering"

Международная осенняя школа

### «Предпринимательства и бизнес инжиниринга»



### The stages of project

- The school was held in two stages:
- **Stage 1** – September 2013 in Saint-Petersburg – will create a bank of joint projects on the basis of the Russian–Dutch companies; implemented an educational and cultural program for participants;
- **Stage 2** in the Netherlands – final events at the University of Saxion in December 2013

### этапы реализации

- Школа будет проходить в два этапа:
- **1 этап** – сентябрь 2013 года в С-Пб – будет создаваться банк совместных проектов на базе Российско–Голландских компаний; реализовываться образовательная и культурная программа;
- **2 этап** в Нидерландах – проведение итоговых мероприятий на базе Университета Саксён в декабре 2013 года

вторник, 25 марта 14 г.



International Autumn School

## "Entrepreneurship and business engineering"

Международная осенняя школа

### «Предпринимательства и бизнес инжиниринга»



## mission

Our aims to do everything possible for you to know and be able to do more than others. We can only achieve this aim with you! We invite you not only to study but exchange the experience and to establish business links!

## МИССИЯ

Наша миссия – сделать все возможное, чтобы Вы знали и умели больше других. Достичь этой цели мы можем только с Вами. Мы приглашаем Вас не только учиться, но и обмениваться опытом, налаживать деловые связи.



вторник, 25 марта 14 г.



International Autumn School  
**"Entrepreneurship and business engineering"**  
 Международная осенняя школа  
 «Предпринимательства и бизнес инжиниринга»



## The participants

**10 students** School of Management Herzen's University with specialization:

- "Entrepreneurship"
- "Project Management"

**10 students** of the School of Entrepreneurship and Business Engineering Saxion University (The Netherlands)

## Участники\*

**10 студентов** факультета управления Герценовского университета обучающиеся по направлению «Менеджмент организации», со специализацией:

- «Предпринимательство»
- «Управление проектами»

**10 студентов** Школы предпринимательства и бизнес-инжиниринга Университета Саксён

\*Все студенты пришли предварительный отборочный конкурс

вторник, 25 марта 14 г.



International Autumn School  
**"Entrepreneurship and business engineering"**  
 Международная осенняя школа  
 «Предпринимательства и бизнес инжиниринга»



## The 1st stage of Program

**September, 22<sup>nd</sup>** - Arrival Day

**September, 23<sup>rd</sup>** - The Day of official opening of business school in Herzen University; presentation of Master's program Herzen's - Saxion; Lecture of Professor; Welcome-party of national styles; self-presentation of participants.

**September, 24<sup>th</sup>** - Russian-Dutch case-study Day (based on real Company).

**September, 25<sup>th</sup>** - Workshop- «foresight-Idea» projects.

**September, 26<sup>th</sup>** - cultural-educational program, taking part in exhibition, reception at the consulate, visiting Russian-Holland Company.

**September, 27<sup>th</sup>** - Excursion's Day - visiting Petergof's park and the Palace; park ensemble in Strelna city. Bye-Bye Party.

**September, 28<sup>th</sup>** - Departure Day

## 1 этап программы

**22 сентября** - день приезда.

**23 сентября** - день официального открытия бизнес-школы в Герценовском университете: презентация магистерской программы РГПУ-Саксон; открытая лекция «Голландия-Россия: вековые традиции сотрудничества»; Welcome-вечер национальных стилей - самопрезентация участников.

**24 сентября** - день кейс-стади российско-голландской на базе российско-голландской компании с участием приглашенных экспертов.

**25 сентября** - мастер-класс - «foresight-идейные» проекты.

**26 сентября** - культурно-образовательная программа - участие в выставке, прием в консульстве, посещение российско-голландской компании

**27 сентября** - день экскурсий - посещение Петергофского парка и дворцово-паркового ансамбля в Стрельне. «Bye-Bye» Party.

**28 сентября** - день отъезда.

вторник, 25 марта 14 г.

**Россия  
Голландия  
Nederland  
Rusland  
2013**

International Autumn School  
**"Entrepreneurship and business engineering"**  
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«Предпринимательства и бизнес инжиниринга»



### Teachers of the school

- Educational program of School provided by:
- specialists with professional skills in international Business,
- professors School of Management and Saxion University,
- Top-managers of Russian-Dutch companies and the best Entrepreneurs of St. Petersburg

### Преподаватели школы

Основную образовательную программу школы обеспечивали:

- специалисты высокого международного уровня – преподаватели факультета управления РГПУ и Саксион,
- менеджеры крупнейших Российско-Голландских компаний
- ведущие предприниматели С-Петербурга

вторник, 25 марта 14 г.

**Россия  
Голландия  
Nederland  
Rusland  
2013**

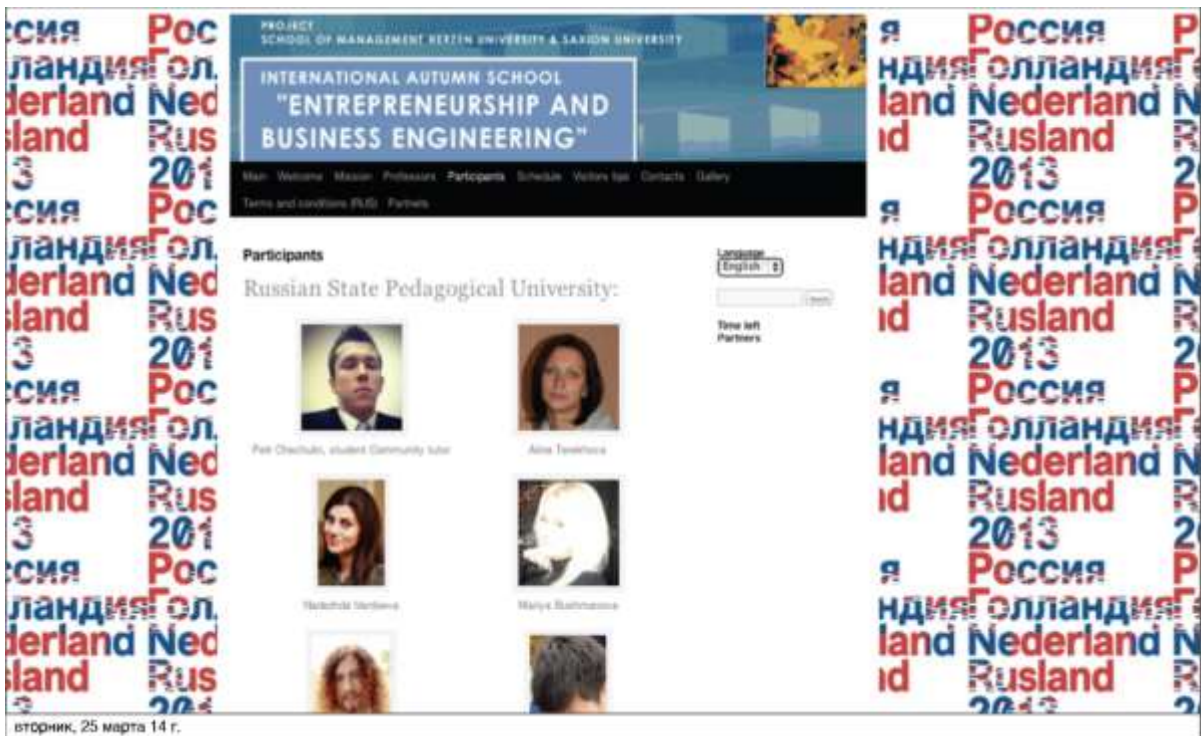
International Autumn School  
**"Entrepreneurship and business engineering"**  
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«Предпринимательства и бизнес инжиниринга»



## Stakeholders    Стейкхолдеры



вторник, 25 марта 14 г.



## Company's manager questions:

- – What is the **market positioning** in Russia? (What is the role of architects, contractors and individuals? Is there demand for multi-technology?)
  - They would like to know who is in the **lead of building projects**.
  - They are **looking for contacts** with architects and contractors in Russia.
  - **Model for development** of the company in Russia?

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## Target of case study:

### Target of case study:

#### **Research questions:**

1. *What is a possible market niche for Matel Metaal in Russia using a SWOT-analysis? What's the segment?*
2. *Create a list of possible partners for the company using the contacts at LENEXPO Industrial Forum and Internet resources (.ru – domains)*
3. *What are the risks that Matel Metaal Company will face by starting their business in Russia? Make a rank of risks!*
4. *What's the strategies you can suggest to the company for successful start of their business in Russia? How to conquer the Russian market, your team vision?*

#### **Matel Metaal questions for our students:**

- *Find out who is normally in charge at building projects: Architects, Contractors or other parties?*
- *Find out what could be the most successful market entry strategy: agents, production, sales office, joint venture, or others?*
- *Find out what is the size of the market for metal stairs and metal railings for*

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## students report

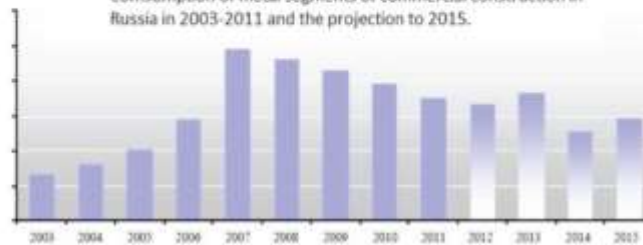
### What students have done:

- Made a **research** in Saint-Petersburg, Moscow and Enschede (suppliers, customers, niche market, partners, legal requirements, competitors);
- Visited **“Industrial forum-2013”** in LenExpo and the General Consulate of the Netherlands in Saint-Petersburg;
- Compared **business cultures** in Russia and the Netherlands for to get a difference in business approach
- Private professional contacts.

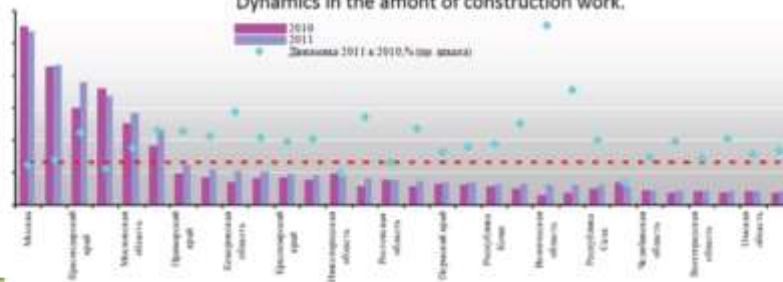
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## students report

Consumption of metal segments of commercial construction in Russia in 2003-2011 and the projection to 2015.



Dynamics in the amount of construction work.



вторник, 25 марта 14 г.

## Market potential of Moscow

Expansion of Moscow market in 2013



There is a plan to build a 105 mln m2 of real estate.

The area of the city is increased in 2.35 times.

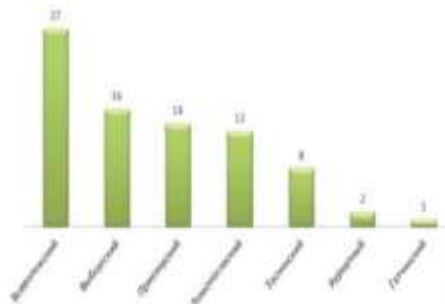
Demand for services will increase affordances, as the market of metal directly depends on the development of construction and this industry is currently in the stage of active growth.

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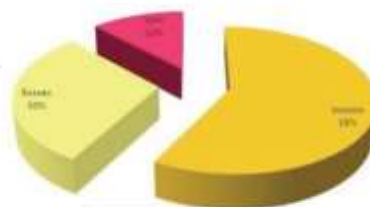
## students report

## Market potential of Saint-Petersburg

Distribution of new cottage settlements in St Petersburg.



Distribution of new cottage settlements rating by 4 q.



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**students report**

## Subjects to be contacted with:

```
graph TD; MM[Matel Metaal] --- A[1. Architects]; MM --- P[2. Partners]; MM --- Ag[3. Agents];
```

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**students report**

## 1. Architects

- **Sergey Choban** (Workshop "Speech", +7(495)7417893, info@speech.su)
- **Evgeniy Gerasimov** ("Evgeniy Gerasimov & Partners", +7(812)6009060, public@egp.spb.ru)
- **Evgeniy Podgornov** ("Interkolomnium" CEO, +7(812)7867049, info@intercolumnium.ru)
- **Irina Terkina** (ITerkina@sodis-development.ru)
- **Elena Proskuryakova** ("Sodis", e.prosk1@mail.ru)
- **Julia Reshetova** (r.j.spb@mail.ru)
- **SL project - architect workshop and design bureau** (+7(916)1259203, info@ab-sl.ru)
- **Prime cube** (+7(499)3903928, pr-cube@mail.ru)
- **AABA** (+7(495)5078690, info@aaba.ru)

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## students report

### 2. Partners

- LTD Architectural office «Studio-17» (office@studio-17.ru)
- Architectural studio «Evgeniy Gerasimov and partners» (public@egp.spb.ru)
- Project Office «Grigor'ev and partners» (egp.spb.ru, info@egi.spb.ru, +7(812)7030022 )
- Studio of Elite accommodation of Aleksandr Akimenkov «Master-servis design» (info@akimenkov.ru)
- Blacksmith workshop «Provintsiya» (St.-Petersburg, Koltsova str. 58, +7(921)3109953)
- Penny Lane Realty (realtor.ru)
- Mercury Forge (+7(495)788-48-38, Mercury-forge.ru)
- Ug-stairs (+7(812)6429266, Ug-stairs.ru)
- EVL (+7(383)2483415, Evl.ru)
- Building company "Konsmet" (+7(812)7035669, Konsmet.ru)
- Petrovskaya blacksmith (+7(812)9958395, Kovanspb.ru)

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## students report

### 3. Agents

- You can find the agents through the **Professional Forums and Fair** (approximately 95 annually both Moscow and SPb):
  - - «LENEXPO»,
  - - «Crokus Forum»,
  - - «VVC»
  - - etc
- **Agencies of Real estate**
  - - «Penny lane»
  - - «ITAKA»
  - - «BN.ru»

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**students report**

## Competitors

- According to the research it was found that the UPS of product which the company reported are not only the distinctive feature of Matel Metaal, they are also typical for other companies, which can make direct competition when entering the Russian market. The company should take into account that the main disadvantage of competitors is the high pricing policy

Company	Advantages	Disadvantages
«Deutsche Treppen» www.d-treppen.ru	Quality of products Customer focus Premium quality materials	High pricing policy (from 2500 euro per 1 m2)
«Ee Stairs» www.eestairs.com		High pricing policy (from 3500 euro per 1 m2)
«Stairs & Railing» lestnicy-perila.ru		High pricing policy (from 6700 euro per 1 m2)

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**students report**

## The most suitable strategies in the project

- 1 Export
- 2 Establishing a new factory in Russia
- 3 Joint venture

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## 1. Export

In this case company should have an agent in Russia in order to find customers to buy products and a working team which will install stairs. Moreover , you have to rent space to stock stairs you bring.

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## 2. Establishing a factory in Russia

Risks	Benefits
<ul style="list-style-type: none"><li>• High level of corruption</li><li>• Losing quality as a unique selling point</li><li>• Problems with government relations</li><li>• Problems with qualified staff</li></ul>	<ul style="list-style-type: none"><li>• Low costs for transportation</li><li>• Low price for raw materials</li><li>• Direct sales</li><li>• Easier communication with russian customers</li></ul>

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students report

## 3. Joint venture

Risks	Benefits
<ul style="list-style-type: none"> <li>Losing quality</li> <li>Risks of transportation</li> <li>Training new staff</li> </ul>	<ul style="list-style-type: none"> <li>Less financial risks in comparison with establishing a new factory in Russia</li> <li>Access to the russian customers and distribution network</li> <li>Less problems with legislation system</li> </ul>

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students report

## Conclusion

- The one who makes a decision: **Architect**

The investigation showed that the architect is who makes the decision within a construction project.

- The product which you can start with is **stairs**

We looked at all the products that MM can produce and deliver. On the basis of our research we have come to a recommendation that MM should start up business with stairs.

- Export or produce in the own country: **Direct Export, Joint Venture, Establishing a factory.**

Our recommendation is to start with exporting from the Netherlands. Because you have control over the selection of representatives of foreign companies. Good feedback from the target market. The best protection of the trademarks, patents, the companies prestige and other intangible assets.

For the medium term we recommend for you to establish a joint venture with a Russian producer. We have already produced a list of possible partner companies for you, to start your search.

вторник, 25 марта 14 г.

**students report**

## Recommendation

- Access to the market of the **Russian Federation** is very risky. Use a consultancy company to avoid the legal and communication risks.
- **Participate in exhibitions** (for example LenExpo) to make yourself visible.
- Connect with **possible partners** which we have found for you. Also promote yourself through the website (translate it into Russian).

вторник, 25 марта 14 г.

Home Nederland-Ruslandjaar Agenda Nieuws Vraag & aanbod Praktische infoZoeken

FAQ Pers Contact DisclaimerNederlands Pycckий English



# Nieuws

2013 is het bilaterale Nederland-Ruslandjaar. Nederland organiseert een breed programma in Rusland met economische, culturele en maatschappelijke activiteiten. Wil u meer weten of zelf meedoen? [» Lees verder](#)

### Nieuws

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**Laatste week PERESTROJKA! in Amsterdam**  
1 dag geleden

---

**Componist Louis Andriessen over Prokofjev, anarchisme en kunstbezuinigingen**  
1 dag geleden

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**Samenwerking tussen Mariinskiballet en Nederlands Dans Theater**  
2 dagen geleden

Nieuws  [Nieuwsoverzicht »](#)

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### Komende evenementen

**Perfectly Imperfect**  
21 nov 2013

### Herfstschool internationaal ondernemen in Sint-Petersburg



In kader van het Nederland-Ruslandjaar 2013 werken de Hogeschool Saxion en de Herzen Pedagogische Staatsuniversiteit in Sint-Petersburg samen aan een gezamenlijke Herfstschool. Jacques Bazan van de Hogeschool Saxion vertelt hierover:

\*Van 30 september tot 4 oktober vond in Sint-Petersburg de eerste fase van de Dutch-Russian Business School plaats. Het was een samenwerking tussen de Hogeschool Saxion en de

Dear students and colleagues!

In expectations of the second stage of Autumn School, which will be held 2-8 December on the base of Saxion University (Enschede, Netherlands), I would like to ask you to take part in a little research which could help us to work more fruitful in future. Please answer the several questions and find out what was your cross-cultural team work experience and cross-cultural problem in a way of doing joint projects! All the data will be analyzed for to improvement the future cooperation between the all the project stakeholders: professors, managers, team members, companies and entrepreneurs. I'm looking forward the answer from you until 10 November 7.00 p.m.

Thank you in advance, Irina S. Petrova

1. Do you have experience in cross-cultural communication \ cross-cultural team work before Autumn school project? Yes \_\_\_\_\_ No \_\_\_\_\_

2. If, yes, please specifies:

- Where? (country, name of the company)

- When? (since what year you start to get your cross-cultural experience)

and how long does it take (weeks? months? years?)

- What was the purpose (mission) of doing cross-cultural cooperation or to take part in international project

3. What kind of problem did you have during the period of taking part in Autumn School project (or doing business \ project with the foreign partners in your experience in general)? specifies it, please?

4. Why it is happened at your opinion? What kind of cross-cultural border?

5. What could be done on your opinion for to solve the problem of such kind of cross-cultural team work (or can help to avoid it next time)?

Name \_\_\_\_\_ Surname \_\_\_\_\_ Age \_\_\_\_\_

Company name \_\_\_\_\_

Your Position in it \_\_\_\_\_

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### What kind of problem did you have during the period of taking part in Autumn School project (or doing business \ project with the foreign partners in your experience in general)?

3. What kind of problem did you have during the period of taking part in Autumn School project (or doing business \ project with the foreign partners in your experience in general)? specifies it, please:

- Habits difference - For Russian people it's quite common to finish the assignment/project just before the deadline, during last days/hours. Most of foreigners don't respect and understand this kind of habits. Finnish people are used to not to take anything they don't own - if you forget your bag/wallet you'll find it in the place you left it.
- Different group work vision and attitude to it. - Finnish people in general prefer to work by their own, if they have the choice between group work and by themselves they would rather choose second option
- Language barrier - When Russians are not able to speak English they continue speak Russian for asking something or answering. French people even in case they understand and are able to answer in English, they would anyways speak French to you (if that happens in France)
- Behavior difference - Russian are more emotional, expressive, open-minded in some points than Finns. Asian countries representatives more often prefer to stay alone than have any dialogues - for Russians that's unaffordable in most of cases. German people sometimes are too straightforward and sceptical, they would not appreciate the try to make exception in the rule. Bulgarian people are easy-going, they always want to meet and talk to you, they consider you as a friend after the second meeting already!

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### What could be done on your opinion for to solve the problem of such kind of cross-cultural team work (or can help to avoid it next time)?

Explanation and presentation of cultural differences (for instance how regular representative of the nation would behave in a situation), team-works for understanding these cultural differences, underlining that everything has basic in mentality, etc

Age 21

- As far as I am concerned, we need to improve English ourselves, so that we can communicate more fluently.

- Speak in English more! Do not always do this: "Russian goes together with Russian and speak in Russian, Chinese goes together with Chinese and speak in Chinese, Dutch goes together with Dutch and speak in Dutch". Do not just go with your guys, please go with the foreigners and have a chat with them. We need to know more about each other so that we can work more naturally and express ourselves or our own ideas more actively.

- I suggest that it's better to choose a leader of every group, and he/she is going to be responsible for the team.

Age 23

вторник, 25 марта 14 г.

### What could be done on your opinion for to solve the problem of such kind of cross-cultural team work (or can help to avoid it next time)?

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- I suggest that it's better to choose a leader of every group, and he/she is going to be responsible for the team.

Age 23

1. Improve the level of English. For example organize some courses for people who want to participate in the international projects long before the event. Maybe the requirement for the participation should be the certificate of intermediate English.
2. Teach people how to work in the international environment. Pre-project preparation courses are suggested both for teachers and students.
3. Carefully choose the project manager.
4. Mind the cultural differences when organizing cross-border projects.
5. Work on the personal development and self-organization. Recommend to students specific literature with tips of how to avoid problems when travelling abroad.

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## Why it is happened at your opinion? What kind of cross-cultural border?

because all the cultures are unique and specific, everyone used to behave in a different way and that's looks for them very obvious and like the best variant ever

### 4. Why it is happened at your opinion? What kind of cross-cultural border?

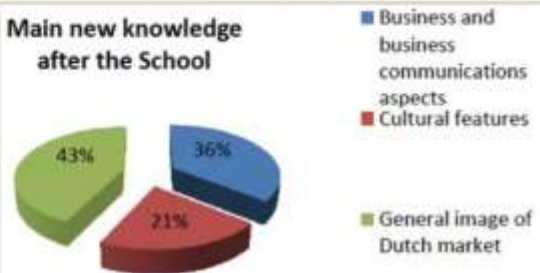
1. Language barrier. Poor in-school language preparation in Russia and Africa, underestimation of the role of English in the modern world.
2. Cultural barrier. Russian intonation and phonemic system seems to be rude for the Europeans. The organisation committee didn't take into consideration cultural differences.
3. Psychological barrier. The organizer possessed a number of personal features of character that made her a person that isn't please to deal with.
4. My personal disorganization. It's better to be more attentive and pay attention to the number of things when abroad.

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### Main new knowledge after the School

Business and business communications aspects	5
Cultural features	3
General image of Dutch market	6

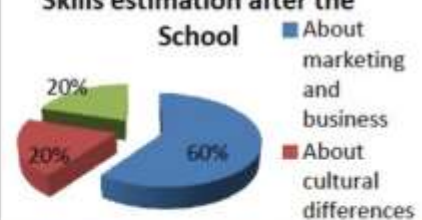
### Main new knowledge after the School



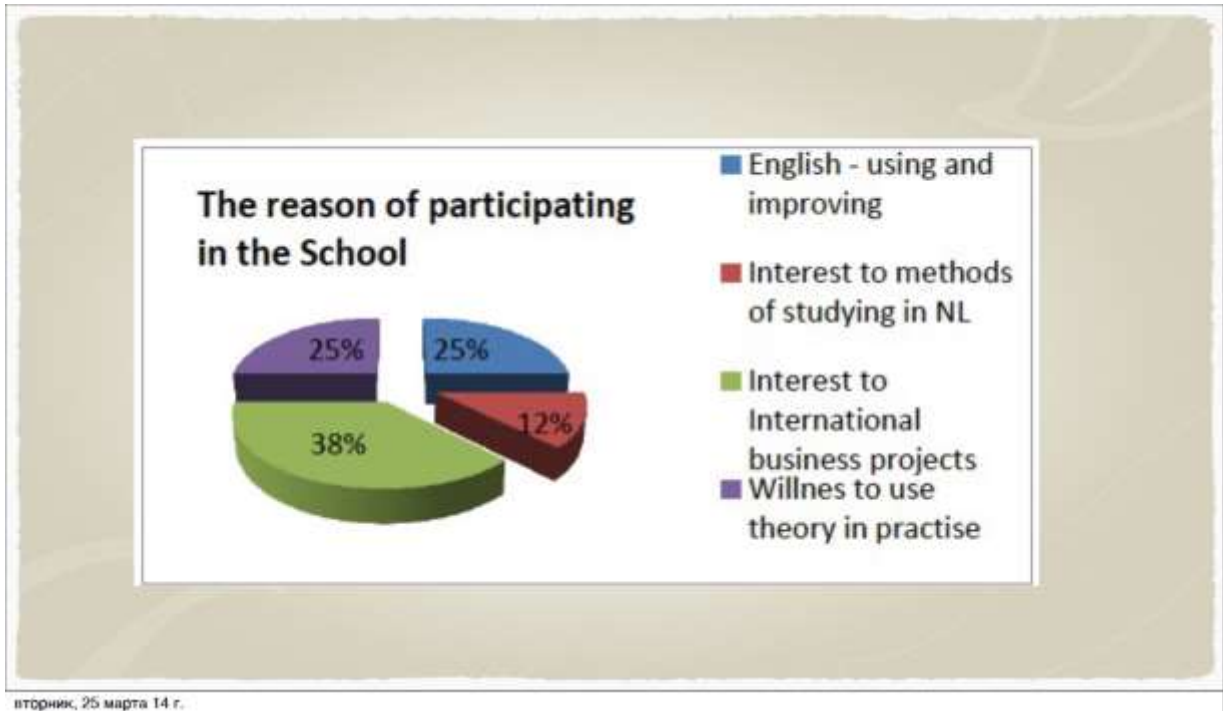
### Skills estimation after the School

Measurable effect, more knowledge	10
About marketing and business	6
About cultural differences	2
Conclusions about self-grounding	2

### Skills estimation after the School



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## Thank you for your attention

- to be continued .....



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