



The Dutch Education System and Entrepreneurship – how can this be adapted to other realities?



Introduction

The deep concerns about present and future prospects in a time of economic uncertainty must be repaired by bridging the gap between education and business. We can tackle youth unemployment trough stimulating entrepreneurship. Entrepreneurship is a major contributor to the (productivity) growth and innovative power of the economy.

Policymakers have a make or-break opening—and an obligation—to chart a new path linking education tailor made to business or the other way round. A patch that will secure economic competitiveness and will provide our young people the jobs and future they deserve. We need to recognize that a 21st century education is the bedrock of competitiveness — the engine, not simply an input, of the economy. The new dynamics of society demands not only individuals with critical thinking and ethics training to contribute to sustainable development, but also with strong capabilities to survive in an increasingly demanding jobs market. That means that every aspect of the education system—primary, postsecondary and adult education, after-school and youth development, workforce development and training, and teacher preparation programs— must be aligned to link education and business in order to prepare our (young) citizens with the 21st century skills they need to compete.

Netherlands:

Closing the gap between education and business Education should be a hotbed for innovative and ambitious enterprise. All too often entrepreneurs who are still in college or students who want to branch out into enterprise are frustrated by practical restrictions.

Just like many other European countries, there is no national education strategy in the Netherlands when it comes to entrepreneurial skills teaching. This may be surprising, because the Dutch are famous of their research and development, innovation and entrepreneurial spirit. It seems that this entrepreneurial spirit is already pretty embedded in the Dutch culture. What requirements need to be met to start a business in the Netherlands are supported by special agencies such as the Kamer van Koophandel (Chambers of Commerce), Dutch Centers of Entrepreneurship (DutchCE) and support systems for start-ups related to (un)employment, connected to the Dutch Welfare to Work system (through providers such as Werkplein (Work Plaza), UWV (Social Security Jobcenters) and municipalities (provider for the benefit, also for starting-up a 'One-man-business')...





Bottlenecks

The Dutch Government has very pleasant rules to start-up a company and have also a favourable taxsystem for foreign companies (which is under scrutiny of the European Commission). The Dutch Government further plays a big role to create and maintain an entrepreneurial spirit and in their wishes to remove restrictions and close the gap between education and enterprise. Linking education to the needs of enterprise, stimulating entrepreneurship in education is facing a number of bottlenecks in the Netherlands:

- Bottleneck 1: The importance of entrepreneurship is insufficiently understood and recognized in the education culture
- Bottleneck 2: Teachers are insufficiently trained in entrepreneurship
- Bottleneck 3: There is not enough available teaching material for entrepreneurship directly applicable boxes.

Until a few decades ago, Dutch pupils and students were trained to work for a company. Now 1 in 8 people working in the Netherlands is an entrepreneur. Because of this trend, the Dutch Government aims to link education to the needs of enterprise:

- Incorporating entrepreneurship in the curriculum;
- Removing practical restrictions for students running their own business;
- Enabling start-ups and established Small & Medium Enterprises (SME's) to make better use
 of available expertise.

Dutch Government involvement has increased since 2005.

Teaching entrepreneurship

As regards to a solution to the second bottleneck they are especially excited about the teachers internships (source: Leren is Ondernemen; Jasper Bakker/Sijbren de Jong). This way it will teachers allow trough practice placements to gain knowledge and catch up in how it works, as regards making the theory more in line with the practice. As regards to removing practical restrictions for students running their own business, there is of course a risk. If pupils/students who go for 'being a entrepreneur' do not fulfill this commands, damage for the entrepreneur can occur.

Start-up companies are likely to be more successful if they have enough 'entrepreneurial skills', including an insight in the market and negotiating skills. Students will be more likely to start a business if they are introduced to entrepreneurship during their study. The Dutch government stimulates educational institutions to incorporate 'entrepreneurial skills' in their curriculum. This could involve students setting up a student business, being taught by a host lecturer working in the industry, or being encouraged to undertake a work placement.

36% of Dutch teacher-respondents declare they have taken an entrepreneurship-related course, making us the second highest rating country in Europe (second to Finland). Several Dutch projects, such as the two-year project "The Entrepreneurial Teacher". Its goal is to increase awareness of





entrepreneurial skills in education at the PABO (the education institution for teachers). However, only a small amount of PABO's decided to incorporate entrepreneurship in their curriculum.

Abolishing restrictions for students running their own business

Dutch educational institutions should adjust their curriculums so that it becomes possible to combine education with building a successful business. For instance by allowing Dutch students to graduate while running their own company. Financial restrictions must also be removed. Under the current system, Dutch students who run a successful business earn too much to qualify for a student grant. The Dutch Government has therefore decided to no longer calculate income from business profit in the year of graduation.

Enabling business to make better use of expertise available at universities The Dutch Government wants both start-ups and established SME's to make better use of the knowledge available at universities. It has provided funds to Universities, such as Erasmus University (Rotterdam), Groningen University and Radboud University/HAN (Nijmegen) to better align education to the needs of business & industry. The funds are used to teach students how to set up their own company and to help researchers translate their scientific expertise into products and services that are attractive to the (Dutch) market.

Train students to become qualified professionals

More than 30% of the workforce in the Netherlands is trained at higher education level. Yet there is a shortage of qualified staff in some industries. There is a need for more science graduates, for instance. To address the situation, the Dutch Government is taking the following steps:

- Imposing a stricter study regime
- Closing the gap between education and the labour market
- Encouraging collaboration with top sectors.

Stricter study regime

The government wants better education for students to prepare them for the labour market. It is planning radical changes higher education (higher vocational colleges and universities). Studies will be more tightly regulated, with a greater selection of students and education geared towards the needs of industry. Changes will also be made in professional training. Professional training institutes, the government and scientists are drawing up qualification documents that specify for each profession the skills the graduates must have. Closing the gap between education and the labour market The curriculum and exams must be geared towards the demands of the Dutch industry. Businesses also play a role in improving education. For instance by offering work placements and student grants. Collabouration with top sectors Dutch Businesses and knowledge institutions that





operate in the top sectors are invited to list deficiencies and consider exchange programs between schools and businesses or ways to adjust education to the needs of industry. They have also been invited to draw up a master.

Promoting Enterprise in education

Promoting enterprise in education and bringing education and the business community closer together is just one of the focal points of Dutch business and innovation policy. Since 2000, the Ministries of Economy and of Education, Culture and Science have been promoting enterprising behaviour and enterprise in schools and universities.

The 'Actieprogramma Onderwijs en Ondernemen' (Education and Enterprise Action Programme), started in 2007 and run by National Agency, forms the core of this policy. The programme has two objectives:

- 1. An increasing number of education institutions in the Netherlands have integrated entrepreneurship in education into their policies, organisations and programmes
- 2. More students are behaving in more enterprising ways, are positive about entrepreneurship and are setting up their own businesses within five years of graduation.

Entrepreneurship more deeply enshrined

The results of this monitor suggest that compared to previous measurements in 2007 and 2010, entrepreneurship in education has become a permanent feature in the organisation and the courses offered by a growing number of education institutions. The study provides various indications for this: The number of schools at primary, secondary and higher professional level that have included entrepreneurship in their mission and vision has increased. Where the strategies of senior secondary vocational and academic education are concerned, the focus on entrepreneurship dropped slightly between 2010 and 2012. The number of schools that have enshrined entrepreneurship in their curriculum has increased substantially in all educational sectors. In 2012, that is the case to a greater or lesser extent in approximately three quarters of primary and secondary schools, over 80 per cent in senior secondary vocational schools and universities and over 90 per cent in higher professional institutions. The greatest increase in this regard took place between 2007 and 2010, followed by a stabilising trend in 2012, which likewise is a sign that the level achieved has been embedded

In the greater majority of institutions, entrepreneurship is to some extent part of a teacher's competence profile. This is the strongest in senior secondary vocational and higher professional education and the least in primary and secondary schools. Teachers are following more courses and training sessions to enhance their knowledge and skills of entrepreneurship, according to information from the institutions, that is. The number of institutions offering their teaching staff courses and training sessions on this subject has increased in secondary, senior secondary vocational and higher professional institutions. In almost all sectors, and often to an increasing decree, entrepreneurial education is an interdisciplinary activity involving collaboration between and across specialised disciplines.





More contacts between education institutions and the business community but fewer company visits

The contacts between education institutions and the business community became more intensive in all educational sectors, except primary schools. This is reflected among other things in an increase in the number of visits of entrepreneurs to education institutions and a higher frequency of entrepreneurs engaged as guest teachers. In higher professional education especially, the business community has started playing a bigger part in defining the content and organisation of entrepreneurial education. That said, the number of company visits has dropped, according to the students. Approximately three quarters of the senior secondary vocational and higher professional students interviewed visited one or more companies during their course, and about half of university students. Compared to the previous measurement, the number of students whose course does not include any company visits at all has increased at senior secondary vocational, higher professional and academic levels. Despite the abovementioned intensification of the contacts between education institutions and the business community, company visits feature less often in courses. This may be related to the economic recession, in the sense that businesses have other priorities and can free up less time for hosting and coaching students.

Ambitious plans for the future

With the exception of primary education, school heads in all educational sectors say that they intend to pay more heed to entrepreneurship in the future. According to the heads interviewed there is still a great deal that needs to be done here. To a greater or lesser extent, schools believe that the government has a role to play in promoting entrepreneurship. The institutions want support from the government particularly in the fields of funding, promotion and legislation. The ambitions school heads have with regard to entrepreneurship is also reflected in performance interviews. Almost half of the heads in secondary, senior secondary vocational and higher professional schools state that the subject of entrepreneurship will be addressed when monitoring and assessing teachers in the future. In the future, it will also be featuring more prominently in the recruitment of new teachers for senior secondary vocational and higher professional schools. At present, entrepreneurship features mainly in performance interviews with teachers in higher professional institutions (26% fairly strong).

Appreciation for entrepreneurial education

On average, heads barely give their institutions "satisfactory" marks for entrepreneurship. Only at secondary and academic levels is there a (minor) 68 increase in satisfaction with entrepreneurial education. The marks students give entrepreneurial education are also rather meagre; only senior secondary vocational schools get above-average marks.

Entrepreneurial ambitions among students

Approximately two thirds of students see themselves as entrepreneurs, with entrepreneurship featuring prominently in their career aspirations. This is an increase compared to 2007, though relatively stable compared to 2010 (63% in 2012, 62% in 2010). Students at senior secondary





vocational, higher professional and academic institutions differ only marginally in the degree to which entrepreneurship features in their career aspirations. The main reason students have for becoming entrepreneurs is to be independent, to be free agents. In 2010, a slight increase was observed in the number of students in academic institutions who wanted to go into business after graduating. The significant increase observed between 2007 and 2010 is maintained in 2012; over 20% of students still want to become entrepreneurs after graduating. As in previous measurements, familiarity with facilities for student entrepreneurs is still lagging behind; a large group of students is not familiar with the facilities offered by the institutions.

Results per educational sector

Primary education

The largest shift from not having enshrined entrepreneurship in the curriculum "at all" (50% in 2007) to schools that had done so "a bit" (59% in 2012) took place in primary education. Parents are involved in implementing the entrepreneurship curriculum in more than half of the schools, an increase of some 5 per cent compared to 2010. There are also more contacts with the business community; businesses are visiting schools more often and entrepreneurs are giving more guest lectures. This is important when it comes to assuring entrepreneurial education. Including entrepreneurial competences in teacher profiles, but especially the testing of entrepreneurship among students is lagging behind compared to other educational sectors.

Secondary education

Entrepreneurship has a place in the mission and vision of more secondary schools (33% in 2012 compared to 28% in 2010) and heads more often see themselves as entrepreneurs. More specific entrepreneurial activities are being organised (up 10% compared to 2010) and guest teachers are invited to give lessons more often. In secondary schools, teachers themselves receive additional training in entrepreneurship (22% in 2012 compared to 17% in 2010).

Senior secondary vocational education

Compared to other educational sectors, less positive results were found at senior secondary vocational education institutions. It should be noted, however, that entrepreneurship was already more or less enshrined in these institutions. Progress is then not so easy to achieve. A (slight) decrease was found in the embedding of entrepreneurship in mission and vision, in the educational programme and in the testing of entrepreneurial competences. However, guest teachers are more often called in to teach entrepreneurship than they were a few years ago (96% in 2012 compared to 87% in 2010). The picture that emerges from the survey among senior secondary vocational education students is more positive. More and more of these students consider themselves to be entrepreneurs and entrepreneurship features in the career aspirations of more students, and more students actually get in touch with entrepreneurship: At 62 per cent and 42 per cent respectively, the proportion of students in senior secondary vocational institutions earning ECTS points for subjects or projects related to entrepreneurship is much higher in 2012 that it was in 2010. Compared to





students in higher professional and academic institutions, these students are on average more satisfied with the entrepreneurial education they receive.

Universities of Applied Sciences

Compared to other educational sectors, the greatest progress made in entrepreneurship in education between 2010 and 2012 was observed at universities of applied sciences. For instance, the degree to which institutional management is involved in promoting entrepreneurial education increased by over 18%, and enthusiasm is not limited to management: department and faculty heads indicate more often than before that they see themselves as entrepreneurs. To effectively assure entrepreneurial education in the organisation and the curriculum, schools need qualified staff with entrepreneurial competences. Increasingly, entrepreneurship is becoming part of teachers' competence profiles ("very strong" +11%) and higher professional education institutions are increasingly seeking to cooperate with other subjects or departments. Another positive result is that students are aware that their university is encouraging their entrepreneurial ambitions and that more students are seeking to gain credits in entrepreneurship (64% in 2012 compared to 50% in 2010). In recent years, contacts between universities and the business community have become more intensive.

Finally, the business community has started playing a much greater role in defining the content and organisation of entrepreneurial education (more demand-driven).

Universities

Compared to previous measurements in 2007 and 2012, entrepreneurship has also become a more important part of the curriculum at universities and more Centres of Entrepreneurship have been established. The part played by the business community in universities has also grown (more demand driven). Entrepreneurs give more guest lectures and teachers have more opportunities to gain practical experience in businesses. In common with senior secondary vocational and higher professional institutions, university students are gaining more credits in entrepreneurship and more experience as entrepreneurs during their courses. Without being able to establish a causal link, it is striking that more academic students want to become entrepreneurs after graduating (compared to 2010, +2% most certainly, +3% possibly). To sum up, important steps in entrepreneurship in education have been taken at universities as well, and entrepreneurship has become more popular with students.

DUTCH CE

DutchCE is the network of Dutch Centers for Entrepreneurship. The centers have a dual role of becoming a regional location for entrepreneurship education and serving as an incubator for startups.





Entrepreneurship education will be aimed at students who want to develop practical corporate skills or who consider starting their own business. But also students who want to work within academia can apply these skills in order to valorize their research in the field of academic entrepreneurship.

Conclusions

The results of the second measurement suggest that compared to the previous measurements in 2007 and 2010, entrepreneurship in education has become a more permanent feature in the organisation of and courses on offer at a growing number of education institutions. The greatest advances in this regard were observed in secondary and higher professional education. Compared to senior secondary vocational and higher professional education,

entrepreneurial education occupies a less central position at universities but progress was found there, too. The situation in primary education is fairly stable, a decline in certain aspects of entrepreneurship in education was observed at senior secondary vocational level, although there, entrepreneurship did already occupy a prominent position and progress is hence more difficult to achieve. The intensity of contacts between education institutions and the business community has increased, although there is an overall drop in company visits by students. Entrepreneurship features in the career aspirations of approximately two thirds of students (at senior secondary vocational, higher professional and academic levels), representing only a marginal difference compared to 2010. Nonetheless, a large group of students is not familiar with the entrepreneurial facilities offered by the education institutions.

Do we need entrepreneurial teachers & how do we identify entrepreneurial skills at school? The entrepreneurial world does not match very well in an educational environment. And to make it more difficult; About children in the age group 11-20: We also have the fact that children are in development and entrepreneurial skills also develop through experience which as yet they have not had. Currently entrepreneurship as a school package is seen in the Netherlands as 'extra work' for teachers in this stage. In Holland they do believe that identifying entrepreneurial skills while they are still in the education system is the key to future success...





A Critical reflection -Croatia

Referenced work: Dutch Education System and Entrepreneurship – how can this be adapted to other realities?

The dutch view of enterpreneurship from the stance of the individual workers in the education system is admiring, introducing enterpreneurship to young people while they are still part of the high school education system is noble. Moreso we believe that it would be possible to promote to start even earlier... When do students first come to form their ambitions and aspirations? If possible, we believe the basic idea of enterpreneurship should be nurtured from the start of the education and formal social forming, regardless if the students show promise for being an entrepreneur or not. In the same way we encourage the children to participate in social activieties, studies and sports, we could subtle introduce to them the basic idea of enterpreneurship, in a way that would be most appealing and easy to grasp.

Creativity is one of the most desirable aspects of the personality characteristics when it comes to picking the ideal enterpreneur. And I for one believe that the source of creativity becomes the strongest in the childhood phase, before the introduction of knowledge and ideas that are part of a certain education system. Ofcourse, I dont intend to suggest that every child is a natural enterpeneur or that every idea from the wild imagination of a child is a winner. I just want to present the idea 'nurturing the creativity and desire for development that is natural in every healthy child'. I believe that would be easy to acomplish as a preparation for the more serious implementation of the enterpreneurial teaching that would be implemented in education in a later phase.

Reading trough the bottlenecks of the dutch education system that obstruct the efficient link of education and enterprise I was brought to the belief that enterpreneurship in the Netherlands is infinitely better implemented in the the educational framework. A Lack of understanding of enterpreneurship in the education culture? An obstruction maybe - yes, but one which is not impossible to remove. In essence, the entepreneurship comes down to creativity and determination. How many times have we heard the fameous stories of the world renowned enterprenurs who spoke of their early failures and how they picked themsleves up and kept going despite everything and eventually achieved the fame and success? The person who works as a part of the education system and comes in direct contact with the young people as their teacher or participant in teaching has to have knowledge and awareness of entrepreneurship as a part of everday life. I find it difficult to even comprehend that a person of such a limited view and knowledge could mentor young minds in today's world. As such, I belive that the basic idea of enterpreneurship has to be succesfully introduced and teached not only to the young people and students, but basicly to every member of the society who influences and directly or indirectly teaches young people. Its simply the fact that entepreneurship has become the part of everday life and as such, not understanding enterpreneurship equals to not understanding basic social norms.





If you simply connect this with bottleneck number 2: "Teachers are insufficiently trained in entrepreneurship": The fact that the person posseses the title does not make it 'totally knowing' or 'incapable of comitting errors'. The human being learns as long as it lives. Teachers and students alike learn and have to strive to learn from birth untill death. The times change, the education changes, the long known facts are proven inaccurate and have to be changed. Change is the way of life and as such members of the society have to learn and adapt constantly, so society in itself could advance and develop.

Bottleneck no.3 refers to the lack of material required for teaching. This is a situation that is well known in a number of elementary and high schools across Croatia. However, while reviewing the detractors in the Dutch system, we came to understand how troubled and unprepared our own education system is when it comes to connecting education and enterprise. So from a Croatian point of view we would not state that the Dutch education system workers lack understanding for entrepreneurship? In Croatia, the education system lacks basic knowledge of entrepreneurship in general. From personal experience I can say for certain that during the entire course of my elementary and high school education I did not come in contact with the term "enterpreneurship" as a part of the formal education. It was not mentioned in books or by my teachers, let alone explained and properly defined.

Finally, the term appeared as a part of the marketing and economic studies on a local community college. Through the entirety of the elementary and high school education that spans twelve years in Croatia, not once was my class approached by a teacher who thought that learning of entepreneurship might be useful. So in the Croatian case: It's not a bottleneck: it's a straight misfire and complete lack of knowledge regarding teaching for something that become an everyday occurance in this day and age. Moreover, we are hampered by our local social political situation. Our schools, operate on an almost exact system that was used in an old socialist regime, that is still mostly unchanged. The tragic irony remains in the fact that the regime collapsed twentyfive years ago, yet the education system stayed the same. Ofcourse, during that time the very term entrepreneurship was not looked at kindly. The firm leadership believed it was too much assosciated with capitalism and was for the same reason ignored and never has become part of the formal education system. Fortunately, lately there have been long talks about the education system reform in Croatia, something that become quite contreversal in the croatian political top. However, due to the inept attitude of the leading politicians, the very future of the reform hands on a small thread.

I would like to add up that the term "entrepreneur" is almost in itself contreversial in Croatia. In our language "poduzetnik", was for a long time a term for a person that emerged from the political emigration from abroad during the turbulent early ninties. A person that spent some time (or most of its life) abroad and was most likely already sucessful enterpreneur from whichever country it came from and returned in Croatia upon the declaration of independance. At the time valuable country assets like factories and production infrastructure were owned by a socialist government and with the arrival of the new regime, the situation changed. The so-called "enterpreneurs" were often connected with the people in the leading governmental party and as such could easily acquire cheap ownership of factories and machines that were the source of employment for the significant part of





the population. With most of the workers fighting in the conflict, the factories were mostly stripped down, the machinery and valuables sold away and buildings mostly left to rot and decay. The thousands of workers lost their jobs overnight. This period is often refered to as "privatization". Due to this events, the very term "enterpreneur" often strikes as negative among young people in Croatia, who are still faced with the troublesome prospect of living in the country with uncertain employment, corruption and lack of progress...





A Critical reflection - Turkey

Referenced work: Dutch Education System and Entrepreneurship – how can this be adapted to other realities?

Education systems, are one of the factors determining development levels of countries in many fields such as social, economic, scientific and technologic, etc. Sometimes they are subject to various changes in order to keep up with the requirements of the age, to remain effective and improve themselves. Various changes have been made in Turkey recently with the purpose of making the national education system more qualified and catching up with the standards of developed countries. With "Primary Education Law no 6287" adopted on 30 March 2012, a radical decision is made in the Turkish education system and put into practice. This law, which is known by public as '4+4+4', made a sudden impact in Turkish education system.

The Turkish education system is under the supervision and control of the state, namely the Ministry of National Education. According to the Constitution of the Republic of Turkey, everyone has the right to receive education. Education is compulsory from ages 6 to 14 and is free of charge in state schools. The country's primary schools currently have a 98 percent participation rate.

Stages of the Education System are:

- Pre-School Education: Optional kindergarten education, up to 6 years of age
- Primary Education: Compulsory and free basic education for eight years (5 years elementary + 3 years secondary), 6-14 years of age
- Secondary Education: 4 years of High School (Lise), or Vocational High School education, 15-17/18 years of age. Some schools might have an additional year of language study. High schools are mostly owned by the government and provide free education
- Higher Education: 4 years of University, or 2 years at Higher Vocational Schools. Some schools have an additional year of language study. Under normal circumstances, Master's study lasts 2 years; PhD 3-5 years. This category includes all educational institutions which will provide post-secondary education. They are under the supervision of Higher Educational Council (YOK)

Compulsory education lasts 12 years. Primary and secondary education is financed by the state and free of charge in public schools, between the ages of 6 and 18, and by 2001 enrollment of children in this age range was nearly 100%. Secondary or high school education is mandatory but required in order to then progress to universities. By 2011 there were 166 universities in Turkey except for the Open Education Faculty

On November 22, 2010, the government initiated the Fatih project which seeks to integrate state-of-the-art computer technology into Turkey's public education system.





Unfortunately in Turkey, there is up to date no national education strategy for entrepreneurial skills teaching. In High school, students can choose subject of Entrepreneurship if they like. But most of them have no idea about it and mostly the teachers have no (proper) qualifications on this subject.

The requirements which are needed to start a business are supported by special agencies such as Chambers of Commerce, OECD Local Economic and Employment Development Programme, etc. quite similar as in the Netherlands

In recent years Turkey has the same strategy as the Netherlands, but should be more tailor made and developed, to create and maintain an entrepreneurial spirit and in their wishes to remove restrictions and close the gap between education and enterprise.

Studies on removing practical restrictions for students running their own business, enabling business to make better use of expertise available at universities and combining education with building a successful business should be improved and implemented in Turkey ,too.

"The funds are used to teach students how to set up their own company and to help researchers translate their scientific expertise into products and services that are attractive to the (Dutch) market." This is not done at schools or even at universities in Turkey at all.

In recent years, the government wants better education for students to prepare them for the labour market as it is in the Netherlands, but closing the gap between education and the labour market may not be that much easy. Because promoting enterprise in education and bringing education and the business community closer together or raising the number of schools at primary, secondary and higher professional level that have included entrepreneurship in their mission is not an easy process. We have just started the job here!

Enshrining entrepreneurship in curriculum should be increased substantially in all educational sectors. Unfortunately, entrepreneurship is not a part of a teacher's competence profile, so this is a major obstacle.

Teachers should follow more courses and training sessions to enhance their knowledge and skills of entrepreneurship. And institutions should offer their teaching staff courses and training sessions on this subject in secondary, senior secondary vocational and higher professional institutions as you implement there.

It is a fact that the contacts between education institutions and the business community became more intensive in recent years but this level of intensity is not enough.

Entrepreneurs as guest teachers! The Idea is great and should be applied here as well.

The students don't see themselves as entrepreneurs because they only study to access a university to become a teacher, an engineer or doctor etc. They only want to become entrepreneurs after graduating.

Also parents are not involved in implementing the entrepreneurship curriculum schools





As a conclusion, in last years important steps in entrepreneurship in education have been taken in education but still we have a long way to go! European or domestic projects are not enough to reach this goal. Government should pay more heed on entrepreneurship in education.





A Critical reflection - Greece

Referenced work: Dutch Education System and Entrepreneurship – how can this be adapted to other realities?

The Greek educational system-reflections upon the comparison to the Dutch system

The need for a continuous vocational training as a means of dealing with the economic and social changes in Europe is of the outmost importance. The conditions and the content of employment have changed and new groups of people should have the chance to be incorporated into this new era of workforce. The technological developments and demographic changes have speed up the economic and social changes all around us. Europeans need to make products that are competitive worldwide and this need is reinforced by the demand to have a well trained and educated work force to rely on. Work placements for unskilled personnel are decreasing whereas places where experienced and well trained skillful people are wanted are increasing. Thus the educational system of each country should be able to adapt to this new situation.

In these times of economic uncertainty it is more than necessary for schools to produce citizens that not only have critical thinking but also the knowledge and the skills to become something of themselves in an increasingly demanding and competitive work environment. Looking back on our (Greek) educational system and comparing it to the needs and demands of modern European society, it is obvious that a lot of changes should be implemented in order to live up to the challenge of gearing the Greek educational system to a more vocational, professional and entrepreneurial mode. Why? If one examines the system, they will come to the conclusion that it has a more theoretical and philosophical orientation that starts from kindergarten and goes up to University classes. Surely some would say that it is even expected in the country that invented philosophy. However, the need for a change is demanding and cannot wait any longer, no matter how many the political or practical obstacles and obstructions.

The Greek educational system is consisted of 6 years Primary school followed by 3 years of Junior High School. These two levels are considered mandatory. Should someone choose to continue his studies he has two options: attending 3 years Senior High School with the option of taking exams at the end of the third year in order to access a University or attending the Vocational Senior High School where one can attend more practical courses and gain a skill in a work sector - again with the option of taking exams and accessing a lower university course of vocational study.

One might argue that there are a lot of exams here! A whole educational system is oriented around these university exams. Almost every other parent wants and desires a university degree for their children. Vocational training and the acquisition of practical skills have been over the years set aside. It's not that there aren't workshops or vocational courses offered. It's not that teachers are not well qualified to teach. More and more teachers are acquiring further skills in their profession, they





graduate from universities full of energy and eager to transfer knowledge and blend with their students. However, the Greek reality soon strikes them. It is merely a matter of political priorities and strategic planning.

It is common policy for students who are not all that good at theoretical classes that involve language and writing or do not like school as a whole, to attend the Vocational Senior High School. Thus, all the 'bad students' accumulate in these schools. The level and quality of teaching and knowledge, the methods used at these classes vary. Most of these students attend school so as not to stay at home and do nothing because the last 3 years of Senior High School are not mandatory, as mentioned above. They have little or no interest in learning anything, not even their chosen profession. Having set aside the quality of vocational education, the Greek system revolves around preparing young students to take the university entry exams.

Thus, there seems to be a loose connection between education and vocational training let alone entrepreneurship. A young person cannot start up a company on their own. There has to be a great amount of back up money at hand in order to face the difficulties of taxation and bureaucracy, especially in these difficult times. You have to be very bold, patient and know all the right people.

In order for the change to happen, there has to be a new political educational strategic planning that will connect education in Greece today to the professional and vocational needs of modern era. It is undeniably important to brink our school curriculums closer to the general demand for well educated and equipped citizens.





A Critical reflection - Portugal

Referenced work: Dutch Education System and Entrepreneurship – how can this be adapted to other realities?

The Portuguese educational system VS Dutch system

The role and importance of entrepreneurship as a booster of economic development has been recognized over time. The establishment of new businesses is searched and needed, particularly in an economic context such as we are currently living, and this places emphasis on the issue of entrepreneurship education at our schools, which necessarily involves discussion and debate on the topic in order to ensure that results can actually lead us to reach the intended goals. If, on one hand, in Portuguese higher education system can already be found some programs and projects to teach how a business should be thought through and scheduled, on the other hand, presently the discussion consists in the possibility of integration of the entrepreneurship subject on previous levels of education, where the programs contents' are broader, more global and less specific. This has led to a discussion on the definition of entrepreneurship, and apparently the option to integrate this issue in primary and secondary education appears to be in line with inducing and facilitating the setting up of attitudes, rather than acquiring business expertise or achieving skills in the economic sphere. We can say that cultural issues are one of the factors determining and driving entrepreneurial behaviour, raising the question that teaching strategies ought to take these conditioning factors into account. It's important to reflect on how cultural issues can and should guide the teaching strategies and future programs or projects designed to promote the entrepreneurial mind and attitudes at all education levels within the considered territory.

We must highlight that the Portuguese challenge is to overcome a cultural inhibition to entrepreneurship, making an investment in entrepreneurship's education as a tool to implement the urgent changes in attitude and behaviour of the individuals. The strategy to pursue must be designed in a long term perspective, but it has to allow, in the near future, the continuous creation of entrepreneurial skills and abilities, carried out in a solid and underpinned way. Regarding this, the only institution that can meet the referred aim is educational system, through its different levels, and to do so, teachers will need to turn the main actors, playing a critical role. To achieve teacher's motivation in entrepreneurship, and trough them, achieving students' motivation, is still essential. It will be necessary to encourage change in students' behaviours, in order to accomplish a society with higher entrepreneurial culture. The interdependence between all these actors (culture, community, educators, schools, teachers and students) is crucial. It's also important to enhance that it's necessary to setup a proper environment to promote entrepreneurship education. These environmental conditions should, at first, be endorsed by the Ministry of Education, who has to develop an organizational, and curricular plan, and define the main leaders in the educational structure, without forgetting that the main goal of entrepreneurship is cultural attitude and behaviour.





Upper secondary students' participation in vocational education and training (VET) is slightly below the EU average, at 45.8% compared to 48.9% in 2013. As part of its strategy to address early school leaving, Portugal has increased the number and diversity of vocational courses offered within secondary education. The new courses include, for example, a basic vocational course that students can take from the age of 13. This gives students at risk of re-sitting years another alternative and is complemented by targeted guidance services. Steps are being taken to improve the quality and labour market relevance of VET. In particular, training materials have been improved and the proportion of training at the work place has increased significantly on the basis of new partnerships with the industry. Vocational programmes with a significant work-based dimension are now being offered to young people over 16, who are interested in a more practical education. These programmes lead to recognised professional qualifications and monitoring of their quality by higher education institutions ensures their accreditation and provides their graduates with access to further studies. The extensive range of programmes and target groups should, however, be simplified. The Centres for Qualification and Vocational Education provide additional guidance to young people, including on routes to validation of non-formal and informal learning. They also build links with employers, schools and certified VET institutions, in order to help adapt the courses offered to the regional economy. The National Agency for Qualification and Vocational Education and Training is also developing a new tool designed to predict the qualification and skills needs of the country's economy, in order to be able to better adapt the VET being offered to the labour market. Lastly, the new short-cycle higher technical courses (TeSP) are intended to develop close relations between business schools and regional businesses.





An Italian Epilogue about Entrepreneurial Education

Introduction

With the TBG project, school partners have been called to reflect on how the educational and entrepreneurial Dutch system could be adapted to their local and national realities.

This exercise, which started with the implementation of thematic workshops in the Netherlands on April 2016, implemented in combination with the pilot of the online modules from the "A Scuola d'Impresa" project was very useful. In particular, it encouraged the teachers involved in the implementation of the TBG project to critically report on their pedagogical practice in the field of entrepreneurial education, thus exploiting the results obtained during the two years of activities with the students.

Taking into consideration the reflections provided by the school partners, we hereby provide additional thoughts and suggestions on entrepreneurial education.

The European Union promotes entrepreneurship as a key factor for competitiveness. It underlines the importance of developing a European business culture through projects and initiatives to adopt the right mind-set of enterprise and strengthening the acquisition of entrepreneurial skills.

Entrepreneurship in Education

Entrepreneurship has never been as important as at this moment: entrepreneurs are the engine of the European economy, as well as the pillars of sustainable economic recovery. However, the entrepreneurial spirit is something that goes beyond of simply making money; it is a means to be able to understand how and what can be possible in terms of business even before it is done.

Entrepreneurship education is an engine for future growth and will help to inspire the entrepreneurs of tomorrow. To remain competitive, Europe must invest in its people, the young, on their skills and capacities for adaptation and innovation. This means to encourage the adoption of a new European mentality focused on an entrepreneurship's attitude, and the first step in this direction consists in adding an entrepreneurial spirit in schools.

It is in the school and vocational training education system that is necessary to begin to form a new work culture, encouraging risk-taking and innovation. So, out of school, the youth policy and active citizenship can make an important contribution to promote autonomy and creativity of young people.





The term of "Entrepreneurship education" should be understood according to the Oslo Agenda principles, European Parliament and Recommendation Council of 18 December 2006 on key competences for lifelong learning.

Entrepreneurship education is an education promoting the development of a more proactive way, which has to start right from the school, as an indispensable condition for young people adaptability in a globalized labour market.

This education promotes the acquisition of a transversal competence needed, primarily for the effective activation of a business. It is useful, in this regard, to quote the definition given on the 'Entrepreneurship in Education and Vocational Training' community text.

"Entrepreneurship refers to an individual's ability to turn ideas into action. It includes creativity, innovation and risk-taking as well as the ability to plan and manage projects in order to achieve objectives. It is a useful skill to everyone in everyday life, at home and in society; it helps workers to be aware of the context in which they operate and seize opportunities. It is a starting point for business activities. When it comes to entrepreneurship education this should not be confused with a general course of business administration or economics, because the objective of this action is the promotion of creativity, innovation and self-employment".

The "Education" term identifies the formation of a mentality and behaviour for which they can make a contribution not only to school, but also to training agencies and other stakeholders by promoting opportunities for informal and non-formal education as Public bodies, Chambers of Commerce and Trade associations. Training plays a key role in cultivating this mentality. However, as entrepreneurship education is not among the curricular subjects of most school programs of the EU countries, it is essential that entrepreneurship education gain a larger space in schools.

No one can expect that young people are creative and resourceful and able to cope with the crisis and difficulties of the labour market and globalization, if the school and the educational institutions (with the inclusion of family, associations and organizations of the civil society) do not aim to prepare an adequate culture, encouraging risk-taking, creativity and innovation.