How to prove to be Entrepreneurial? Certificates are not sufficient?!

Matthijs H.M. Hammer,
Senior Lecturer Entrepreneurship, Saxion University / Delft University of Technology
Tromplaan 28, 7512 RD Enschede, The Netherlands
+31 5348 71397, m.h.m.hammermsc@saxion.nl, www.saxion.edu

Nico G.J. Vloon,
Lecturer Entrepreneurship, Saxion University

Nathalie Brahimi,
Lecturer, Lycée Ozenne

Abstract
Normal educational programs do have an exam at the end, where a certificate or diploma can be obtained. All students get the same document, however not all students are equal. Enterprising and entrepreneurial students have low scores on tests, but do have experienced a lot of valuable thing instead. These ‘things’ are not listed on certificates. From here, the next questions arise:
1. To what extend there is a need to distinguish more on out-put quality?
2. What aspects can be rated / expressed to show employers / investors what a student really distinguishes and can contribute?
3. What would be an appropriate way to present these improvements of application?

Looked from the employers or investors point of view, some possible solutions emerges. It is not that means are wanted for a given goal, from the stocktaking of one’s means, many goals can be chosen. As a result, an App-store can be created, where Applicable Approvals are ranked on their value for employers or investors. Although this possible answer to the questions; do they apply in other situations / regions as well? Are there better ways to show ones real talents and possibilities? Especially for entrepreneurial students, this article gives some guidelines to them to show to potential investors, stakeholders or employers, who they really are, what they really can and who they really know. This gives them more advantages than just a diploma or certificate. Within the science of entrepreneurship education, the main focus is on the education process itself, or before the start of that process. What will happen after the education process, after a certificate or diploma is achieved, is not often touched. This paper enters this field from the perspective of lectures, trying to help entrepreneurial students, with often low marks, at their start of professional live.

Keywords: Entrepreneurship, Education, Résumé, Certification

Introduction
In this paper, the auteurs want the reader to join them on a journey into their daily work as teachers and practitioners in higher entrepreneurship education. Despite small research projects and experiments with students and young professionals, some important questions seem to be unanswerable. Not that a scientific proofed answer would be impossible, it is more that some dilemma’s need to be overcome and choices be made. In this paper, first the context of the research is drawn, where after the theoretical framework will be presented. Then the dilemma’s
will be addressed and described. Finally the questions and some possible answer indications are presented. For the context description, the authors make use of a former written paper (Vloon et al., 2013).

**Context**

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 scare. 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) (Hammer, 2012).

Theoretical Background
Entrepreneurship is often seen as an important factor of economic growth (Thurik and Wennekers, 2004, Acs and Szerb, 2010). Consequently, policy makers are interested in this field. There is also a strong relation between entrepreneurial education and entrepreneurial activity (Walter and Dohse, 2012). 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 et al., 2010), as long as these entrepreneurs stay in the region or country. Many scholars and educational professionals have designed programs for supporting the entrepreneurial spirit or education of new, young entrepreneurs (Fayolle, 2006, Gibb, 1993). Different approaches for supporting entrepreneurship and entrepreneurship education can be identified (Gibb, 2002, Blenker et al., 2011). First of all there is the positivistic approach, which is dominant in the traditional sciences. This approach of entrepreneurship led to the development of models, concepts and classifications for entrepreneurship. Most of them are however limited to a specific field of application (Blenker et al., 2012). In a second approach, derived from social sciences, most attention is on entrepreneurship as a cognitive development of an individual (Baron, 2008). Others take a perspective of a process model for entrepreneurship and describe an entrepreneur as a someone moving along the entrepreneurial process of value creation (Shane and Venkataraman, 2000). And as a fourth approach, Zull (2002) gives a biological perspective to an entrepreneur and describes the neurological processes associated with entrepreneurial activities. It is argued broadly among scholars that entrepreneurship need other skills, methodologies and teachers (Koopman et al., 2013, Groen et al., 2002). 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 the argumentation this paper, the foundational theory of Dewey (1938) is used as a methodological framework, and therefore it has a design approach.

Dilemmas of Entrepreneurship Education
Entrepreneurship Education is used as multi success method to ‘deliver’ more successful graduates, as described above in the theoretical framework. Massive qualitative and quantitative research carried out and there seems to be no doubt; educated as entrepreneurs is the way to
success in your professional and even private life. Summarized from the theoretical framework, for this paper the work of Rasmussen et al. (2011) is used, where the typical entrepreneurship education characteristics are identified as:

- Emotional involvement of students / pupils;
- Use of contests, competitions and games;
- Importance of Ideas : they should lead to concepts;
- Informal and flexible conceived learning sessions;
- Substantive focus on the : “Why”, "how" and "who" more than "what";
- Interactivity among students, with teacher and coach;
- Teacher as coach and facilitator;
- Learning by working under pressure;
- Learning by doing, making mistakes and discovering;
- Learning from several people (teachers, peers, etcetera);
- Problem-oriented and multidisciplinary approach;
- Students generate self-knowledge through exchange of ideas, discussions;
- Work towards achieving a goal;
- Working in groups;
- Becoming a direct contributor of entrepreneurs;

Building from these characteristics, many entrepreneurship education programs are designed by the principles of Kolb (2005) which are shown in figure 1 where learning style and teaching style are matched.

<table>
<thead>
<tr>
<th>TEACHING FOCUSSED PROGRAM</th>
<th>STUDENT LEARNING FOCUSSED PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lectures</td>
<td>to acquire knowledge</td>
</tr>
<tr>
<td>teacher focused</td>
<td>student focused</td>
</tr>
<tr>
<td>static and firm</td>
<td>dynamic and flexible</td>
</tr>
<tr>
<td>teaching goals</td>
<td>learning goals</td>
</tr>
<tr>
<td>uniform</td>
<td>individual</td>
</tr>
<tr>
<td>fosters passiveness</td>
<td>fosters students activity, creativity,</td>
</tr>
<tr>
<td>students are guided</td>
<td>serendipity</td>
</tr>
<tr>
<td>learning routes prescribed</td>
<td>students discover</td>
</tr>
<tr>
<td>teachers provide the answers</td>
<td>learning routes facultative offered</td>
</tr>
<tr>
<td>teachers are leading</td>
<td>teachers pose questions</td>
</tr>
<tr>
<td>teaching is important</td>
<td>teachers guiding and coaching</td>
</tr>
<tr>
<td>lectures / lessons are important</td>
<td>opportunity for learning is important</td>
</tr>
<tr>
<td>rooms / classrooms are important</td>
<td>testing is important</td>
</tr>
<tr>
<td>supply is important</td>
<td>library and study facilities are important</td>
</tr>
<tr>
<td>location scheduled</td>
<td>ability to ask questions is important</td>
</tr>
<tr>
<td>time defined</td>
<td>regardless of location</td>
</tr>
<tr>
<td>uniform study progress</td>
<td>time independent</td>
</tr>
<tr>
<td>fixed order</td>
<td>individual study</td>
</tr>
<tr>
<td></td>
<td>variable sequence</td>
</tr>
</tbody>
</table>
fixed content, facts based
training protocols to develop
recapturing skills

variable content
scope for development of student
specialization

Applicable for management and technical
skills
to study languages, mathematics, e.g.

Applicable for develop entrepreneurial skills,
Life Long Learning, on-the-job self-
supporting attitude, and creativity skills.

Figure 1, characteristics of the entrepreneurial programs

As at many universities, at Saxion University of Applied Sciences in the Netherlands, students are offered project based learning situations, in addition to their regular classes, university wide. The main reason for this approach is because about 80% of their future professional work will consist of project management issues. In the specific area of the east of the Netherlands, where Saxion is situated, all studies do have a technical approach in one way or the other, what mediated the introduction of project based learning (Sijgers et al., 2005). As a project manager, enterprising manager or entrepreneur, knowledge is not enough, one also needs to develop project management and entrepreneurial skills (Groen et al., 2002). These skills cannot be acquired by attending lectures alone. Therefore, students taught concepts such as Life Long Learning (LLL), and problem solving instead of reproducing facts and knowledge. Using these concepts, students may develop Applicable Approved competences. Students are encouraged students to choose and acquire their own projects; therefore they may develop their own unique and outstanding resume. So, by the end of their Bachelor degree, students will be adequately prepared, competent and confident for the work they will be doing, thereby finding their key to success and sustainable happiness.

But, when finishing university successfully, all students graduate with the same diploma. When a student studied hard, and focused only on the knowledge books, those students mostly get high grades. Even some get a cum laude. For an outsider this student may be a better student. Although the student who enterprised a lot, next to and during his or her study, has average grades and cannot show what he or she is really able to. A diploma or certificate, mostly refer to the fact that a certain point in development has past, by all those with that same certificate or diploma. It is exceptional that it gives an indication of the individual road, the holder of that certificate travelled. To endeavor this problem, smart students and universities, apply for an extra entrepreneurship coarse or minor-program, so they can show to the outside world that they are somewhat from different. Even some universities do have honor-programs or excellence programs for students to reward them with an extra line with honors. Despite these good trails, among a population of thousands’ of graduates, only a hand-full of differentiations of certificates are presented. Does this justice to the fact that every student is unique and surely enterprising students travel all an individual road, based on individual learning styles, interests and talents (Kolb and Kolb, 2005)? Does this justice to the fact that all students are ‘adequately prepared, competent and confident for the work they will be doing, thereby finding their key to success and sustainable happiness’ as state in the above paragraph? Referring to Maslow (1943), every man strives for the feeling of wellbeing. However, the circumstances in which a person feels happy, differs from person to person. Wellbeing has material but also predominantly intangible sides. In order to be able to experience the feeling of well-being, it is necessary for most people that they work and be healthy. When your work inspires you, gives you energy, supports your ambition and excites you, then it could even keep you healthy in mind and body, instead of being a burden.
(Vloon and Hammer, 2009). From these dilemmas, the authors have the questions as described in the section below.

**Questions**

From the dilemmas described above, the next three questions arise. After each question a sort of ‘direction of thought’ from the authors is given. Nevertheless, any other direction, approach or hint will be a warm welcomed. Even when the reader does not agree with the questions or reasoning, a fruitful discussion will be ahead.

1. **To what extend there is a need to distinguish more on out-put quality?**

This first question is about the manifest of a certificate or diploma. Is there really a need for young professionals to distinguish themselves among others; more than the paper they get when graduated? In the eastern Dutch culture, the authors share the opinion that potential employers, investors or stakeholders do need more than a specific certificate or diploma to identify the right person for the job. Is this aspect valid in other regions as well? Put it from the perspective of the employer or investor, an ordinary way on information sharing of a candidate is a resume. 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 know but also and arguably even more important, what a they can do (Vloon and Hammer, 2009). On higher educational level, it is important that students “Do not directly answer questions asked, but solve problems”. In the two cases below, the authors 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.*
Assuming that a certificate is not sufficient, the next question emerge.

2. **What aspects can be rated / expressed to show employers / investors what a student really distinguishes and can contribute?**

The easiest answer to this question is the contra-question: “For what purpose is it needed?” As entrepreneurial thinkers, it is not about the means what is necessary for the goal chosen; it is about the goals achievable with the means a person have (Sarasvathy and Venkataraman, 2011). So how can a young graduate show in a proper way what means he or she has? From this point of view, it can be anything what someone knows, who someone knows and what someone can. For some educators this approach seems to end up in an endless list of aspects, names, etc. Also employers and investors do not want to be over flooded with information-dump. Therefore the third and last question will be addressed and discussed:

3. **What would be an appropriate way to present these improvements of application?**

For future-proof young professionals, it is an obligation to show and share their value to stakeholders. The developments in ICT and global connectivity provide improved ways of showing the available talents. Based on experiments and testings’ with their students, the authors propose a ranking-system of skills and competences. In the examples given by the students, the can also indicate whom they know. Skills and competences can be shown at different levels:

**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.

**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 be able to interpret and apply these.

**Level AAA:** 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 graduates, the concept of Applicability Approval (short: App) is used. An App can have multiple forms and can be gained when demonstrating a skill or competence in an appropriate context. It is important that the context of application is provided, to demonstrate the addition to the normal certificate or diploma. Certificates collected may be helpful in demonstrating that a certain level is reached and therefore can be a valuable app (Vloon, 2013). But powerful App’s have multiple forms as a certificate, newspaper article, price, formal document, acknowledgement-letter, enquiry results, prototype-product, draft article, publications, described situations of professional achievement, etc. Even a membership-card from a specific and appropriate society can be an App. The collection of Apps
from a student is called an App-store, from which a résumé can be constructed for a specific goal, job of occasion. The App-store is just an example, a try, for a way to present the real value of a young enterprising graduate.

Acknowledgement
The authors want to thank their students for their patience and endurance for several testings’ and experiments. They also want to thank the many HR-managers, CEO’s and entrepreneurs which they interviewed and spoken to, for sharing their mostly confidential insights in decision-making on investments, partnerships and hiring young graduates.

References
DEWEY, J. 1938. Experience and education, Simon and Schuster.


VLOON, N. J. 2013. WHY Performing Projects is an Effective way of Studying and LLL. Toulouse, France: Université Toulouse III - Paul Sabatier.

