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Source: *Small Business Economics*, January 2016, Vol. 46, No. 1 (January 2016), pp. 13-29

Published by: Springer

Stable URL: <https://www.jstor.org/stable/43896106>

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Accepted: 19 August 2015 / Published online: 3 September 2015
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Abstract The article provides a historic perspective and an overview of policy and practice affecting entrepreneurship education today with a special focus on the recent development in Sweden. When entrepreneurship policy is being implemented in the Swedish educational system, the main effect on entrepreneurship education seems to be growth in an alternative view on entrepreneurship as foremost a means for accomplishing learning through action and practice. The implementation tends to favour the entrepreneurial learning concept over the entrepreneurship concept, where entrepreneurial learning encompasses a multitude of educational practices for developing internal entrepreneurship and enterprising abilities. External entrepreneurship for business venturing is not given priority. The thought tradition withheld in Business schools thus has had little influence on the implementation in Swedish primary and secondary school. Instead, new ideas on entrepreneurship are created outside the business context through experimentation in school teaching practices, where one also can spot an emerging research interest from pedagogy scholars.

Keywords Education policy · Entrepreneurship education · Entrepreneurial learning · European Union · Sweden

JEL Classifications I28 · I21 · J24 · L26 · J23 · M13

1 Introduction and background

Teaching entrepreneurship has been an issue for business schools at least since the end of the Second World War (Carlsson et al. 2013). Over the years, scholars from diverging fields have found an interest in entrepreneurship education, but the core has mainly been the same—education in new business venturing (Pittaway and Cope 2007). At the same time, new business venturing has drawn political interest as a way of expanding the economy and creating new jobs (The Lisbon Treaty 2000; Volkmann et al. 2009). In line with this, the Swedish centre-right government following current EU policies launched an official strategy for entrepreneurship within the educational field (Regeringskansliet 2009) and changed the curricula in 2011 so that all pupils from preschool to 12th grade should be taught entrepreneurship, not limiting the subject to business schools and higher education. When it comes to higher education, governmental initiatives for promoting entrepreneurship are so far limited, but according to changes in appropriations and current projects there is an increasing interest for implementing entrepreneurship at a wider scale in higher education too (Näringsdepartementet 2013; Tillväxtverket 2012, 2014).

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In Sweden, there are at the moment 114,000 children in preschool, 950,000 pupils in primary school, 324,000 pupils in secondary school (Skolverket 2015) and 344,000 students in higher education (Swedish Higher Education Authority 2015). With a population of 9,784,000 (Statistics Sweden 2015, March numbers), this means that possibly up to 14 % (or 18 %, including higher education) of the total population will be participating in entrepreneurship education each year, if and when the implementation has gained full effect. At first glance, one might expect that all students throughout the Swedish educational system then should be taught new business venturing, building on the business school tradition. But this might be a premature answer. Entrepreneurship education has no regulated form (Neck and Greene 2011) and in itself encourages effectuation (Fayolle and Gailly 2008) where teachers act on different opportunities that arise (Ødegård 2000).

According to Pittaway and Cope (2007, p. 500), there is no consensus on what entrepreneurship education actually “is”, and they also state that: “policy is generally unclear about what outputs are to be created when such education is promoted; and, even if these policy questions were resolved we do not know what works and to what end”. Turning to more explicit research in these matters, we can also adduce that if the intent behind policy is to create economic growth through entrepreneurship, it should not be about education (Arshed et al. 2014; Mason and Brown 2013; Shane 2009) but support high growth firms (Mason and Brown 2013) and innovation in established organisations (Acs et al. 2013). On the other hand, if policy is about enhancing entrepreneurship through education, it should first of all aim at raising the educational level in general (Kolstad and Wiig 2014; Wennekers and Thurik 1999), and secondly support educational contexts where entrepreneurship appears naturally (Falck et al. 2012; Falck and Woessmann 2013).

Current research does accordingly not give us a coherent picture what actually is meant by entrepreneurship education nor what effects one can expect from the ongoing wide implementation in Sweden, which gives us little guidance in what we could expect from current initiatives. We have thus asked ourselves how does the Swedish implementation of EU policy for entrepreneurship education relate to and effect current knowledge of entrepreneurial education?

This article aims to answer this question by (a) a review of entrepreneurship education, (b) a description of the development and implementation of the entrepreneurship education policy and (c) a description of the development of Swedish educational practice. These more descriptive parts are then followed by analysis, discussion and conclusion where the research question is revisited, but also adding reflections on the effects of the entrepreneurship field as such.

1.1 Materials and methods

The novelty of the implementation of policy together with the explorative character of the research question called for a qualitative study. A quantitative study was not deemed feasible, especially due to the imprecision of leading concepts (cf. Fayolle and Gailly 2008; cf. Pittaway and Cope 2007).

The research was carried out between 2011 and 2015, where documents were collected and assessed throughout this period.

The material for the study is divided into three different groups. The review of entrepreneurship education is built upon existing research, mainly published in international entrepreneurship and business journals. The policy section encompasses documents from both EU and Sweden. The identification and choice of both Swedish and EU policy documents were done by identification of the most central documents and text by reference threads: that is going back and forth in time following references in the most recent publications to older publications and vice versa, favouring those that reoccurred and/or those that were given special attention. In total, eight EU documents and seven Swedish documents (of different character) were selected and analysed giving special attention to phrases that either were cited in later documents and/or were dealt with specified means and ends of entrepreneurship education. The section on the Swedish educational practice consists of a mixture of mostly Swedish sources, encompassing research and governmental reports, articles, websites and the author’s continuous dialogue with teachers and peers with interests in the field.

The research also encompasses the authors first-hand experience from a pilot project sponsored by The Swedish Agency for Economic and Regional Growth (Tillväxtverket), with the goal of gaining knowledge

how to promote entrepreneurship in health and social care training. A research diary has been used to systematically record the development of the project, which is also summarised in three consecutive reports to Tillväxtverket (Hägglund et al. 2014). Data from this specific project are in this paper mainly used as contextual information, adding detail on the recent development of entrepreneurship education in Swedish higher education.

For the categorisation of entrepreneurship education, the division between education *in*, *for*, *about* and *through* entrepreneurship (initially developed by Jamieson 1984 and Johnson 1988) has been used.

2 A review of entrepreneurship education

The first entrepreneurship courses taught at colleges and universities started to appear in the beginning of the 1970s as small business management (Kent 1990), although Landström (2005) and Katz (2003) mention that there have been courses from the 1940s and onwards in both Great Britain and USA. Carlsson et al. (2013) claim that the first course in entrepreneurship was given at Harvard Business School in 1947. Since this infancy, the scope and size of the field have widened considerably, not only in Sweden (Johannisson and Madsén 1997; Klofsten and Spaeth 2004; Spaeth and Hakanen 2010), but in Norway (Ødegård 2000), Finland (Komulainen et al. 2011; Kyrö 2008), Great Britain (Gibb 2002, 2005), as well as for the USA (Kuratko 2005).

Whether entrepreneurship can be learned at all remains a debate amongst researchers and practitioners that goes back to the still vital research in personal traits, where especially known entrepreneurs argue that entrepreneurial traits are something they are more or less born with (Haase and Lautenschläger 2011; Neck and Greene 2011; Nicolaou and Shane 2009; cf. Berglund and Holmgren 2013). Most scholars on the other hand argue that entrepreneurship should be regarded as a discipline, and like other disciplines it can be both taught and learned (e.g. Drucker 1985; Johannisson and Madsén 1997; Neck and Greene 2011; Sarasvathy 2004). As Bjerke (2005) points out, there is also a division between entrepreneurship as a practical form of knowledge focused on entrepreneurial actions on the one hand, and entrepreneurship as

mere theoretical knowledge focused on understanding entrepreneurship as a social phenomenon on the other.

These divisions partly explain the variety in the curricula as well as in teaching methods noticeable in business schools today, or as Fayolle and Gailly (2008, p. 579) put it “There appears to be no universal pedagogical recipe regarding how to teach entrepreneurship”. In their extensive literature review, Pittaway and Cope (2007) list the following teaching methods connected to a diversity of ideas of what entrepreneurship is: (a) the use of the classics, (b) action learning, (c) new venture simulations, (d) technology-based simulations, (e) the development of actual ventures, (f) skill-based courses, (g) video role plays, (h) experiential learning and (i) mentoring. Depending on the learning objectives, one will find both very practical courses (*in* and *for* entrepreneurship) aimed at developing the students’ ability to be entrepreneurial through *experiential learning* as well as more theoretical courses (*about*) aimed at enhancing the students’ ability to understand, reflect and question current dogmas of entrepreneurship. The diversity of the research field is thus also reflected in the diversity of the educational field (Spaeth and Hakanen 2010). Neck and Greene (2011) though note that teaching entrepreneurship is a method that goes beyond understanding, knowing and talking and requires using, applying and acting, but most of all needs practice.

The early courses up until the mid-1980s did not show this variety though as they were more focused on a traditional theoretical understanding *about* entrepreneurship (Plaschka and Welsch 1990). Since then, the design of the courses has changed, where many courses today emphasise idea creation and new business creation *in* and *for* entrepreneurship (cf. Klofsten and Spaeth 2004). This change was mainly due to students’ criticism of the first courses for being too theoretical (*about* entrepreneurship) but also that the knowledge thus gained was not usable when trying to solve ill-defined, unstructured, ambiguous, complex, multidisciplinary, holistic, real-world problems, according to Plaschka and Welsh (1990, p. 61) who also, at that time, argued that “educational programs [in entrepreneurship] and systems should be geared towards creativity, multidisciplinary and process-oriented approaches, and theory-based practical applications”. Similarly, Kent (1990, p. 3) stressed that entrepreneurship education needed to focus on developing innovation, risk-taking, imagination, problem-

solving and decision-making skills. These ideas are still valid, according to Neck and Greene (2011), who emphasise that entrepreneurship is teachable and learnable but not predictable. These ideas also resonate well with *effectuation* as a leading principle for entrepreneurs (cf. Fayolle and Gailly 2008).

There are also researchers who oppose the idea of a general description of what's to be considered as entrepreneurial learning and entrepreneurial means. Indeed, divergent needs inside the field require a need to tailor different educational activities to different entrepreneurial abilities and educational goals (Fayolle and Gailly 2008; Gibb 2002; Kyrö 2008; Sarasvathy 2004), thereby making room for a more complex view on entrepreneurship that is visible both in classes and in curricula. Gibb (2002, 2005) also emphasises the need for heuristic approaches where entrepreneurship education allows the traditional scope of university programs and courses to expand.

Except for some general ideas about the how and what of entrepreneurship, as described above, it is hard to find a common denominator of what makes entrepreneurship education successful. Rabbior elaborates on this, stating that:

Prescription is not at the heart of entrepreneurship. The entrepreneur is a searcher, an explorer, an adventurer. True to this, an education program that is guaranteed effective in inspiring and assisting entrepreneurship is impossible to prescribe. (Rabbior in Kent 1990, p. 54)

Drucker (1985) underpinned this very argument by asserting that planning is incompatible with an entrepreneurial society and economy and that we must teach all individuals that they themselves must take responsibility for their own continuous learning and re-learning.

In this context, *creativity* springs forward as a central concept that more or less might define how entrepreneurship could (and should) be taught. In Kent (1990), Kourilsky suggests a focus on action learning where correctness is replaced by tenacity as the students, through developing and applying different solutions to problems, learn until they find something that works. Action learning and experimentation are still central aspects in entrepreneurship education (cf. Rae 2012), but over the years new ideas have surfaced. For instance, Hjorth (2011) suggests that provocation, deterritorialisation (uprooting) and decoding/imagination should be the core of an entrepreneurial entrepreneurship

education. He argues that the effect the provocation triggers will force the student into action learning and foster both critical and creativity skills, whereby the student embarks on a journey of becoming. Thus, emphasising the process of being entrepreneurial [cf. Steyaerts (2007) discussion on *entrepreneurship*].

Johannisson and Madsén (1997, p. 84) also elaborated on this theme stating that one mainly ought to address learning in and through entrepreneurship instead of about entrepreneurship. They also connected entrepreneurship with a need for experimentation as they gave a formula for best practice.

Like any creative activity entrepreneurship is best taught through hands-on practice and testing of concrete action, individually and in groups. Such experimental work is best supported by granting discretion, providing encouragement and offering role models in the form of established entrepreneurial projects. (Johannisson and Madsén 1997, p. 10, author's translation)

The argument ends in a suggestion that entrepreneurial schooling constitutes a new learning paradigm in two dimensions compared to traditional schooling (p. 86), where the old fact-based school with predefined knowledge and language is replaced by a dialogical culture where the student takes responsibility of his/her own learning that is grounded in real-life experiences and a creative exploration of the world. Action learning through entrepreneurship (or enterprising behaviour, according to, e.g. Gibb 2002) will in this perspective be based on a learning style that involves trial and error, but also a learning process that transcends the subject of entrepreneurship to be applied in all sorts of subjects and academic fields. Blenker et al. (2008) describe it as an orientation towards *reflexive action* where Gibb (2002) emphasises that this must meld with theory into a heuristic understanding guiding future behaviour.

Summing up, entrepreneurship education covers a variety of educational ideas and practices and does not supply us with a fixed template of how it could or should be structured. It might have started out as small business management, but have become much more than that over the years. Depending on objectives, there are a variety of educational traditions that interested parties can use as inspiration for any program that claim to be entrepreneurial, whether it is in, for, about or through entrepreneurship.

3 Development of entrepreneurship education policy

Throughout Sweden and the European Union, current outspoken political interest in entrepreneurship encompasses a diversity of parties and ideologies. The section below gives an account of the development of the entrepreneurship education policy first in the European Union and then in Sweden.

3.1 Policy development in the European Union

Official EU documents express both a need for fostering of an entrepreneurial spirit amongst its citizens and a need for business creation and economic growth (European Commission 2006, 2007, 2010, 2012, 2013). Entrepreneurship in this context is viewed as a general remedy for many acute social and economic problems facing politicians at all levels of society. An idea echoed in, for example, a report sponsored by The World Economic Forum (Volkmann et al. 2009, p. 9) expressing “Entrepreneurship education is critical for developing entrepreneurial skills, attitudes and behaviours that are the basis for economic growth”.

The current view on entrepreneurship as a desired skill for all citizens differs substantially from the way entrepreneurship was introduced to school systems in the 1980s. At that time, the interest in entrepreneurship was limited to business creation as a skill taught by *Junior Achievers* in a few chosen local schools (cf. Sukarieh and Tannock 2009). This relatively confined phenomenon was identified in a report for the OECD Centre for Educational Research and Innovation, by Ball in 1989, who, following a study of disparate entrepreneurial school initiatives in thirteen different countries, introduced the idea that entrepreneurship should be added to the school curricula. Ball described

... how young people can be enabled to develop employment initiatives and entrepreneurial skills as an important ingredient of their education and training; and what changes are needed in educational curricula and school practices designed to strengthen young people’s capacity to assume responsibility and initiative in a situation where labour markets and skill requirements are rapidly changing. (Ball 1989, from the abstract)

With Ball, a discussion regarding the plausibility of entrepreneurship’s relevance and implementation in school curricula had begun. One can also note in the quotation above that Ball addresses general skills rather than just business skills.

Ten years after the Ball report, at the European Council in Lisbon, on 23–24 March 2000, European Union heads of state and government officials agreed to a strategy intended to increase the EU GDP by 3 % before 2007 making the economy one of the most competitive knowledge-based economies in the world whilst increasing the number of jobs and economic growth. The delegates also agreed that entrepreneurship should be regarded as a basic skill necessary for the achievement of their objectives (The Lisbon Treaty 2000, §26).

With this treaty, the previous discussion on entrepreneurship changed into policy creation, where previous mainly theoretical business concepts and ideas were given political meaning. In this process, we can also identify a drift in the use of the term entrepreneurship as a concept used for theoretical development where ambiguity is a problem to a concept used for practical political purposes where ambiguity offers opportunities (sic!).

The framework was completed in 2006 when the EU formulated both *The Oslo Agenda for Entrepreneurship Education in Europe* (European Commission 2006) and a recommendation of eight *Key competences for lifelong learning* (European Union 2006). The latter aimed at students in schools but also adults who have left school. These eight key competences were judged to be essential to all EU citizens where the seventh was “sense of initiative and entrepreneurship” which is described as follows.

Sense of initiative and entrepreneurship is the ability to turn ideas into action. It involves creativity, innovation and risk-taking, as well as the ability to plan and manage projects in order to achieve objectives. The individual is aware of the context of his/her work and is able to seize opportunities that arise. It is the foundation for acquiring more specific skills and knowledge needed by those establishing or contributing to social or commercial activity. This should include awareness of ethical values and promote good governance. (European Union 2006)

The main skills addressed for this key competence are expressed in a later document from the European Commission:

... proactive project management (involving, for example the ability to plan, organise, manage, lead and delegate, analyse, communicate, debrief, evaluate and record), effective representation and negotiation, and the ability to work both as an individual and collaboratively in teams. The ability to judge and identify one's strengths and weaknesses, and to assess and take risks as and when warranted, is essential. (European Commission 2007, p. 11)

In these citations, nothing is said about the ability to start and run a business, at the same time it explicitly states a skill for "proactive project management" giving room for a multitude of interpretations and contexts where project management can be applied. The guiding documents are in this respect quite open, which unsurprisingly is in accordance with present governance principles. Unspecific descriptions make it hard for member states and other stakeholders not to agree with them, opening up for a wider acceptance as well as necessary adaptations to different political and cultural contexts (Souto-Otero et al. 2008). Just over these few years we can note that the political context successively not only widens the definition of entrepreneurship but also changes the meaning of it.

Other policy documents have followed. In the strategy for smart, sustainable and inclusive growth, named *Europe 2020*, each member country is encouraged "To ensure a sufficient supply of science, maths and engineering graduates and to focus school curricula on creativity, innovation, and entrepreneurship" (European Commission 2010, p. 11), where the three last stressed competences echo the original Schumpeterian theory.

The EU policy is further developed 2012 in the document *Rethinking Education: Investing in skills for better socio-economic outcomes* that states:

Attention should be *particularly* focused on the development of entrepreneurial skills, because they not only contribute to new business creation but also to the employability of young people. However, at the national level only six Member States have a specific strategy for entrepreneurship education. To address this, in 2013 the

Commission will publish policy guidance to support improvements in the quality and prevalence of entrepreneurship education across the EU. Member States should foster entrepreneurial skills through new and creative ways of teaching and learning *from primary school onwards*, alongside a focus from secondary to higher education on the opportunity of business creation as a career destination. Real world experience, through problem-based learning and enterprise links, should be embedded across *all disciplines and tailored to all levels of education*. All young people should benefit from at least one practical entrepreneurial experience before leaving compulsory education. (European Commission 2012, pp. 3–4, authors stress added)

In this document, policy moves forward, now not only addressing what to achieve, but how to achieve it. In the citation above, it becomes obvious that according to EU policy educational practices have to change in order to reach desired goals. At this point, entrepreneurship is no longer confined to a skill and a subject in existing curricula; it becomes a policy tool for changing the way schools (and other educational institutions) function, and how students and teachers should interact. The text is also extremely encompassing, as the italics above indicate. Entrepreneurship has become a concern for almost all educators, throughout all member countries. In addition, the European Commission (2012, p. 17) invites member states to pursue their reflections on what's stated through debates with their Parliaments and relevant stakeholders in order to press ahead with reforms.

Also noticeable in this citation, compared to the previously mentioned texts, is a stronger emphasis on business creation in higher levels of the educational system. Project management is not mentioned. One way of interpreting this is that business creation still exists as a central end goal for entrepreneurship education, but that this does not mean that it has to be a goal for each educational stage.

The aforementioned documents are still valid, where the European Commission continuously strives to make the member states incorporate the eight key competences into the curricula guiding educational systems throughout Europe (e.g. European Commission 2012, 2013). With these documents (and others), a policy foundation has been laid down where

entrepreneurship is put forward as a competence that should be embraced by all EU citizens and taught at all levels of the educational system. Still, the documents are vague when it comes to exactly what should be taught and how. Not only do guidelines emphasise a strong relationship between entrepreneurial competence and project management and that entrepreneurship should reflect, as we see above, “real-world experience, through problem-based learning and enterprise links”, but also urged experimentation in identifying suitable work processes (European Commission 2013).

3.2 Swedish policy and implementation

In 1996, the Swedish Ministry for Trade and Commerce commissioned Johannisson and Madsén (1997, p. 17, author’s translation) to study “the conditions for training in entrepreneurship and business”. Johannisson and Madsén did not fully comply with the objective stated by the ministry, though. Instead, they chose to emphasise the learning aspects of entrepreneurship in the report as follows.

We see (...) the current interest in the concept of “entrepreneurship” as a renaissance for still valid educational ideals, which means that well-oriented and initiative-prone individuals in interaction with others realize visions. (Johannisson and Madsén 1997, p. 17, author’s translation)

This report constitutes a starting point in the forming of a Swedish policy for implementing entrepreneurship in the educational curricula on all levels, beginning with preschool. Developed by both social democratic and centre-right dominated governments, the new initiatives in Sweden aligned with the policy development by the EU; in fact, the report by Johannisson and Madsén can be viewed as a Swedish sequel to the Ball report of 1989.

The governmental attention to entrepreneurs and entrepreneurship has since then influenced the educational sector as it has supported (through Tillväxtverket and its precursors) local entrepreneurship initiatives, although limited to certain projects. It was not until 2009 that the centre-right government launched an official strategy for entrepreneurship within the educational field (Regeringskansliet 2009), which can be noted emphasised entrepreneurship as business creation.

The written strategy became policy in the latest curricula that guide primary school (Skolverket 2011a) and secondary school (Skolverket 2011b) but with a weaker tie to business creation at earlier levels. Although both curricula use the term “entrepreneurship”, they differ in their descriptions. In the lower grades, the term is used somewhat loosely to encourage greater independence in problem-solving. Within the secondary school context, the term is clearly connected with business creation, as seen in the quotations below (Table 1).

The curricula correspond with the communication from European Commission (2010, 2012) and with the principal ideas expressed by Ball (1989) and Johannisson and Madsén (1997). The implementation appears to have remained close to both politically initiated reports and official policy documents.

So far, Swedish policy and governmental action have not been as explicit when it comes to higher education. Nonetheless, according to guiding policy from EU and existing Swedish strategy (Regeringskansliet 2009) there is no clear division between educational levels although business creation is more explicitly mentioned for higher levels.

In conjunction with the publication of the strategy in 2009, The Swedish Agency for Economic and Regional Growth (Tillväxtverket) and The Swedish Agency for Growth Policy Analysis (Tillväxtanalys) were given a 3-year assignment to improve knowledge development of entrepreneurship in health care (Tillväxtverket 2012). A year later, this initiative was followed by The Ministry of Social Affairs’ (Socialdepartementet 2010) assignment to Tillväxtverket to promote entrepreneurship in health and social care training. Following these initiatives, Tillväxtverket was in 2014 given a new assignment where the agency, in liaison with The Swedish National Agency for Education (Skolverket), will take responsibility for the general implementation of entrepreneurship in higher education. The appropriation, which guides the mission for Tillväxtverket, was also changed for 2014 and it now states “The Swedish Agency for Economic and Regional Growth will be coordinating matters relating to the promotion of entrepreneurship in higher education” (Näringsdepartementet 2013, p. 6, author’s translation). The exact form and conditions for this assignment are at this moment not known, but we can at least say that the governmental interest in promoting entrepreneurship in higher education does not stop with the health and social care training.

Table 1 Description of entrepreneurship in current curricula (2011) in Sweden

| Educational level | Description of entrepreneurship |
|-------------------|--|
| Primary school | An important task for the school is to provide overview and context. Schools should encourage pupils' creativity, curiosity and self-confidence and willingness to test ideas and solve problems. Pupils should have the opportunity to take initiative and responsibility and develop their ability to work both independently and with others. The school will thereby contribute to the pupils' development of an approach that promotes entrepreneurship. (Skolverket 2011a, p. 9, author's translation) |
| Secondary school | The school shall support the pupils' development of skills and attitudes that promote entrepreneurship, enterprise and innovation thinking. This will increase the pupils' opportunities to start and run businesses. (Skolverket 2011b, p. 7, author's translation) |

Following this development, and building on knowledge gained through sponsored projects, the government agency Tillväxtverket has successively changed its communication in these matters. At the start in 2011, the first pilot projects were aimed at promoting *entrepreneurship* in the specific field of health and social care training in higher education. In 2013, this had changed to more broadly promoting *entrepreneurial learning* in higher education, and in 2014 when a new call for pilots was issued, it had changed again to promote an *entrepreneurial culture*. So far, with just these few cases, there is no clear tendency on effects or how government will proceed in the future. What we can say though, is that the lack of a clear implementation strategy together with indistinct actions indicates a hesitating approach.

4 Development of Swedish practice

The Swedish school system consists of preschool (1–6 years), primary school (1–9 grade) and secondary school (10–12 grade). The last year of preschool is, together with primary and secondary school, mandatory and is guided by governmental curricula. The school system (up to secondary school) has gone through several reforms the last 25 years, including municipalisation and opened up for alternative forms of ownership, matters that are still widely discussed in public debate. The school system is also a reoccurring topic in election campaigns as well as a popular subject for different governmental initiatives, where it is not uncommon that teachers raise their voices asking for less political interference in their profession.

Higher education institutions are with few exceptions owned by government, and they gained explicitly stated autonomy through a reform in 2011. The offered

educations follow the Bologna system and are free of charge, although students usually need to take governmental loans in order to pay for housing, food, etc. In 2014, 40 % of the younger population (25–34 years old) had at least 2 years of tertiary education (Swedish Higher Education Authority 2015).

4.1 Diminishing focus on entrepreneurship as business venturing

Despite recent governmental interest, the concept of entrepreneurship is not new to Swedish schools, but then as new business creation. Through the Swedish branch of Junior Achievers, the concept was introduced in 1980 (Ung Företagsamhet 2015). Especially in secondary schools, entrepreneurship has also played some role in the curricula for decades. In the 1990s, more extensive implementation programs for entrepreneurship were launched, particularly in the northern parts of Sweden (Berglund and Holmgren 2013). Still, these isolated experiments in entrepreneurship training in schools, political mandates for new business creation in relation to entrepreneurship, and general notions of entrepreneurs as venture driven, have fostered a rather narrow and traditional view on entrepreneurship amongst teachers (Leffler 2006; Otterborg 2011)—a view now in decline, according to Skolverket (2014).

Even though starting a business encompasses a multitude of challenges, it does not fit in at all places in the school system and does not suit all pupils, all subjects and all teachers. Adding to the problem is that the Swedish use of “entreprenör” is even closer connected to running businesses than the common use of “entrepreneur” in English. In Sweden, the use of “företagsam” (a person that does) therefore sometimes is put forward as an alternative translation when entrepreneurship is discussed (Slevin and Terjesen 2011).

The increased demand for entrepreneurial activities at all grades has in some places created resistance towards entrepreneurship (which of course also can be attributed to an unspoken and/or unintended neoliberal agenda guiding the implementation). Responses from those being asked to implement entrepreneurship initiatives in primary and secondary schools include refusal, passive negligence, and more active pragmatic actions, thereby hampering the implementation process but also expanding the actual scope of entrepreneurship practices inside the school system. Today, entrepreneurship has become more about challenging old pedagogical and didactic dogmas by introducing new ways of creating knowledge and less about starting new businesses. Teachers are increasingly either moving out of the classrooms to contexts where they can achieve their learning objectives through projects with different partners and/or bringing these partners back into the classroom (Berglund and Holmgren 2013; Hägglund and Löfgren 2014; Lackéus 2013; Leffler 2006; Otterborg 2011; Skolverket 2014; Skolverket at Forskning.se 2014).

The described development is, at this point, restricted to mandatory school, but although data are scarce the same tendency for resistance and adaption seems to go for higher education too (Eriksson and Hoppe forthcoming; Hägglund et al. 2014).

4.2 New definitions in the wake of the development

Berglund and Holmgren (2013) claim that teachers tend to favour the following definition of entrepreneurship, stemming from Nutek (a precursor to Tillväxtverket).

Entrepreneurship is a dynamic and social process, where individuals, alone or in co-operation, identify opportunities and do something with them to reshape ideas to practical or aimed activities in social, cultural, or economical contexts. (Berglund and Holmgren 2013, p. 18)

The reason for the wider acceptance of this definition would likely be that it is open to both social and cultural contexts, besides business. More recently, as Skolverket has been given a direct mandate for implementing and supporting entrepreneurship in primary and secondary schools, at the same time the attention has moved from *entrepreneurship* to

entrepreneurial learning, and the agency tend to favour the broader contextualisation discussed earlier:

Entrepreneurial learning means to develop and stimulate general skills such as taking initiative, responsibility and turn ideas into action. It is about developing curiosity, self-reliance, creativity and courage to take risks. Entrepreneurial learning also promotes the skills to make decisions, communicate and collaborate. Being entrepreneurial and enterprising is the same. It means to seize opportunities and changes, and to develop and create value, personal, cultural, social or economic. (Skolverket 2010, p. 3, author's translation)

Although nothing is mentioned about business creation in this passage, Skolverket (2010) point out that there is nothing wrong with that kind of application either. One might also observe that Skolverket in this definition explicitly equals “being entrepreneurial” with “enterprising”, as discussed earlier (cf. Slevin and Terjesen 2011).

4.3 Increasing focus on entrepreneurial learning

Sweden have in this process witnessed a new emergence and wider deployment of the term “entrepreneurial learning”, and it is now to some extent replacing an earlier focus on entrepreneurship in the communication from the governmental agencies Tillväxtverket and Skolverket. In this respect, the learning aspects of entrepreneurship have become more central in the actual implementation of the governmental strategy than the earlier focus on business creation, where both Tillväxtverket and Skolverket today are paying more attention to what can be learned *through* entrepreneurship, compared to an earlier focus on education *in, for* or *about* entrepreneurship (cf. Spaeth and Hakanen 2010).

Entrepreneurial learning as a concept precedes the educational context however. It emerged in traditional entrepreneurship theory in the late 1990s describing how (small) business entrepreneurs learn (Cope 2003; Rae 2005). In today's educational context, the term is used somewhat differently, where entrepreneurial activities are seen as educational means to achieve learning that is hard to achieve via more traditional teaching methods.

This development has, in relation to traditional entrepreneurship education, led to the emergence of a new tradition of entrepreneurship thought that use the term “entrepreneurial learning”, albeit differently. Within business studies focussing on *entrepreneurship education*, we have “entrepreneurial learning” as a traditional and bounded view on how entrepreneurs learn as they start and run their businesses. And within realms of mainly non-business studies focusing on *enterprise education*, we have “entrepreneurial learning” as a more pragmatic view on how the concept itself can be used to challenge bounded pedagogical and didactical ideas (cf. Kyrö 2008; cf. Lackéus 2013).

The academic research in this alternative field of entrepreneurial learning is still in its infancy (Lackéus 2013; Skolverket 2014), which makes it hard to say something more definite about the practice development, except that the discussion is similar to that of the traditional view and that teachers are using the entrepreneurship and entrepreneurial learning concepts to justify pedagogical experimentation. A specific difference compared to the traditional view is a much greater emphasis on what can be achieved *through* entrepreneurship. The learning aspects of the entrepreneurial process are considered more important than entrepreneurship as a subject and even as a skill. Aspects of, for example, learning-by-doing, coined by John Dewey, are thus given more attention than, for example, discussions on the subject of entrepreneurship and theorists like Schumpeter and Kirzner (cf. Lackéus 2013; cf. Leffler 2006; cf. Otterborg 2011).

Also in this context there are researchers who struggle to define (and limit) the field to make it easier to comprehend. In her thesis, Otterborg defines entrepreneurial learning in an educational context as follows.

Entrepreneurial learning, I have defined it as a learning form in which the learner, in cooperation between schools and industry, works with reality-based tasks. The aim of entrepreneurial learning is to enhance the students’ knowledge regarding skills, abilities and attitudes. Students are expected to develop: self-awareness and self-efficacy, pattern breaking abilities and resist collective action, take responsibility, manage and solve problems, take initiative and be creative, flexible and both see and grasp opportunities, and be able to interact with others. (Otterborg 2011, pp. 147–148, author’s translation)

As Otterborg’s definition shows, the focus for entrepreneurial learning in the school context is on the enterprising mentality of the students, described as *internal entrepreneurship* by Komulainen et al. (2011), which can be learned *through* entrepreneurship education. This contrasts the traditional views that focus on *external entrepreneurship*, i.e. to enhance skills for setting up businesses, where the pedagogical process is focused on *in* and *for* entrepreneurship depending on the course objectives.

Ødegård (2000) stresses that an adaption to entrepreneurship in the learning environment will teach the students the skills needed in a postmodern era, where the students will emerge as professional lifelong learners and teachers as moderators in that process. Otterborg (2011) describes this as a change in the mission for education. Students shall not only be trained to become obedient employees in existing industry and organisations, they must also be trained for job creation in undefined new circumstances, she argues. In this we can also note that focus is on the students’ learning and not on the teachers’ teaching. Putting entrepreneurship on the agenda, organising education around students instead of institutions, can thus mean a much larger change in the scholarly task than one initially might think, giving rise to questions about both the substance and the design of entrepreneurship education, but also more critical questions about the forces that governs the educational system today (cf. Dahlstedt and Hertzberg 2011; cf. Dahlstedt and Tesfahuney 2010; cf. Komulainen et al. 2011; cf. Olssen and Peters 2005).

5 Analysis

It has been possible to trace the political interest for introducing entrepreneurship in education to policy documents from the late 1980s and onwards where the change in the Swedish curricula in 2011 had been preceded by prolonged policy development in both EU and Sweden. The Swedish agenda complies with the EU agenda where the interest in entrepreneurship can be derived from a political aspiration to create growth, but also more prominent in the studied documents an aspiration to change education in order to foster individual skills for constructive initiatives dealing with complex problems.

The main focus for both the EU and the Swedish policy sphere is the individual's ability to learn and relearn in a changing society, manifested in the document *Key competences for lifelong learning* (European Union 2006). Along with seven other key competences, a *sense of initiative and entrepreneurship* is declared as necessary for all EU citizens. The ability to turn ideas into action is the main focus why policy seems to favour education *in* and *for* entrepreneurship over courses *about* entrepreneurship. In the words of Plaschka and Welsch (1990), this will help them solve ill-defined, unstructured, ambiguous, complex, multidisciplinary, holistic, real-world problems. This reasoning is also echoed by researchers in the new field now developing, as the examples from Ødegård (2000) and Otterborg (2011) above show.

Slight differences in the guiding policy documents are also visible. Compared to the early guiding EU documents, the Swedish policy document has to some degree put more stress on entrepreneurship as the ability to start and run businesses, especially in higher levels of the educational system. Nonetheless, in the schools today, with a focus on *entrepreneurial learning*, we can identify an implementation that lie closer to the intentions iterated in the original EU policy, stressing the ability to initiate and turn ideas into action. From a policy perspective, this does not constitute a problem. As discussed, policy is usually deliberately vague in order to ensure wide acceptance, which in this case is complimented by encouragement in experimentation in means in order to find something that works (that is, with a vague end). This vagueness actually resonates quite well with the business school tradition, which is open to a diversity of non-prescriptive approaches to both means and ends in entrepreneurship education. In this sense, earlier works by Plaschka and Welsch (1990) and Kent (1990) comply with more recent studies by Fayolle and Gailly (2008), Gibb (2002, 2005), Neck and Greene (2011), and Pittaway and Cope (2007). The implementation process as such is thus filled with uncertainty, where policy seems to rest on effectuation over planning as leading principle, which in an entrepreneurial perspective seems appropriate.

An interesting tendency in both the policy development and the implementation in Sweden is a movement from the *Program context* to the *University enterprise context*, using Pittaway and Copes (2007) categorisations. This is especially noticeable in

Tillväxtverkets communication from promoting entrepreneurship in specific educational program to supporting entrepreneurial culture in higher education. In this we can spot a shift away from a focus on desired skills and knowledge of students, but also away from the interaction between students and teachers, towards the educational institutions themselves.

5.1 From business to pedagogy

The implementation of entrepreneurship in the curricula of Swedish primary and secondary schools has put a larger emphasis on *how* to achieve learning goals, compared to *what* to achieve. Entrepreneurial learning has accordingly become more important than entrepreneurship, and in conjunction with this business aspects have become less pronounced.

The traditional view on entrepreneurship and entrepreneurial learning, with its history and diversity mainly developed and nurtured in business schools in higher education, seems at the most to be a point of departure, inspiration and reference in the recent development. But, it stops there. Instead, the scholarly discussion about the Swedish implementation mainly takes place inside the pedagogical field dealing with education in mandatory school and is not surprisingly focused on pedagogical matters. By this an alternative view on entrepreneurship and entrepreneurship education gains ground. If the development also is part of and/or will lead to the emergence of a new paradigm, as Johannisson and Madsén (1997) and Gibb (2002) discuss, is too early to state; but with the establishment and growth in alternative views on especially entrepreneurship but also entrepreneurial learning, one cannot rule out this possibility.

As in the traditional view, there is no common agreement in the alternative view as to how the objectives of entrepreneurship education should be reached, except that the learning outcomes should not be limited to abilities connected with starting and running businesses. It can also be argued, in line with scholars of the traditional view (e.g. Drucker 1985; Rabbior in Kent 1990), that one cannot prescribe how to educate *through*, *in*, *for* or even *about* entrepreneurship. Instead, the more spontaneous "if it works it works", gives way to an infinite number of practices. Accordingly, the introduction of entrepreneurship in the Swedish curricula of 2011 and the governmental initiatives for a broader implementation in higher

education constitute opportunities for all those who want to change their pedagogical practices, provided they can accept the terms entrepreneurship and/or entrepreneurial learning as policy rather broadly mandates.

With a focus on pedagogy, the entrepreneurial learning practice now forming inside the educational system is a movement quite independent from the traditional view. The historical background of entrepreneurship in secondary school, with Junior Achievers and a clear focus on starting businesses, was in the beginning considered a hindrance for getting a wider acceptance in the school system. But, when policy implementation together with practice moved away from entrepreneurship as business creation towards entrepreneurship as a means for complementary learning and a tool for instigating change in teaching practices, the former resistance amongst teachers seems to have folded. Judging by the Swedish implementation, business is not very welcome as a dogma in connection to entrepreneurship.

In the wake of the implementation, an alternative view on entrepreneurship education has gained ground. It includes an alternative tradition of thought in the entrepreneurship field, a thought tradition focusing on pedagogy that both challenges and complements the traditional view on entrepreneurship and entrepreneurial learning. The difference lays mostly in the learning outcome and not in the learning methods. Where the traditional view focuses on learning for business purposes, one might say that the alternative view focuses on learning everything else but business. The concept of entrepreneurship differentiates the views. Where the traditional view focuses on *external entrepreneurship*, the alternative view focuses on *internal entrepreneurship*. Entrepreneurial learning, on the other hand, binds these two diverging views together.

Entrepreneurial learning, regardless of view, is geared towards *reflexive action* (Blenker et al. 2008) and *experiential knowledge* (Gibb 2005). The creative entrepreneur becomes a role model who acts on problems and thus gains knowledge. Using Schöns (1983) categorisation, we might also say that entrepreneurial learning favours knowledge stemming from both *reflection in action* and *reflection on action*, compared to more theoretically based knowledge, whereas in Polanyis' (1983) categorisation, entrepreneurial learning is geared for *tacit knowledge* over

explicit knowledge. Engaged in entrepreneurial activities, students (in resemblance of entrepreneurs) learn through *action learning*, but they are not always aware how they do it nor that they learn at all. With these characteristics, together with the lack of prescription and control, of course entrepreneurial learning constitutes a challenge for especially more conservative institutions and teachers. If business aspects of entrepreneurship were a first hindrance for gaining acceptance amongst teachers of the implementation, the characteristics of entrepreneurial learning could be regarded as the second. Not only will it be hard to evaluate knowledge gained (Dahlstedt and Hertzberg 2011; Gibb 2002, 2005), one might also have to change the organisation and practice of traditional teaching institutions (Gibb 2002, 2005; Olssen and Peters 2005).

5.2 Expanding entrepreneurship education

Through the changes in the Swedish curricula for primary and secondary school, the practice that constitute entrepreneurship education is at the moment growing and changing. The traditional home in the business school is challenged, at least in Sweden. Personal motivation and drive, as a selection criteria and a means in business focused education, has become an end in policy and the new practice now developing.

How this will affect the traditional view on entrepreneurship and entrepreneurial learning, mainly upheld by business schools, we do not know. Judging by what's been discussed here, at least the ambiguity of the entrepreneurship field is increasing. By the references given in the preceding text, one can also note that a few business school academics participate in both the discussion on the traditional view and the alternative view on entrepreneurship and entrepreneurial learning, but the recent development has not stirred up any real concern or debate amongst business scholars.

What happens though, is that we through this development can spot how new views of entrepreneurship, entrepreneurship education and entrepreneurial learning including new definitions are spreading throughout society. Given the good fit between policy, governmental changes in curricula and the practice developing, one might speculate that it also might have effects on the entrepreneurship discourse as such, diminishing the business influence and increasing the

pedagogical influence. Education *through* entrepreneurship is what especially meets the Swedish students through out the school system, whereas education *in, for* and *about* entrepreneurship is more confined to business schools and higher education.

Having stated this, there does not seem to be any real hindrance for a closer exchange of thoughts between the traditional and alternative view on entrepreneurship education. With the diversity of traditional business school teaching of entrepreneurship, as, for example, Pittaway and Cope (2007) describe, there are plenty of common denominators and ideas also apparent in the practice now developing in Swedish mandatory school. A mutual exchange of educational ideas can therefore most likely be beneficial for all, if one acknowledge differences in sought for ends like internal and external entrepreneurship.

5.3 A more entrepreneurial society?

The economic and entrepreneurial effects of the implementation of the entrepreneurship education policy are at this stage too early to evaluate and not covered by this study. Still, the study provides us with some indications on the development.

Aspects concerning effectuation, experimentation and adaption to different contexts where entrepreneurship appears naturally, which is represented in developing practice in Swedish mandatory school, should support entrepreneurship as such in analogy with the findings by Falck et al. (2012) and Falck and Woessmann (2013). For higher education, the movement from promoting entrepreneurship over entrepreneurial learning to entrepreneurial culture as the main objective for the government agency Tillväxtverket seems to comply with these findings as well.

The current focus of what can be learned through entrepreneurship is also interesting in a societal perspective. If it will promote learning that is hard to gain through more traditional teaching methods, we might expect a rise in the general educational level, which according to Kolstad and Wiig (2014), and Wennekers and Thurik (1999) relate positively with the level of entrepreneurship in society.

It may seem contradictory, but as these meagre examples indicate, with more adaption to circumstances and less business in entrepreneurship education the better overall effects on entrepreneurship in society.

6 Discussion

When entrepreneurship policy is being implemented in the Swedish educational system, the main effect on entrepreneurship education seems to be growth in an alternative view on entrepreneurship as foremost a means for accomplishing learning through action and practice. The implementation tends to favour the entrepreneurial learning concept over the entrepreneurship concept, where entrepreneurial learning encompasses a multitude of educational practices for developing internal entrepreneurship and enterprising abilities. External entrepreneurship for business venturing is not given priority. The thought tradition withheld in Business schools has accordingly had little influence on the implementation in Swedish primary and secondary school. Instead, new ideas on entrepreneurship are created outside the business context through experimentation in school teaching practices, where one also can spot an emerging research interest from pedagogy scholars.

Due to a multitude of expressed means and ends, the process of turning EU entrepreneurship policy into Swedish educational practice entails the creation of opportunities for achieving a whole range of goals amongst governments, agencies, educational institutions and educators. Hence, the process in itself opens up for entrepreneurial action where concepts like entrepreneurship, entrepreneurship education and entrepreneurial learning are used as adaptable argumentative tools for a number of different stakeholders. The sought for economic effects on growth and job creation are at this moment not given much attention, and one might argue that it is still premature to assess these types of effects. Instead, in the school setting, aspects of learning and individual development are key.

The concept of *entrepreneurship* (focusing on opportunity engagement) is in the Swedish educational setting being challenged by the concept of *entrepreneurial learning* (focusing on what can be learned through entrepreneurship). The study also shows that the denotation of entrepreneurship in education policy and educational practice is moving from *external entrepreneurship* (business building competence) to *internal entrepreneurship* (enterprising mentality). This movement coincides with an increasing interest in entrepreneurship from educators from other fields than business, where the competence

“sense of initiative and entrepreneurship” now appears more as an end instead of a means in entrepreneurship education. Definitions of entrepreneurship with a close relation to business creation, mainly upheld by business researchers in entrepreneurship, are at the same time being challenged by new definitions created in the realms of pedagogy.

Reflexive action and experiential knowledge still appear to be the heart of entrepreneurial learning, regardless of context, where educators outside business schools especially put interest in complementary competences that can be learned *through* entrepreneurship, in relation to the business schools focus on education *in, for* and *about* entrepreneurship. Views of the entrepreneur as a creative seeker that first and foremost gain knowledge (and not financial success) by enacting problems and opportunities in the world are strengthened.

7 Conclusion

The most immediate result from the ongoing implementation of entrepreneurship policy in the Swedish educational system is that the complexity of the entrepreneurship education field is increasing. Existing policy encourages a multitude of interpretations about both means and ends, which together with the inherent experimentation in educational practice continuously adds ideas on how entrepreneurship could be taught and to what ends. Traditional ideas of entrepreneurship education for supporting business venturing are not as much challenged than complemented by new contexts where entrepreneurship is given meaning.

7.1 Further research

The study has just touched upon an emerging development of the entrepreneurship education field and the first years of Swedish practice after a change in curricula in 2011, limiting it to a few mayor policy documents mediated through initial reports and research papers. For Sweden, more in-depth analysis is needed, as one can expect to find new subfields emerge when entrepreneurship education and entrepreneurial learning mix with the traditions of subjects like language studies, history and physical training (just to mention a few). Studying the parts, where the adaption to specific learning objectives and

circumstances might favour more precise teaching practices, can help us find the clarity that eludes us at a more general level. As, for example, Fayolle and Gailly (2008) argue, divergent needs will require different educational activities.

New practices and meanings added to the entrepreneurship concept create problems for research where conceptual rigour is necessary. Mars and Rios-Aguilar (2010) therefore suggest *academic entrepreneurship* as a leading concept, limiting the field to economics and business creation. Gibb (2002, 2005), on the other hand, concerned with the entrepreneurship concepts usefulness to society, forcefully argues that entrepreneurship must transcend economics and business, and gain new meanings, in order to be useful for society. Current study describes a development that lies close to the ideas advocated by Gibb, but it does not diminish the importance of the requests by Mars and Rios-Aguilar. More research, but also new ideas how to distinguish different types and aspects of entrepreneurship, are most welcome.

For the European Union, there are complementary studies to be made in those countries where policy has lead to changes in curricula and educational structures. As policies as well as leading concepts are vague, further qualitative studies are to be recommended initially, adding to a discussion on how to demarcate what is to be considered as entrepreneurial and what is not, as well as intended means and ends. Even though the general conclusion is that the vagueness of the field prevails, addressing entrepreneurship in classrooms has made some teachers to question existing teaching practices, especially seizing opportunities to address knowledge gained through reflexive action. If this actually will lead to more initiative-prone individuals as claimed in policy, is to early to state and thus also constitutes a research area of its own.

Compliance with ethical standards

Disclosure statement Magnus Hoppe has participated in a project funded by The Swedish Agency for Economic and Regional Growth for implementing entrepreneurship and entrepreneurial learning at Mälardalen University. This is mentioned in the text.

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