

# Conceptualizing Entrepreneurial Mindset and Entrepreneurial Competences in a School Context<sup>1</sup>

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Entrepreneurship can be seen as a "meta-method" for human development - through entrepreneurship the potential that humans have can be achieved (Sarasvathy & Venkataraman, 2011). Linked to this is the notion of "an entrepreneurial mindset" that for a long time has been highlighted as an important basis for working entrepreneurially, which in turn is seen as an important vehicle for the individual to live and work in future society.

Since 2010, entrepreneurial learning is part of the Swedish curriculum where the National School Agency uses the definition of entrepreneurship developed by National Agency for industry some ten years ago when they had responsibility for entrepreneurship in schools:

"Entrepreneurship is a dynamic and social process where individuals, alone or in collaboration, identify opportunities and make something with them to transform ideas into practical and goal oriented activities in social, cultural and economic contexts"

This definition uses key words in the entrepreneurship literature and specifically Shane and Venkataraman's (2000) synthesis in which entrepreneurship has its core in the nexus between individual(s) and opportunities. While Shane with his economics background have pressed hard on that this is a purely economic phenomenon, Venkataraman has opened up to wider arenas (Sarasvathy & Venkataraman, 2011) which is in line with the school definition.

What "an entrepreneurial mindset" means has been a bit of a "black box". It is not clear what the concept stands for. In education, for example, Ellström (2002) highlighted the development-oriented learning as a concept that can match this, but maybe Dweck's (2012) idea of "growth mindset" is closest to what is meant by an entrepreneurial mindset. Dweck says that we adopt and replicate a mindset that is either developmental or fixed. With a development-oriented mindset, we see others and ourselves as potentials for something more than we are today. Taking it to its extreme a fixed mindset would mean that we see ourselves as fully developed and the possibility for further learning is extremely limited. The very idea of entrepreneurship is strongly related to potential since it is about realizing opportunities. It is hard to imagine that you can work entrepreneurially in an environment characterized by a fixed mindset. In such an environment it is important to avoid mistakes (because you cannot learn anything from them), dodge challenges (because they can expose your weak sides), and the leaders'/teachers' main task is to sort out the smart from the dumb (because people cannot develop). In the daily work, hard work should be avoided (because you cannot learn anything from it) and the feedback is not worth much (other than helping to stay clear from similar tasks in the future). People who have succeeded are sad reminders of our own shortcomings.

In a growth-oriented environment, mistakes are a natural part of everyday life (as they provide learning opportunities) and challenges are welcomed (as they put your abilities to test and triggers new learning). The leaders'/teachers' focus are on formative assessment (since everyone can develop) and to get all to

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be committed and work hard (since effort is the path to mastery). The formative feedback provides the individual with help to become better and role models can inspire even greater effort. From this, it should be clear that an important prerequisite for acting entrepreneurially is a growth mindset.

Educators, researchers and other stakeholders of the school system, such as politicians and parents, need to be aware of this and help each other to be as much development-oriented as possible.

If we then turn to the six competencies I propose for the school system, I will for each of the six first define what is meant by each component and then do an analysis of their origin in relation to the entrepreneurship literature. Together they form the acronym CRITIC – as in critical competences to have in order to be entrepreneurial. To be able to be entrepreneurial a student needs to train and develop:

- **Courage** – to dare to be on the verge of your comfort zone, and there do what you (yet) are not fully comfortable with.

Courage has in entrepreneurship literature a link to "risk taking" that is part of the entrepreneurial orientation (EO) construct (Lumpkin & Dess, 1996). This originates from the fact that entrepreneurship was linked to self-employment and thus a greater personal risk. It can be seen as the most original concept linked to entrepreneurship since it was discussed by Cantillon (1734) almost 300 years ago. Risk in business can be about embarking uncharted territory, "mortgage" substantial resources or borrow substantially. The risk may be economic, but also psychological or social. Sarasvathy (2001) highlights in her widely acclaimed theory of "effectuation" that entrepreneurs normally do not see risk as welcome in itself but rather as a price you have to pay to be in an entrepreneurial process where you pursue opportunities. Similarly, the competence courage is a means for the individual to develop their action repertoire and not an end in itself. It is not about liking to be outside your comfort zone, but about being prepared to pay the price for a stronger action ability.

- **Responsibility** – to take responsibility for both your own and your peers' learning by being a driving force that possess patience and not give up despite setbacks

This dimension also originates from EO, but there it is known as autonomy. It is defined in Lumpkin & Dess (1996, p. 140) as "the independent action of an individual or a team in bringing forth an idea or a vision and carrying it through to completion". It is thus about to be self-driven when embarking on opportunities and not let organizational structures become hinders. A central idea of intrapreneurship (Pinchot, 1985) is to create opportunities for employees to take responsibility and thus be able to act as a more independent actor despite being within an organizational structure where the frames are given. Similar to this, responsibility in a school context would mean that the student becomes an independent actor in relation to their own learning. The goals are pre-given, but the student takes an active part in deciding how to achieve them.

- **Initiative** – to be proactive and be able to act without prompting from a teacher and thus not be dependent on a leader / teacher that sets the agenda.

Initiative is linked to "proactiveness" which also is part of EO. Proactiveness is defined as actions to anticipate future problems, needs and changes. In the entrepreneurship literature, it is very much about being early with novelties related to the business and to always be open to exploring and implementing new (business) opportunities. Initiative was highlighted already by Schumpeter (1934) as central in the entrepreneurial process. By having a vision of the future, the entrepreneur

can become the creator of the future. This can be related to Sarasvathy's (2001) "pilot-in-the-plane" principle, where the entrepreneur by taking the initiative becomes master of his fate rather than the prisoner of circumstance. Similarly, by taking more initiative, the student can become more active and thus less dependent on teacher.

- **Tolerance for Ambiguity**– to be able to solve tasks even though the situation is ambiguous and not fully understood.

Tolerance for Ambiguity (TA) has been studied in psychology for a long time. In the entrepreneurship field it came to be used in the 1980s (e.g. Begley & Boyd, 1987) and has since been a trait that often has been included when entrepreneur's characteristics has been the focus (e.g. Westerberg, Singh & Häckner, 1997). According to Budner (1962), ambiguity can come from novelty, complexity, or situations without an unequivocal solution. He defines TA as a tendency to like situations that have these traits and the opposite (intolerance for ambiguity) as a tendency to view such situations as threatening. TA is therefore crucial to be able to act on opportunities, which normally means a hefty dose of novelty, complexity and lack of clarity. In the school context the student meets similar situations (new types of tasks that hold complexity and have no clear answer) but on a more basic level. This could mean that with a more developed tolerance for ambiguity you can better understand the task and easier find strategies that can lead toward a solution.

- **Interactivity and ability to collaborate** – to be able to both give (share thoughts and knowledge) and take (absorb other's thoughts and knowledge) and based on this work together with others to carry out tasks and solve problems

Interactivity and ability to collaborate is not an entrepreneurial ability linked to EO (such as risk taking) and it is not linked to the characteristics of the entrepreneur (such as tolerance for ambiguity), but is still undoubtedly a key competence to be able to act in our future society (which may already be here). Already in the early 1980s, Miller (1983) showed that communication and an ability to work with others was important for companies acting in dynamic markets. In recent years, the concept of "open innovation" is highlighted as central for success. Working with open innovation implies that firms interact more deeply in the whole innovation process. Parida, Westerberg & Frishammar (2012) showed that many aspects of the interaction (both with customers, suppliers and partners in the industry) were central for the company's innovation performance. This pattern also fits with Sarasvathy's (2001) idea of "resource quilting" which means that entrepreneurs primarily see other players in the industry as partners rather than as competitors. Key aspects for obtaining good collaboration lies in creating a balanced exchange (see e.g. Wincent, 2008) and building a strong network capability (see e.g. Parida & Westerberg, 2009). Network capability consists of the ability to communicate internally, knowing your partners, establish and maintain relationships and build concrete collaborative projects. These aspects also seem central to interact in a school environment. An important basis for this is to know oneself, one's own competences and abilities, which in turn is the basis for building self-confidence.

- **Creativity** – to be able to contribute to finding new solutions that are nontrivial/conventional

Creativity is related to "innovation" and is the fourth component that is taken from EO. Innovation is perhaps the most central aspect of EO and is about to engage in and support new ideas, experimentation and creative processes (Lumpkin & Dess, 1996). Schumpeter (1934) stated long ago that creativity is central to the renewal of businesses and industries. By "new combinations" of resources, new products and production methods are created that better solves

the needs of the market. The market has now been extended to society by the introduction of social innovations (and social entrepreneurship). In these situations, creativity is used to solve social needs in society. At school, it is probably more interesting to work with the challenges facing society. Developing creativity does not require solving societal challenges, but may take place in most subjects by taking advantage of and developing the ideas that emerge from the students.

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