

“Value Creation is Important - but we Seldom Use that Word”

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Abstract

It has become increasingly important for universities to document that they create value for society (Rashidi et al., 2020). One way to contribute impact is by engaging students in entrepreneurial value creating processes (Moberg & Rasmussen, 2016). This paper explores value creation in HE based on a case study involving an interdisciplinary teacher training course on entrepreneurial teaching, where the university teachers were introduced to value creation conceptions. This led to interesting discussions and reflections, but also questions on how to integrate the value creation perspective in concrete courses and programs. To qualify value creation pedagogy (Lackéus, 2018) at the university we are interested in:

- 1. How do teachers perceive and reflect on value creation in relation to I&E teaching?**
- 2. How can we support teaching and educational development by providing teachers with models of value creation as didactic and pedagogical tools in I&E teaching?**

Approach: This paper combines a review of existing models of value creation related to the field of innovation and entrepreneurship with an empirical case study. The case study applies a mixed method including a small survey among entrepreneurship educators, expert interviews carried out as preparation for developing the course, materials developed by the course participants and interviews with 5 participating educators/educational leaders.

Results: Firstly we present different understandings of value creation which seemingly are influenced by the disciplinary field, the course/curriculum the educators are involved in and the values and ideas of their students. Overall two main understandings of value creation appear: as a mindset and as a competence. Finally a new supplementary model for value creation in relation to entrepreneurial teaching and education is proposed.

Implications: The main intention behind the proposed model is to develop a heuristic that can inspire and support teachers, educational leaders and - developers who wish to develop and implement entrepreneurial education where students develop *competencies* in value creation. Ultimately this could lead to more students gaining competencies in value creation through their university studies.

Value/Originality: The proposed ‘dynamic value-creation model for entrepreneurial education’ supplements existing models. Firstly it combines characteristics from existing models by including a number of different types of value and different levels of stakeholders as well as focusing solely on entrepreneurial teaching and education. However new perspectives and elements are also added: The addition of time and an actor adds up to a more dynamic model.

Key words: entrepreneurship education, higher education, value creation, conceptual models, educational development

1 Introduction

It has become increasingly important for universities to document that they create value for society (Rashidi et al., 2020; Sanchez-Fernandez et al., 2010). One way to contribute impact is by engaging students in entrepreneurial value creating processes (Moberg & Rasmussen, 2016). According to Ding (2017), however, a substantial number of students across disciplines associate “entrepreneurship” with starting up businesses implying a commercial focus appealing to only some students. To engage more students and bridge between narrow and broader definitions of entrepreneurship education, Lackeus (2015) points to the importance of introducing value creation pedagogy in curricula from primary school to university.

Regarding the primary school sector, recent studies of Swedish school classes (e.g. Lackeus, 2017) have shown an interest among teachers in how to integrate a value-creation perspective in their teaching. Moreover, textbooks and other training material have been developed for the primary school sector. When it comes to higher education and the university sector, research and studies focusing on value creation in education and in entrepreneurial teaching are only sparse.

The question is how value creation pedagogy may fit in with university educators’ ideas about and approach to “value” in their teaching practice and in relation to entrepreneurial teaching in particular.

This paper explores value creation in higher education (hereafter HE) based on a case study in 2021 involving an interdisciplinary training course on innovation and entrepreneurship (I&E) for university educators. The participants were introduced to value creation conceptions (e.g. Jones, Penaluna & Penaluna, 2020) and frameworks (e.g. Lackeus (2018)’ Framework for five different kinds of value”). This led to interesting discussions and reflections, but also generated questions on how to integrate the value creation perspective in concrete courses and programs.

To qualify the discussion of value creation pedagogy at the university we are interested in:

- 1. How do educators at the university perceive and reflect on value creation in relation to entrepreneurial teaching?**
- 2. How can we support teaching and educational development by providing educators with models of value creation as didactic and pedagogical tools in entrepreneurial teaching?**

The paper is structured in six parts. After the introduction, section 2 presents the theoretical foundation, followed by the methodological approach to the case study in section 3. The results are presented in section 4 which leads to the proposal of a dynamic value creation model in section 5. The model and its potential for supporting discussions of value creation, didactic and pedagogical planning, and educational development is discussed. In addition, section 5 presents the limitations of the study and the implications for further research. Finally, section 6 concludes the paper with the main findings and insights.

2 Theoretical background and framing

2.1 Introduction

Value creation processes are key in entrepreneurial education and teaching, which can be manifested in society in different ways by the enterprising graduates; e.g. by their innovative changes for the common good, their successful start-ups or their cultivated mindset looking for opportunities and solutions to societal problems. Over the last 10 years, more educators, researchers and practitioners in this field have started to shed light on the value creation concept. However, when it comes to the number of academic publications addressing

entrepreneurial education in a university setting or research focusing solely on value creation, it still remains low. Studies addressing the implementation of value creation pedagogy are almost absent.

In this theoretical section we outline some of the different approaches to entrepreneurial education and value creation. Further, we introduce some of the existing value creation models and their implications in an entrepreneurial teaching context.

Referring to Lack us (2015; 2016; 2018), we use the term “entrepreneurial education” to cover approaches that integrate entrepreneurial thinking and practice in courses and curricula, but not specifically with the aim of creating ventures.

This broad perspective include enterprise education, value creation pedagogy and in some cases also innovation education¹. Throughout the paper, we will use ‘entrepreneurial education’ to denote the broad educational approach, and ‘entrepreneurial teaching’ about approaches that integrate smaller or larger elements of entrepreneurial activities into courses or teaching sessions. When referring to courses or curricula aimed at venture creation, we will use the term “entrepreneurship education”. Though the focus is on value creation and entrepreneurial education at HE, insights from this paper may be relevant at other levels of the educational system.

2.2 The concept of value creation

According to Lack us (2016, p. 3), Fayolle (2007) was probably one of the very first to focus on value creation in relation to entrepreneurial education, e.g. by presenting translations of key parts of Bruyat’s (1993) doctoral dissertation on entrepreneurship as new value creation.

Bruyat (1993) proposed a definition of entrepreneurship including two dimensions: *novelty* of the value created and *resulting impact* of the process on the individual (Lack us, 2016, p.3)

This emphasis on change and learning from value creation activities is/was the main reason “for considering value creation as a definitional core of entrepreneurial education” (Ibid).

Later Bryat & Julian (2001) further stressed that value creation should include interactions with the surrounding environment (Lack us, 2016, p.3). Ten years later, Neck & Greene (2011, p. 56) followed up by arguing that many important areas in entrepreneurship education could be summed up to value creation. In parallel, Blenker et al. (2011, p. 421) stressed that entrepreneurship education should focus on “value creation in the broadest sense”.

In 2012 the Danish Foundation for Entrepreneurship proposed a definition of entrepreneurship education explicitly focusing on value creation (Vestergaard et al., 2012, p. 11):

“Entrepreneurship Education is defined from a broad understanding of entrepreneurship: Entrepreneurship is when you act upon opportunities and ideas and transform them into value for others. The value that is created can be financial, cultural or social”.

This definition has, according to Lack us (2016, p.3), had a significant impact on the field of entrepreneurial education in theory and practice. What should be noted about this definition is its emphasis on *multiple* types of value, which also can be found in Ouden (2012).

During the following years, Martin Lack us published several papers and publications about value creation in relation to entrepreneurial education. In Lack us (2015), he introduced the term “value creation pedagogy” to propose a broader approach to entrepreneurial education. The aim was to engage a broader group of students in value creation processes and create more impact than many enterprising or venture creation programs typically did.

In his doctoral dissertation (Lack us, 2016a, p. 4), he proposed an operational definition of value creation aimed at educational institutions:

¹ In Denmark several ECTS-based courses are named something with innovation, when the correct term would probably be entrepreneurial, simply because innovation is a generally more well-known word and has fewer negative connotations than e.g. entrepreneurship/entrepreneurial.

“Let students learn by applying their existing and future competencies to create something preferably novel [authors’ underlining] of value to at least one external stakeholder outside their group, class or school/university”.

As indicated, novelty seems to be important. However, only one out of six case examples mentioned in Lackêus (2016b) had a focus on novelty. For comparison, Shane & Venkataraman (2000) defined entrepreneurship as a combination of enterprising individuals and entrepreneurial opportunities, which meant that entrepreneurial opportunities per se contribute new means-ends relationships - otherwise, it is “just” a chance for optimization.

The role of novelty in entrepreneurial education may be part of the explanation why educators and teachers, especially from many profession-oriented educations like nursing, medicine and teacher training, seem to question what new “value creation” can add to their curriculum and teaching practice, if any. The typical argument has been that being able to fulfill the role as a professional is per se adding plenty of value to society.

In Lackêus (2016b; 2018), a value creation model and framework was proposed outlining 5 types of value, derived originally from economics and sociology. In response to these publications Jones, Penaluna & Penaluna (2020) proposed their model and approach to value creation in relation to entrepreneurial education. Their aim was to attract more attention to the value of learning in itself, including students’ ability to create value for him-/herself *before* creating value for others.

To summarize the historical outline, the value creation concept has developed from a strong focus on contributing economic growth for the individual and society to acknowledging that multiple types of value are at play today. It is questioned, however, whether value creation requires certain capabilities to be learned in advance or is learned simply by engaging in value creating processes. Further, the importance of “novelty” is questioned across approaches and definitions.

2.3 Authors’ approach to entrepreneurial teaching and learning

In line with Lackeus (2016)’s definition of value creation, we lean on approaches involving experiential learning (Kolb, 1984) and learning by doing (Dewey, 1998) in entrepreneurial education and teaching. The experiential learning approach is essential when supporting students in developing entrepreneurial competencies (Arpiainen et al. (2013). Through students’ practical experiences with real-world entrepreneurial processes, they will experience intensive positive and negative emotions, which will improve chances of deep learning and the development of relevant competences. Employing Pittaway & Edwards’ (2012) categories, learning “through” value creation processes is key. Taking this theoretical learning position and with our research interest in mind, Donald Schön (1991)’s concepts “reflection-on-action” and “reflection-in-action” are also highly relevant. Since entrepreneurial education and teaching will be new territories for many HE educators and educational leaders, we are also interested in how value creation models may facilitate their ‘reflection-on-action’ as a stepping stone towards ‘reflection-in-action’.

2.4 Characteristics of existing models of value (creation)

In this section we introduce three models of value (creation) proposed by some of the scholars mentioned in section 2.2. The aim is to present the model characteristics including their overlaps, and to identify barriers and potentials for implementing value creation pedagogy. The review of the models is summarized in Table 1.

2.4.1 Lackêus (2016 & 2018) value framework

As already mentioned, Lackeus (2016b; 2018) presented a value framework in relation to entrepreneurship and entrepreneurial education consisting of five different and partly overlapping types of value: social, enjoyment, economic, influence and harmony value(s).

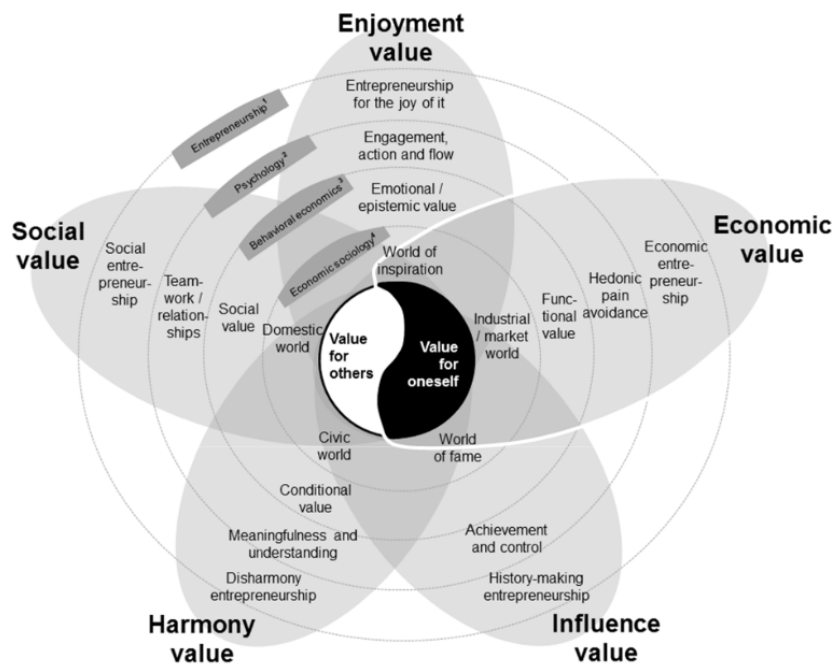


Figure 1: Framework for five different kinds of value, Lackeus (2018 & 2016)

Having argued for value creation pedagogy as an approach to entrepreneurial education with a broad appeal and a solid level of impact, Lackeus (2018) set out to answer the question; what is value - based on a thorough literature review of “value” in economy and sociology. As the model shows, each value may be described according to a specific disciplinary field (e.g. entrepreneurship, psychology etc.). Moreover, value may be for oneself and/or for others. However, as stressed by Lackeus (2018), creating value for others is inherently related to creating value for oneself and vice versa. The economic value enjoys a special status in the model that cannot be ignored. Though Lackeus (2018) has claimed the model and framework to be useful for teachers working with educational design, including to understand the different types of value as objectives for an entrepreneurial (learning) process, the model does not seem to support educators directly in decisions on how to help students learn to create these types of value.

2.4.2 Ouden (2012): An integrated approach to value

Ouden has presented what he describes as an integrated approach to value through an innovation lense, thus, not related to entrepreneurship and entrepreneurial education. Very shortly Ouden (2012) is arguing for four different value concepts representing economics, psychology, sociology and ecology, which can be described on four concentric levels (user, organization, ecosystem and society).

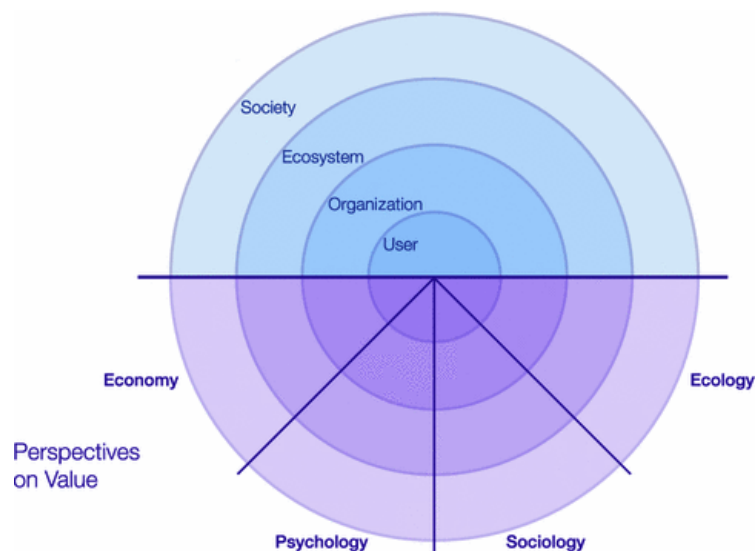


Figure 2: Integrating views on value from social sciences in the value framework, Ouden (2012, p. 23)

Where economic, social and psychological values also can be found in Lackêus (2018)' framework, this model is characterized by its special attention to ecology. Innovation is considered valuable if it is able to contribute all four kinds of value to a user, an organization, an ecosystem or a society as such. Despite the integrated approach acknowledging different value perspectives, no guidance is offered in how educators should support students in developing the capacity required for creating the different types of innovation.

2.4.3 Jones, Penaluna & Penaluna (2020): A unified approach to value creation pedagogy
In contrast to the two previous models, this model does not focus on different types of values and disciplines.

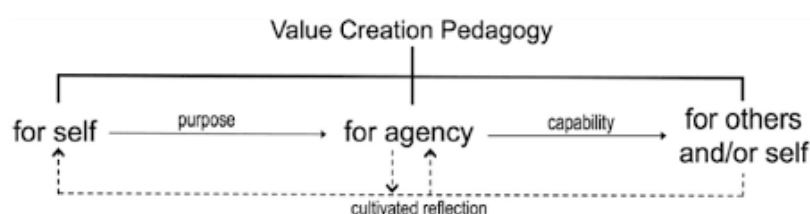


Figure 3: The VCP spectrum, Jones et al. (2020, p. 106)

Instead, Jones, Penaluna & Penaluna (2020) try to indicate a way to balance some approaches to value creation pedagogy they find restricting. Value creation pedagogy is more than happiness of the individual or societal needs. With the VCP spectrum, they propose an approach where both individual, societal needs and capital are leveraged. The paper and model elaborate on the benefits of such a unified approach, implying that students need to focus on learning and the value of learning in itself while studying at the university. After graduation they have the capabilities needed for creating value for others. The need to balance learning and value has also been addressed in a video by Lackeus <https://vcplis.com/2018/10/19/mixing-learning-and-value-creation/>

The characteristics of the three models are presented in Table 1.

| | Lackeus (2016; 2018) | Ouden (2012) | Jones, Penaluna, Penaluna (2020) |
|-------------------------------------|-----------------------------|---------------------|---|
| Focus on multiple types of value | x | x | |
| Focus on entrepreneurial learning | (x) | | x |
| Focus on creating value to others | x | x | |
| Focus on creating value for oneself | x | | x |
| Focus on creating new value | x | x | |

Table 1: Summary of characteristics of existing models

3 Methodology

To gain insight and qualify the discussion on value creation in entrepreneurial teaching at the university, the case study was based on a qualitative and explorative case study involving 12 teachers and educational leaders from The University of Copenhagen (UCPH) and the University of Southern Denmark (SDU) participating in an online transdisciplinary continuing course (2,5 ECTS) on entrepreneurial teaching from August to October 2021. The course was research based but practice oriented, in that participants formulated development goals in advance and integrated their own practice during the course. The participants came from philosophy, health, rhetoric, architecture, science, technology and nurse training and had different levels of expertise in entrepreneurial teaching. They were motivated by different professional competence gaps in terms of knowledge and skills that could qualify their teaching, educational development and discussions with colleagues at their home institution. The course ended by a presentation of participants' course outcome in general and in relation to their development goals. The authors were involved in the teaching part regarding value creation (two course modules).

3.1 Data collection and analysis

The research design consisted of a mixed methods approach (Bazeley, 2018) to get a deeper understanding of the notion of "value" in entrepreneurial teaching and the participants' reflections and experiences of value-creation in that respect.

Questionnaire data from a Danish higher education network of entrepreneurial teachers and expert interviews with stakeholders were collected prior to the course. Towards the end of the course participants contributed document data and completed a questionnaire of their course outcome. A month after the course, participants were interviewed to further qualify the discussion on value creation in entrepreneurial teaching across disciplines.

3.1.1 Questionnaire 1 - Danish network on entrepreneurial teaching

To collect data prior to the course about educators' preferences and interests regarding competence development in entrepreneurial teaching, a questionnaire was distributed in 2020 to all 75 members of UNIEN, a Danish university network for educators interested in entrepreneurial pedagogy and teaching. In addition to a relatively high response rate (N=28) the respondents represented all but one of the eight Danish universities, thus, also potential participants of the course under development. The questionnaire addressed respondents'

understandings of innovation and entrepreneurship, their aimed learning outcome in entrepreneurial teaching, importance and constraints of entrepreneurial teaching at the university, and teaching practice and competence preferences in case of a continuing course in entrepreneurial teaching.

The questionnaire 1 data were collected in SurveyXact and analyzed according to the above mentioned themes, but with a specific focus on “value” and “value creation” in entrepreneurial teaching for the purpose of this paper.

3.1.2 Expert interviews

To go deeper into some of the themes and subjects derived from questionnaire 1, we invited six experts and stakeholders in entrepreneurial education for a 1 hour semi-structured Zoom-interview in fall 2020.

Each interview addressed four themes in relation to entrepreneurial teaching: students’ perspective; teachers’ perspective; value-creation and entrepreneurial teaching and the role of the university. In advance they received the interview themes and filled out a consent of participation including GDPR-issues. The recorded interviews were summarized afterwards to start the analysis before further transcription. To guide the analysis of the first research question in particular, an analytical framework addressing value creation was developed. The conceptual frame was based on the theory and an open inductive reading of the interview material to learn more about how value and value creation was understood and perceived across participants.

3.1.3 Documentary data - Padlets and outcome material

During the course, the participants were invited to discuss in groups “where and why does it make sense to work with value-creation in “your” programs (bachelor, master, courses, groups of students etc.)”, and to post their reflections in a Padlet afterwards. The posts and comments generated input to the discussion of the notion of value in entrepreneurial teaching. Further, the participants’ presentations (powerpoints) at the end of the course contributed data on their outcome of the course including the influence from issues and discussions during the course. This documentary material was analyzed with a special focus on value-creation aspects and perspectives.

3.1.4 Questionnaire 2 - Course participants

To collect data on the course outcome in a more systematic way, participants were asked to fill out a questionnaire in SurveyXact (questionnaire 2) responding to issues regarding the relevance of specific course elements (e.g. the value concept in entrepreneurial teaching), pedagogy and didactics. The respondents should state their outcome of specific issues by choosing among predefined response categories. They could also comment on each question if relevant. Nine out of 12 participants responded. The quantitative data and text data were analyzed with a focus on statements and comments related to the “value-concept” in entrepreneurial teaching.

3.1.5 Individual interviews - Course participants

To follow up on the questionnaire and documentary data seven participants were invited for a 30 minutes semi-structured interview on Zoom a month after the course ended. Five participants accepted the invitation representing engineering (product development), health science (human physiology), science (food and nutrition) and the humanities (audiology and philosophy).

This interview addressed value creation and its relevance to the informant’s setting, as well as the value-model by Martin Lackeûs as a didactic and pedagogical tool to (better) support students in creating value for themselves and others in a broader sense. The participants received the interview questions in advance and filled out a consent of participation including

GDPR-issues. The recorded interviews were summarized afterwards to start the analysis before further transcription. Like the analysis of the expert interviews, the conceptual framework was employed to help identify perceptions and perspectives of value and value creation across participants. When analyzing the data addressing value models in entrepreneurial teaching, we looked for potentials and barriers to participants' use of value creation models in their teaching practice.

4 Results

The results are presented in four parts starting with the general interest and importance of value creation identified among the Danish network members in innovation and entrepreneurship. Then the results concerning the two research questions are addressed, which lead to our proposal of a dynamic value creation model for entrepreneurial teaching and educational development.

4.1 General interest

From the preliminary questionnaire study among the Danish network members, a third of the 28 respondents showed an interest in "value creation" in relation to entrepreneurial teaching. For example, they found "knowledge of value creation" and "gaining experiences with creating knowledge for a company in practice" to be among the most important for students to learn in the field of innovation and entrepreneurship. Further, they had involved students in meta reflections on value creation in their teaching. Taking into account that respondents were members of a professional network interested in innovation and entrepreneurship teaching, a greater commitment to value creating processes was expected.

However, when we started to interview the experts and subsequently the course participants, the complexity of the value concept in entrepreneurial teaching and education also started to come through.

4.2 How do educators at the university perceive and reflect on value creation in relation to entrepreneurial teaching?

4.2.1 Expert interviews

All six experts were engaged in entrepreneurial teaching at the university, either as educators, educational leaders or policy makers stimulating entrepreneurship across the Danish school system. Their background, including their scientific field and experience, became to some extent apparent in their view and reflections on value and value creation. The policy maker had a focus on value creation as the utility of students' learning and obtained self-efficacy at the university, which was further motivated by the third goal in the Danish University Act about universities' societal responsibility. As such, value creation is already inherently part of the university's obligations and therefore fundamental to education in general and entrepreneurial education in particular. The educator and educational leader from the social sciences was concerned about the quality of students' knowledge, competences and analytical skills to solve societal and complex problems in a responsible way to foster behavioral change in people's life. Students should work hard to not only identify problems, but also to find solutions of real value, that is a valuable solution to a social problem, and in a shorter time limit. He had a strong resistance against using the word 'value creation' and assured that he had never used it or said it aloud. It seemed to be associated negatively with political lingo, which he generally "warned" against when communicating about innovation and entrepreneurship to educators at the university.

The educator from the engineering field found students' entrepreneurial mindset most important in entrepreneurial teaching, e.g. to understand the importance of the research phase identifying "problem" and "users" leading to many types of valuable solutions depending on their needs.

The educator from the technology and innovation field also talked about the importance of “cultivating the entrepreneurial mindset” of students, implying a strong desire to sense problems and needs, to look for opportunities and to find solutions to change things for the better. In contrast, the educator and educational leader from a mono-disciplinary field in the humanities, found that value creation was just too concrete to talk about in a university setting. With regard to his own teaching, he facilitated students’ engagement in case-work that invited them to employ their knowledge and competences to produce a product or service. In this way, they should contribute “value” by solving an identified problem or need for a given target group. However, this teaching approach was far from being practiced at his department. Rather, “value” was seen as an inherent quality to the discipline itself waiting for the student to be exchanged when graduating. By comparison, another educator from the humanities was often teaching interdisciplinary entrepreneurial courses and had for many years been practicing a value creation pedagogy. This meant that the students were introduced to a broad value perspective and a teaching approach emphasizing the development of an entrepreneurial mindset and competences by case-work and value-creation for others.

To summarize the expert interviews, contributing value to the society is central to the university, but when it comes to the different rationales for dealing with value creation in an entrepreneurial setting (or not), three perspectives stood out: “value creation” can be an identity promoting quality inherently framing the learning goals of a course but to be exchanged after university; it can exist more directly related to students’ casework and their engagement with an external stakeholder; and finally, the concept takes a lot of words to capture what “value” exactly means in each case. “Value creation” seems to be either too abstract or too concrete, simplifying students’ learning outcome.

4.2.2 Interviews with course participants

The five course participants expressed various perspectives on “value” and “value creation” in entrepreneurial teaching and education, but also commonalities. Most of the participants were involved in curriculum developments at their home institution, which further influenced their reflections on value creation.

They all found “value creation” to be very relevant and important as a “mind setting” competence directed towards global and local needs in society. In courses related to innovation and/or product development, though, the value perspective guided the students’ case-work more directly, while in other cases like philosophy, the value concept rather formed part of the discipline itself and was addressed at a more abstract level. Yet, despite this abstraction, the increasing focus on societal relevance in HE generally influenced how philosophy was communicated and justified today.

The relevance of addressing value aspects in HE was further supported by participants’ Padlet statements. For example, it was seen as an important and engaging factor if students were conscious about contributing something of value to others. Interestingly, when asking participants about the values associated with “their” discipline or curricula, they often referred to the students and *their* motives for studying. For example, students from the engineering field were interested in starting their own business and making money, students from food and nutrition and human physiology wanted to contribute health and sustainability for other people, while students from audiology had a strong feeling for helping other people, e.g. by contributing evidence based methods and tools. Economy values were almost absent here. It also became clear that even talking about the same general value such as ‘social value’ could imply many different meanings, even within the same discipline. As one participant stressed, the value positions need to be made explicit and transparent to qualify value creating learning processes. Interestingly, none of the participants used the word “value creation” in their teaching, nor in their discussions with colleagues or stakeholders, e.g.

regarding specific revisions of curricula. Moreover, they expressed uncertainty about how to include value creation didactically and pedagogically.

From the interview data in particular, two overall approaches seem to dominate: Value creation as a mindset and as a competence. Of course, intermediate forms also exist.

| | Value creation as a mindset | Value creation as a competence |
|--|--|--|
| Didactical strategy | To provide students with disciplinary knowledge, skills (and competences) which eventually can be used <i>for</i> creating values later on in life | To create opportunities for students to learn <i>through</i> value creation processes during the study program |
| Learning philosophy | Cognitive and constructive learning theories | Experience-based learning learning theories |
| Main frustration with the concept and related theories | It is too concrete | It is too abstract: How do we do this in a well-reflected and practically useful manner? |
| Need for | Learning activities that can support the development of a certain mindset | A tool that can support educators' and students' reflection-on-action and reflection-in-action |

Table 2: Two overall approaches to value creation in relation to educational teaching

To summarize the participant interviews, different views and perspectives on value creation were expressed that seemed to depend on the disciplinary field, the course or curriculum participants were involved in and of the values and ideas that students themselves bring into the classroom. The conception of value in entrepreneurial education across disciplines seems to be inherent to the discipline itself; inherent to teaching involving innovation and inherent to the mindset of students attending specific programs and courses. Interestingly, the educators rarely talked explicitly about value in their teaching sessions, neither with the students, nor with other stakeholders in-and outside the university. Further, one should be aware that “value” and “value creation” may not only be inherent to a given discipline or curriculum; the students also bring in personal values that influence how values are constructed and negotiated in class and/or with external stakeholders.

4.3 How can we support teaching and educational development by providing educators with models of value creation as didactic and pedagogical tools in entrepreneurial teaching?

4.3.1. Interviews with course participants and documentary data

As part of the two course modules on value creation, the participants were introduced to the three models in the theory part addressing value in general and entrepreneurial teaching in particular. Based on the framework by Lack  us (2018), they should discuss in groups its potentials and barriers for teaching and educational development. These discussions, in addition to the presentations of their learning outcome and action plans at the end of the course, showed that Lack  us's (2018) framework itself had inspired the participants to discuss and reflect about “values” and “value creation” in relation to their own contexts.

However, the complexity of the value creation concept and the need for more detailed didactic and pedagogical models also became clear.

Regarding the potentials of Lack  us's framework, its dynamic nature was stressed. It could help facilitate discussions and negotiations among students, and with stakeholders as well,

about the core values in a project. Further, it could support educational development by fostering critical discussions among colleagues of what values should be prioritized in future curricula and why. One participant mentioned that the model could stimulate a dialogue with their advisory board with the aim of identifying and co-creating which values should be at the center in specific curricula. To another, it was considered a good dialogic tool in interdisciplinary educational settings. Moreover, it could also help educators and students keep an awareness of “the others” and the local/global interests and needs in courses with more “classical” university teaching.

Regarding its barriers, the model and the associated values were considered too broad, which implied a need to specify the relevant values and to whom in each case.

More of the participants mentioned sustainability as a core value that needed more presence in the model. One participant found “influence” to be equally relevant to all value types, rather than just one out of many values. Yet, another participant needed more guidance and help in clarifying the question of whom students are contributing which values to in a given setting. It was suggested to qualify the model by adding concentric circles of different internal and external stakeholders. Further, a participant found it important to be able to address micro and macro perspectives in discussions of impact in value creation processes, and suggested qualifying the model with the parameter “time”.

Based on the results from the theory and the empirical part, we propose a dynamic value creation model with the aim of serving entrepreneurial teaching and educational development.

5 Proposed value creation model

In line with Lackeûs (2016; 2018) and Jones, Penaluna & Penaluna (2020) we propose a model and heuristic tool with the aim of facilitating discussions, decisions, evaluation and reflections on “value” and “value creation” in entrepreneurial education and teaching.

The model in Figure 4 is targeted towards two types of “actors”: 1) educators wanting to develop enterprise and value creation-pedagogy based teaching; 2) students in need of clarifying core values in a project or case work, including stimulating their awareness of “value” as a dynamic concept that may change during a project as they and/or stakeholders get new insights, and/or the project changes. The proposed model consists of six values: Harmony, Enjoyment, Economy, Social, Cultural and Ecology. We build on Lackeûs’s “flower” model (2018, p. 15), but have added new leaves, left out or extended others inspired by other value models (e.g. Jones, Penaluna & Penaluna, 2021; Ouden, 2012). The cultural and ecological values have been designated core values in a multi-disciplinary perspective instead of being instances of the harmony value only. The influence value has been left out of the model in consequence of its instrumental nature (“mean to an end”) rather than a central value in itself.

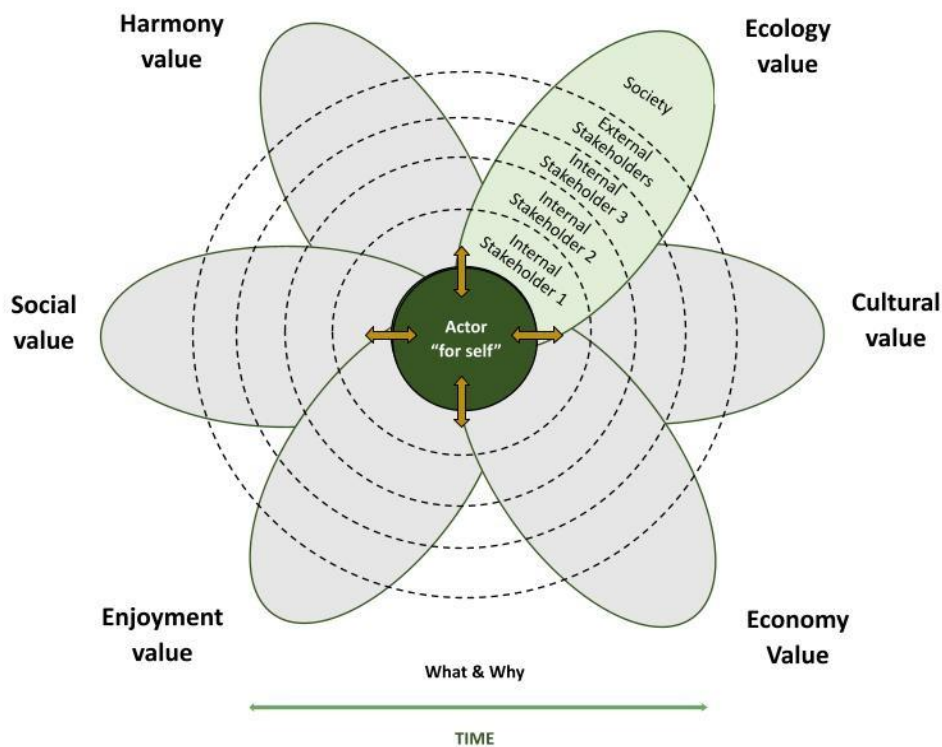


Figure 4: The dynamic value-creation model for entrepreneurial education

At the center of the model we have an actor that may change, implying different “value lenses” accordingly. An actor can for example be a student, a group of students, an educator or a stakeholder. When identifying the relevant values, the actor also has to ask for whom (myself or others). Inspired by Ouden (2012) and to satisfy the need for being able to address values for different levels of stakeholders, we have added a number of concentric circles, each representing an influential internal or external stakeholder seen from the actor’s perspective (micro/macro). For each circle, the actor may ask “what” values are relevant to contribute and “why”; but as the double arrows indicate, these concentric circles also affect what values are relevant to the actor. “Time” should draw attention to the shorter and longer time perspective of value creation processes; e.g. spanning from a single exercise in a lecture to being integrated into a longer case-work, or first contributed after graduation. The double time-arrow further acknowledges the dynamic nature of value creation processes implying that values sometimes need to be re-negotiated in response to new insights and/or changing conditions. In line with Jones, Penaluna & Penaluna (2020), referring to Lepak et al (2007, p. 190), “time” also implies a distinction between *using* and *exchanging* value in value creation processes. According to this conception, value can be the potential satisfaction one gains from using knowledge, skills and/or capabilities (not solely associated with entrepreneurial learning), or it can be the value obtained through exchanging one’s knowledge, skills and/or capabilities.

5.1 Discussion of the model

When it comes to value creation as a core element in entrepreneurship education and related fields at the university-level, conceptual models can serve as a driver for integrating the value

creation perspective in a course or study program. Lackêus' (2018) model, for example, generated important discussions and insight among the participants.

The proposed model, though preliminary in respect of the exploratory case-study, should help stimulate common ground for discussions of "value" across disciplines, stakeholders and educational approaches. The adoption of the model as a dynamic tool for reflection and discussion of what values that might be relevant and why, will always be influenced by the role of the actor, what context or setting is in focus and to whom the value may make a difference. In this way, the dynamic model differs from Lackêus' model in its focus on values associated solely with entrepreneurial education and teaching. For comparison, entrepreneurship in Lackêus's model is only one of four concentric and integrated circles each influencing and influenced by the five core values in his model.

Inspired by Ouden (2012), concentric circles constitute contextual perspectives to be addressed during employment of the model. In contrast to Ouden (2012), however, "value" in relation to entrepreneurial education is not required to be created at all levels and from all perspectives to be considered valuable. For example, students may create value to only one stakeholder outside his group, class or school, in line with Lackêus (2018).

The proposed model also differs from the three value models presented in the paper when it comes to the "actor". The actor can "play" many roles, e.g. student (Lackêus, 2018; Jones, Penaluna & Penaluna, 2021), user (Ouden, 2012), educator or stakeholder. Depending on the actor, the value creation model may trigger different value perspectives and ideas for a design, service or product. For example, if the actor is a student engaged in entrepreneurial casework, the model may serve as a tool for her continuous internal and external dialogue with herself, group members, educators and stakeholders to understand, discuss, negotiate and to formatively assess the relevance of the value creation process.

From an educator's and/or educational leader's perspective, the model may serve several purposes:

- Facilitating critical reflection, dialogue and discussion of the concept of value creation in entrepreneurial education
- Tool for educators and educational leaders to develop courses and study programmes including value creation perspectives and thoughts of progression
- Tool for educators to negotiate objectives of projects and casework with external stakeholders
- Strengthening students mindset and mental models about their ability to contribute value (identity formation) on short and long term as well as on micro-/macro and local-/global level
- A tool that can support summative and formative evaluation including examination in relation to a given context

Value creation-pedagogy cultivating students' mindset and mental models about their ability to contribute value in the short and long term is key in entrepreneurial teaching. The model may as well provide some guidance for developing or teaching venture creation pedagogy-based courses.

Having said that, we also have to acknowledge that "values" are not just created through entrepreneurial teaching, but already exist in the classroom by the personal values that students and educators attribute to a specific field or discipline.

5.2 Limitations of the study

The role of the authors as educators at the continued training course should be mentioned here: We did not act as researchers until teaching the modules on value creation was completed in order to avoid mixing up the two roles. Hence, when interviewing the course participants we had formally finished up our teaching, but informally we were still engaged

in the course and would participate in the final presentations of the training course (low-stake exam format). Our less neutral positions may have affected the interview situation. To follow up on the exploratory study, we plan to carry out a more comprehensive study including surveys and/or interviews with more educators regarding their understanding of value creation in regards to entrepreneurial teaching, as well as having a larger number of educators to test the model for one or several of the outlined purposes. According to the interviewees, the majority of their students had preferences for a particular type of value. This will inevitably influence the dynamics in class and when interacting with stakeholders, which should be investigated further. Preferences for value might even be a decisive factor for which students are attracted to a certain study programme and/or who are most likely to succeed finishing their studies and live meaningful professional lives afterwards.

6 Conclusion and implications

This small-scale empirical study documents that the value creation perspective appeals to a broad range of teachers across HE institutions, but also that they emphasize different types of value and ways to approach “value creation” at the university. In this way, the study presents insights into how educators and educational leaders understand value creation in different disciplinary contexts and what role they consider it to play in their present and future practice. One particular distinction is whether value creation is considered a more implicit mindset or an explicit competence that educators and educational leaders need to create rooms for students to practice already through their studies. Interestingly, the educators rarely talked explicitly about value in their teaching sessions, neither with the students, nor with other stakeholders in-and outside the university. Further, “value” and “value creation” may not only be inherent to a given discipline or curriculum; the students (and educators) also bring in personal values that influence how values are constructed and negotiated in class and/or with external stakeholders.

From the analysis of three existing value creation models, Lackéus’ (2018) “Framework for five different kinds of value” has probably been the most useful model in order to guide curriculum and teaching development in higher education, and when you explicitly want to support students in developing competences that enable them to create value for oneself and others. The framework was found to underpin important dialogue. However, the participants also found shortages in the model: Firstly they argued for adding other types of value such as sustainability/environment, culture and health. Secondly, some of the participants expressed a need for a teaching and educational development model that put focus on progression with regard to time and stakeholders. These identified shortcomings led to the development of a new value creation model. The presented dynamic model has potential to serve as a stepping stone for introducing the value creation perspective in teaching at HE institutions - and consequently, contributing value “back” to society.

It is our hope that the presented model can function as a heuristic tool for educators, educational developers and educational leaders who wish to develop and implement entrepreneurial education where students develop *competencies* in value creation. It is very important to stress that it is not our intention that full study programmes should be about initial value creation for others. Students also need to gain discipline-oriented knowledge, skills and competences that can be applied in value creation processes during their studies and afterwards. The model is not only intended for educators, educational developers and managers. It is also intended for facilitating reflection and discussion among students e.g. for negotiating the purpose of an entrepreneurial study project. Also we believe it can be used by both educators and students to facilitate dialogue and negotiations with external stakeholders about research and study projects.

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