Co-Creation in Higher Education

CREATIVE EDUCATION BOOK SERIES

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Scope

The knowledge, learning and creative economies manifest the changing significance of intellectual capital and the thickening connections between economic growth, knowledge and creativity. Increasingly economic and social activity is comprised by the 'symbolic' or 'weightless' economy with its iconic, immaterial and digital goods. This new digital knowledge economy includes new international labor that rely on developments in information and communication technologies (ICTs) that are changing the format, density and nature of the exchange and flows of knowledge, research and scholarship. Delivery modes in education are being reshaped. New global cultures of knowledge and research networks are spreading rapidly. New forms of openness and networking, cross-border people movement, flows of capital, portal cities and intensive development zones all are changing the conditions of imagining and producing and the sharing of creative work in different spheres. At the centre of is the economy/ creativity nexus. But are education systems, institutions, assumptions and habits positioned and able so as to seize the opportunities and meet the challenges? This new series investigates all the aspects of education in (and as) the creative economy in order to extend the dialogue about the relationship between contemporary higher education and the changing face of contemporary economies.

Co-Creation in Higher Education

*Students and Educators Preparing Creatively and Collaboratively
to the Challenge of the Future*

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All chapters in this book have undergone peer review.

Printed on acid-free paper

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SETTING THE STAGE FOR CO-CREATION IN HIGHER EDUCATION

RETHINKING CO-CREATION

With this introductory chapter we wish to set the stage for the perspectives behind the present contribution. The broad field to which our research studies ascribe will be presented and the structure of the book unfolded. Our ambition is not to review exhaustively the many – and still growing in number – contributions that have been dedicated to the investigation of co-creative practices. Rather, we wish to make visible and explicit the common thread among the different chapters, as well as to relate our contributions to a specific field of studies and a specific need for knowledge. First of all, we should spend some words to clarify the concept of co-creation.

Contributions on co-creation have so far touched upon specific themes, such as:

- design thinking
- product innovation
- organisational development
- social innovation/management research
- student direction
- conceptual research in general

Contributions that make use of the concept of co-creation are primarily design and business oriented. Prahalad and Ramaswamy (2004) are often mentioned as the initiators of co-creative discourses. However, their perspective on co-creation is confined to the market discourse. In their understanding, co-creation is related to the value creation that customers-market relations can generate bringing new values into the market. Their ground-breaking role is recognised, probably on the grounds that they were the first to write about optimising customer experiences through co-creation (co-opting).

Degnegaard's review (2014) considers a wide range of disciplines in his specification of the concept and we consider this as a good place to start. We refer to his review for a thorough conceptual stage setting. Sanders and Stappers (2008), instead, represent one of the major research areas in co-creation: design thinking. Voorberg et al. (2014) contribute with a review that is focused on social innovation. Camargo-Borges and Rasera (2013) represent a second direction within co-creation: a social constructivist perspective on organisational development. As Degnegaard

(2014, p. 99) clearly illustrates, business and social studies are the areas that have mostly contributed to reflections on and applications of the concept of co-creation. He therefore concludes that "there is very little research-based literature so far on how the field of co-creation has developed, and of how the concept is being established and on the future trajectory of the concept of co-creation" (Degnegaard, 2014, p. 96). Regarding the design thinking perspective, we refer to Liedtka's extensive work (2014) and her collaboration with Ogilvie (Liedtka & Ogilvie, 2011).

Our anthology focuses on approaches to teaching and learning in Higher Education (HE) with a special focus on collaborative, co-creative and distributed perspectives. As such, it aims to follow up on research in the area of co-creation and to apply it in the new context represented by Higher Education. With this collection of articles, we wish to show the diversity of approaches to co-creation, on the one hand and, on the other, we intend to give a specific direction to these studies, which is humanistic, sociological, creative and pedagogical – a direction that is still in need of further investigation and research into co-creative practices. In accordance with our purpose, we look at co-creation as the process of creative (original and valuable) generation of shared meaning and development.

HIGHER EDUCATION: CHALLENGES

HE institutions are here seen in the light of the societal developments and of recent directions in academic workplaces, nationally and internationally. The academic labour market has been changing rapidly during recent decades and new developmental tendencies in how to handle the development and its challenges have led to the fact that higher educational pedagogies are emerging (Krogh, 2013). Educating students to be able to develop skills that will prepare them to manage personal as well as social and occupational challenges in ever-changing, global and technology-based settings is progressively becoming the aim of educational institutions. According to the transformations in society, HE institutions are changing their very roles, from focusing on research and teaching to having focus on research, teaching and more effective learning. This includes keeping their attention on the emotional, sensory, affective and psychological sides of learning and teaching, together with a general approach to curriculum development that is creative and innovative. At the same time, these ideals have to face a harsh reality: the number of students is increasing more and more. This makes motivational, relational and affective issues even more relevant. We have to ask ourselves, are the students increasingly unengaged and detached? And are the HE institutions able to engage and challenge students optimally? However, we know from research and experiences (Aarup Jensen, 2015) that students seem to react according to the structures, culture, and human beings (staff) they meet in the educational systems, if we as educators invite and allow them to do so. Therefore, we must not underestimate the influence that the institutional system and staff have on the students' learning and development. If we wish to prepare our students for a yet unknown future, we must work on academic excellence, as well as psycho-affective

readiness (mindfulness, resilience, collaborative processes, creativity). How can the HE institutions of the future prepare for this educational task?

We know a great deal about what makes learning happen (Ramsden, 2003; Gibbs & Tang, 2007), and in HE institutions a large number of teachers carry out experiments that approach and involve the students in such a way that they learn skills and abilities to meet future challenges.

In Denmark, principles of collaborative and co-creative learning have found their institutional places. Aalborg and Roskilde universities have for years been organising their pedagogy based on principles such as problem-based learning (PBL), student-led directions and participation, students taking on responsibilities and teachers as supervisors, facilitators (Bovill, 2011). At other institutions (e.g. UCN[1] in Denmark, Uppsala University/CEMUS[2] in Sweden), principles such as learner-led (Iversen et al., 2015) and co-creation processes in teaching activities have resulted in increased student engagement and involvement, and high-level learning outcomes.

It is not simple to change educational cultures. Many diverging interests, traditions, values, and emotions are influencing these changes and the very possibility of them happening.

This book will cover and document new research within aspects of working with teaching and learning approaches aimed at empowering students to handle their lives during their education and towards an occupational life.

There is not one way of doing this, all kinds of teaching strategies must be based on very essential curricular arguments for making the relevant choices for doing it. We refer here to the principles of alignment (Biggs & Tang, 2007) or the educational design (Dale, 1999; Jank & Meyer, 2006).

The basic themes we are interested in researching are:

- Problem-based learning (PBL)
- Co-creation
- Learner-led teaching
- Student-centred approaches
- Assessment
- Arts-based methods
- Collaborative dynamics
- Interconnection of cognition/emotion
- Creativity in HE

WHY CO-CREATION?

The relevance of investigations and research on the concept and practices of co-creation is many-sided. The concept is intuitively perceived and understood, as is the experience of shared values across different stakeholders. Not as intuitive, though, are the ways in which individuals and groups can develop awareness of the practices that are linked to co-creative experiences.

Within the framework of Higher Education this is even more relevant: for a future that needs to strengthen human relationships and practices of sharing, the ability (or disposition) of creating a shared value in spite of differences is strategically fundamental.

Can we envision and describe co-creation as deliberate research strategy for the future? Can we imagine a future where co-creation is a deliberate pedagogical strategy?

Often educators work with co-creation in their teaching but lack a context to reflect, analyse and conceptualise their co-creative practices. With this book based on our research in different HE areas, we wish to engage in a conversation with scholars, researchers and practitioners, and we wish to think together with educators *about* co-creation, as a framework that can explain relational dynamics in Higher Education for society in the future.

Our target group is an international community of scholars, researchers, educators, artists, leaders and consultants at Higher Education institutions. Our book is primarily aimed at an academic reader. However, reflective practitioners within adult education in a broader sense might be interested in the topic, especially if their profession involves educational or organisational tasks (adult learning or life-long learning). Moreover, the book is meant as inspiration for educators, facilitators and leaders, who are interested in the concept of co-creation and its applications in different HE educational areas. At academic level, we believe that several graduate and postgraduate courses can actively use the book, as a teaching or inspiration resource.

We suggest that attention to co-creative processes is a trend that is going to grow in the future, together with the growing of interest in creative solutions for future education and organisation. With the global focus on our main and intertwined themes, we intend to address an international audience of scholars in the Western world as well as countries with growing economies. Where, globally, countries have conceptualised and formulated a strategic interest in the field of Higher Education, we can offer original and relevant research.

It is our hope that this book will inspire a large target group from the fields of education, pedagogy, leadership, consulting and development. Last but not least, we wish to contribute meaningfully to the future development of these fields, opening up new debates on co-creation and on how to prepare our students in the best way to handle academic tasks and challenges in the future.

BOOK STRUCTURE

The present volume is the product of a co-creative process that the authors went through and that we, as editors, facilitated. The chapters cover a variety of topics and interventions within Higher Education. Their authors have worked collaboratively, giving each other feedback and suggestions. This generated internal conversations that – hopefully – generated a shared value for all.

In Chapter 1, *Re-thinking curriculum for 21st-century learners – Examining the advantages and disadvantages of adding co-creative aspects to Problem-Based Learning*, Annie Aarup Jensen and Lone Krogh discuss an experiment of changing curriculum in the direction of students, to a greater degree, becoming 'leaders' of their own learning processes and how this can be done within the formal framework of an educational programme. They argue that the Problem-Based Learning (PBL) principles as they are practiced at Aalborg University with focus on concepts such as student direction, problem solving, peer feedback and teachers facilitating the learning processes and the competence development can be transferred to other teaching areas. The case in point is a 1st year BA in Organisational Learning, where an experiment was carried out. Students were offered the possibility of participating in co-creative and collaborative processes with the teachers as far as the formal framework of the programme allowed. Some of the results of the experiment are presented. Among other things they show that most students wish to be a part of the co-creation processes regarding teaching activities. However, some also seem to prioritise more traditional teaching forms. From the results they also see that introducing these kinds of change in an educational institution is not necessarily an easy task for neither teachers nor students, as it entails a shift in roles for both.

In Chapter 2, *Co-creating knowledge – students and teachers together in a field of emergence*, Ann-Merete Iversen and Anni Stavnskær Pedersen introduce co-creative processes as a means to re-inventing teaching in Higher Education. A methodological approach is presented in which significant parts of knowledge production and knowledge exchange are based on co-creative generative dialogue between students and teachers. It is argued that co-creative methodology enhances the societal relevance of education and at the same time prepares students for becoming 21st-century knowledge workers.

Chapter 3, *Facilitating reflective learning and co-creative teaching by portfolios in problem-based learning (PBL)*, will mainly focus on how the development of teaching portfolios can facilitate new teaching staff's reflective capability in a PBL environment. Chunfang Zhou, Ole Ravn, and Xiangyun Du look at the social theories of learning that regard a co-created curriculum model as a basis for developing a community of practice, as in PBL, where all learners and teachers are reflective partners who contribute to a joint enterprise, a shared repertoire and mutual engagement. One of the authors of this chapter describes how reflective didactic experiences were developed by her teaching portfolio through participation in the university pedagogy programme at Aalborg University (AAU), Denmark. The discussion of this case leads to the following findings: (1) the teaching portfolio is an effective means of facilitating new staff's self-enhancement and shaping professional identity towards being a reflective teacher, and (2) the teaching portfolio is an effective means of building reflective conversations for oneself and between supervisors in a PBL staff development programme, and of developing the value of co-creation in a PBL environment.

In Chapter 4, *Teaching co-creation in higher education through dance exercises*, Claus Springborg explores how to use exercises from improvised couples dances, such as tango and contact improvisation, to teach four co-creation capabilities: Voicing, listening, respecting, and suspending (Isaacs, 1999). He first looks at the challenge of teaching these co-creation skills from two related perspectives: deutero-learning (Bateson, 1972a) and embodied neural metaphors (Lakoff, 2012; Springborg, 2015). The perspective of deutero-learning highlights that an important part of learning co-creation skills is the process of internalising the structure of the learning context itself. The perspective of embodied neural metaphors highlights the importance of considering which sensory-motor experiences students are exposed to within the learning context and whether these can be used as embodied metaphors for the more abstract co-creation skills and concepts taught. The author proposes how exercises elsewhere used to teach improvised couples dance can provide both a learning environment structure and direct sensory experiences, useful for the teaching of co-creation skills, such as voicing, listening, respecting, and suspending.

In Chapter 5, *Co-creation in PBL project work*, Ole Ravn uses the notion of co-creation in the particular context of higher education where the teaching by supervisors and the learning processes of students are entangled in a co-creative process in a PBL setting. The scenario is the situation where the teaching process is developed continuously during meetings with students and the specific content is what students bring into the teaching and learning situation. And the students' learning processes and knowledge production are shaped and formed by a co-creative process, fuelled by their own and the supervisor's contributions. Based on the above reflections on the key elements in the area of teacher-student co-creation, this chapter takes as its problem formulation: how can a supervisor establish an open space for a co-creative process between supervisor and a group of students?

The approach to developing a vocabulary about this open space for co-creativity falls into three steps. First, the idea is to pinpoint more clearly how we can conceptualise the open space for co-creative processes in education. Here the framework developed by Helle Alrø and Ole Skovsmose in their study of dialogical processes in education is discussed. Their work builds, among other sources, on Paulo Freire's ideas of dialogical pedagogy.

Secondly, the idea is to look into supervision approaches and discuss how they relate to the developed co-creative process space. Finally the chapter establishes some reflections on how to open the co-creative space in a fruitful way.

In chapter 6, *A cogenerative dialogue: reflecting on education for co-creation*, Henrik Find Fladkjær and Kathrin Otrel-Cass utilise Roth & Tobin's method of cogenerative dialogue (2001) to co-construct and analyse a teaching innovation. The teaching innovation was based on the principle of peer learning and involved students going through cycles of evaluating, critiquing and co-constructing their learning. More specifically, students discussed first in groups with a more senior peer, then paired up with an opponent student to discuss each other's projects, not only to share feedback but also to come up with solutions. The authors' cogeneration

foregrounded different insights and voices and how they have come together to formulate a joint product, this chapter.

In Chapter 7, *Theatre as co-creative space and as inspiration for higher education*, Tatiana Chemi and Pierangelo Pompa look at collaboration in the theatrical creative process, which defines a very interesting and fertile paradigm for all kind of co-creative dynamics. Theatre can be co-creative or not. Theatrical co-creation implies structurally a pedagogical and ethical process, since it is founded on the development of embodied skills and values, which are always, by their own technical nature, relational and social. In the extra-daily time and space of theatre laboratory work, the traditional notion of authoriality is abandoned, and a collective body-mind arises as an unforeseeable discovery for each individual.

In Chapter 8, *Co-creating the joy of writing: creative analytical writing practices*, Charlotte Wegener suggests a way to think about and teach creative co-created writing practices that makes writing a key to both learning and identity building for students. It suggests ways in which writing becomes a way of thinking, learning and being in the world, and allows for joy. The chapter presents examples from writing supervision based on a model of three drivers for creative co-created writing called 'the Toolbox', 'the Building Materials' and 'the Building'.

The purpose of Chapter 9, *Co-creating meaning through Artful Inquiry*, is to point out the need for aesthetic and artful methods for reflection, learning and co-creation. The context is management education focused on developing innovation competency. The data derive from action research, observations and written reports. The main contribution of this chapter is the introduction of a model for Artful Inquiry, which involves constructing powerful questions and finding appropriate artistic methods for reflecting and for co-creating with people or with artistic material. Lotte Darsø argues that Artful Inquiry can access deeper layers of knowing, which would otherwise remain tacit and non-conscious. The findings show how new insights can be obtained through drawing with dominant and non-dominant hands and through reflecting with artistic processes. The material 'speaks back' in surprising ways, metaphorically and symbolically. Also the impact of leadership icons, as well as co-creating with tangible materials, can give rise to new meaning and transformational learning.

In Chapter 10, *Arts-involving Burning Man festival as co-creation in social education studies*, Julie Borup Jensen addresses the topic of co-creation in student learning processes concerning democracy and citizenship in social education studies at the Danish University College, Northern Jutland. The co-creational effects of experimenting with an arts-involving festival, inspired by the new Nevada Desert event *Burning Man*, in collaboration with pedagogical staff and residents of local refugee and immigrant institutions and local communities, are investigated by means of socio-cultural and cultural-psychological perspectives on learning processes. Original data is drawn from a qualitative action research project that aimed at developing practice and knowledge about arts involvement in the local social education programme. The study revealed potential and challenges in respect

of using artistic and aesthetic expressions, methods and activities as a way of framing the co-creational aspects of student learning within the area of democracy and citizenship. The findings show that working with co-creation in teaching may lead to community building, building of relationships within the local community, visibility in society and, last but not least, student learning and development of understanding of democracy in practice. The findings also indicate that there are challenges in respect of scaffolding a co-creational process that requires a great deal of negotiation of responsibility and participation.

In Chapter 11, *Bizchange: co-design meetings to enable stakeholder-supported design moves*, Sune Gudiksen, Søren Bolvig Poulsen et al. take their point of departure in co-creation as a design negotiation endeavour. Through an engaged scholarship approach and in a four-month course *BizChange,* they describe a series of co-design meetings in three different digital media student-company cases. In particular, they explore in what way the students manage to get across perspectives, ideas and concepts to decision makers and stakeholders. This includes how to approach stakeholder involvement and associated constraints, the inclusion of experienced peers to spot blind spots and the use of co-design negotiation tools as a means of involving a circle of stakeholders.

In Chapter 12, *Teaching co-creation: paradoxes in rock and pop ensemble classes*, Turid Nørlund Christensen looks at the domain of arts-based rock and pop music, where co-creative processes are essential in the artistic formation of an authentic and original band expression. However, methods for teaching the tacit knowledge of these artistic co-creative competences in Higher Education have yet to be developed. Teaching ensemble playing from an artistic co-creative perspective was researched from an instructor's point of view in a pedagogic development project at the Royal Academy of Music, Aarhus (RAMA). An ensemble course was designed and facilitated through problem-finding group improvisations, mimicking the exploratory process of co-creative rock bands. Experience-based group reflections were facilitated, aiming at identifying and transforming the domain-specific tacit knowledge to propositional knowledge from a social constructivist perspective. The didactics and methodology were conceptualised from a pragmatic approach to interdisciplinary research in co-creation, co-design, social systems, cultural sociology, psychology, educational theory, dramaturgy, and domain-specific aesthetic and educational studies, and researched using audio recordings, feedback from students, class notes and self-observations.

Two main contributions resulted:

- Structures for a co-creative educational design approach, incorporating the informal educational characteristics of rock and pop ensembles and corresponding learning objectives.
- A mapping of the structural elements of the educational co-design approach and corresponding co-creative competences, derived from the aesthetic characteristics of rock and pop ensembles.

In Chapter 13, *Designing learning for co-creation – conceptual and practical considerations*, Dorina Gnaur and Inger Marie Larsen-Nielsen explore the practical implications of the concept of co-creation in a professional context from an educational point of view. The question they are posing themselves is: how can higher and further education (HE) educate for co-creation, that is, provide educational frameworks that respond to the societal demand for co-creation, particularly within the public welfare sector? First, they focus on which organisational and individual requirements an HE learning design should take into account in order to support the diffusion of co-creation competences. Then they argue for the need to integrate these considerations in the learning design and demonstrate a practical application in the form of a didactical design. They call this a hybrid learning design, in that it takes advantage of technological developments to mediate co-creative learning in multiple learning environments.

NOTES

[1]   University College North Jutland.
[2]   The Centre for Environment and Development Studies.

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