



University
of Applied
Sciences



UNIVERSITY OF TWENTE.

3E CONFERENCE PROCEEDINGS

Book of Abstracts

3E Conference – ECSB Entrepreneurship Education Conference

2018

3E CONFERENCE – ECSB Entrepreneurship Education Conference

© 2018

ECSB European Council for Small Business and Entrepreneurship

SECRETARIAT

c/o University of Turku, School of Economics

Rehtorinpellonkatu 3

20500 Turku

FINLAND

e-mail: info@ecsb.org

internet: www.ecsb.org

ISSN 2411-3298

Preface

Dear colleague,

It is with great pleasure we welcome you to the *3E Conference - ECSB Entrepreneurship Education Conference 2018*. This book presents the abstracts of the sixth 3E Conference held on 16–18th May 2018 in Enschede, the Netherlands. The Conference is hosted by the University of Twente, Saxion University of Applied Sciences and the European Council for Small Business and Entrepreneurship (ECSB).

Entrepreneurship Education is recognised as a way to support learners, at all levels of education, to develop the skills and attitudes to work within, and adapt to, a changing global economy. However, we should not lose sight of the capacity to help learners to engage critically with the drive for entrepreneurship; encouraging them to engage with the positive and negative impacts; and exploring new and diverse ways of creating value for European society and the economy. In doing so, we can also help them to understand their role as enterprising employees, as well as discovering and developing their entrepreneurial potential. This context requires us to reflect upon what we teach, how we teach and ultimately the rationales for our chosen approaches. As educators we also need to engage those outside the academia, sharing our experiences and creating a dialogue with practitioners and policy makers at all levels and with local, national and international business communities.

Through an innovative and unconventional format, the 3E Conference has established a new approach for entrepreneurship conferences. Unlike many conventional academic events, the Conference focuses on problems and questions rather than on ready-made solutions and presentations of research findings. It offers an exclusive and engaging opportunity for educators, researchers, practitioners and policy makers to debate and exchange experiences of the major challenges and advances in enterprise education, with a special focus on Europe.

The theme of 3E 2018 is “*Entrepreneurship Ecosystems – Engaged scholarship and living labs*”. Following the success of last year’s three-day model, this year there were also two calls, one for research papers and one for practitioner development workshops (PDW). The first day, 16th May, is dedicated to 18 practitioner development workshops. On 17–18 May 46 research papers are presented. We wish to thank the reviewers and session chairs for their valuable work. The conference is held this year in Twente, one of the most entrepreneurial ecosystems of the Netherlands and is hosted by all levels of education and their entrepreneurial support organisation.

On behalf of the organisers, we want to thank all the presenters and authors for their papers and wish you an inspiring, exciting and stimulating 3E Conference.

Ruud Koopman and Aard Groen
Conference Chairs
University of Twente
/Saxion University of Applied Sciences

Silke Tegtmeier
President of ECSB

In cooperation with:

**roc van
twente**

NovelT

USASBE
United States Association
for Small Business and
Entrepreneurship

advancing entrepreneurship worldwide
ICSB
International Council
for Small Business

 SimVenture
evolution

SimVenture
Inspiring Business Minds

Table of contents

PRACTITIONER DEVELOPMENT WORKSHOPS

CREATING AND RUNNING AN ENTREPRENEURSHIP MASTERS PROGRAMME WITH NO DISSERTATION OR EXAMINATIONS	11
Nigel Adams and Kristian Mackie	
HOW CAN A CROSS-EDUCATIONAL FRAMING INFLUENCE THE ENTREPRENEURIAL MINDSET OF STUDENTS? ..	12
Frederikke Dybdahl and Malene Hangaard Alstrup	
BEST PRACTICES IN ENTREPRENEURSHIP EDUCATION.....	13
Kaija Arhio and Leena Eskola	
HOW FACEBOOK AS E-LEARNING PLATFORM CAN HELP TEACHERS TO ENGAGE STUDENTS ON ENTREPRENEURSHIP EDUCATION?	14
Fabiane da Costa e Silva, Sandra Regina de Holanda Mariano, Joysi Moraes and Kare Moberg	
FOR RETIREMENT AGE AND BEYOND? CO-DESIGN OF ENTREPRENEURIAL SKILLS TRAINING.....	15
Sarah Davis, Breda Kenny, Aisling Conway and Olive Lennon	
SELF-FORMATION AS AN ENTREPRENEURSHIP EDUCATION FOR NON-BUSINESS STUDENTS	16
Jonas Sjøgaard Grøn and Michael Rene Kristiansson	
THE ROPE MAKER'S PEDAGOGY IN TEACHER EDUCATION	17
Heikki Hannula	
INNOVATION WITHIN THE UNIVERSITY BY ACTIVATING EMPLOYEES USING ADOBE'S KICKBOX.....	18
Martin Haring	
SUPPORTING PEOPLE FROM CHILDREN TO ENTREPRENEURS IN DIFFERENT (EDUCATIONAL) CULTURES	19
Lenita Hietanen, Mats Westerberg, Per Blenker, Matthijs Hammer, Ruud Koopman and Heikki Ruismäki	
HOW CAN WE DESIGN AN INFORMAL MULTIDISCIPLINARY ENTREPRENEURSHIP SUMMER PROGRAMME FOR OUR NEW GENERATION Z TEENAGERS FROM A VARIETY OF SOCIO-ECONOMIC BACKGROUNDS?	20
Maeve Liston	
CLINICS OR CASE STUDIES? - FACILITATION OF HIGHER LEVEL LEARNING OBJECTIVES	21
Sandra E. Malach and Robert L. Malach	
CAN ENTREPRENEURSHIP EDUCATION ENABLE FLEXIBLE THINKING USING EFFECTUATION AND CAUSATION?	22
Verena Meyer and Tatjana Timoschenko	
DESIGNING AND ASSESSING LEARNING IN VENTURE CREATION PROGRAMS.....	23
Karen Williams Middleton and Lise Aaboen	
WHY ENTREPRENEURSHIP NEEDS MORE STORIES: THE POWER OF STORYTELLING IN THE ENTREPRENEURIAL CLASSROOM	24
Helle Neergaard	
BACHELOR THESIS – VALUE FOR COOPERATION PARTNERS.....	25
Karen Williams Middleton and Lise Aaboen	

INTERDISCIPLINARY TRADES EDUCATION IN SUPPORT OF RURAL ENTREPRENEURSHIP AND ECONOMIC DIVERSIFICATION: CONCEPTUAL FRAMEWORK TO PRACTICE.....	26
Cheryl O’Connell	
TOWARDS OPEN ENTREPRENEURSHIP? A LEARNING-CENTRED APPROACH.....	27
David Rae	
STOWAWAYS IN MIXED ENTREPRENEURSHIP COURSES.....	28
Mohsen Tavakoli, Christian Friedemann and Joseph Tixier	

RESEARCH PAPERS

EDUCATING START-UP COUNSELLORS – CHALLENGES IN THE CONTEXT OF WOMEN ENTREPRENEURSHIP	30
Annett Adler	
CROSSING THE THRESHOLD – TEAM STUCKNESS IN ACTION LEARNING	31
Sigrid Westad Brandshaug, Roger Sørheim and Marte Konstad	
SOCIAL ENTREPRENEURSHIP RESEARCH AND EDUCATION. CONTRIBUTIONS FROM THE ECONOMY FOR THE COMMON GOOD.	32
Vanessa Campos, Joan-Ramon Sanchis and Cristina Navarro	
UNDERSTANDING STUDENTS’ ABILITY TO RECOGNIZE ENTREPRENEURIAL OPPORTUNITIES: THE ROLE OF NEED FOR AUTONOMY AND PASSION FOR INVENTING	33
Sílvia Fernandes Costa, Kasia Zalewska-Kurek, Arjan Frederiks and Isabella Hatak	
THERE ARE STILL FOUNDATIONS TO BE LAID - AN ANALYSIS OF ENTREPRENEURSHIP EDUCATION IN STEM DEGREE PROGRAMS	34
Britta M. Gossel, Kathrin Schleicher, Anja Solf, Maximilian Krauß, Christian Weber and Andreas Will	
DESIGN THINKING PATTERNS IN ENTREPRENEURSHIP TEXTBOOKS – A CONCEPTUAL ISSUE FOR ENTREPRENEURIAL EDUCATION.....	35
Christian Greiner and Tom Peisl	
LEARNING SITUATIONS OF ENTREPRENEURIAL DECISION-MAKING IN VOCATIONAL TEACHER EDUCATION.....	36
Birgitte Halbfas and Verena Liszt	
THE FORGOTTEN MAJORITY OF VCP STUDENTS	37
Dag Håkon Haneber and Torgeir Aadland	
HOW STUDENT ENTREPRENEURS DEVELOP THEIR SOCIAL NETWORK OVER TIME.....	38
Martin Haring	
ENTREPRENEURSHIP AND SPORTS: A CHALLENGING COMBINATION	39
Ben Hattink	
ENTREPRENEURSHIP AND MENTAL HEALTH	40
Cecilie Haukland and Einar Rasmussen	
CONCEPTUALIZING “ENTREPRENEURIAL-ORIENTED SUSTAINABILITY EDUCATION” THROUGH BIBLIOMETRIC METHODS	41
Roberto Rivas Hermann and Marilia Bonzanini Bossle	

ENTREPRENEURIAL IDENTITY FORMATION THROUGH IDENTITIES OF A MUSICIAN AND A MUSIC TEACHER	42
Lenita Hietanen and Heikki Ruismäki	
ENTREPRENEURIAL “CLASSROOM” - EXPLORING TEACHER’S CREATIVITY IN 11 COUNTRIES	43
Mia Hocenski and Ljerka Sedlan König	
THE ROLE OF SOCIAL MEDIA IN ENHANCING STUDENTS’ ENGAGEMENT	44
Erwin Huang and Janice Ng	
THE USE OF EXPERIENTIAL TEACHING AND LEARNING (T&L) MODEL	45
Erwin Huang and Janice Ng	
UNDERSTANDING THE EMERGING ADULT THROUGH THE HIDDEN INTERPLAY OF PEDAGOGY AND ANDRAGOGY IN ENTREPRENEURSHIP EDUCATION.....	46
Gustav Hägg and Agnieszka Kurczewska	
IS STRATEGIC MANAGEMENT AND FIRM GROWTH A GENDER RELATED ISSUE?	47
Sanna Joensuu-Salo, Kirsti Sorama and Salla Kettunen	
ENTREPRENEURSHIP EDUCATION - EDUCATING FOR AN UNPREDICTABLE LABOR MARKET?	48
Nils Magne Killingberg	
WHAT IS THE DISTINCTIVENESS OF ENTERPRISE EDUCATION FOR NON-BUSINESS DISCIPLINES?	49
Inna Kozlinska, Anna Rebmann and Ulla Hytti	
INSPIRE! BUILD YOUR BUSINESS - A GAME-BASED APPROACH IN ENTREPRENEURSHIP EDUCATION	50
Ines Krajger and Erich J. Schwarz	
CLASSIFYING ENTREPRENEURIAL EDUCATION INTO FIVE BASIC TYPES THROUGH FOUR QUESTIONS GROUNDED IN DEFINITIONS OF ENTREPRENEURSHIP	51
Martin Lackéus	
VENTURE CREATION PROGRAM: WHAT ENTREPRENEURIAL COMPETENCIES DO STUDENT DEVELOP?	52
Even Haug Larsen and Oleksandra Bielie	
ENTREPRENEURSHIP EDUCATION – SO WHAT?	53
Karolina Lesniak and Roger Sørheim	
COUNTERING SOCIAL IDENTITY THREATS – ENTREPRENEURSHIP EDUCATION DIDACTICS FOR PROMOTING ENTREPRENEURIAL INTENTION	54
Andreas Liening, Tim Haarhaus and Lena-Sophie Steinebrei	
LEARNING FROM OTHER’S ENTREPRENEURIAL FAILURE - A PEDAGOGICAL INTERVENTION ON HIGHER EDUCATION LEVEL (WORK IN PROGRESS).....	55
Verena Liszt	
HOW ENTREPRENEURIAL IS IT TO CONNECT STUDENTS TO UNIVERSITY TECHNOLOGY TRANSFER?	56
Mats Lundqvist and Karen Williams Middleton	
ENTREPRENEURSHIP EDUCATION FOR THE ACQUISITION OF ENTREPRENEURIAL EXPERTISE.....	57
Richard A. Martina and Ingrid A. M. Wakkee	
TEAM FORMATION IN STUDENT LED VENTURES	58
Iselin Kristine Mauseth and Gry Agnete Alsos	

GROW A BUSINESS MODEL	59
Birgitte Nielsen, Marie Ernst Christensen and Mikael Birkelund Jensen-Johansen	
ENTREPRENEURIAL EDUCATION WITH IMPACTS: COULD “ENTREPRENEURIAL EDUCATION ECOSYSTEMS” BE USEFUL?	60
Matthias Pepin, Étienne St-Jean, and Rino Levesque	
TOWARDS INTERCULTURAL ENTREPRENEURSHIP: A NEW DYNAMIC FOR EDUCATION?.....	61
David Rae	
PERCEPTIONS ABOUT DIFFERENT WAYS OF BECOMING AN ENTREPRENEUR – SURVEY FOR HIGHER EDUCATION STUDENTS.....	62
Tarja Römer-Paakkanen, Maija Suonpää and Pirjo Saarinen	
STUDENTS BECOMING ENTREPRENEURS FOR LIFE: MANAGING ENTREPRENEURIAL PASSION AND RESILIENCE.....	63
Gunn-Berit Sæter, Marte Konstad and Øystein Widding	
INTERNATIONAL COMPETENCIES WITHIN FAMILY AND NON-FAMILY BUSINESSES.....	64
Birdane Seçkin, Louise van Weerden and Erik Wierstra	
STUDENT ENTREPRENEURSHIP SOCIETIES AS THE CHANGE AGENTS OF THE FUTURE WORLD OF WORK?.....	65
Päivi Siivonen, Kirsi Peura, Ulla Hytti and Kati Kasanen	
WHAT DRIVES UNIVERSITY SPIN-OFF FUNDING AND SURVIVAL?.....	66
Igor Skute, Isabella Hatak, Kasia Zalewska-Kurek and Petra de Weerd-Nederhof	
HOW DO ENTREPRENEURIAL AND INNOVATIVE TRAITS INFLUENCE NEW VENTURE PERFORMANCE? EXPERIENCES OF A STUDENT-COMPANY CO-CREATION GAME.....	67
Frans Stel and James Small, Tilburg University	
EXPLORING STUDENTS’ TRANSITION INTO EXPERIENTIAL ENTREPRENEURSHIP EDUCATION: CHALLENGES AND LEARNING	68
Oskar Hagvall Svensson	
UNIVERSITY BUSINESS INCUBATORS: A REVIEW AND A RESEARCH AGENDA.....	69
Ademola Taiwo	
ENTREPRENEURSHIP EDUCATION EFFECTIVENESS AND EDUCATORS’ ROLE: INSIGHTS FROM EMOTIONAL AND PSYCHOLOGICAL PERSPECTIVES	70
Mohsen Tavakoli, Miruna Radu-Lefebvre, Alain Fayolle and Christian Friedemann	
“WHO IS AN ENTREPRENEUR?” - THE ORPHAN IN ENTREPRENEURSHIP EDUCATION	71
Claus Thrane and Per Blenker	
5 YEARS AFTER: EMPIRICAL ACCOUNTS OF ENTREPRENEURSHIP EDUCATION AMONG PROFESSIONAL MUSICIANS	72
Ben Toscher, Marianne Baudoin Lie, Tor Anders Bye and Øystein Widding	
UNDERSTANDING NON-BUSINESS STUDENT MOTIVATIONS AND PERCEPTIONS ON ENTREPRENEURSHIP MINOR PROGRAMS.....	73
Richard Tunstall, Susan Whittle, Karen Burland and Carla Queseda Pallares	
HOW TO CONCEPTUALISE ENTREPRENEURSHIP AND ENTREPRENEURSHIP EDUCATION IN BHUTAN?.....	74
Marco van Gelderen	

GENDERED LANGUAGE, GENDERED CHOICES? STUDENT RESPONSES TO ENTREPRENEURSHIP EDUCATION
COURSE DESCRIPTIONS75
Jan P. Warhuus and Sally Jones

PRACTITIONER DEVELOPMENT WORKSHOPS

CREATING AND RUNNING AN ENTREPRENEURSHIP MASTERS PROGRAMME WITH NO DISSERTATION OR EXAMINATIONS

Nigel Adams, University of Buckingham
Kristian Mackie, University of Buckingham

Workshop Summary

Post-graduate entrepreneurship education programmes are offered by many universities and some are experiential, but it is thought that there are no other universities in UK offering an experiential Master's Degree in entrepreneurship that does not include assessment by dissertation or examinations.

In 2014 research was carried out to find a "distinctive and distinguished" experiential approach to offering a master's programme in Entrepreneurship. A programme was found that had been offered at a university in South Wales from the late 1990's until 2002, when the faculty who had created the programme left the university.

Working on this basis, an experiential master's programme was created with the objective of developing graduates who would become Business Consultants to growth SMEs or as a result of their studies and working with entrepreneurs they would start to develop their own businesses or work for growing SMEs.

The PDW will:

1. Present the challenges of developing, getting approval and running an innovative master's programme.
2. Question whether this innovative type of entrepreneurship master's programme in full or in part, could be offered by other universities.
3. Discuss if sufficient academic rigour can be achieved in such an innovative experiential master's programme.

Workshop Style

15 minutes – The leader of the experiential master's programme will present information.

5 minutes – The audience will be requested to react and discuss what they heard.

10 minutes – Interactive Q&A/discussion on the points raised and reactions received.

Expected Outcomes

We aim to achieve the following outcomes

1. A response to the question, "Do you think this type of Post-graduate education, assessed by innovative methods should be developed in more universities?"
2. Verify if other enterprise educators think that other universities should consider offering similar master's programmes.

Details of any related Research

Little, if any, research has been published about this type of experiential master's programme. The only similar type of course offered appears to be the Objective Structured Clinical Examination (OSCE) approach used in Medicine.

HOW CAN A CROSS-EDUCATIONAL FRAMING INFLUENCE THE ENTREPRENEURIAL MINDSET OF STUDENTS?

Frederikke Dybdahl, VIA University College
Malene Hangaard Alstrup, VIA University College

Workshop Summary

By examples from the cross educational context at via university college viborg in denmark, we will explore the possibilities and dilemmas when working on developing an entrepreneurial mindset. The students study to become social educators (pedagogical work), nurses, teacher, public administrator employees etc. They work in cross-educational teams, solving a social innovative challenge, given by a private organization, a local business or the local municipality. The aim for the students is also to experience and reflect on the interprofessional collaboration, that they are a part of as well as reflecting on their own interprofessional competences.

Teachers using the steps of design thinking towards ideas for solving the challenge, facilitate the students. During the process, they must use the platform; viaconnect which is an online crowdsourcing community for students, teachers and organizations. In this, they can work directly with leading brands and organizations to solve some of their most pressing challenges. In the end they upload their proposal to solving the challenge, and are judged by the criteria's of desirability, feasibility and viability;

Our experiences

The development of the mindset is dependent on the ability of the team to work as a team. The groups with the best experiences from the weeks and with the most solid ideas are the students who succeeded in the teamwork and who the most flexible attitudes. So how can the frame influence the mindset? Is it even possible to develop the entrepreneurial mindset for all of the students?

Workshop style

The workshop facilitators will introduce and explain the frame and chosen elements of the cross-educational process at via university college, viborg dk. The facilitators will facilitate a small process, in which the audience/participants will share knowledge and experience on the topic

Expected outcomes

Feedback and discussion on the framing as well as some of the essential dilemmas presented in the context.

Details of any related research

Currently working on developing a frame for, evaluating the effect of entrepreneurial education – what does an entrepreneurial mindset look like in action. Also working on an educational frame to succeed the two weeks in order to enhance and develop the entrepreneurial mindset of the future involved students.

BEST PRACTICES IN ENTREPRENEURSHIP EDUCATION

Kaija Arhio, Centria University of Applied Sciences
Leena Eskola, University of Oulu, Kerttu Saalasti Institute

Workshop Summary

In the background of this workshop is one EU-funded project of developing entrepreneurship education. According to the European Commission's Entrepreneurship 2020 Action Plan school-based entrepreneurial learning is a key issue in ensuring the development of the European welfare. Many national strategies have been designed during last decade to enhance entrepreneurship education. The objective of this three years project was to develop an entrepreneurship education strategy and operating model for our region. The strategy was constructed by using participatory strategy building process and it covers all educational levels from kindergarten to higher education. Practically this was organized in three sub-regional workshops. After launching the common strategy the main question is How to make this happen in educational organisations? What are the successful practical methods that help teachers in their daily work when implementing entrepreneurship education? Are we able to find/define best practices in entrepreneurship education?

To support implementing the strategy in educational organisations we published webpages during the project. From these webpages the readers are able to find the main contents of the strategy (www.minunpolkuni.fi/en). Also multiple different practical methods and examples of used good practices in entrepreneurship education has been collected to the webpages. What are those best practices? What do we mean by best practice in entrepreneurship education? Who decides what is best or good practice? Which research underpins this workshop topic?

Workshop Style

Workshop style is interactive with group discussions. We wait 15...20 participants from different levels of education. First some published good/best practices will be introduced shortly, then the participants will share their own examples of entrepreneurship education best practices. We wait also discussion about how to define best practices in entrepreneurship education. In the future we want to develop this to be more scientific paper, too.

Expected Outcomes

By sharing examples and good practices the participants may find new viewpoints to utilize also in their own teaching. Expected outcomes of this workshop will be ideas/ methods/ good practices about entrepreneurship education in schools / in different subjects/ among different teachers. As a result of the workshop we wish to have also ideas how to develop our paper.

Details of any related research

There is a need to advance an entrepreneurial culture aiming to encourage the right mindset, entrepreneurial skills and awareness of career opportunities (Commission of the European Communities 2006; Seikkula-Leino et al. 2010). Practitioners and researchers share common understanding of the central elements to be included in entrepreneurship education. The idea is to support and improve learner's working life and entrepreneurial skills throughout the learning pathway. Teaching entrepreneurship in every level of education plays a key role in this context. Multiple methods of teaching can be used in entrepreneurship education. Teacher's role and pedagogical choices play an important role in this (e.g. Varamäki et.al. 2015).

HOW FACEBOOK AS E-LEARNING PLATFORM CAN HELP TEACHERS TO ENGAGE STUDENTS ON ENTREPRENEURSHIP EDUCATION?

Fabiane da Costa e Silva, Universidade Federal Fluminense
Sandra Regina de Holanda Mariano, Universidade Federal Fluminense
Joysi Moraes, Universidade Federal Fluminense
Kare Moberg, Danish Foundation for Entrepreneurship – Young Enterprise

Workshop Summary

Entrepreneurial education programs (EEP) that use blended methodology, i.e. combine online and face-to-face meetings, usually adopt virtual learning tools from learning management systems (LMS) to carry out its activities at distance.

EEP developed for high school can benefit itself from the intensive use that young people makes of social networks as teaching strategy. The use of social network for educational purposes by students might be less intrusive compared to their inclusion in an unknown LMS. Even because the majority of LMS is geared to the needs of the teacher rather than students' needs.

If we think about other organizational contexts, such as companies, most of them already use social networks to engage audiences, expand sales, advertise brand etc. Furthermore, there is the fact that Facebook is the most used social network in the whole world. And this is the reality of young people from developing countries, such as Brazil, including those who live in a context of social vulnerability. That's why these questions arose: why not use Facebook as a tool to engage young students with their learning environment? How to structure a learning environment on Facebook? How to engage students in participating of learning activities through the social network? How to enhance social network connectivity in the educational process?

Workshop Style

First, we'll share the reasons for choosing and the experience of using Facebook with high school students as a LMS. After that, we'll promote an activity that simulates a blended course, that is, intersperse presence interaction and at distance activity through Facebook.

Expected Outcomes

We hope to promote a stimulating PDW, providing an experience of interaction and learning. We also would like to connect scholars interested in using facebook as a LMS.

Finally, we wish to expand the ways of using facebook or any social network as an interactive tool of engaging teaching and learning.

Details of any related research

The majority of the researches related to the theme is recent and is about the use of social network in higher education. Karr (2016) states that Facebook is in line with the constructivist proposal of teaching, since it stimulates collaboration in a social context of learning. Messias and Morgado (2014) researched how the complementary use of Facebook to Moodle (a LMS) contributed to student involvement and effective learning. On the other hand, Susilo (2008) discussed the use of Facebook as an alternative connected to the reality of the web, as well as a tool that allows to know deeper students and that allows a better interaction.

FOR RETIREMENT AGE AND BEYOND? CO-DESIGN OF ENTREPRENEURIAL SKILLS TRAINING

Sarah Davis, Cork Institute of Technology
Breda Kenny, Cork Institute of Technology
Aisling Conway, Cork Institute of Technology
Olive Lennon, University College Dublin

Workshop Summary

Integral to inclusive entrepreneurship must be the provision of entrepreneurial skills education for the older population. Research in older entrepreneurship to date shows clear social and economic benefit for entrepreneurial individuals and for the wider society in which they are active. Where current policy initiatives are beginning to offer entrepreneurial skills training to those over 50 years of age, limited attention has been paid to individuals at and beyond retirement age, although retirement age is being pushed in an upward direction. A Senior Entrepreneurship Action Programme (SEAP), was implemented with older unemployed adults (over 50s) in 3 different countries as part of an Erasmus+ MyBusiness European project. This workshop seeks to implement a Nominal Group Technique (NGT) to establish the changes required to modify this entrepreneurial action programme designed for job-seekers over 50 to a more generalised, accessible and inclusive entrepreneurial action program for older adults of 65 years of age and beyond.

Workshop Style

A 5 stage Nominal Group Technique process (40 minutes) to include:

- 1) Introduction to materials and silent generation of ideas (5 minutes)
- 2) A round-robin to gather and record ideas (10 minutes)
- 3) Discussion for clarification (10 minutes)
- 4) Preliminary voting or ranking of importance of items (5 minutes)
- 5) Discussion of preliminary vote findings and group consensus on final ranking of top 5 items (10 minutes)

Expected Outcomes

This workshop will explore entrepreneurship educators' perspectives on providing skills training to the over 65 age group addressing issues such as thematic content, implementation modes and appropriate inclusion of technology. This structured method for generation of ideas and suggestions as output will direct changes to the proposed action programme at the early stages of development. In addition it provides an opportunity for entrepreneurship educators to explore how entrepreneurial skills training can be made relevant to older persons and how latent entrepreneurial talent in this older cohort can be better leveraged for personal and societal gain.

Related Research and Practice

The source materials, on which this proposed workshop is based, were previously developed in a co-design process and reported by Kenny and Rossiter (2017). Analyses by Kautonen et al. (2017) show that improvements in quality of life occurs through people (>50) pursuing self-realisation through entrepreneurship. The GEM special report into Senior Entrepreneurship found that, despite older adults (65 -80 years) being the most risk-willing group, they were least likely to know a Start-up Entrepreneur or to have confidence around starting and running a business and they highlighted the importance of awareness raising. This conference workshop forms part of an early consultation phase of research where broad engagement will drive the co-design of relevant materials for retirement age and beyond. A randomised control trial (RCT) will examine the efficacy of implementation of the training materials on outcomes including entrepreneurial self-efficacy, quality of life and cognitive ability of persons over 65 years of age.

SELF-FORMATION AS AN ENTREPRENEURSHIP EDUCATION FOR NON-BUSINESS STUDENTS

Jonas Sjøgaard Grøn, University of Copenhagen
Michael Rene Kristiansson, University of Copenhagen

Workshop Summary

A main challenge for entrepreneurship education for non-business, non-tech students is to expand on the understanding of entrepreneurship, so it includes and highlights the possible contribution from students of humanities. These students typically fail to realize their own relevance and importance in the entrepreneurial process when understood as problem-, user- or tech-driven. At the same time involving fields of humanities in the entrepreneurial process has long been perceived as a crucial element in designing better and more sustainable solutions and businesses.

Based on this challenge we have initiated a teaching-concept in a series of workshops focused on applying effectuation as a practical starting point. At the 3E Conference we will recently have finished the first application of this concept in a co-curricular course before, during and after the academic internship. The course aimed to make the students pro-active, self-dependent and apply self-driven entrepreneurship based on their own academic professionalism.

Based on the experiences with this concept we will in the workshop ask: How do we provide the students of humanities with the best potential to develop intra- and entrepreneurial competences? In this context what could be the role of self-formation in entrepreneurship education for non-business students? And what is the relevance of or addition to existing educational theories within entrepreneurship such as for example but not excluded to effectuation?

Workshop Style

Based on the 3 workshops developed for the students, we run the participants through a time-intensive miniature version of the same process: initiation, qualification and legitimation. Participants should expect a very interactive format that requires to invest and share their own reflections in order for the outcomes from all the participants to be joined into a patchwork of the self-formation process in relationship to entrepreneurial projects.

Expected Outcome

Through this workshop-style, the outcome of the workshop will be to increase our shared understanding of the content and the application of self-formation in entrepreneurship education. The final patchwork of the process will be filmed with a shared explanation provided by the participants.

Details of any related research

The current concept and course is a result of several years of research connected to Department of Information Studies (former RSLIS) at University of Copenhagen, which recently resulted in the publishing of the book "Entrepreneur – process – project" [written in Danish]. Alongside this course mentioned above is conducted research into the knowledge creation among the students and an inspiration catalogue is developed to qualify the content of such processes for others.

THE ROPE MAKER'S PEDAGOGY IN TEACHER EDUCATION

Heikki Hannula, HAMK UAS School of Professional Teacher Education

Workshop Summary

Learning entrepreneurship is more dependent on teachers' pedagogical solutions than on the content of the teaching. The teachers should themselves behave in an entrepreneurial way in their teaching. Entrepreneurial behaviors are among other things using judgement to take calculated risks, opportunity seeking and grasping, solving problems creatively and taking responsibility for, and ownership of, things (Gibb 2005.) To be able to behave in an entrepreneurial way in teaching, the teachers need personal learning experiences on the methods supporting this kind of behavior. The main question is: Would the Rope Maker's Pedagogy support the teacher students' learning in an entrepreneurial way?

Workshop Style

The Rope Maker's Pedagogy will be demonstrated in ten minutes introduction by setting the objective, letting the small groups make their implementation plans, teaching will be implemented and the participants will reflect the process. After that we will discuss 30 minutes about the learning process: confusion – action – readiness to take risks.

Expected Outcomes

The Rope Maker's Pedagogy is the way of learning and teaching. The method itself teaches at least responsibility, decision making and acting in the event of uncertainty. We will discuss about the other possibilities.

Details of any related research

The basic idea of Risk Pedagogy comes from Paula Kyrö (2006). In teacher education it is possible to organize learning in the way of "learning by teaching" (Martin & Oebel, 2007.) We can call this the Rope Maker's Pedagogy. Here the rope reflects the teacher's competence. The rope is made of fibers, yarns and filaments. In the Rope Maker's Pedagogy the students together are wearing the rope from these parts. The students will develop their skills and competences one by one. (Kuivalahti, 2015)

INNOVATION WITHIN THE UNIVERSITY BY ACTIVATING EMPLOYEES USING ADOBE'S KICKBOX

Martin Haring, University of Applied Sciences Amsterdam

Workshop summary

To stimulate our students to become more entrepreneurial is one side of the coin of our educational system. But how can we keep ourselves and our colleagues sharp and involve ourselves in the continuous process of improving the educational system?

One of the methods used over the last years to stimulate employees to work on initiatives to improve the company and the products of the company is the kickbox developed by Adobe (Adobe, 2017). Several international companies like KLM and Elisa (van der Kooij, 2016, Sheth, 2015) have implemented this method to boost the innovativeness of their company.

At the Amsterdam University of Applied Sciences a pilot with the method of the Adobe kickbox was initiated and executed during 2017 and 2018¹. During this workshop I want to share the outcomes of this pilot with the participants and have a discussion about how we can improve this method and share experiences of the attendees on this subject.

Workshop style

In this workshop we want to show some results of our first experiment (HvA, 2017) using this method and give participants of the workshop handles to use this method in their own situation. The workshop gives an overview of the used tools within the experiment and gives insight in the first experiences with these tools. The participants are invited to share their experiences and ask questions about our approach.

Expected outcomes

Based upon the experiences of the experiment done at the HvA participants of the workshop can take away input for doing an experiment with this method at their own university.

Details of any related research

At the moment a couple of master theses have been written on this subject. The master thesis of R.J. Sheth (2015) is available to the public by the internet. The talk of Mark Randall (CEO of Adobe) at the last thenextweb conference is also available for the public on YouTube.

Take away for teaching practice

This workshop can help us to get new ideas about how we ourselves can also contribute to the innovation within our own organization, so we can show a good example to our students.

¹ <http://www.talentfactoryhvauva.nl/projecten/talent-box> (in Dutch)

SUPPORTING PEOPLE FROM CHILDREN TO ENTREPRENEURS IN DIFFERENT (EDUCATIONAL) CULTURES

Lenita Hietanen, University of Lapland
 Mats Westerberg, Luleå University of Technology
 Per Blenker, Aarhus University
 Matthijs Hammer, Saxion University of Applied Sciences
 Ruud Koopman, University of Twente
 Heikki Ruismäki, University of Helsinki

Workshop summary

Despite common political guidelines in Europe, supporting citizens to awaken to notice their entrepreneurial selves, finding out their latent nascent entrepreneurship and finally start a firm seems to be more or less culture dependent.

As a material in the PWD, we share Anna's path from a little Finnish girl to a musician, music teacher, and finally, an entrepreneur in the field of music. We distribute some essential people and episodes in her life, including her educational path, which Anna (in two interviews) named that have been essential in her entrepreneurial identity formation process.

Anna graduated at the upper secondary school in the year of 1999, which means that after Anna's school years, various entrepreneurship education development processes also in the Finnish general education as well as in higher education have been organized.

In the workshop, we consider together how we – coming from many different (educational) cultures – could as in the roles of entrepreneurship educators to support Anna to formulate her entrepreneurial identity as early and as strong as possible and even start a firm.

Workshop Style

We designers have made a distribution of Anna's life career, which the participants in the PWD are going to consider - each participant through his/her own cultural 'lens', but in little groups. In its own turn, every group considers every part of Anna's life.

Expected outcomes

Scholars from different countries try to find out some research gaps to be further studied together. One ambition is to develop an international, culture independent entrepreneurship education model, which could bring new approaches to enrich and develop entrepreneurship education through the entire educational path, including formal, non-formal and informal environments.

Details of any related research

The essential literature includes studies for example in entrepreneurial learning, entrepreneurial life career, entrepreneurial identity formation, music identity formation, non-formal and informal opportunities in education including technological opportunities, for example blended learning. The contexts from entrepreneurship education in different educational levels are welcome. However, the special emphasis is on the entire educational path, especially general education beginning in the early childhood. Focusing on entrepreneurship behavior during the process towards young entrepreneur, the literature about effectuation and causation find their usefulness. Entrepreneurial types may be defined through Darwinian, Communitarian and Missionary types.

HOW CAN WE DESIGN AN INFORMAL MULTIDISCIPLINARY ENTREPRENEURSHIP SUMMER PROGRAMME FOR OUR NEW GENERATION Z TEENAGERS FROM A VARIETY OF SOCIO-ECONOMIC BACKGROUNDS?

Maeve Liston, Mary Immaculate College

Workshop Summary

21st century skills require young people to have questioning and inquiring minds with effective problem solving, entrepreneurial thinking, creativity and communications skills. Governments and industry are highlighting the importance and need for a highly capable STEM and Entrepreneurial population with critical thinking skills to ensure not only economic, but also social and cultural prosperity making the world a better place to live in. We need our future population to be able to apply skills within and across disciplines and in real life situations i.e. knowledge, skills, & abilities associated with STEM and entrepreneurial thinking are in demand not only in traditional STEM occupations, but in nearly all job sectors. Therefore it is of critical importance that both formal and informal educational experience at all levels are innovative, relevant and prepare students with real world skills that are transferrable to the workplace (OECD, 1997).

This workshop will allow participants to experience, practice and reflect on a wide variety of innovative and creative inquiry-based, student-centred, teaching and learning pedagogies focusing on Scientific Thinking, Entrepreneurial thinking and Creativity that were incorporated into 'The EMPOWER Entrepreneurship Summer Programme' run in Ireland for students between the ages of 14-17.

Workshop Style

- Interactive
- Hands-on
- Team Work and Collaboration
- Discussions and reflections

Expected Outcomes

The participant will become familiar with a wide variety of Scientific and Entrepreneurial thinking activities that can promote innovation and creativity; have the opportunity to practice and carry out Engineering & Entrepreneurial Thinking Problem Solving Challenges; and explore the design of and reflect on the design of an informal multidisciplinary entrepreneurship programme.

Details of any related research

Data has been gathered on feedback and reflections from the participating students; the design team and contributors to the delivery of the EMPOWER programme under the following themes:

- Pedagogical approaches and moving forward (Informing the design and delivery of future programmes).
- Engagement and Impact (Competencies and Skills development; Impact Personally and Professionally);
- Gender Perspectives (Ideas about Entrepreneurs and Entrepreneurship)

The data will be presented throughout the session to further develop our discussions on how can we design engaging, inclusive outreach initiatives that cater for the personal development of the student and how can multi-disciplinary approaches enhance the entrepreneurial experience of the student and thus better prepare them for challenges across all life-situations, career paths and walks of life.

CLINICS OR CASE STUDIES? - FACILITATION OF HIGHER LEVEL LEARNING OBJECTIVES

Sandra E. Malach, Haskayne School of Business, University of Calgary

Robert L. Malach, Haskayne School of Business, University of Calgary

Workshop Summary

This workshop is designed to discuss the pros and cons of clinical experiences versus traditional in class methods of experiential learning. Will students have a better learning experience and acquire more knowledge through the provision of information to nascent entrepreneurs via a clinical experience or working with their peers and faculty members to solve an applied problem in the classroom?

The workshop will focus on resolving the question of whether it is best to utilize experiential education in the classroom versus in a new venture clinic in the context of Bloom's taxonomy and the entrepreneurship education literature. Our University was a pioneer in clinical entrepreneurship education beginning in 1985 but when the clinic was closed in 2002 the Faculty transitioned from a clinical model to in-class, experiential exercises. The presenters will describe start-up business examples and work with participants to discuss the strengths and weaknesses of in-class versus clinical models that provide experiential learning opportunities identifying and solving problems arising from proposed new ventures.

Workshop Style

In addition to conveying our experience with both methods of teaching, a sample classroom exercise will be shared and contrasted with a similar clinical file. The participants will then be invited to share their perspectives with the presenters facilitating the discussion with a view to finding a collective perspective on which learning model allows students to gain the most knowledge.

Expected Outcomes

The participants will be able to share their understanding of the benefits of experiential learning in both clinical and classroom settings with a view to developing a collective understanding of the best models for differing institutional environments and desired learning outcomes.

Research

Traditional educational theory supposes that the lecture method is an appropriate teaching methodology for conveying substantive information at the lower level of Bloom's taxonomy (Anderson, 2001). The entrepreneurship teaching research strongly supports experiential learning for driving students' inquiry into entrepreneurial competencies and processes (Kolb, 1984) as entrepreneurship education strives to achieve the higher levels of learning in Bloom's taxonomy. However, the leading educational researchers have always recommended a hybrid approach stating that "traditional lecture-based, didactic methods alone are insufficient" and that deep learning requires experience and reflection (Cooper, 2004). We will discuss how this foundational research assists us in evaluating the decision to use the classroom or a clinic.

CAN ENTREPRENEURSHIP EDUCATION ENABLE FLEXIBLE THINKING USING EFFECTUATION AND CAUSATION?

Verena Meyer, Leuphana University of Lüneburg
Tatjana Timoschenko, Leuphana University of Lüneburg

Workshop Summary

Effectuation becomes more widely used in the classroom and by practitioners every day. This concept lends itself easily to teaching and is often considered as a promising alternative to classic entrepreneurship education. While effectuation certainly enriched the variety of methods for entrepreneurship education, the question we care about is: Can a teaching approach which combines effectuation and causation enable a more flexible way of entrepreneurial thinking? Strongly related to this is the issue what this approach should look like. Instead of the presentation of a “how to-guide” for teaching effectuation and causation, we attempt in this PDW to first of all collect experiences with teaching effectuation and causation and critically reflect upon them. Then, we want to collectively develop new ideas how to combine both concepts. In doing so, the second question we care about is: How can we get from the combination of two approaches to a synergy that actually enables flexible entrepreneurial thinking? A follow-up on this question is if this is beneficial for the learners’ mindset. In brief, we want to provide a starting point to overcome the limited black-and-white-thinking and foster more flexible thinking in entrepreneurship education.

Workshop style and expected outcomes

First, we share our experiences and the feedback from a workshop with master students in an entrepreneurship study program. Second, we strive towards an interactive discussion ignited by provocative statements which present critical issues that we or fellow colleagues encountered in teaching effectuation and causation. Expected outcomes are:

- Exchange experiences of teaching effectuation and causation
- Discuss ideas to combine both concepts and create synergies
- Critically reflect upon the chances and challenges of such an approach

Details of any related research

There is much research on effectuation (Sarasvathy, 2001) as well as critical perspectives on effectuation (Perry et al., 2012; Arend et al., 2015). The latter often discusses how to distinguish effectuation from other concepts (i.e. bricolage), but also if “causation” is actually the “counter-concept” to effectuation. While research provides many issues to critically examine when teaching these concepts, education itself has rarely been discussed in the effectuation literature. One exception is Günzel-Jensen and Robinson (2017) who find that effectuation is welcomed in the classroom, but students experience certain barriers in using this concept.

Takeaways for teaching practice

Delegates in this session can expect to take away: a more profound understanding of effectuation and possible teaching practices, a variety of ideas how to fruitfully combine two ways of thinking, and learn about the idea that entrepreneurship education can be more than just getting students to start a business. Instead, we want to explore together if and how entrepreneurship education can also have an impact on the learner’s mindset and provide the possibility of making entrepreneurial thinking more flexible – which is hopefully a starting point to become more flexible in our mindsets and our teaching methods as well.

DESIGNING AND ASSESSING LEARNING IN VENTURE CREATION PROGRAMS

Karen Williams Middleton, Chalmers University of Technology
Lise Aaboen, Norwegian University of Science and Technology (NTNU)

Workshop Summary

In Venture Creation Programs, the venture acts as a 'learning vessel', enabling what students need to learn - and more - given a greater or lesser extent of guidance. But how do we ensure that the students are engaging in 'doing what they need to do' in order to 'learn what they need to learn'? In this workshop, participants will benchmark and crowdsource in order to identify and develop teaching tool prototypes for venture creation programs. Each 'teaching tool' consist of a learning objective, which is a combination of learning activities and an assessment suggestion. All participants are expected to bring a learning activity. The workshop consists of two steps. The first is to capture learning activities from the entire group. Then we divide into smaller groups where we will develop them further into teaching tools. The teaching tools will be documented and distributed among the participants to be used by the participants in their home university.

Workshop Style

We will crowdsource learning activities in a matrix with 'mindset' and 'skillset' on the x-axis and 'classroom' and 'venture' on the y-axis. The participants will work in groups developing learning activities into a tool by combining it with activities from the other side of the y-axis and suggest an assessment.

Expected Outcomes

After this PDW, the participants will be better equipped for assessing and improving the total learning in VCPs. The participants will have concrete tools, based on crowdsourced practice, to bring back to their universities.

Details of any related research

Venture creation programs are "entrepreneurship education programs which utilize the on-going creation of a real-life venture as the primary learning vessel (thus involving venture creation as part of the formal curriculum), including intention to incorporate." (Lackéus and Williams Middleton (2015, pg. 50). Programs emphasizing engaged venture creation belongs to the stream of research on entrepreneurial education intended to prepare individuals for the practice of entrepreneurship/entrepreneurial activity emphasizing the importance of experiential learning (Cope, 2005). A challenge in this literature is understanding how the venture activities should be assessed and evaluated as well as how the activities should become a measurable part of the education, particularly as the teaching has outpaced research to understand how education should be designed with effective assessment of what we intend students to learn (Neck and Corbett, 2018). However, there is a marked shift towards development of entrepreneurial competence, recognizing not just development of knowledge, but also skills and attitude (or mindset) (Lackéus, 2013; Williams Middleton and Donnellon, 2014), thus including the importance of emotional development to mitigate setbacks and support learning through failure (Cope, 2011; Fang He et al., 2017; Gartner and Ingram, 2013).

WHY ENTREPRENEURSHIP NEEDS MORE STORIES: THE POWER OF STORYTELLING IN THE ENTREPRENEURIAL CLASSROOM

Helle Neergaard, Aarhus University

Workshop summary

This PDW responds to calls for entrepreneurship education to use storytelling as a pedagogical tool in the entrepreneurial classroom. It builds on Gibb's (2002) notion of living with, dealing with, creating and enjoying uncertainty and complexity.

The narrative tradition suggests that identity and understanding are narratively structured and that it is therefore possible to narrate new opportunities and (entrepreneurial) identities into being (Fletcher, 2006). Storytelling skills are therefore valuable tools in the creation of enterprising behaviour and entrepreneurial activity. Further, stories of entrepreneurship abound. Numerous books and movies tell inspirational stories about how the author's created their business producing a variety of insights or 'aha' moments for those reading or watching them. Such stories act as powerful means for transforming mental schemes because they often invoke role models. That storytelling constitutes an important means of communication is nothing new. It builds on the logic that stories and narratives have been shared over centuries in every culture as a means of education to create worlds of shared understandings and meanings. Stories create their own bonds, and their meanings constitute powerful means for replacing the existing ideology with a new mindset. Hence, the ability to construct and communicate stories that enable and produce action to make these stories 'come true' is crucial in entrepreneurship.

Workshop style

This interactive workshop will fall in two parts (preferably of 45 minutes each): Part 1 will present the theoretical side of storytelling. Part 2 will therefore present the potential of storytelling as a learning tool and share an inventory of storytelling interventions.

Expected outcome

Storytelling is a means of dramatizing and communicating the learning process. By involving participants in at least one concrete intervention to be used in the classroom, the outcome for participants therefore includes an understanding of how storytelling can be used to assist entrepreneurial student learning.

Related research

Stories play three roles in the classroom: (i) an informing and (ii) inspirational role (iii) a skill-building role by researchers, entrepreneurs and educators. Storytelling has been used as (i) a research tool (the narrative tradition in qualitative research, c.f. Larty and Hamilton 2011); (ii) a legitimacy and resource acquisition tool (Lounsbury and Glynn 2001); (iii) an identity tool (Rae 2004); (iv) an opportunity creation tool (Hjorth 2007); (v) a learning tool (Gartner 2007); (iv) inspirational stories. In brief, stories stimulate and engage the human brain. They help people to trust you. They help the speaker connect with the audience at a personal and emotional level. They are the ultimate tool of persuasion because they appeal to emotions. Finally, they constitute a very powerful way of breaking down resistance and getting people to CARE.

BACHELOR THESIS – VALUE FOR COOPERATION PARTNERS

Birgitte Woge Nielsen, University College Denmark
Peter Keller Hansen, VIA University College Denmark

Workshop Summary

Students often put many hours of hard work in the process of making their bachelor thesis. However, almost nobody reads it, and it has no impact on e.g. clinical practice or private companies. In this workshop, you will be part of a further development of a project where students make their thesis in collaboration with public or private organizations, hospitals or private companies, with focus at producing value for the cooperation partner. The project started 2 years ago, it includes six different educations within the field of Health, and possibility of working across educations. Students participate in workshops organized by the Student incubator team, to promote the innovative and entrepreneurial mindset of the students.

Questions we care about

- How can we promote and optimize that the students creates useful value for the cooperation partner?
- Is it possible to use approaches from Theory of Science to support innovative and entrepreneurial approaches?
- How can the students across educations collaborate and inspire each other at the workshops?
Workshop topics are, a) personal competencies, b) pitching and graphic facilitation, c) project management, d) innovation and science and e) perspectives of the project and possibilities for entrepreneurship.

Workshop Style

We will involve the audience through an interactive approach in the processes the students try and subsequently invite the participants to discuss advantages and disadvantages of the approach and create suggestions for improvements or new ideas.

Expected Outcomes

A delegate must expect to participate actively in the workshop approach to experience the effect of the innovative and entrepreneurial processes on body and mind. There will be breaks with time for discussion and reflection with focus at the questions we care about and continuously work with.

Details of any related research

Inspired by the EU publication “Open innovation” we want to combine innovation and science for the benefit of the society. We mix creativity, inspired by Tom and David Kelley and pedagogical and didactic approaches, inspired by Lotte Darsø in innovative processes with a scientific approach.

INTERDISCIPLINARY TRADES EDUCATION IN SUPPORT OF RURAL ENTREPRENEURSHIP AND ECONOMIC DIVERSIFICATION: CONCEPTUAL FRAMEWORK TO PRACTICE.

Cheryl O'Connell, North Island College

Workshop Summary

Across Canada, trades programming encompasses training designed to meet the needs of industry while offering the technical competencies required to achieve Red Seal credentials. As industries diversify and the potential for small business and entrepreneurship continues to expand globally, an opportunity exists to enhance traditional college-based trades programs by preparing graduates for careers in emerging and dynamic economies. The focus of this workshop is to explore the timely advancement of traditional trades programming through an innovative interdisciplinary trades' education framework, which is informing curricula for non-business students who aspire to gain core competencies aligned with entrepreneurship and small business development.

Rural economic diversification has become a paramount consideration for citizens and leaders looking to inform regional development, as they identify a means of addressing compromised rural economies. Although progressive research has been presented at the global level, there continues to be a need to assess emerging opportunities. The potential for sectorial based interdisciplinary programming introduces a competitive edge for rural development and diversification, whilst informing advances in post-secondary programming. The evolution of an interdisciplinary educational framework aligned with rural economies has the potential to transform conventional trades' education, while preparing trades professionals for the workforce of the 21st Century!

Workshop Style

This interactive workshop encompasses discussion on the evolution of an Interdisciplinary Trades Education (ITE) Framework and the architecture to support interdisciplinary curricula spanning the trades. The workshop provides a forum to inform the ITE Framework, contemplate its viability and relevancy beyond Canada, engage in discussions as to strategies for customization and implementation.

Expected Outcomes

At a macro level consider the opportunities of an interdisciplinary approach to trades education within the context of rural communities. Contemplate Interdisciplinarity beyond the scope of traditional business programming; inform applicability of the ITE Framework for diverse locales; review influencing variables while considering the role each holds in advancing curricula.

Related Research

The ITE Framework has been informed by research presented by Garavan and O' Cinneide (1994); Ghina, Simatupang, and Gustomo (2014); Ibrahim and Soufani (2002); and Myrah (2003), while being influenced by the works of many scholars who have addressed the role of Community Colleges as an essential part of the fabric of rural economies and social development (Garza and Eller, 1998). The progressive advancement of enhanced program models and curricula can also inform timely policy, policy that promotes and supports the inclusion of rural-based enterprises in the global market place (Chambers and Deans, 1998; Cordes and Peters, 2014). Scholars have articulated that entrepreneurial communities foster the production of goods and services to serve the local needs while garnering the potential of an expanded economy (Hoggart,1990), whilst acknowledging that entrepreneurship and small business enterprises continue to warrant respect as an economic driver for rural economies (Goetz, Fleming, and Rupasingha, 2012; Petrin, 1994), and also of significance, scholars denote the commitment of community college's in the provision of accessible education aligned with regional needs, fostering capacity building and encouraging collaboration whilst creating a "pipeline of inclusive human capital" (Cantor,2009; Pg 9) in support of regional and local development.

TOWARDS OPEN ENTREPRENEURSHIP? A LEARNING-CENTRED APPROACH

David Rae, De Montfort University

Workshop Summary

How can educators and learners use Open resources for entrepreneurship education and development?

There is rapid growth in the availability of free-to-use, online resources classed as Open. The Open movement includes a growing list of categories: innovation; data; research; access; source code; educational and learning materials; and government. There is increasing interest in their potential for value creation, but this has so far received very limited attention in entrepreneurship education.

This workshop explores how educators can use Open, digital and data-led approaches to enhance entrepreneurial learning, innovation and value creation by students; for example, in micro and small business, community, international and organisational settings. The session will invite participants to share examples and experiences of using Open resources.

The workshop will introduce the idea of 'Open Entrepreneurship' as an inclusive, worldwide learning-centred approach, building on the 'Open' movement, to include Innovation; Data; research and access; source code; educational and learning materials; and Open Government. These, in combination, offer potential to create learning environments with rich access to data and resources, innovative connections, and opportunities for co-creating value. The Open movement is spreading rapidly in Africa and has potential for enabling innovation towards UN Sustainable Development Goals.

Workshop style

Participants are invited to bring examples, questions and ideas to this interactive workshop.

It will pose and explore these questions:

1. Are educators using any 'Open' approaches and resources to facilitate entrepreneurial learning and innovation? What can be learnt from these? 'What works' and what is missing?
2. Does 'Open Entrepreneurship' offer a useful framework for collaborative learning, innovation and entrepreneurial action? How could it be improved?
3. How can 'Open Entrepreneurship' be realised and developed as a practical, inclusive approach which educators, learners and entrepreneurs can appreciate, understand and use?

The workshop approach will feature:

A short paper for pre-reading and a quick online survey. Questions 1-3 will be posed and explored in groups.

Expected Outcomes

The workshop will enable participants to:

- Develop shared understandings and examples of using Open resources
- Appreciate using Open approaches in designing and facilitating entrepreneurial learning
- Connect their professional practice with the development of Open Entrepreneurship
- Consider how Open connects with Entreprcomp & Digcomp
- Join an Open Entrepreneurship development network.

STOWAWAYS IN MIXED ENTREPRENEURSHIP COURSES

Mohsen Tavakoli, Grenoble-Alpes University and University of Applied Sciences and Arts, Western Switzerland
Christian Friedemann, Em Lyon Business School
Joseph Tixier, Em Lyon Business School

Workshop Summary

We conduct a program, Venture Creation Initiations (VCI), for the students coming from different horizons: lawyers, engineers, athletes and artists beside students coming from more business related disciplines like economy and accountability, working together on a venture creation project. This course takes three months and students work under a group of six. They start with the ideation and are guided by a professor to prepare a business plan, which is at least economically viable. Our problematic consists in the fact that as the projects progress, most of the time non-business students become less engaged and finish the course rather as stowaways. Which in turn increases conflict between team members and finally reduce their performance. We aim to develop the application of Team Psychological Safety (TPS) in team-based entrepreneurship classes.

Workshop Style

With the use of role-play method, our workshop addresses this complex situation from educators' perspective. We propose a real situation and work together with delegates to better apprehend how TPS would help them to provide a better learning environment.

Expected outcomes

Based on extant research showing how TPS impacts the team learning, delegates participating in this PDW deal with a real case and hopefully gain a better understanding of the concept and its applications in entrepreneurship classes.

Related research

Bradley et al., 2012, J. Appl. Psychol.; Edmondson, 1999, Adm. Sci. Q.; Harms, 2015, Technol. Forecast. Soc. Change; Howorth et al., 2012, Acad. Manag. Learn. Educ.

RESEARCH PAPERS

EDUCATING START-UP COUNSELLORS – CHALLENGES IN THE CONTEXT OF WOMEN ENTREPRENEURSHIP

Annett Adler, University of Kassel

Questions we care about (Objectives)

According to the Global Entrepreneurship Monitor in 2017, there are only six women for every 10 male entrepreneurs statistically reflected in innovation driven countries like Germany. Considering the TEA rates (total early stage Entrepreneurship Activity) innovation driven countries in Europe have the lowest female TEA rate in general (Global Entrepreneurship Research Association, 2018). Within the scientific debate various reasons like personal behaviour (Watson and Newby, 2007), a lack of role models (Brixy et al., 2015), network related issues (McGowan and Hampton, 2007; Foss, 2010; Jungbauer-Gans, 2000) or a predominantly male entrepreneurial image (Bührmann et al., 2007) are given. In order to this, it is suggested to question institutional arrangements. Institutional perspectives in relation to start-up counselling include organizational and structural embeddings that are addressed as arrangement that (re-) produces gender (in-)equality. In Germany different organisations and institutions like credit institutes, freelancers, higher education institutions and chambers act in the field of start-up counselling. Combining gender, institutional and pedagogical perspectives following questions to the role of startup counselling arises:

- a. What is the current state of research in start-up counselling?
- b. How are gender perspectives and entrepreneurship education considered within the scientific debate on start-up counselling?
- c. What are implications for further research towards start-up counselling in and entrepreneurship education?

Approach

To answer these questions a literature desk research on start-up counselling is carried out that takes into account the following keywords: 'new venture, new business, start-up combined with counselling, consulting, coaching. These keywords were combined during the research in relevant databases e.g. German library networks, google scholar and relevant journals on entrepreneurship education and counselling.

Results

The paper first provides an overview of the current state of research in start-up counselling with a focus on gender perspectives and entrepreneurship education.

Implications

Based on the results further research on statistical data is required as well as the view on the practice of start-up counselling itself. Regarding this, approaches of qualitative research and gender studies that relate specifically to interactions or discourse studies on start-up counselling become relevant. The results promote start-up counselling as a new research field Entrepreneurship Education and provide the basis for qualification concepts in further education.

Value/Originality

This paper addresses start-up counselling with a focus on gender studies as new research topic for entrepreneurship education, that can be then used for further education.

Key Words: Start-up Counselling, Women Entrepreneurship, Gender Perspectives in Entrepreneurship Education

CROSSING THE THRESHOLD – TEAM STUCKNESS IN ACTION LEARNING

Sigrid Westad Brandshaug, Norwegian University of Science and Technology (NTNU)

Roger Sørheim, Norwegian University of Science and Technology (NTNU)

Marte Konstad, Norwegian University of Science and Technology (NTNU)

Questions we care about (Objectives)

Action learning, with the components of people, problems and colleagues (Pedler, 1991) is a method in line with what Neck and Corbett (2018) argue for as the future direction of Entrepreneurship education, where the educator role is a facilitator, the student role is doing, and the center of learning is the student. We argue in this paper that the challenges the students face solving real life problems in organizations is closer to the challenges entrepreneurs and entrepreneurial teams meet, whether they will start their own business or work in already established organizations. The challenges the students face can be fun and lead them in a “flow”, but they can also be tough, which can make them feel “stuck”. The question we care about is: How do student teams experience and handle challenges in an action learning context?

Approach

In this paper we explore challenges three student teams meet in an action learning context using data from process reflection reports. Through the concepts of “stuckness”, liminality and team resilience we look into how the student teams experience and handle challenges.

Results

Our findings show that even though the student teams work under the same learning framework, they face different types of challenges, and there are differences both at the individual and at the team level on how these challenges are experienced and handled. The concepts of stuckness, liminality and team resilience seems valuable for understanding these differences.

Implications

Emphasizing the value of letting the student teams being in charge of solving their problems, the teacher’s role as a facilitator is central, looking for the resources in the team and the team’s ability to get out of stuckness. This explorative paper also show the importance of doing more research on this topic, especially related to learning outcome.

Value/Originality

This paper use concepts from adult learning to “normalize” tough challenges in an action learning context, which can help both students and faculty to stay more open facing challenges, and at this be more able to get out of “stuckness”.

Key Words: Challenges, Stuckness, Action learning, Liminality, Team Resilience

SOCIAL ENTREPRENEURSHIP RESEARCH AND EDUCATION. CONTRIBUTIONS FROM THE ECONOMY FOR THE COMMON GOOD.

Vanessa Campos, University of València
Joan-Ramon Sanchis, University of València
Cristina Navarro, University of València

Questions we care about (Objectives)

Being SE the closest to ECG principles, our work proposes to analyze the contribution of ECG model to SE through the education in values. Therefore our specific objectives are: (1) identify the specific contributions of ECG principles to SE as well as their overlaps; (2) perform a literature review to analyze and quantify the number of research papers on SE and ECG and (3) identify the possible existing gap.

Approach

Double methodology, (1) determine the potential contributions of the ECG model to SE, we propose to analyze the CG matrix and (2) empirical analysis on the existing literature body on SE and ECG.

Results/ Implications

SE and ECG model share a number of principles and features which may be translated into some important overlaps in relation to both research bodies. So CG matrix can help to successfully launch and manage social ventures.

Value/Originality

SE is present in many Entrepreneurship courses across European Universities, however few of them include ECG related topics. This fact is mainly due to the no existence of a developed literature body that relates SE and ECG model.

Key Words: Social Entrepreneurship, Economy for the Common Good model; Common Good matrix; Corporate Sustainability; Sustainable Business Model.

UNDERSTANDING STUDENTS' ABILITY TO RECOGNIZE ENTREPRENEURIAL OPPORTUNITIES: THE ROLE OF NEED FOR AUTONOMY AND PASSION FOR INVENTING

Sílvia Fernandes Costa, University of Groningen
Kasia Zalewska-Kurek, University of Twente
Arjan Frederiks, University of Groningen
Isabella Hatak, University of St. Gallen and University of Twente

Questions we care about

Student entrepreneurship occurs at the nexus of the individual and the opportunity, with heterogeneity existing on both the individual and the opportunity sides. This implies that for both progress in research on student entrepreneurship and the development of effective recommendations for educational design, research needs to venture beyond the assumption of student entrepreneurs constituting a homogeneous group, for which any entrepreneurship education is beneficial.

In this research, we aim to better understand students' ability to recognize entrepreneurial opportunities. By drawing on self-determination theory, we posit that students' need for autonomy is positively associated to their opportunity recognition ability. Furthermore, integrating broaden-and-build theorizing, we hypothesize that entrepreneurial passion positively correlates to the opportunity recognition ability of students.

Approach

We use a cross-sectional research design. We collected data from 90 students from two Dutch universities using two surveys at different points in time.

Results

We find support for our two hypotheses. We find that students' autonomy is strongly correlated to their opportunity recognition capability, supporting hypothesis 1. Additionally, we find that students who score higher on the different elements of entrepreneurial passion, score higher on opportunity recognition capability.

Implications

The contributions of this study are two-fold. First, we focus on the importance of understanding students' needs and affective interests towards entrepreneurship in the classroom. We build on the argument that autonomy is important for students' ability to recognize opportunities. Second, we focus on the affective predispositions towards entrepreneurship by focusing on the different dimensions of entrepreneurial passion, demonstrating that opportunity recognition ability is associated to experiencing intense positive feelings when engaging in entrepreneurial activities which are central to students' identity.

Value/Originality

These findings suggest that we may have to consider established individual-level predictors when aiming to enhance our understanding of student entrepreneurship. Our results also show that students who experience intense positive feelings when performing entrepreneurial activities and for whom entrepreneurship is central to their identity, are better able to recognize opportunities. This is very important, because it stresses the importance of experiencing positive affect towards entrepreneurship more generally for early-stage entrepreneurial abilities to build. Moreover, it is important for students to define and develop their identity in terms of being an entrepreneur to be able to recognize opportunities. Practically, our findings suggest that entrepreneurship education should further broaden its focus from identifying the most effective methods for teaching how to write a business plan or develop a business model, to generate designs that support the development of students' emotional and cognitive abilities relevant to entrepreneurship.

Key Words: Self-determination theory; Broaden-and-build theory; Autonomy; Passion; Student entrepreneurship

THERE ARE STILL FOUNDATIONS TO BE LAID - AN ANALYSIS OF ENTREPRENEURSHIP EDUCATION IN STEM DEGREE PROGRAMS

Britta M. Gossel, Kathrin Schleicher, Anja Solf, Maximilian Krauß, Christian Weber and
Andreas Will - Technische Universität Ilmenau

Questions we care about

Often enough, questions are discussed in research far away from practice ("rigour vs. relevance"). Even if a lively discourse on educational approaches to entrepreneurship has developed over the last decade, there is still a lot of groundwork to be done. For non-business students, especially in STEM degree programs (science, technology, engineering and mathematics), it is usually assumed that entrepreneurship education is rarely embedded in the curriculum. Our main questions are: (1) How is entrepreneurship education embedded in higher education STEM degree programs? (2) What didactical approaches of entrepreneurship education can be found in the curricula of STEM degree programs?

Approach

There is broad consensus that good arguments support the integration of entrepreneurship education into all higher education curricula. However, when we reflect on empirical research on this subject, we become aware that it is still not exactly known to what extent this idea is being realized. Against this background, we have decided to do groundwork in the area of STEM degree programs. As the announced sub-theme "entrepreneurship education for non-business students" shows, there seems to be a difference between entrepreneurship education for business students and entrepreneurship education for students of other disciplines. For Germany, we assume that entrepreneurship education is rarely offered to STEM students but there is no detailed analysis of the STEM curricula so far.

Results

The present study gives an overview of the status quo of the curricular anchoring of entrepreneurship education in STEM degree programs for the six East German Laender. A total of 1361 STEM degree programs offered by 58 East German universities was identified and an in-depth search and analysis of the study documents (module descriptions) was carried out. Regarding question (1), the results indicate that entrepreneurship education is to 19.3 percent anchored in the curricula of the STEM degree programs and that there are differences between the subjects. In addition, a qualitative content analysis of all identified entrepreneurship courses was conducted. The focus here was on the question of the approach to entrepreneurial education on which the respective course is based. With regard to question (2), the results indicate differences in didactical approaches and course content.

Implications

Our work can be seen as an important basis for future research questions: What are the hurdles for universities / course managers not to anchor entrepreneurial education in their STEM curricula? Why are there degree programs in which entrepreneurial thinking and action is anchored and others are not? What didactical approaches to entrepreneurship education are implemented in higher education teaching and how large is the gap between practice and research in entrepreneurship education? In addition, this study is intended to provide other actors in the higher education context with practical arguments for embedding (or expanding their range of) entrepreneurship education in STEM degree programs.

Value/originality

While the entrepreneurship education community is discussing advanced pedagogical approaches, fundamental preparatory work is still underway. This study provides (a) a complete inventory of STEM in the six East German Laender including Berlin (Germany) and (b) a deep qualitative analysis of the courses offered and the associated entrepreneurship education approaches. The aim is to link the status quo of entrepreneurship education practice with the current debate in entrepreneurship education research.

Key Words: entrepreneurship; entrepreneurship education; STEM; higher education; Curriculum

DESIGN THINKING PATTERNS IN ENTREPRENEURSHIP TEXTBOOKS – A CONCEPTUAL ISSUE FOR ENTREPRENEURIAL EDUCATION

Christian Greiner and Tom Peisl, Munich University of Applied Sciences

Abstract

Various scholars contributed extensively to the area of entrepreneurial education. Standard textbooks focus on convergent thinking, i.e. writing a business plan. They do not support the development of business models as well as the creative arts of divergent thinking, i.e. design thinking, to the same extent. Nevertheless, our key findings in assessing successful entrepreneurial text book is that the daily practice of entrepreneurial activities based on design thinking and lean start-up methods are underrepresented or almost completely ignored in successful entrepreneurship text books. The authors conclude that convergent thinking is an essential part of entrepreneurial education. Hence, textbooks should include latest research findings.

Questions we care about

Is design thinking represented adequately in entrepreneurial textbooks used in entrepreneurial education?

Approach

To answer these questions 10 of the most prominent design thinking patterns were analyzed in entrepreneurial textbooks by means of grounded theory using RQDA. This analysis was accompanied by a descriptive statistical analysis with regard to the number of direct, indirect and not addressed design thinking patterns. As data source 16 economically successful entrepreneurship textbooks (8 in German and 8 in English) in 2016 at Amazon.de were selected, which were available in the online library at our university. Used design thinking patterns were: 1.) Agility and agile methods, 2.) Empathy, 3.) Adventuresome and openness, 4.) Illustration, 5.) Innovative ideas, 6.) Integrated and holistic understanding, 7.) Iterative approach, 8.) Lead user, 9.) problem solving methods, 10.) Teamwork and expertise.

Results

Many concepts are only indirectly addressed in standard text books. Therefore, the initial conclusion shows that entrepreneurial education has to shift its own paradigm – from business planning to business modeling, from analytics to creativity, from lecturing to coaching and facilitating. The (numerically) underrepresentation of those concepts may lead to an almost completely ignoring by the reader. See figure 1. There is no difference between German and English text books.

Implications

In our research, we point out that the link between what is said and done is substantial. Teaching entrepreneurship course without textbooks might not be the solution. However, the authors no longer have a bad conscience in doing so. Implications for text book writers is to extent the entrepreneurial view to design elements and for students/practitioners to challenge the divergent roadmap in standard approaches.

Value/ Originality

We identify the existing gap between what is state of the art in entrepreneurial education and the standard in text books.

Key Words: Entrepreneurship education, design thinking

LEARNING SITUATIONS OF ENTREPRENEURIAL DECISION-MAKING IN VOCATIONAL TEACHER EDUCATION

Birgitte Halbfas, University of Kassel
Verena Liszt, University of Kassel

Questions we care about

Stable employment careers of today's youth are becoming increasingly more seldom. Accordingly, VET has to prepare students for possible career options as entrepreneurs or at least as "entrepreneurs in enterprises". Therefore, decision-making in uncertain situations is one key competence of entrepreneurs. At our chair of entrepreneurship education, we designed one specific course based on decision-making in uncertain situations. Within this decision-making course, students learned, discussed and experienced decision-making and finally invented an exercise to test other people's decision-making behavior. Hence, the fundamental question is, can we observe entrepreneurial decision-making in protected teaching and learning environments simulating entrepreneurial reality? This implies another question. Given our experiences with different learning and teaching designs on the issue of decision-making: Are we able to identify criteria that help to develop effective learning and teaching settings?

Approach

The following paper presents a teaching and research approach on entrepreneurial decision-making in uncertain situations (Sarasvathy 2001, 2008; Reymen et al. 2015). The authors initiated an entrepreneurial decision-making course and trained students to develop decision making exercises, which are tested by observing (Pryzborski/Wohlrab-Sahr 2010) others behavior. Based on different literature, the authors develop three criteria to evaluate the exercises and use qualitative content analyzes (Mayring 2000, 2010) to identify deeper insights about decision-making logics and their usage in uncertain situations.

Results

The results show, that observation is a research method, which is useful to identify decision-making logics in protected teaching and learning environments simulating entrepreneurial reality. It also shows that the coding scheme of Reymen et al. (2015) is helpful to distinguish between the two different logics. Our analyses also reveals first insights in criteria that help to develop effective learning and teaching settings concerning entrepreneurial decision-making.

Implications

Further research in the field of decision-making processes under uncertainty is necessary to support entrepreneurs and to develop further entrepreneurship education (exercises). The results are able to influence the higher education focusing on entrepreneurial behavior, especially exercises and accompanied research in decision-making in uncertain situations.

Value/Originality

Research about decision-making is rare in the field of uncertain situations and not even linked with entrepreneurship education. Therefore, we are looking for criteria that help to develop effective learning and exercises. Additionally, we are focusing the research method on observation instead of reconstruction through interviews, the latter mainly happening in state-of-the-art research.

The authors discussed the first draft of the paper on last year 3E conference and rearranged the structure and the focus based on the reviewer's feedback as well as the feedback during the paper session. Additionally, new aspects (e.g. criteria) and research data are integrated.

Key Words: decision-making, uncertainty, education, observation, exercise

THE FORGOTTEN MAJORITY OF VCP STUDENTS

Dag Håkon Haneber, Norwegian University of Science and Technology
Torgeir Aadland, Norwegian University of Science and Technology

Objectives

A venture creation program (VCP) is a type of entrepreneurship education program that aims to bridge university student entrepreneurship education and commercialization of technology and is defined as programs that use a new venture as a vessel for learning providing the students the opportunity create their own workplace after the education. While many VCP students continue working in their own ventures after graduation, some students end their entrepreneurial efforts during the program and sign job contracts with large established companies. Since the new venture creation process is such a central part of the educational design of a VCP, our research question is what does a venture creation program mean for students that have signed on for a job in an established company?

Approach

There exists limited research on students' perceptions of their own entrepreneurship educations, and the methods applied for research on outcomes in entrepreneurship education often focus on new venture creation. The research in this study is explorative and we chose to apply an inductive method design to explore the students' view of their VCP. The Zaltman Metaphor Elicitation Technique's (ZMET) main objective is to bringing forward and characterize the mental models of individuals and focus on using metaphors to explain the interviewees' unconscious processes. We interviewed six students that had signed job contracts and six students that still worked in their new ventures. The interviews and analysis followed a laddering technique and explored the mean-end constructs in the two groups.

Results

Our findings show that students' learning and students' social milieu and culture are two central and closely interconnected aspects of a VCP. Students that have signed a job contract for an established company base their learning more on the social milieu and culture in addition to network creating opportunities and reflections for their future life and career rather than the immediate challenges and situations that might be related to new venture creation efforts. Their choices regarding entrepreneurial activity appear to influence the learning situation and the social aspects of the education. The VCP is experienced as immersive with consequences for all aspect of the students' lives.

Implications

The study has implications for further research and program managers. Further research should address VCP graduates alumni and their activities and careers beyond new venture creation. Also, we consider a methodological turn in the direction of more thorough and rigorous methods such as the ZMET as appropriate for the field. Program managers should beware students' experiences of the VCP culture and milieu in order to understand the social dynamics among the students.

Value/Originality

The exploration of students' view on their own entrepreneurship education is limited in the literature. Applying the ZMET methods uncovers deep insight into VCPs and how students experience the program. Our method provides a more thorough understanding of how the different aspects of the VCP are causally interconnected and are influenced by the students' own choices.

Key Words: Venture Creation Program; ZMET; Students; Inductive; Entrepreneurship Education; Future Career

HOW STUDENT ENTREPRENEURS DEVELOP THEIR SOCIAL NETWORK OVER TIME

Martin Haring, University of Applied Sciences Amsterdam

Objectives

Recent studies have focused on which networks would help entrepreneurs to become successful and what would be the best mix of strong ties and weak ties to build an organization upon. With this longitudinal research we add insights into the process of network development on an individual level and complement earlier research on this topic.

Approach

This article explores the development of strong and weak ties in the social network of student entrepreneurs and the role five mechanisms of social networking play in the process of opportunity recognition, resource mobilization and gaining legitimacy, through a longitudinal case study among 17 student start-ups in the period 2009-2013.

All student entrepreneurs started their businesses in the last two years of their bachelor education, part of a venture creation program. They were interviewed directly after they had started their businesses, and their activities were monitored while they were developing their businesses and networks over a period of three years.

Results

This study adds to the current social network literature by analyzing how student entrepreneurs use social networking while being involved in the entrepreneurial process of starting a business and especially make use of the advantages of being a student, i.e. being part of the network and having access to the resources of the university. Successful student entrepreneurs distinguish themselves of the rest by keeping on adding valuable connections to their network, having no fear in asking for help and profiting of the goodwill in the business world towards student entrepreneurs.

Implications

Over time the population of student entrepreneurs grew smaller due to fact that they decided to stop their businesses. But in the end there were enough cases to base our research conclusions upon.

Originality

This research is based upon a unique dataset and covers the development of a population that hasn't appeared in many studies yet.

Key Words: Social networks, student entrepreneurs, university, network development, mechanisms of networking, entrepreneurial processes, venture creation programs

ENTREPRENEURSHIP AND SPORTS: A CHALLENGING COMBINATION

Ben Hattink, Hanze University of Applied Sciences Groningen

Questions we care about

Over the last few years, the demand and supply of sports has increased resulting in various product-market-partner combinations. These developments has resulted in a need for- and increase in several sports-related higher education courses designed to prepare and develop sports professionals for a hybrid sports landscape. What kind of roles do sports play in relation with the core processes of (sportrelated) entrepreneurial jobs and enterprises? How is this related to an educational sportentrepreneurship programme? How can such a programme be further developed within the context of sports and entrepreneurship?

Approach

An inventory of all alumni of a programme for entrepreneurial Bachelor's degree sportstudents related to their job market positions was made by following social media and short semi-structured interviews. Based on this inventory, holistic multiple case studies were developed and discussed in the different fields of the combination sport and entrepreneurship.

Results

Alumni have positions in a variety of domains: entrepreneurship in sport, entrepreneurship with sport and entrepreneurship for sports. Also found is a new combination, entrepreneurship through sport. In this domain, for example, a sports organisation facilitates business clubs and startups as part of its entrepreneurial activities. This perspective is related to existing ideas about business/entrepreneurial ecosystems. In the case study related to entrepreneurship through sport it is called a sport entrepreneurial ecosystem (SEES). In the context of an SEES, several organisations (market, government, civil society) are active and organised around sports to create an environment in which entrepreneurship by ambitious entrepreneurial professionals and professional entrepreneurs can flourish. Based on the discussion with stakeholders of the programme, the entrepreneurship through sport field requires specific knowledge and skills which are not addressed in the current programme. However, not only on programme level there are implications. Education institutes and universities could also be part of an SEES.

Implications

In addition to the identification of a new domain entrepreneurship through sports, the results of the case study indicated new roles for educational institutions. This could include new roles for tutors as well as new activities and processes within those institutions and programmes to support entrepreneurs and organisations.

Value and Originality

The role of sports as a binding, bonding and/or bridging mechanism could be used in the combination sport and entrepreneurship. However this could not only be interesting for sport related education, entrepreneurship through sports might give inspiration, ideas and opportunities to other organisations in the field of education and entrepreneurship as well.

Key Words: sport(s), entrepreneurship, education, Sport Entrepreneurial Ecosystem, SEES

ENTREPRENEURSHIP AND MENTAL HEALTH

Cecilie Haukland, Nord University

Einar Rasmussen, Nord University

Questions we care about

Recent research indicates that individuals with mental disorders are more common in the entrepreneur population than in the general population. Providing individuals with mental disorders the opportunity to become entrepreneurs may have considerable benefits for the overall wellbeing of these individuals, as well as positive societal impacts through new entrepreneurial activity and reduced health care spending. The literature on entrepreneurship education has generally overlooked issues related to inclusion related to mental health, which is unfortunate because entrepreneurship seem to be particularly attractive to people outside of the norm. Mental disorders can make it difficult to complete higher education and following a normal course of study might be very difficult for many of these individuals. Entrepreneurship is known as a hands-on discipline, and the entrepreneurship education is becoming more and more action-based to enhance the entrepreneurial learning. Hence, we argue that entrepreneurship education may be a particularly suited arena for educating individuals with mental disorders to realize their full potential. The purpose of this paper is to explore how entrepreneurship education can harness the positive aspects of such symptoms for providing education and better career options to this group of students. There is a need for information on whether or not the entrepreneurship education today fits the diversity of the population, including individuals with different mental disorders. Hence, our preliminary research questions are; How does entrepreneurship education fit the needs of individuals with mental disorders? What kind of teaching methods suits best for individuals with a mental disorder, wanting to become an entrepreneur?

Approach

We will use the Delphi method for this study and will base our research on statements from entrepreneurs with mental disorders, experts in entrepreneurship education, educators with deep experience with inclusion of students with disorders, as well as experts from the psychiatric sector with deep knowledge on such disorders. The Delphi method is a systematic approach to gain expert consensus on topics where little research have been conducted, or that are otherwise hard to measure (Jorm, 2015; Morris et al. 2013). We plan to have conducted the first round of survey responses from the experts during Spring 2018.

Results and Implications

By linking the insights from entrepreneurs, educators and experts on mental disorders, this paper is expected to show how entrepreneurship education can be designed to benefit individuals with mental disorders, as well as how it can help individuals with mental disorders achieving their true potential. A better design of entrepreneurship education programs can contribute to give individuals with mental disorders a better life and rather take advantage of the potential they actually have.

Value/Originality

This paper is contributing to both entrepreneurship research as well as research on mental health, by looking into how different entrepreneurship education programs can include individuals with mental health disorders. In contrast to previous research, this paper focuses on the positive aspects of having a mental disorder and how to use it as an advantage in an entrepreneurial setting. Hopefully this will create an important fundament for further empirical studies.

Key Words: diversity, inclusion, mental health, mental disorder, entrepreneurship education, action- based entrepreneurship education

CONCEPTUALIZING “ENTREPRENEURIAL-ORIENTED SUSTAINABILITY EDUCATION” THROUGH BIBLIOMETRIC METHODS

Roberto Rivas Hermann, Nord University Business School,
Marilia Bonzanini Bossle, Federal Institute of Science, Technology and Education of Rio Grande do Sul

Questions we care about (Objective)

Several entrepreneurship programs at higher education institutions have started to integrate sustainability-oriented courses into their programs (Barber et al., 2014; Hameed et al., 2016; Lans et al., 2014; Lourenco et al., 2013). However, it is latent the need for convergence of sustainability and entrepreneurship education (Mindt and Rieckmann, 2017; Wyness et al., 2015). Finding the right balance between developing sustainability skills and entrepreneurship remains a challenge in the curriculum (Wyness et al., 2015). The purpose of this paper is to fill in this gap by answering the question: How to conceptualize “entrepreneurial-oriented sustainability education” based on the meta-knowledge trends of both fields?

Approach

We rely upon a bibliometric method which highlights convergences between these different thematic areas to identify new research communities (Zhang and Jiancheng, 2017). The final sample included 986 papers, published between 1972 and 2017 (with only 27 papers published before the year 2000). The conceptual model is thus built based on the combined efforts of the researchers’ content analysis and on the outputs of the software, namely meta-knowledge trends as network diagrams, “citation bursts”, time-slice diagrams and cluster-based keyword generation (Zhang and Jiancheng, 2017).

Results

Based on the analysis of frequencies in which certain concepts are used in the literature we can conceptualize “entrepreneurial-oriented sustainability education” as the one which combines an i) educational focus ii) teaching learning approaches, iii) main themes and iv) integrates external collaboration. The educational focus accounts of a broad range of institutions (not only universities), it also accounts for a domain of education and a target audience (surprisingly not only business students but also faculty). Active learning and ‘real world’ oriented are the dominant teaching learning approaches. However, the most demarking feature of the framework is the broad array of themes, we highlight: innovation-design, corporate-organizational aspects of sustainability, entrepreneurship ecosystem support, individual skills, new venture creation and sustainability literacy. Last, external collaboration is based on: principles as collaborative design or academic dialogue; it engages actors as community partners, campus sustainability initiative or other stakeholders, collaboration is also manifested through practices as peer assessment.

Implications

We argue that it is not only the entrepreneurship education field which shall integrate sustainability principles. The results indicate that sustainability education field has its own developed concepts which can integrate entrepreneurship principles perhaps with better outcomes/ students gaining better cognitive fit to spot green opportunities. We provide a framework of key concepts that should be considered when developing courses blending sustainability and entrepreneurship outcomes. Based on the literature we indicate how important (in terms of teaching hours, learning outcomes, curricular activities) some of the concepts shall be included in the curriculum.

Value/ Originality

We introduce the concept of “entrepreneurial-oriented sustainability education” to account for differences with “sustainability-oriented entrepreneurship education”.

Key Words: Bibliometric; Sustainability education; Entrepreneurship education; Co-citation Analysis; Topic-modelling; Word co-occurrence; Conceptual paper

ENTREPRENEURIAL IDENTITY FORMATION THROUGH IDENTITIES OF A MUSICIAN AND A MUSIC TEACHER

Lenita Hietanen, University of Lapland
Heikki Ruismäki, University of Helsinki

Questions we care about

There have been plenty of ambitions in Europe, to develop entrepreneurship education practices to better response on the need in educating more entrepreneurs. Despite emphasizing importance of the entire educational path, the most effective entrepreneurship education studies still find their place in business studies somewhere after basic education. The present case comes from Finland, focusing on Anna's (a pseudonym) career path from a little child interested in music through studying music and graduating as a music teacher and who finally become an entrepreneur in music, too. Some essential episodes and people during her life career address how an entrepreneurial identity may grow up based on or with other, non-business identities. After a tentative analysis of the narrative produced in two interviews (recordings about two and a half hours together), there arises one main question: What kind of support may certain kinds of meetings, non-business episodes and identity formations (for example an identity of a musician or a music teacher) offer to an entrepreneurial identity formation? The other, more detailed questions were arisen through analyzing Anna's narrative: how her entrepreneurial identity was formulated and what types of entrepreneurial identities did Anna manifest?

Approach

This is a narrative study, which is an appropriate approach when investigating a life career through allowing the informant to tell a story based on her memories. In the first interview Anna somewhat freely told about her paths as a musician, a music teacher and an entrepreneur in music. In the second interview, Anna answered the questions formulated focusing on some details the researchers became interested in the first story.

Results

The tentative findings show that Anna's identities as a musician and a music teacher have tightly supported to her identity formation as an entrepreneur. Besides having music as a hobby and studying it, Anna tells about some astute people as examples, especially people, who have encouraged her to put her ideas in action. As Anna noticed somewhat late her nascent entrepreneurship, the findings show that in our non-business areas of life, we have hidden resources, which we should recognize as supporting our entrepreneurial identity formation process.

Implications

The present study addresses the importance of every teacher, trainer and leader in projects and firms among the others, to support each child's and novice's initiative approach, his/her own ideas and ambitions to creatively experiment the opportunities they have recognized. Through the present study carried out in Finland, it is also able to find out some internationally relevant ways supporting people from the phase of latent nascent entrepreneurship to actual entrepreneurship.

Value/Originality

The study increases an information about a remarkable role of non-business activities and living a private life, in entrepreneurial identity formation.

Key Words: entrepreneurial identity, identity of a musician, identity of a music teacher, identity formation process, narrative study

ENTREPRENEURIAL “CLASSROOM” - EXPLORING TEACHER’S CREATIVITY IN 11 COUNTRIES

Mia Hocenski, Josip Juraj Strossmayer University of Osijek
Ljerka Sedlan König, Josip Juraj Strossmayer University of Osijek

Questions we care about/Objectives

This paper focuses on creativity as one of the main entrepreneurial skills next to leadership and risk taking. Teachers as role models are becoming more aware of the changes needed within themselves and their classrooms. Their perception of importance of creativity and innovativeness is the focus of this research. The questions we care about are: Are teachers in Europe aware of the importance of creativity in their teaching, do they value their role in developing student’s creativity and innovativeness and would they like to receive training in creativity?

Approach

The paper aims to research and compare the views of teachers (N=149) from 11 countries (Germany, UK, Croatia, Bosnia, Serbia, Slovenia, Portugal, Ireland, France, Spain and Albania) regarding creativity and innovativeness in teaching. The theoretical background of the paper explains the connection between creativity and entrepreneurship education, provides a reasonable rationale for creativity as a needed entrepreneurial skill in individuals, supports the idea of the need for creativity in teaching, and emphasizes encouraging training on creativity.

Results

The data from 11 European countries show that 94% of teachers consider creativity and innovativeness in classrooms important or very important. Also, 126 teachers agree that they like new things and would try out new functions and usages. Almost three out of four teachers (72%), find ordinary teaching materials not catered to their needs, and therefore often have to develop materials by themselves. Interestingly, only 4 of 149 teachers (2.68%) are very satisfied with the knowledge and skills they had acquired during their initial teacher education. Teachers in the survey identified curriculum, conformity, lack of materials and conditions, as well as ex cathedra approach and the pressure of predefined grading system, along with the lack of support as the most common factors that inhibit creativity in the classroom. Apart from that, few teachers pointed out intrapersonal factors such as lecturers’ reluctance to change, humiliation, insufficient thinking out of the box, as well as lack of teacher's knowledge about how to boost creativity among students. Nonetheless, 95.3% would be willing to receive training in creativity and innovativeness.

Implications

The results of this research show a gap between the use of already existing teaching materials and teachers’ needs and expectations of how materials should be like and therefore entail crucial information for both authors and publishers since a market research should be carried out in order to see which materials are needed, to meet expectations and needs of teachers.

Value

The findings of this paper hope to encourage teachers to participate in teacher training in creativity and can help raise teachers’ awareness of the obstacles to creativity and innovativeness in classrooms across Europe.

Key Words: Creativity, Entrepreneurial Skills, Innovativeness, Teachers

THE ROLE OF SOCIAL MEDIA IN ENHANCING STUDENTS' ENGAGEMENT

Erwin Huang, Hong Kong University of Science and Technology

Janice Ng, Hong Kong University of Science and Technology

Questions we care about (Objectives)

In entrepreneurship education, assessment is a less researched area. Supporting the notion of assessment for learning, we have designed several assessment components that enhances students' learning, including: 1) Post-lesson reflection, 2) Discussion on social media, 3) Video production. We believed that our assessment method could enhance students' engagement.

Approach

We have designed our course with guest seminars and interviews in regular class with outside classroom experiences on other days. Students are required to do post-lesson/post-experience reflections afterwards, which are done on our Facebook page rather than submitting on the school e-learning platform. A summary video and guiding questions are posted to prompt students' responses. Then instructor and guest speakers (real entrepreneurs) can respond to students' reflections and on-going discussions can be generated. We have implemented this assessment model on our current batch of students (15 in total, from various disciplines) in a social entrepreneurship class (fall semester, 2017). In the final lesson, we have collected students' opinion of the course by survey.

Results

All students believed that post-lesson reflections are useful in the learning process while most of them recognized the benefits of using social media in assessment. While the use of video is a less favored approach of assessment, the majority still find it valuable in their learning processes, especially its use on research project. Over 60% of students agreed that the use of social media enhances their learning and it stimulates their interest towards the subject area.

Implications

With our empirical data, we suggested that using non-traditional approach of assessment can be an effective way of learning the real life dynamic process of entrepreneurship. Post-less reflections helped students consolidate learning. The use of social media and video projection are more applicable for students to apply their learning on real-life situations.

Value/Originality

Little past studies had examined new form of assessments in entrepreneurship courses and especially less on the use of social media as well as the use of video in the process. Yet, by integrating the learning process and assessment with daily social media lifestyle of the learner, there might be positive effects for further integrating learning into day to day living. Making reflections and meaningful discussions more prominent in learner's lifetime learning.

THE USE OF EXPERIENTIAL TEACHING AND LEARNING (T&L) MODEL

Erwin Huang, Hong Kong University of Science and Technology

Janice Ng, Hong Kong University of Science and Technology

Questions we care about (Objectives)

We have implemented our integrative model of experiential learning approach in our undergraduate social entrepreneurship class. Components included: 1) Authentic experiences/visits, 2) Interview and seminars with real entrepreneurs, and 3) MISO research method on social phenomenon and entity. We believed our experiential learning model will enhance students' entrepreneurial skills and mindset.

Approach

We have implemented the teaching model on our current batch of students (15 in total, from various disciplines) in the social entrepreneurship class. In our class of social entrepreneurship (fall semester, 2017), students take the initiative to interview entrepreneurs during regular lessons, conduct research on various social issues and reach out to different stakeholders to collect information on topics of their own choices. We have structured out curriculum by having interviews and seminars by real entrepreneurs during our regular lessons while authentic experiences and action-based learning are scheduled outside class time as pre-learning activities for providing students sufficient understanding before guest sessions. In the final lesson, we have collected students' opinion of the course by survey.

Results

It was found that more than 90% of students agreed that guest seminars are able to enhance both their entrepreneurial mindset and skills. Similarly, over 90% of students believed that authentic experiences facilitate the development of entrepreneurial mindset and skills. Results also indicated that most students find MISO research important and helped them understand more about industries and the society. In general, the self-rated report indicates the development of entrepreneurship mindset and skills in students after taking the course are significant.

Implications

With our empirical data, we suggested that such non-traditional approach of teaching and learning is beneficial to students learning entrepreneurship. Engaging real entrepreneurs in the field is essential for students to gain insights towards the dynamic journey of entrepreneurship.

Value/Originality

Little past studies had assessed the impact non-traditional teaching method on fostering students' entrepreneurial mindset and skills, and even less on the type of integrative model of teaching and learning which we had proposed. This is an important finding that enriches pedagogical research and practices in the field. Further research is needed to compare our model with other teaching pedagogies and to investigate the lasting effect of the course.

UNDERSTANDING THE EMERGING ADULT THROUGH THE HIDDEN INTERPLAY OF PEDAGOGY AND ANDRAGOGY IN ENTREPRENEURSHIP EDUCATION

Gustav Hägg, Lund University
Agnieszka Kurczewska, University of Lodz

Question we care about

Entrepreneurship education, both as a subject and as an approach for learning, is today argued a key solution for preparing tomorrow's workforce. Both from a policy and a research perspective the importance of equipping future generations with entrepreneurial knowledge, skills, and judgmental abilities are being voiced. However, in the course of enlivening these arguments and promoting a more active learning approach, there is a growing critical concern regarding the effectiveness and also foundation for how to educate potential student entrepreneurs. To remedy this critical concern, we pose the question, "who is the student entrepreneur?"

Approach

Building on prior conceptual work targeting pedagogy and andragogy for understanding how to educate in entrepreneurship education, we problematize by departing from the student entrepreneur standpoint. By following this approach, we put an initial focus on problematizing the key characteristics of the emerging adult; a construct emanating from developmental psychology, who is an individual that is no longer an adolescent nor yet an adult. In addition, we also draw from evolutionary educational psychology and expertise research to understand the learning process students go through.

Results

By applying expertise research in conjunction with developmental psychology, we illustrate an educational process moving from a pedagogical phase into an andragogical phase where the learner becomes more and more in control of the learning process. As a result, we end up with a continuum model picturing the 'hidden' interplay between the different phases of learners' development.

Implications

The proposed continuum model of entrepreneurship education for emerging adults may serve as a reference point and its different levels might act as guideline for entrepreneurship educators. The both education-based and psychology-based review conducted in the paper might be helpful in understanding the conceptual debates around entrepreneurship education, especially on how to teach, which have been overshadowed by discussions on how to learn.

Value/Originality

By questioning an andragogical perspective on learning for students who are in a transitional stage between adolescence and adulthood, we hope to launch a deepened discussion on teaching methods used in entrepreneurship education. Especially, the inclusion of developmental psychology, expertise research, and evolutionary educational psychology bring some novel insights on how to teach based on student characteristics.

Key Words: Andragogy, Developmental psychology, Entrepreneurship education, Expertise, Instructional science, Pedagogy

IS STRATEGIC MANAGEMENT AND FIRM GROWTH A GENDER RELATED ISSUE?

Sanna Joensuu-Salo, Seinäjoki University of Applied Sciences
Kirsti Sorama, Seinäjoki University of Applied Sciences
Salla Kettunen, Seinäjoki University of Applied Sciences

Questions we care about

Female entrepreneurs are often described as Brem (2008) summarizes: female businesses under-perform in number of employees, sales turnover, etc; female business owners are less likely to own multiple businesses, less eager to plan expansion and tend to start smaller businesses with a smaller amount of start-up capital than men; the value assets in female businesses is significantly lower than in male businesses. Female entrepreneurs prefer working part-time and in the service sector and women are more risk-averse and spend less time on networking. These characteristics should have an effect on the growth strategies and the sources of growth women prefer and again on the mindset of strategic thinking (effectuation vs. causation). If this is true, this should be taken in to account when planning entrepreneurship education. In this research, we question this by examining three cases of female entrepreneurs. The objectives and questions of this research are as follows: 1) examine the growth strategies of women entrepreneurs, 2) examine the sources of growth in women owned firms and 3) examine the mindset related to causation and effectuation of women entrepreneurs.

Approach

The qualitative data is formulated to three case / entrepreneurship stories. The data in the study was collected by conducting two interviews and two half-structured questionnaires for each case entrepreneur. The data includes also financial information about each case company. The enquiry was made in the beginning of 2016 and again a year later. The first interviews in spring 2016 were made to find out the entrepreneurial story. The second was made a year later and included questions about the entrepreneurship goals and ways to get there, the usefulness of the topics and progress of own skills. Data was analyzed by content analysis.

Results

The results show, that these female entrepreneurs use wide variety of growths strategies and the source of growth in all of these cases was non-organic. Cases also show that the nature of strategic decision making is based on both, effectuation and causation. In these three cases, gender does not seem to play an important role. It is noteworthy that the nature of strategic decision making, and the character of the female entrepreneur are compatible.

Implications

Female entrepreneurs are often seen, as risk avoiding in business life. These results do not support a gender difference in choosing the means of strategic management.

Value/Originality

In entrepreneurship education it is important that educators don't make assumptions about female students in regard to strategic management and business growth and acknowledge the image of a female entrepreneur suggested by the previous research and question the relevance.

ENTREPRENEURSHIP EDUCATION - EDUCATING FOR AN UNPREDICTABLE LABOR MARKET?

Nils Magne Killingberg, NMBU Handelshøyskolen

Questions we care about

This conceptual paper explores the concept of employability and its connection to entrepreneurship education. The purpose of is to develop a set of open questions that will provide scholars in entrepreneurship education with a research agenda for future studies. Entrepreneurship education (EE) is increasingly being viewed as a vehicle of value creation and economic growth (Matlay, 2009), thus there has been an increase in new programs and courses that aim to teach entrepreneurship to students. With respect to research on the effects of entrepreneurship programs, a recent review demonstrates that EE has limited effect on students' intentions to start a business (Fayolle et al., 2006). Conversely, studies have shown that most graduates from EE are in fact seeking employment in established organizations (Jones et al., 2017; Støren, 2014). Even if several scholars have made attempts to link the concept of employability and EE outcomes (Rae, 2007; Rae, 2008); we lack an in depth understanding of what makes these graduates employable. To be able to explore this issue, we need to review and analyze the EE literature with a focus learning outcomes, and then discuss these competencies in light of labor market demands.

Approach

This conceptual paper draws on Entrepreneurship Education research and contemporary research on the labor market. Through a review I link key aspects of employability, to important Entrepreneurship education outcomes at a competency level. Then, key questions for a future studies are outlined.

Results

By reviewing studies on entrepreneurial learning processes and recent studies on employability, I summarize and illustrate what competencies graduates achieve from EE, and how these can be translated and made relevant in the context of a shifting and unpredictable labor market.

Implications

This paper suggest the following research questions for future studies. What broad competence/metacompetence are made through participating in entrepreneurship education? How are competences from entrepreneurship education used to succeed in an unpredictable and flexible labor market? What makes entrepreneurship students employable? How effective are entrepreneurship education in enhancing employability?

Value/Originality

Although other scholars have contributed to the discussion of graduate employability among entrepreneurship graduates, this paper is attempting to inspire to a new debate taking a competency-based approach to the modern labor market and thus contribute to a refreshed focus in entrepreneurship education, influencing future pedagogy and education policy in new ways.

Key Words: Entrepreneurship education, employability, competence

WHAT IS THE DISTINCTIVENESS OF ENTERPRISE EDUCATION FOR NON-BUSINESS DISCIPLINES?

Inna Kozlinska, University of Turku
Anna Rebmann, Aston University
Ulla Hytti, University of Turku

Questions we care about (objectives)

Powered by the strong policy support, enterprise education is often positioned as a remedy to youth unemployment, social problems, challenges of digitalization, changing career landscape.

However, enterprise tends to be understood and interpreted so broadly in the educational context that it faces the risk of becoming a pervasive ideology, which may be taken to mean anything to anyone, and take credit for impact from other disciplines. There is still limited knowledge and evidence on whether and in what way non-business disciplines really need enterprise, and what added value it brings. We, therefore, question: 'What is the distinctiveness of enterprise education for non-business disciplines, and in what ways it is not distinct from other disciplines?'

Approach

We based this investigation on an in-depth case study of a British university and critical enterprise education research. The case study included 28 qualitative semi-structured interviews conducted in five faculties bringing together insights from 11 business educators and 17 nonbusiness educators for analysis and comparison. The data were processed in NVivo 11 using thematic analysis.

Results

We found a distinct desire for entrepreneurship education and commercial application of knowledge in the faculties of engineering, medicine, life and health sciences. Students across disciplines need this education to be more employable and be able to set up own businesses. We also find non-distinctive elements typically in a form of 'soft skills' – creativity, imagination, team-working, reflection, etc. – firmly present in design, communication, engineering and other non-business modules. This leads to a conceptual and practical question whether educators and universities need to promote these non-distinctive elements as 'enterprise'. What are the other ways of harnessing enterprise education to bring value for students but also to legitimize the efforts to embed enterprise?

Implications

We interpret the findings as a critical call to strengthen the distinctiveness of enterprise education, clarify its conceptual boundaries and pursue research-driven ways of creating better synergy with other disciplines.

Value/originality

This paper contributes to the current literature on embedding enterprise into non-business disciplines and to the empirical knowledge of differences in enterprise education delivery between business and non-business studies. It advocates the values of criticality and reflexivity in embedding enterprise across the university.

Key Words: enterprise education, entrepreneurship, distinctiveness, non-business disciplines.

INSPIRE! BUILD YOUR BUSINESS - A GAME-BASED APPROACH IN ENTREPRENEURSHIP EDUCATION

Ines Krajger, Alpen-Adria-Universität Klagenfurt
Erich J. Schwarz, Alpen-Adria-Universität Klagenfurt

Questions we care about (Objectives)

This paper aims to address the question, if entrepreneurial core competencies and theoretical concepts and methods of business model development can be integrated in a realistic entrepreneurial learning setup which leads to a better learning outcome and yet provides fun to students?

Approach

Many Entrepreneurship programs still provide students with insufficient support in gaining competencies, which go beyond mere management know-how. However, entrepreneurial competencies, human relations and conceptual and relationship competencies are important for starting a new venture. These competencies could be taught by confronting students with situations where they can fail and have to deal with risks and uncertainty. Further, students should get the opportunity to gather experience within the field of practice. Business games are one way of meeting the requirements of a contemporary education in entrepreneurial thinking and acting.

Results

As a realistic entrepreneurial learning set-up we designed a game for business modeling. In order to make the complex process of business modeling tangible for three target groups with different backgrounds of experience and knowledge, three different versions of the game have been developed. The first tests of the gamified learning setup demonstrated that participants were highly motivated. But even more important is that they considered that they have gained in all dimensions of entrepreneurial competencies. We also show that complex theories and methods can be successfully taught in a gamified setting.

Implications

Using the game as an educational setting changes the role of students as well as teachers. Students as players of the game become prosumers in the business model development process. Teachers have to be instructors and are required to create a learning atmosphere which facilitates an experience and reflection transfer.

Value/Originality

It could be demonstrated that entrepreneurial competencies can be taught in an innovative educational setting. Games are a good way to teach entrepreneurial skills and thinking in a short time. Compared to traditional settings, students learn more and with pleasure.

Key Words: Business game, business modeling, entrepreneurial competencies, gamification, entrepreneurship education

CLASSIFYING ENTREPRENEURIAL EDUCATION INTO FIVE BASIC TYPES THROUGH FOUR QUESTIONS GROUNDED IN DEFINITIONS OF ENTREPRENEURSHIP

Martin Lackéus, Chalmers University of Technology

Questions we care about (Objectives)

A few simplistic classification models have so far dominated the field of entrepreneurial education. The paucity of established classification models has made it difficult for both practitioners and scholars to advance the field. The simplest and most widespread classification of entrepreneurial education is a UK centric dichotomy of broad versus narrow definitions of entrepreneurship, dividing the field into 'entrepreneurship education' versus 'enterprise education', with 'entrepreneurial education' used as a 'catch all' term for both. This dualistic classification has siblings in many other European countries.

The starting point of this article is that entrepreneurship is arguably more multifaceted than having just a broad and a narrow definition. In a previous review of 75 different definitions of entrepreneurship, 18 recurring terms were found. This implies that if we want to use definitional differences to classify entrepreneurial education, we need to do a better job than to rely on a naïve dualism of broad versus narrow conceptions of entrepreneurship. The purpose here is therefore to search for more deep-probing answers to the following question: What is entrepreneurial about entrepreneurial education?

Approach

First, seven different definitional perspectives on entrepreneurship are identified from literature, reviewed and connected to entrepreneurial education. This leads to the articulation of a process framework. Four of the definitional perspectives are identified as a useful typology, providing increased clarity around what enterprise and entrepreneurship education inherently is about. Based on this, a questionnaire consisting of eight simple questions is then proposed.

Answers to four of these questions can in an unambiguous way classify any entrepreneurial education course or program in a reliable and transparent way, based on definitional foundations of entrepreneurship.

Results

A set of four questions have been articulated that can be answered in a yes/no manner by an entrepreneurial educator, and that will give an unambiguous answer to the question of which one out of five different types of entrepreneurial education it is an example of. The proposed resulting five-pronged typology represents an answer to the generic question of what is entrepreneurial about entrepreneurial education, and more specifically gives eight different perspectives to the question: "What is entrepreneurial about MY entrepreneurial education course or program?".

Implications

Entrepreneurial educators have been given a new questionnaire that can analyze what is entrepreneurial about their teaching, and relate it to a progression model showing how they can develop their teaching further. Scholars can use the questionnaire to classify and benchmark different courses and programs in a less biased way. Both scholars and educators can now get theoretically well-grounded answers to the question of what is entrepreneurial about entrepreneurial education. Answers are given in eight different dimensions, four of whom form a new typology of entrepreneurial education connected to the definitional core of entrepreneurship.

Value / Originality

The typology and the questionnaire with eight different questions connected to definitional foundations of entrepreneurship bring a new level of clarity to entrepreneurial education and represent a novel theoretical contribution to the field of entrepreneurial education.

VENTURE CREATION PROGRAM: WHAT ENTREPRENEURIAL COMPETENCIES DO STUDENT DEVELOP?

Even Haug Larsen, Norwegian University of Science and Technology
Oleksandra Bieliei, Norwegian University of Science and Technology

A venture creation program is a separate cluster of entrepreneurship education and supposed to produce two outcomes: (1) educate business developers and entrepreneurs (2) create new ventures (Lackéus and Williams Middleton, 2015).

The purpose of this paper is to understand and describe what entrepreneurial competence that alumni students from a venture creation program perceive as the main learning outcome after graduation. Mitchelmore and Rowley (2010) have done a literature review and created an entrepreneurial competency framework. The authors of this paper have compared this framework with empirical data from thirty interviewed alumni students from a venture creation program in Norway. The research question is thus: "What entrepreneurial competence does alumni students from a venture creation program perceive as the main learning outcome after graduation?"

The skills and knowledge's that was mentioned the most was oral communication (15 times), idea generation (10 times), recognising and envisioning taking advantage of opportunities (10 times), previous involvement with start-ups (9 times), business operational skills (8 times), interpersonal skills (8 times). Further was mind-set identified as a skill and the most dominant entrepreneurial competence that was declared by majority of the participants. In this paper the authors discuss why these entrepreneurial competencies was mentioned the most.

Key Words: Entrepreneurship education, venture creation program, entrepreneurial competencies

ENTREPRENEURSHIP EDUCATION – SO WHAT?

Karolina Lesniak, Norwegian University of Science and Technology
Roger Sørheim, Norwegian University of Science and Technology

Questions we care about

The environment was established as an important factor in shaping entrepreneurial attitudes. However, with growing role of the system of encouragement and support for entrepreneurship at universities, it is difficult to contextualize the impact of the environment beyond the organized entrepreneurial system on student's entrepreneurial attitudes. Looking into historical case of students of electrical engineering who became extremely successful entrepreneurs in the 1990s. In Norway, we can have a glimpse on a "pure" connection between environmental factors and entrepreneurship. As such we want to ask:

- How the environment influenced the tech entrepreneurs from the class of 1991-92 in the process of becoming entrepreneurial?
- How the existing role models in the environment contributed to the process of becoming entrepreneurial of the tech entrepreneurs from classes of 1991-92?

Approach

The study applies an inductive cases study approach (Eisenhardt, 1989). Data were collected through semi-structured interviews with the tech entrepreneurs, other students from those classes, and university professors. Through matrix building approach (Miles, Huberman and Saldana, 2014), the main categories were devised, and cyclically informed by the existing theory.

Results

The case study established the overriding impact of the underlying university-industry connection on the development of the entrepreneurial attitudes by the future entrepreneurs. Moreover, the study showed the crucial influence of academic entrepreneurs, entrepreneurial professors and entrepreneurial peers as definite role models in the process of becoming entrepreneurial.

Implications

With the growing attention put towards entrepreneurship education, the case study shows the significance of developing innovativeness, superior technological knowledge connected with understanding of real life industry challenges for creating entrepreneurial attitudes. Furthermore, it demonstrates the value of academic entrepreneurs teaching students, and entrepreneurial peers setting career examples.

Value/Originality

The history of tech entrepreneurs from the class of 1991-92 had not been investigated before. The findings call for revisiting the university-industry connection in relation to entrepreneurship education, and establish the connection between entrepreneurial academics and students becoming entrepreneurial.

Key Words: Entrepreneurial university, university-industry connection, entrepreneurial role models

COUNTERING SOCIAL IDENTITY THREATS – ENTREPRENEURSHIP EDUCATION DIDACTICS FOR PROMOTING ENTREPRENEURIAL INTENTION

Andreas Liening, TU Dortmund University
Tim Haarhaus, TU Dortmund University
Lena-Sophie Steinebrei, TU Dortmund University

Questions we care about

As more recent studies suggest, social identity affects the “cognitive processes that (...) underlie the formation of entrepreneurial intentions” (Obschonka et al., 2012, p. 137). In this context, an investigation by Maresch et al. (2016) found that subjective norms negatively influence the entrepreneurial intentions of science and engineering students. This might be explained by perceived threats to the students’ social identity, resulting from perceived group differences in opinions and perceptions (Maresch et al., 2016). Since entrepreneurial intention is considered the most proximal predictor of entrepreneurial behavior (Katz and Gartner, 1988; Krueger and Brazeal, 1994), the question arises how threats to the social identity of different student groups could be countered through a differentiation of entrepreneurship education.

Approach

Scholars propose a target-group specific approach to entrepreneurship education (Maresch et al., 2016). By tailoring entrepreneurship education to the particular needs of differing groups of students, pedagogues can counter the threats to social identity (Maresch et al., 2016). This paper illustrates didactic approaches that have been applied to address the issue of subjective norms for non-business students. Findings are based on lessons learned from entrepreneurship education didactics performed at a German higher education institution.

Results

The results presented in this paper show how target-group specific entrepreneurship education didactics have been developed to counter social identity threats of distinct groups of students. The paper includes showcases of how educators can address the individual needs of different student groups to increase their entrepreneurial intention.

Implications

This paper contributes to entrepreneurship research as it examines how the theories of planned behaviour and social identity can be utilized to design target-group specific entrepreneurship education. Furthermore, this paper provides useful input for educators by showcasing selected didactic approaches in the form of a case study.

Value/Originality

This paper addresses the call from Obschonka et al. (2012) for more research into the intertwining between social identity and entrepreneurial intention and behaviour, as well as the call from Rauch and Hulsink (2015) for further investigations of the impact of entrepreneurship education didactics on students from varying disciplines. Moreover, educators can benefit from this paper by developing target-group specific entrepreneurship education didactics.

Key Words: Entrepreneurship education; social identity theory; social identity threats; theory of planned behavior; entrepreneurial intention.

LEARNING FROM OTHER'S ENTREPRENEURIAL FAILURE - A PEDAGOGICAL INTERVENTION ON HIGHER EDUCATION LEVEL (WORK IN PROGRESS)

Verena Liszt, University of Kassel

Questions we care about

The events called fuckup nights follow a concept for failed entrepreneurs. The aim is to share stories of failure, which is both liberating and fun for the failed entrepreneur (Fuckup nights video, online). However, what happens with the audience, mainly students and/or future entrepreneurs? What is their benefit? In the best case, the audience enjoys good entertainment and learns something from the failed entrepreneur. Main Research question: Could the story-telling of failed experiences be an entrepreneurship education method? Therefore, the author analyzed the current research with national and international perspectives (Nohl & Schondelmayer 2006, Cardon et al. 2009, Shepherd 2009, Cope 2011). The author will discuss' opportunities and constraints of the concept and finally presents new empirical results from an own study about both the content of fuckup night speeches in a German city and the learning outputs from students.

Approach

Current research about learning from failure is available and recommendations for entrepreneurs telling their stories to relief negative feelings and stress are well-known (Mantere et al. 2013, Singh et al. 2015, Cope 2011). Theoretical approaches about learning from others failure are scarce. The author discusses four different theoretical approaches to understand the benefit and possible effect of listening to failed entrepreneurs: (1) narratives, (2) role models, (3) vi-carious learning, and (4) theory-practice connection.

Results

In the paper, the author discusses the model of self-efficacy (Bandura 1977) as well as the relationship from theory and practice in teaching (Remmele 2016) to critical analyze the concept of fuckup nights. (3) As a final step, the author interprets speeches from failed entrepreneurs at fuckup nights and group discussions from students listening to the speeches using content analysis (Miles & Hubermann 1994).

Implications

Learning from entrepreneurs' failure is a slightly researched field and lacks of attractiveness in society and research. This influences the behavior of (future) entrepreneurs in two ways: On the one hand, future entrepreneurs suffer from fear of failure and need role models and realistic scenarios. On the other, existing entrepreneurs can also suffer from fear of failure and hold the ending of a project or company, which leads to negative consequences.

Therefore, more research as well as well-structured events, which focus their aims, are necessary. It is not only about entertainment and liberation; so other (future) entrepreneurs get some-thing out of it.

Value/Originality

In research, the concept of the fuckup nights as pedagogical concept is not yet discussed. The paper is focusing on one culture and considers the students point of view instead of focusing the entrepreneur, which is normally happening in research about failure.

Key Words: learning, failure, failed, narratives

HOW ENTREPRENEURIAL IS IT TO CONNECT STUDENTS TO UNIVERSITY TECHNOLOGY TRANSFER?

Mats Lundqvist and Karen Williams Middleton, Chalmers University of Technology

Questions we care about

This paper asks the following question “How entrepreneurial is it to connect students to technology transfer?”. The answer is non-obvious in at least two ways. Firstly, university technology transfer is mostly assumed to be about research, patents, licensing and occasional academic entrepreneurs starting ventures, but not being a space for students to make entrepreneurial impact. Secondly, if students were connected to early technology transfer inventions, what, if any, entrepreneurial learning could that then offer?

Approach

The paper investigates a 7,5 HEC, eight-week course running annually since 2008 which connects student teams with early-stage invention disclosures. Under a secrecy agreement, the teams are asked to explore the viability of an idea. The outcomes of this course are investigated in two ways: how ideas have progressed (or not) after the course (indicating entrepreneurial impact), and how students experience learning outcomes (indicating entrepreneurial learning). A case study of one of the ideas transforming into a venture is also offered to help identify ways student-involvement can be entrepreneurial.

Results

Over ten years, altogether 211 ideas have been evaluated by the student teams within the course. 27 ideas have progressed into an incubator where idea owners have been matched with student teams. Of these 27 incubated ideas, twelve have become incorporated firms which are all (with one exception) operational to date. These descriptive findings along with the case Swedish Algae Factory indicate in what ways student involvement in technology transfer can be seen as ‘being entrepreneurial’.

The idea evaluations do not contain typical entrepreneurial learning outcomes, such as business plan writing or testing value propositions on customers (Lean Startup method). Instead, skills are obtained through analyzing technical ideas into multiple directions, exploring future value visions, determining next steps, and organizational dynamics including teamwork and stakeholders (e.g. idea provider).

Implications

The findings strongly suggest that we need to revise our view of university technology transfer and what is entrepreneurial or not. Connecting students to technology transfer, makes entrepreneurial sense not only from an impact and progress perspective, but also from an entrepreneurial learning point of view.

Value/Originality

This study can help universities revise what is meant by technology transfer and entrepreneurship education and how the two can connect.

ENTREPRENEURSHIP EDUCATION FOR THE ACQUISITION OF ENTREPRENEURIAL EXPERTISE

Richard A. Martina, the Amsterdam University of Applied
Ingrid A. M. Wakkee, the Amsterdam University of Applied Sciences

Questions we care about

Entrepreneurship education (EE) has grown exponentially over the last decade. A shift can be observed from teaching about entrepreneurship to teaching for and through entrepreneurship, where learning by experience is essential. Despite the awareness of the importance of didactics for EE, there is a paucity of studying didactical methods that lead to the acquisition of entrepreneurial expertise and mindset. The development of entrepreneurial expertise is essential to decrease the naivety and 'social waste' of resources by entrepreneurs. Research shows that expertise can only be acquired through long efforts of deliberate practice. Therefore, the main research question that this study will address is "how does deliberate practice in EE influence the acquisition of entrepreneurial expertise by the students in higher education?"

Approach

Deliberate practice in entrepreneurship is similar to chess and medicine because entrepreneurship is the application of knowledge and requires decision-making. It is not an expert behavior that makes an expert entrepreneur, but an expert mindset. A pretest-posttest trial at a Dutch university of applied sciences will be conducted and will consist of three treatments using simulations with real-life scenarios about the discovery and creation of entrepreneurial opportunities. Research shows that the serious study alone, which involves finding solutions for problem sets, have a positive impact on the acquisition of expertise. Studies in medicine reveal that simulations are valid tools for learners to practice and obtain expertise, can also be delivered on the Internet through massive online open courses (MOOCs). MOOCs can be used for delivering expert-problem solving didactics with increasing difficulty and immediate feedback.

Results

The expected result of the experiment is the increased entrepreneurial expert mindset in the domain of the discovery and creation of entrepreneurial opportunities. For example, participants in the treatment group should be able to more finely discriminate the information received regarding the enabling factors and originality of a new venture idea and how these relate to the discovery and creation of entrepreneurial opportunities.

Implications

The results increase our understanding of the antecedents to entrepreneurial expertise and didactical methods to aid in the acquisition of expertise. In addition, results can aid educators to design effective EE to assist students in the acquisition of entrepreneurial expertise.

Value/ Originality

Didactical methods of EE that lead to the acquisition of entrepreneurial expertise and mindset is understudied. This research addresses this paucity.

TEAM FORMATION IN STUDENT LED VENTURES

Iselin Kristine Mauseth, Nord University Business School
Gry Agnete Alsos, Nord University Business School

Questions we care about

This paper investigates the team formation process of new venture teams established in a venture creation program (VCP), an action-based entrepreneurship education program. One common denominator of most VCPs is that students work in teams in the business startup. While research indicates that the functionality of the teams strongly influences learning outcomes, there is little research-based knowledge on how well-functioning teams are developed in this setting. Hence, this paper has the following two research questions: How do new venture teams in the VCP context develop and how do VCP practices influence the team formation process over time? To examine these questions we are inspired by an entrepreneurship-as-practice approach.

Approach

We build on five cases of new venture teams from the VCP, NTNU School of Entrepreneurship. For the purpose of this paper, we build upon interviews conducted with team members at initiation of team formation, as well as follow-up interviews and observations 3 months after team formation. In total, we conducted 35 interviews with student team members, both individually and in groups, in addition 3 interviews with faculty members.

Results

Three groups of practices emerged capturing ways in which practices influence the team formation process, in total including 13 practices. Two groups of practices were organized by the VCP: 1) Curricular practices, and 2) Co-curricular practices. The third group of practices were self-organized, here termed 3) Student practices.

Implications

The results from this study will have implications for organizers of VCPs and other types of action-based entrepreneurship education. As well-functioning teams are important to achieve the learning potential from such programs, a better understanding on how the teams develop and, in particular, how the activities and the culture of the VCP influence this development have important implications for further development of VCPs.

Value/Originality

First, by examining the initial process of team formation in student led ventures, we seek to reveal practices of successful and less successful processes thereby giving important insights to VCP organizers seeking to support successful venture teams. Second, building on an entrepreneurship-as-practice approach, our study add theoretical understanding on how education programs influence on student learning and development. Third, by emphasizing team development in entrepreneurship education, we add to previous literature predominantly discussing the influence of entrepreneurship education on students' entrepreneurial intentions and self-efficacy.

Key Words: Venture creation programs, team formation, entrepreneurship as practice, action-based entrepreneurship education, venture creation

GROW A BUSINESS MODEL

Birgitte Nielsen, VIA University College
Marie Ernst Christensen, VIA University College
Mikael Birkelund Jensen-Johansen, VIA University College

Questions we care about

“Can we develop a business model including economic, social and environmental perspectives didactic suitable for students from a variety of educations within faculties of Education and Social Studies, Health Sciences and business, Technology & Creative Industries?”

“Can Grow a Business Model (GaBM) inspire young entrepreneurs to combine economy with social responsibility and climate sustainability?”

“Can we measure the impact of the GaBM on specific innovative, entrepreneurial competences and the degree of social- and environmental responsibility among students in incubator environments?”

Approach

“Can we develop a business model including economic, social and environmental perspectives didactic suitable for students from a variety of educations within faculties of Education and Social Studies, Health Sciences and business, Technology & Creative Industries?”

We address the question with a three-step mixed-methods model including 1) Qualitative exploration of students and teachers. 2) A feasibility study testing all administration and data collecting on a small number of students and testing the feasibility of the questionnaire app called OctoSkills. 3) A large scaled controlled study with matched control groups measuring the effect of the model on a outcomes like creativity, managing ambiguity, cognitive and non-cognitive skills, social responsibility and climate responsibility.

Results

OctoSkills is an app which provides a very intuitive and easy way to collect pre, mid and post data about the actual entrepreneur skills in a class of students. It provides the teacher with a validated and reliable profile of the whole class and the individual students. The app also provides the teacher with a fast feature to divide the class into groups based on variation of individual skills tested in the app. This feature is especially useful when teaching classroom-based activities.

Implications

If we are able to show the impact of the GaBM on student’s knowledge, attitude and behavior, the model could be a new efficient pedagogical tool in incubator environments in Denmark as well as internationally.

Value

All over Europe, we address numerous big challenges: low growth, unemployment, environmental problems, climate changes, refugee and immigrant issues, lack of resources and increasing populations. If just a few of these challenges are to be dealt with, we need to act, and we need to encourage the younger generations to act. One option would be to innovate the traditional business models by enhancing their focus on humanistic and physical resources in addition to the economical.

With the Grow a Business Model, young entrepreneurs are given the opportunity to be inspired and motivated to create more business value through social resources among vulnerable and marginalized people. They are motivated to reduce the use of resources, recycle materials and decrease pollution.

Key Words: Business Model, Young entrepreneurs, OctoSkills

ENTREPRENEURIAL EDUCATION WITH IMPACTS: COULD “ENTREPRENEURIAL EDUCATION ECOSYSTEMS” BE USEFUL?

Matthias Pepin, Université du Québec à Trois-Rivières
Étienne St-Jean, Université du Québec à Trois-Rivières
Rino Levesque, Idea entrepreneurial education

Questions we care about

Many countries around the world have now introduced entrepreneurship into their curricula, starting at the elementary school level. Nonetheless, K-12 entrepreneurial initiatives mostly remain isolated acts, implemented by self-motivated teachers. This creates a threefold problem of educational continuity in developing an entrepreneurial profile in students in a coherent, integrated and gradual manner.

Approach

A quasi-experiment was conducted in May 2017 to assess the entrepreneurial profile of students at Elementary Cycle 3 (10-12 years), in Quebec (Canada), using Athayde's (2009) Attitudes towards Enterprise for Young People test. The experimental group consisted of 11 classes which had conducted an entrepreneurial project during the 2016-2017 school year (n = 208 students), while the 7 classes of the control group had not (n = 151 students).

Results

At first glance, data showed no difference between the two groups. Digging deeper into this result, our analysis showed that private and Freinet (public) schools' students, both from the control group, had a higher entrepreneurial profile than those of the experimental group. Further analysis also showed that increasing the number of entrepreneurial projects significantly impacted three of the four attitudes assessed, although negligibly.

Implications

Interpretation of those results supports the idea of developing Entrepreneurial Education Ecosystems (EEEs) at the school level to develop a student's entrepreneurial profile in a more coherent, integrated and gradual manner. The French-Canadian concept of the Entrepreneurial Community School (ECS) then serves as an example to illustrate the idea of an EEE at the school level. Further research is nonetheless needed in the specific context of ECS schools to attest their contribution to the development of a higher students' entrepreneurial profile.

Value/Originality

Although EEE is still an emerging notion that needs further conceptualization and which is mainly used in higher education settings, this notion has proven useful in providing insights to tackle the threefold problem of continuity in K-12 entrepreneurial education.

Key Words: Entrepreneurial education, K-12 education, Educational continuity, Entrepreneurial profile, Assessment, Entrepreneurial education ecosystem

TOWARDS INTERCULTURAL ENTREPRENEURSHIP: A NEW DYNAMIC FOR EDUCATION?

David Rae, De Montfort University

Questions we care about (Objectives)

This paper explores the potential of intercultural entrepreneurship for learning, posing these questions:

- What can microcultural and intercultural perspectives offer creative entrepreneurship and education?
- How do they complement existing approaches to entrepreneurship and wider education?
- How do they shape innovative and entrepreneurial processes of value creation across communities and organizations?
- How can intercultural entrepreneurship engage peripheral groups in entrepreneurial learning?

Approach

'Culture' is often used as a general term in policy, theory, economy and education. This implicitly suggests there is 'one culture' and neglects the cultural diversity of a myriad of ethnic groups, communities and organisations, which shape learners' identities.

Microcultures are identifiable groups share a common identity of values, beliefs, behaviours, and cultural heritage, which may be ethnic, linguistic, geographic, faith or place-based. These include indigenous and migrant minority groups. Microcultures are wellsprings of innovation, with limited scope for value creation. The paper explores how multiple forms of value are created through entrepreneurial activities within microcultures (intracultural); between microcultures and in relation to the macroculture (intercultural). Processes of education, learning, and cultural innovation can enhance intercultural understanding and shape entrepreneurial behaviours across cultural boundaries. A layered model for intercultural entrepreneurship is proposed, to inform learning design, and interactions with communities and organizations.

Results

Intercultural entrepreneurship (ICE) is proposed as an inclusive means of engaging international, minority and peripheral groups in entrepreneurship education and subsequently in entrepreneurial activities. ICE connects, uses and builds on ideas in knowledge domains, including creative entrepreneurship and innovation; value creation; cultural studies and economy; inclusive, international and multicultural education; organizational and cultural sociology; and the social processes of identity and learning.

Value/Originality

The paper offers a significant educational counterpoint to theoretical discussions of culture, innovation and entrepreneurship, by attending to the micro-level cultural perspective; and shifting the mode of innovation from intra-to inter-cultural innovation which can reshape meso- and macro-cultural perspectives.

Implications

This is a period of international trends towards nationalism, protectionism, autocracy, conflict, denial of minority rights and their freedoms of independent creative expression. Intercultural entrepreneurship is an approach that inclusive, international and multicultural universities are uniquely equipped to offer, with benefits of enhancing social integration, cultural relations, and new forms of entrepreneurial activity.

Key Words: Entrepreneurship; culture; universities; innovation; education

PERCEPTIONS ABOUT DIFFERENT WAYS OF BECOMING AN ENTREPRENEUR – SURVEY FOR HIGHER EDUCATION STUDENTS

Tarja Römer-Paakkanen, Haaga-Helia University of Applied Sciences
Maija Suonpää, Haaga-Helia University of Applied Sciences
Pirjo Saaranen, Haaga-Helia University of Applied Sciences

Questions we care about (Objectives) and approach

The objectives of entrepreneurship education can be categorized as education about, through and for entrepreneurship. These three broad objectives are based on the differing needs of individuals. (Jamieson, 1984; Gibb, 1993; Scott, Rosa and Klandt, 1998; Hartshorn and Hannon, 2005; Kirby, 2007.) We are interested to understand more deeply students' perceptions about entrepreneurship and to get the better picture also of their background. This article deals with the problem that the students do not know their options of employing themselves as an entrepreneur. The empirical question is: What do the first year students think about becoming an entrepreneur?

We argue that in higher education we should base entrepreneurship education on the different modes of entrepreneurship (e.g. online business, creative-, team-, part time-entrepreneurship, blogger etc.) and different forms of starting a business (e.g. self-employment, starting a new business, start-up entrepreneurship, business transfer, franchising) as the students have quite a narrow view of entrepreneurship when they start their university studies. The focus is on surveying the first year students' perceptions about becoming entrepreneurs in two universities of applied sciences in Finland.

Results and implication

The results show that students have quite a narrow view of entrepreneurship and entrepreneurship studies. In the beginning of their studies they actually are not so aware of entrepreneurship and their experiences and opinion vary quite a lot depending on their study field. The results can be implemented when developing entrepreneurship education and curriculum for higher education students.

Value/Originality

The topic of our study is actually one of the most common research topics in entrepreneurship education. It is still important as in the ever changing environment we should know the background and pre-understanding of students that we coach and teach. Our results show that the students still have quite a narrow view of entrepreneurship. Besides teaching how to establish a new business, or a start-up business, we should present the higher education students also the different ways of becoming an entrepreneur that is self-employment, buying an existing business or continuing a family business or buying a franchise.

Key Words: Entrepreneurship education, higher education, intention, entrepreneurial behavior, entrepreneurial thinking

STUDENTS BECOMING ENTREPRENEURS FOR LIFE: MANAGING ENTREPRENEURIAL PASSION AND RESILIENCE

Gunn-Berit Sæter, Norwegian University of Science and Technology (NTNU)
Marte Konstad, NTNU
Øystein Widding, NTNU

Questions we care about

A growing stream of entrepreneurship literature uses the concepts of ‘passion’ and ‘resilience’ from psychology in order to explain the mobilization of energy, high levels of energy and persistence connected to the new venture activities. In harmonious passion, the person has positive feelings connected to the activity and experience well-being while obsessive passion forces a person to continue with an activity even when it is at the cost of other parts of life. There are calls for research that should “uncover those factors that stimulate passion so we can gain some insight into how this motivational force might emerge and develop” (Murnieks, Mosakowski & Cardon, 2014: 1584). To understand how entrepreneurial passion and resilience emerge and develop is particularly important in entrepreneurship education since it is strongly connected to both energy and risks during the rest of the nascent entrepreneurs’ lives. We therefore ask: How does a venture creation program develop entrepreneurial passion and resilience among students?

Approach

30 out of 320 alumni from a Norwegian venture creation program (VCP) were interviewed about their entrepreneurial life from being a student at the VCP and beyond. An iterative analysis process starting with a general notion that there were something about the focus on energy that we needed to understand. The initial data analysis pointed in the direction of literature about entrepreneurial passion and resilience that led to further analysis.

Results

Our results empirically confirm that it is engaging in entrepreneurial activities that trigger entrepreneurial passion. In order to manage their obsessive passion the alumni therefore impose rules on themselves that forces them to stop their entrepreneurial activities at a certain time every day. Being part of a VCP is another trigger for entrepreneurial passion since it enables interaction with other students experiencing entrepreneurial passion. Our results shows that this location passion seems to lead to learning and that the learning in turn is an important part in creating the location passion in a VCP. Engaging in entrepreneurial activities as part of a VCP also develop students’ resilience since they both learn how to make their venture more resilient through for instance team composition and also provides experience of how to handle and bounce back from critical situations.

Implications

Further studies should focus on the rules that alumni use to control their obsessive passion and how these may be included in the education. Moreover, future studies should focus on how the learning of knowledge ‘in the air’ is interconnected with entrepreneurial passion.

Value/Originality

We address how VCPs trigger, and teach students how to manage, obsessive passion. To our knowledge, this is the first paper focusing on how entrepreneurial passion and resilience are developed in a VCP.

Key Words: Entrepreneurial Passion; Obsessive Passion; Resilience; VCP; Alumni; Learning

INTERNATIONAL COMPETENCIES WITHIN FAMILY AND NON-FAMILY BUSINESSES

Birdane Seçkin, Saxion University of Applied Sciences
Louise van Weerden, Saxion University of Applied Sciences
Erik Wierstra, Saxion University of Applied Sciences

Abstract

The internationalisation of family and non-family companies with focus on strategy development, human resources organisation and overall situation has been the subject matter of many research projects (Flören, 2001), (Johanson and Vahlne 1977), (Erven, Van Weerden, Wierstra, 2012). In order to get a better understanding of the differences between family and non-family companies regarding their internationalisation, this research study examines the international competencies within companies which enabled them to achieve higher export intensity. The data have been obtained from family and non-family companies in the area of East-Netherlands.

Objectives

The aim of this research is to provide insight into the relevant international competencies companies need for their export activities. This will result in recommendations for the companies and changes in the curricula of academic education, thereby facilitating students obtaining essential competencies as desired by the SMEs. These competencies are required by SMEs to support their own export intensifying activities and will enhance the cooperation between educational institutions and the businesses.

Approach

This research explores the core international competencies divided into knowledge, skills and behaviour. Firstly, five export managers are interviewed and the main international competences are selected. With this preliminary research the core international competencies were identified and defined. Secondly, the identified competences are consequently discussed in 28 individual interviews including the CEO's of family and non-family businesses, both decision takers.

Results

The outcomes state that entrepreneurial behaviour, dedication and enthusiasm and relation management are predominant competencies mentioned by both family and non-family companies. This paper illustrates further the various nuances between both types of companies. A further finding of this research is the nearly unanimous statement that international competencies exist within a company, even if that is not within the decision maker. Additionally, it has become clear that the existence of international competencies contributes highly to export intensity of companies.

Implications

It is recommended the companies to cooperate and gain insight into the research analysis of academic institutions and recognise the significant competences for the export intensity. Additionally, companies are advised to take actions to enhance the export intensity influencing competences within the company.

Key Words: international competencies, family and non-family firms, export intensity, SMEs

STUDENT ENTREPRENEURSHIP SOCIETIES AS THE CHANGE AGENTS OF THE FUTURE WORLD OF WORK?

Päivi Siivonen, University of Eastern Finland
Kirsi Peura, University of Turku
Ulla Hytti, University of Turku
Kati Kasanen, University of Eastern Finland

Questions we care about (Objectives)

Entrepreneurship Societies have been defined in research literature as extra-curricular, informal, non-accredited, student-led organizations that aim to promote entrepreneurship by arranging various activities around entrepreneurship but so far only a few studies have investigated them (Pittaway et al. 2011; Pittaway et al. 2015), and even fewer that have focused on ESs in Finland (Parkkari & Kohtakangas 2018). This is surprising given that there are already 19 entrepreneurship societies in 13 cities in Finland (StartupFinland 2018), and are actively contributing to start-up culture in different ways. We aim to fill this gap by investigating the following research questions: (1) What kinds of collective ES identities are constructed? (2) How do the two ESs position themselves in the HE context and the world of work? (3) How is entrepreneurship, employability and the world of work discursively constructed in the ES group discussions?

Approach

The paper assumes a qualitative, discursive approach based on an analysis of two ES board group discussions in two Finnish Entrepreneurship Societies. We apply a discursive approach to analyze our data focusing on cultural divisions, interpretations, modes of speech, categorizations and discursive practices (Pietilä 2010.) Theoretically we draw from the collective identity (Polletta and Jasper, 2001); how contribute the common collective identity defining story that is internalized and shared between the members (Wry et al., 2011).

Results

The group discussions construct a homogeneous collective identity for the Entrepreneurship society. The ESs position themselves as change agents. World of work is depicted as static state and old-fashioned, and the future is seen through changing employment structures and multiple revenue streams. The ES members believe to possess entrepreneurial skills (through ES) necessary to take charge of their future work, and to cope in the uncertain and unpredictable future. The collective identity is enforced by humour and laughter, and the ES members are promoting forward-looking optimism, courage, and individual initiative. The strong collective identity and sense of committing to doing things together mitigates the pressures of being entrepreneurial and neoliberal ideas of individual responsibility.

Value/Originality

Our study is one of the few to investigate Entrepreneurship Societies. In particular we demonstrate how they constructing a collective identity by navigating between the individual initiative and collective support by working and doing together in a supportive, playful environment filled with humour and laughter. This we interpret as a coping mechanism needed for coping with the future filled with uncertainty.

Key Words: Higher Education, Entrepreneurship Society, collective identity, entrepreneurship, employability, the world of work

WHAT DRIVES UNIVERSITY SPIN-OFF FUNDING AND SURVIVAL?

Igors Skute, University of Twente
Isabella Hatak, University of St. Gallen & University of Twente
Kasia Zalewska-Kurek, University of Twente
Petra de Weerd-Nederhof, University of Twente

In light of the increasing importance of academic entrepreneurship, university spin-offs (USOs) have been discussed as an effective mechanism for technology transfer and research commercialisation contributing to the economic and societal development on regional and national levels (Criaco et al. 2014; Fini et al. 2017). At the same time, the process of initiating USOs has been associated with high uncertainty and complexity, with many USOs failing at an alarming rate, especially in the early stages of the commercialisation process (Cozijnsen et al. 2000; D'Este et al. 2016). Yet little is known about the reasons why USOs fail in the early stages of development.

In this study, we therefore examine how early-stage project and team characteristics need to be shaped to overcome the initial phases of spin-off development in terms of securing funding as a leverage for further growth and long-term survival (Colatat 2015). To this end, we integrate the USO development and entrepreneurial competency frameworks (Rasmussen et al. 2011; Vohora et al. 2004), venture capitalists and business planning literature, and learning theory. We focus on the opportunity framing phase and opportunity recognition 'juncture'.

We collect unique dataset of 106 proposals submitted to the Dutch funding agency for acquiring funding for USO research commercialisation activities. Our results indicate that market capital, scientific excellence by means of professorial leadership, learning from funding failure experience and team size can increase the likelihood to acquire funding for research commercialisation survive in the high-tech market segment.

This study has several important theoretical and managerial implications. First, this study provides a more holistic picture of success and their interdependence in the early stages of the research commercialisation process. Second, we contribute to the discussion of the USO evaluation criteria, emphasising the importance to develop different criteria for acquiring research funding and long-term USO performance. Third, we argue on the successful balance of project and team composition in the USO.

These insights might be crucial for academic entrepreneurs willing to attract external funding for their research commercialisation, and can enhance economic and societal impact of USOs by motivating academic entrepreneurs and their business partners to strengthen their commercialisation projects by integrating vital elements to prevent early-stage failure.

Key words: academic entrepreneurship, university spin-offs, venture funding, venture survival

HOW DO ENTREPRENEURIAL AND INNOVATIVE TRAITS INFLUENCE NEW VENTURE PERFORMANCE? EXPERIENCES OF A STUDENT-COMPANY CO-CREATION GAME

Frans Stel, Avans University of Applied Sciences,
James Small, Tilburg University

Academic research has shown that entrepreneurship education increases the Entrepreneurial intention (EI) to start new ventures. Entrepreneurial traits are often mentioned as an antecedent of Entrepreneurial intention. While there is broad consensus among researchers on the importance EI in relationship to the creation of new ventures, the relationships between entrepreneurial and innovative traits and venturing performance remains unclear. We therefore study these relationships. Apart from entrepreneurial traits and EI, we involve the 'discovery' and 'delivery' facet traits of the Innovators DNA scale in our analysis. Discovery facets are important at identification of opportunities: associating, challenging the status quo, experimenting, networking, observing and questioning. Delivery facets are essential at capturing value: analysis, detail orientation, planning and self-discipline. We use a sample of 55 entrepreneurial students across three universities in the Netherlands and Belgium who participated in 2017 in a co-creation game with a high-tech company. We asked the students to develop highly innovative business models in order to solve sustainable challenges and test these in the market. Our research questions are (1) which innovative and entrepreneurial competences contribute to new venture performance; (2) how do innovative and entrepreneurial competences correlate; (3) does participation in a serious venture game have an effect on innovative and entrepreneurial competences. We took as our dependent variable predicted New Venture Performance. This is operationalized as the degree of novelty, feasibility, sustainability and the use of technology of the developed business models, as assessed by the company, coaches and students (N=40). Age, country of birth, and gender served as control variables. Younger respondents are less inclined to challenge the status quo. Discovery traits correlate positively with entrepreneurial attitude, entrepreneurial capacity, locus of control and the willingness to take risks. In contrast, 'delivery' traits as analysis, detail orientation does not correlate significantly with these entrepreneurial traits. Answering our second research question: contrary to our expectations, we could not find an increase in entrepreneurial intention after our venture contest, neither in attitude, nor entrepreneurial capacity, locus of control or risktaking propensity. In our regression models, gender is significant: female students perform better. In addition, 'discovery' traits are important for venturing performance, in contrast to 'delivery' traits' and attitude, capacity, Locus of Control and Risk attitude. As a theoretical contribution of our study, we indicate the value of researching the combination of innovative and entrepreneurial traits in the analysis of venture performance. The practical impact is to include the development of 'discovery' competencies at the individual and team level, e.g. through skills classes in which creativity is trained.

Key words: Entrepreneurial Intention, Innovators DNA, Innovation, Venturing Performance

EXPLORING STUDENTS' TRANSITION INTO EXPERIENTIAL ENTREPRENEURSHIP EDUCATION: CHALLENGES AND LEARNING

Oskar Hagvall Svensson, Chalmers University of Technology

Questions we care about

Experiential entrepreneurship education (EEE) is offered to an increasing spectrum of students, with a growing need to cater to more and more diverse backgrounds. While this provides opportunity for universities to contribute to entrepreneurial competences among graduates, the teaching format associated with EEE interventions poses many challenges for the learner. The nature of these challenges and how they relate to students' learning processes in EEE is not well-known. Accordingly, the paper poses the following questions: What challenges do students face in transitioning into EEE? How do these challenges relate to students' process of developing an understanding of how to take on learning in EEE?

Approach

The paper draws on social cognitive theory and previous work on learning in constructivist learning environments to propose a framework for studying students' transition into EEE as a process of (re-)constructing their expectations on curricular learning from entrepreneurial experience. Further, the dynamics of such a process is investigated through a qualitative case study of a project-based course in which students worked in teams towards generating, developing and validating business ideas through real customer interaction. Data was collected mainly through reflective assignments and retrospective interviews, and analyzed through a general inductive approach.

Results

Four critical learning cycles relating to perceived challenges was identified as students starting to engage in the course: coming up with an idea, engaging external actors, pivoting and managing openness. These challenges seemed to be overcome as students gained new experience, re-shaping their expectations of the nature and purpose of such activities.

Implications

Acknowledging students' transition into EEE as a dual process of re-shaping students' ways of organizing their competences in relation to entrepreneurial processes and curricular activities opens for further investigations into the nature of challenges and learning processes when new students are coming into EEE. Moreover, the study highlights how scaffolded integration of entrepreneurial experience into curricular activities can challenge students' habitual roles and certain pre-conceptions of entrepreneurial processes.

Value/Originality

Through investigating challenges as students start to engage in EEE, the study contributes to unveiling the dynamics of transitioning into such learning environments.

Key Words: entrepreneurship education, experiential learning, learning processes, learning environments

UNIVERSITY BUSINESS INCUBATORS: A REVIEW AND A RESEARCH AGENDA.

Ademola Taiwo, Hochschule Bonn-Rhein-Sieg

Objective

This paper explores the theme University Business Incubation (UBI) by examining critical underlying questions in the study of the theme:

- How does the UBI model differs from other traditional forms of Business Incubators?
- How has UBI been studied in the past decades and what are the empirical & theoretical concepts, variables and level of analyses that have been used in the study of UBIs?
- What actors or stakeholders, constructs and variables interact at each level of analysis?

How do these variables and constructs impact UBI incubatees expectations, overall performance expected outcomes and the impact on the local & regional communities?

The paper also focusses on aggregating quantitative literatures in the UBI theme and developing a conceptual framework that could be used for further analysis.

Approach

A methodical review process was used on the existing literature on University Business Incubation extant literatures and articles in Business management, Innovation, Entrepreneurship & Technology. Three (3) databases were utilized: Science Direct, Web of Science & EBSCO to target the UBI domain. The following keywords were used in the search: University Based Incubation, University Business Incubation. These terms were searched for in titles, text and abstracts. My focus was on quantitative research in UBI from 1987–2017 and variables and constructs were extracted to develop a conceptual framework for the study of UBI.

Value & Originality

Although UBI research is a relatively underexplored terrain, UBI research is difficult and conflicting claims exist and extant literatures span across many disciplines which makes the studies fragmented. It's also largely anecdotal and focusses only on success stories and a unified theoretical lenses or basis is lacking. This paper will address these gaps and aggregate quantitative research about UBI and thus provide a conceptual framework that could be useful for a more concise study in the UBI field.

Result & Implications

This paper contributes to UBI literature by providing a conceptual framework for the study of UBI. It also serves as a guide for policy makers to concentrate on important variables that enhances entrepreneurship within universities. Future research dimensions are also provided for a more integrative approach to the study of UBI.

Key Words: University Business (Based) Incubator

ENTREPRENEURSHIP EDUCATION EFFECTIVENESS AND EDUCATORS' ROLE: INSIGHTS FROM EMOTIONAL AND PSYCHOLOGICAL PERSPECTIVES

Mohsen Tavakoli, Grenoble-Alpes University and University of Applied Sciences and Arts, Western Switzerland
Miruna Radu-Lefebvre, Audencia Business School
Alain Fayolle, Em Lyon Business School
Christian Friedemann, Em Lyon Business School

Questions we care about

While the entrepreneurial passion (EP) has attracted attention of researchers, this conceptual paper aims to show how a combination of EP and the dualistic model of passion (DMP) developed principally by social psychology scholars, would be useful to generate new insights regarding the impact of passionate entrepreneurship teachers on entrepreneurship education effectiveness. Do we need passionate entrepreneurship educators to foster entrepreneurship?

Approach

We take a deeper look at the literature in entrepreneurship, in psychology and educational sciences. We discuss separately the importance of passion for entrepreneurship and passion for teaching to illustrate the necessity of considering them in entrepreneurship education context.

Results

We highlight the somehow ignored key role of entrepreneurship teachers, specially the manner they influence the effectiveness of entrepreneurship classes, through emotional/psychological channels (i.e. their harmonious and obsessive passions for entrepreneurship and teaching).

Implications

This research opens up new avenues to investigate empirically what happens when entrepreneurship educators represent different passions, if any and how they impact the effectiveness of entrepreneurship education.

Value/Originality

We propose an integrated model of harmonious and obsessive passions for entrepreneurship. Beyond pedagogies, learning objectives and teaching methods already discussed in the literature, this paper tries to demonstrated the essential role of entrepreneurship educators.

Key Words: Entrepreneurship education effectiveness, Entrepreneurial passion, Harmonious and Obsessive passions, Entrepreneurship educator

“WHO IS AN ENTREPRENEUR?” - THE ORPHAN IN ENTREPRENEURSHIP EDUCATION

Claus Thrane, Århus University
Per Blenker, Århus University

Questions we care about (Objectives)

Why and how is the question “Who is an entrepreneur?” still of fundamental importance to both students and teachers in entrepreneurship education - even though it has been refuted by most entrepreneurship scholars since Gartner (1988) stated that “Who is an Entrepreneur? Is the Wrong Question”? Should something be done about this dilemma? What could and should be done?

Approach

These simple questions are used to formulate a more coherent and complicated research question for entrepreneurship education: What constitutes a supportive way of using entrepreneurial role models in an entrepreneurial learning process given the lack of empirical evidence for certain personality traits or demographic characteristics leading to entrepreneurship?

Results and Implications

Questions of identity are often essential to students exploring entrepreneurship as a potential professional career choice that, for most students, tends to be seemingly discontinuous and deviate from highly institutionalized academic and professional trajectories. When students engage in entrepreneurship education activities, they basically need to create images of themselves in completely new and different functions and contexts.

Facilitating and assisting such entrepreneurial identity transitions is thus an important part of entrepreneurship education. Although “Who is an entrepreneur?” has been refuted in the field of entrepreneurship research it still seems highly relevant in the field of entrepreneurship education! This, we argue, presents a paradoxical tension to entrepreneurship education and educators in their didactical search for theoretical and empirical anchoring in the “mother” field of entrepreneurship. Rather than suppressing or accepting this tension, we will try to confront the paradox by constructing a mutually accommodating understanding of the entrepreneurial role model transcending both the mother field of entrepreneurship as well as the field of entrepreneurship education.

Value/Originality

So far, no one has asked these questions. The paper thus contributes with some necessary conceptual housekeeping in the field entrepreneurship education research, by reframing some questions asked in entrepreneurship education research and aligning them with the questions asked - and answered - in its mother discipline entrepreneurship research.

Key Words: Entrepreneurial mind-set, Entrepreneurial intent, Entrepreneurial role models, Entrepreneurial identity

5 YEARS AFTER: EMPIRICAL ACCOUNTS OF ENTREPRENEURSHIP EDUCATION AMONG PROFESSIONAL MUSICIANS

Ben Toscher, NTNU
Marianne Baudoin Lie, NTNU
Tor Anders Bye, Sociology Clinic
Øystein Widding, NTNU

Questions We Care About

There is a noted tension between artistic identities and entrepreneurship, with evidence showing uneasiness with the word “entrepreneur” and the pursuit of creative fulfilment over financial reward (Eikhof and Haunschild, 2006; Hausmann, 2010; Pollard and Wilson, 2014; Breivik et al., 2015; Bennett, 2016; Moore, 2016; Blenker, 2017). Yet, after performance skills, the next most important skills musicians require to sustain their careers are entrepreneurial (Bennett, 2007, 2009). We wonder: how do musicians reflect on the concept of entrepreneurship, 5 years after taking a course in entrepreneurship and having worked as a professional musician? How do they reflect on their identities as entrepreneurs and artists?

Approach

We have conducted a series of semi-structured interviews with 16 graduates from the Norwegian University of Science and Technology’s Department of Music approximately five years after they had taken a course in entrepreneurship during their music studies.

Results

Our results indicate that similar to findings in the extant literature, there exists a tension between the identities of the artist and the entrepreneur, that jazz students differ from classical music students in their level of entrepreneurial behaviour and career preparedness, and that students appreciated the opportunity to self-reflect on their career plans and view their education more broadly than simply the mastery of their instrument. This is especially true for the classical music students, for whom entrepreneurship helped them build a positive alternative career perspective than the conventional outcome of being an orchestral musician. Further, students are recognizing opportunities by entrepreneurially finding and building their “niche” audiences, yet they still resist labelling their behaviour as entrepreneurial.

Implications

Our study has practical implications for educators who wish to integrate entrepreneurship education into the music and arts curriculum while being aware of student sensitivities to the term “entrepreneurship”, as well as promising directions of future research, such as whether there are any cultural differences amongst students of HME which may explain their attitudes towards self-promotion as a musical entrepreneur. Our findings show that an “arts entrepreneurial mindset” developed through a reflective education process may enable students to develop a flexible and adaptable creative career identity that incorporates both being a creative artist and an entrepreneur in an industry with uncertain employment outcomes (Bridgstock, 2013, Meijers, 1998).

Value/Originality

We build on previous work which has been conducted examining the career plans, hopes, expectations, trajectories, and identity challenges faced by graduates of higher music education (Devroop, 2012; Vaag, Giæver and Bjerkeset, 2014; Bennett and Bridgstock, 2015). To our knowledge, no studies have been performed exploring the influence of entrepreneurship education on music students’ career progressions, entrepreneurial identities, and working lives.

Key Words: arts entrepreneurship education, artistic and entrepreneurial identity

UNDERSTANDING NON-BUSINESS STUDENT MOTIVATIONS AND PERCEPTIONS ON ENTREPRENEURSHIP MINOR PROGRAMS.

Richard Tunstall, University of Leeds
Susan Whittle, University of Leeds
Karen Burland, University of Leeds
Carla Queseda Pallares, University of Central Catalonia

Questions we care about

- 1) What are the entrepreneurial motivations and intentions of non-business students studying entrepreneurship minor programmes, as compared to single-honor subject counterparts
- 2) How do experiences and perceptions of students develop whilst studying on such programmes?
- 3) What is the impact of these programmes on post-graduation entrepreneurial intentions?

Approach

Entrepreneurship education enables individuals to acquire competences needed to be entrepreneurial. Entrepreneurial intentions have been used to assess changes in students' attitudes and mind-set in order to create a common framework for measuring the impact of entrepreneurship education that goes beyond the number of businesses created (Fayolle, Gailly, and Lassas-Clerc, 2006). While previous studies mainly focused on business students, it is important to analyze students studying non-business programmes (Frazier and Niehm, 2006). Subject disciplines engender different norms and expectations of students (Becher and Trowler, 2001) and the development of intentions, motivations and perceptions over the duration of different university programs is a complex phenomenon which has been insufficiently studied. Furthermore, the success of entrepreneurship programmes in developing entrepreneurial intentions has yet to be confirmed. We seek feedback on our approach and methodology, including insights from other ongoing studies with non-business students.

Results

This study involves a mixed-methods approach, combining exit and entry surveys and annual focus groups, to examine intentions, motivations, learning preferences, experiences and perceptions over time of students studying non-business degree programmes at a research-led full-service university in the UK. This longitudinal study is designed to understand the entrepreneurial process and the variables linked to it. We compare science and arts undergraduate students studying Biological Sciences and Music as single-honour program and those undertaking an entrepreneurship minor variant. Initial pilot data collection began in 2014 and over time more programs will be added to the study.

Implications

This study meets calls for longitudinal studies in entrepreneurship education by tracking students from entry through to graduation. It will shed light on any differences in outcomes due to academic discipline. It will further identify potential links between intentions, motivation, perceptions, experiences, employment and learning preferences over time.

Value/Originality

The study will provide evidence regarding the impact of entrepreneurship education for non-business students. Results will provide a way to assess the successes, challenges and value of entrepreneurship programs for non-business students which may have implications for program content, design and recruitment.

HOW TO CONCEPTUALISE ENTREPRENEURSHIP AND ENTREPRENEURSHIP EDUCATION IN BHUTAN?

Marco van Gelderen, Vrije Universiteit Amsterdam

Abstract

Bhutan is a devout Tibetan Buddhist country which has long been isolated from the world. Because of an increase in youth unemployment, it now looks at entrepreneurship as a possible solution. But what does entrepreneurship mean in the very specific context of Bhutanese culture? Bhutan is known for pursuing its policies of furthering Gross National Happiness (GNH). This conceptual paper investigates the concept of Happiness Entrepreneurship. It does so by first outlining the values that Happiness Entrepreneurship has to adhere to. Then it reviews research of when entrepreneurship makes entrepreneurs (un)happy, and when it makes society (un)happy. Finally, it outlines considerations for entrepreneurship education in Bhutan, and asks what the world can learn from the Bhutanese case.

Questions I care about

- What is a conception of entrepreneurship that fits the context of Bhutan?
- “Happiness Entrepreneurship” may be an answer to the first question – what does it entail?
- When does entrepreneurship make entrepreneurs happy?
- When does entrepreneurship make entrepreneurs unhappy?
- When does entrepreneurship make society happy?
- When does entrepreneurship make society unhappy?
- How can entrepreneurship education train for “happiness entrepreneurship”?
- What can the world learn from a Bhutanese conception of happiness entrepreneurship?

Key Words: Bhutan, Entrepreneurship Education, Happiness, Happiness-Entrepreneur

GENDERED LANGUAGE, GENDERED CHOICES? STUDENT RESPONSES TO ENTREPRENEURSHIP EDUCATION COURSE DESCRIPTIONS

Jan P. Warhuus, Aarhus University
Sally Jones, Manchester Metropolitan University

Questions we care about (Objectives)

This paper examines how students select entrepreneurship education classes. Our prior work (Jones and Warhuus, 2017) finds that entrepreneurship course descriptions use predominantly masculinised language and in constructing entrepreneurship courses educators arguably have an 'ideal' student in mind. Historically, entrepreneurship has been constructed as a masculinised activity. Subsequently, there is a need to critically engage with the westernised, masculine-typified behaviours upon which entrepreneurship is based, given an increasingly ethnically diverse and female dominated HE environment. We argue that course descriptions offer insights into educator constructions of the 'Fictive student', the student to which the curriculum is addressed. We therefore ask the following questions: i) What response does gendered language elicit in students? ii) How do such responses impact on their course preference? iii) Does the national-level cultural context affect student course choice? iv) Is it possible to write a feminized course description and would students prefer it when given the choice?

Approach

We deploy a three-phase data-collection approach based around a set of fictitious masculine and feminine-framed course descriptions for courses about, for and through entrepreneurship, developed using the gendered language identified in our previous research. First, we recruited 25 American and 25 Danish business students and used a survey tool to capture their demographic data and assess their entrepreneurial experiences. Second, the students were asked to choose between a masculine and a feminine (and for the about course also a neutral) framed course description, as part of a think-aloud protocol exercise. Third, after making their course selections, students participated in focus group discussions. The analysis of the data is guided by the Gioia methodology aided by the use of the Nvivo software tool.

Results

Our analysis is ongoing and the paper presents emerging themes around the emotional responses elicited by gendered language, the pervasive masculine norm of entrepreneurship, the potential for reframing entrepreneurship as a feminine activity, the different student-professor power dynamic suggested by masculine and feminize language and the emergence of a new fictive subject; the fictive professor.

Implications and Value/Originality

Our research raises significant questions, and challenges previous assumptions, about the gendered implications of different types of entrepreneurship education and the influence of course descriptions on student course choices.

Key Words: gender, language, higher education, course descriptions, think-aloud protocol