Making Sense of Entrepreneurial Knowledge in Recognition of Prior Learning and Studification Practices

Kirsi Peura, postdoctoral researcher, University of Turku, Finland Joukahaisenkatu 3-5 B, 20520 Turku, +358505027075, kirsi.peura@utu.fi

Tarja Römer-Paakkanen, principal lecturer, adjunct professor, Haaga-Helia University of Applied Sciences, Finland

Satu Aaltonen, project researcher, University of Turku, Finland

Abstract

Questions we care about (Objectives) – The paper focuses on how Finnish HE teaching staff make sense of students' experientially gained entrepreneurial knowledge as part of academic curriculum in entrepreneurship.

Approach – Drawing from a qualitative sense-making methodology, the paper makes use of inductive analysis of personal and group interviews of HE teaching staff regarding practices in recognition of prior learning (RPL) in entrepreneurship and studification of co- and extracurricular activities that develop students' entrepreneurship competences.

Results – The findings highlight that sensemaking of experientially gained entrepreneurial knowledge is multidimensional. The study participants introduce issues working at different levels including: *theoretical* (denoting entrepreneurship as a discipline), *institutional* (denoting organizational objectives and requirements), *practical* (denoting guidelines and administrative processes) and *HE political* (denoting the role of HEIs in producing entrepreneurial individuals). Especially, the epistemic questions related to control over curriculum are made visible when discussing fitting the entrepreneurial knowledge into the students' degrees via RPL and studification practices.

Implications – While Finnish HEIs have taken up the recommendations provided by the Ministry of Education and Culture on providing the HE students with support for self-employment orientations and entrepreneurship in different forms, they partly struggle with adjusting experientially gained and practice-oriented entrepreneurial knowledge with the academic requirements in connection with RPL and studification practices.

Value/Originality – Research focuses on generating understanding how HEI teaching staff make sense of entrepreneurial knowledge in RPL and studification that are novel practices in entrepreneurship education and allow the students to fulfill their academic requirements in entrepreneurship outside the academic curriculum. This study enables us to understand the complexities related to these novel practices in the field of EE and, to contribute to the discussion on entrepreneurial knowledge development in HE in the broad sense.

Key Words: Entrepreneurial knowledge, Experiential learning, Recognition of prior learning, Studification, Sensemaking

Introduction

During the past years, policies and recommendations related to recognition and assessment of prior learning (RPL) and studification of activities that take place outside the class room have

been introduced across Europe. In higher education (HE), particularly, the rise of these practices has been influenced by the objective to shorten the students' graduation times. RPL and studification are administrative processes that are designed to allow the students to fulfill the academic requirements outside the classroom. The main goal of RPL is to recognize and acknowledge individuals' competence and knowledge regardless of how and where it has been acquired and integrate it into the degree. (Adam, 2007; Bohlinger, 2017; Stenlund, 2010.) Studification, on the other hand, means that the students acquire competence that corresponds to the objectives of their degree as they work or take part in practical training organized by a third party such as a company or an association (Auno et al., 2016).

Both RPL and studification concern knowledge and capabilities that are acquired primarily through *experience* (experiential learning) (Cooper et al., 2017). Although various types of experiential learning activities have gained a strong foothold in entrepreneurship education (EE) (Kuratko, 2005; Katz, 2003; Bruyat & Julien, 2001), assessment of learning and skills acquired outside the official academic curriculum have been introduced as a topical issue only more recently. Consequently, questions related to integration of *co-curricular and extracurricular activities* into the curriculum have been recognized important to explore. (White and Moore, 2017). This seems relevant, especially, because a significant share of learning in EE takes place outside the academic curriculum either before or during the studies (Kuratko & Morris, 2018; Morris et al., 2013; Brush, 2014; Brush et al., 2014; Miyasaki, 2014). Yet, RPL and studification remain under-studied and under-theorized areas in the international EE research.

This study is focused on Finland, where RPL and studification are visibly promoted practices by the Ministry of Education and Culture. The normative foundation for them is mainly based on the need to accelerate the students entering the working life. (Prime Minister's Office, 2015) Additionally, entrepreneurship has been recognized as an important skillset that is to be promoted in HE across all educational fields (Ministry of Education and Culture, 2007; 2009; 2017) and development and adoption of RPL and studification practices in this field is highly encouraged (UNIFI, 2016, ARENE, 2015). Despite this, RPL and studification still remain little used practices in Finnish HEIs' entrepreneurship curriculum (Huusko et al., 2018).

Little is known how educators responsible for EE design and delivery are able to or willing to utilize these practices that are promoted in the HE policy. Consequently, there is a need to ask more broadly, how educators position the knowledge and skills gained experientially and through co- or extra-curriculum activities in relation to the academic curriculum in entrepreneurship. In response to that need, this study interpretatively and inductively analyses interviews of 30 members of Finnish HEI teaching staff responsible for planning and delivering entrepreneurship curriculum including the RPL and studification practices. The specific question we care about is how the HE teaching staff understands and makes sense of experientially gained entrepreneurial knowledge as part of academic curriculum. This study enables us to understand the complexities related to these novel practices in the field of EE and, to contribute to the discussion on entrepreneurial knowledge development in HE in the broad sense.

Development of entrepreneurial knowledge in experiential EE

A common agreement in the field of EE is that entrepreneurship is learnt experientially through learning by doing. In experiential entrepreneurial learning process individuals can develop their entrepreneurial knowledge throughout their professional lives. They transform their career experiences into knowledge, through the exploration of new possibilities and the exploitation

of pre-existing knowledge, which in turn influence the development of the entrepreneurs' ability to discover and exploit entrepreneurial opportunities as well as coping with the traditional obstacles facing new ventures. (Politis, 2005, 2008). Moreover, entrepreneurs need to transfer what has been learnt from direct and indirect experience, and others' experience into current use, as well as reflect upon experience so as to seek more in-depth meaning and reasons in events. (Man & Yu, 2007; Hägg & Politis, 2013)

Hägg (2017) has recently pointed out that a counterbalance to the heavy action orientation in EE should be created. For example, learning arenas should stimulate the students' abilities to reflect and become aware of one's learning, as it is important to make the students grasp and develop knowledge from experiences gained when performing and practicing entrepreneurial actions. They also need to gain conceptual understanding of entrepreneurship as a phenomenon and given time to make connections between the action taken and the conceptual knowledge gained. Although the objective of EE is not only to create new businesses or to write business plans, new venture planning can simulate entrepreneurial learning by creating an environment for experiential, work-based learning (Pittaway & Cope, 2007). In addition to learning by doing and reflection, several other features can stimulate learning in new venture creation context. These include, for example, financial and emotional exposure, entrepreneurs' reactive and proactive approaches to problems and opportunities, distinctive episodes such as events and crises as well as habitual learning and routine. (Pittaway 2004)

Experiential learning is centered on the learner's experiences and the experiential learning process, and most notably connected to the learning cycle termed after Kolb (1984) who states that learning is the process whereby knowledge is created though the transformation of experience by using four kinds of abilities. Learners must be able to, first, involve themselves fully, openly, and without bias in new experiences (concrete experience abilities); second, reflect on and observe their experiences from many perspectives (reflective observation abilities); third, create concepts that integrate their observations into logically sound theories (abstract conceptualisation abilities); and fourth, use these theories to make decisions and solve problems (active experimentation abilities).

Experiential approaches take different forms and they are most commonly used with the *through* and *for* entrepreneurship teaching that put less focus on delivering information about entrepreneurship, but instead, strive to develop entrepreneurship personalities regardless of educational practice and/or prepare student entrepreneurs for a future entrepreneurial career in simulated entrepreneurial learning events. Experiential approach is strongly present also in *in* approach, where student can learn how real entrepreneurs behave and act in real business context. (Cope and Watts, 2000; Jamieson, 1984; Johnson, 1988; Jones & Ireland, 2010; Gibb, 2005; Heinonen & Hytti, 2010; Kyrö, 2005; O'Connor, 2013; Pittaway & Cope, 2007). Consequently, different kinds of learning objectives and different forms of knowing have been connected to these approaches including know-why (attitudes, values and motives), know-how (skills), know-who (social skills, networking), know-when (insights, experience and intuition) and know-what (factual knowledge about entrepreneurship) (Johannisson, 1991). Among these, know-what perspective is considered least relevant, if EE objectives are targeted towards educating future entrepreneurs.

Entrepreneurial knowledge development in co- and extra-curricular activities

Kuratko and Morris (2018) estimate that in the future, half of the academic curriculum in entrepreneurship occurs experientially. Additionally, much of the students' learning is estimated to take place outside specific academic courses in experiential co- and extra-

curricular activities that have been recognized important for student's personal development in preparing them for entrepreneurial careers (Morris, Kuratko & Cornwall, 2013; Brush, 2014; Brush, Green & Strimaitis, 2014; Miyasaki, 2014). They that are designed to enrich the student learning experience and support student entrepreneurship. Hence, they are part of the universities "internal entrepreneurship educations ecosystem" (Brush 2014 p. 31) and complement the curriculum and degree programmes as well as community engagement efforts that contribute to the culture of entrepreneurship in the university campuses (Miyasaki 2014; Morris, Kuratko & Cornwall, 2013).

Co- and extra-curricular activities include a large variety of entrepreneurial activities. They include, for example, idea jams and startup weekends, internships at entrepreneurial ventures and incubators, mentoring programmes and shadowing entrepreneurs activities, study abroad, pitching and business plan competitions, student venture hatcheries, campus-based businesses run by students, prototype and website development, student venture fairs students competing in regional/national competitions, speaker series, community outreach initiatives (such as bootcamps, symposia) and technology commercialization projects (Kuratko & Morris, 2018; Morris, Kuratko & Cornwall, 2013).

The offering of experiential co-and extra-curricular activities have grown rapidly in tandem with the emergence of the academic curricular in entrepreneurship. Consequently, how to identify and evaluate the learning outcomes of such activities and combine or incorporate them into the curriculum, has become a topical question. (White & Moore, 2017.) Yet, however, most universities have not integrated them into the entrepreneurship curriculum and programs or been able to assess value of such activities (Morris, Kuratko & Cornwall, 2013; White & Moore, 2016). Furthermore, although the learners' past experiences have been found important, the literature does not directly promote practices which normative basis is on giving HE students credits for previously acquired experiences and this way to accelerate their studies. Instead, the focus has rather been on to develop and give certificates and badges of co-curricular activities to enable higher level of personalization in entrepreneurship studies. (see White & Moore, 2016) Hence, RPL practices are not per se discussed in the literature in depth, but studification of co- and extra-curricular activities has been found worthwhile from the perspective of the individual's learning process.

RPL and studification in HE

The terms used for recognition and validation of prior learning differ slightly across institutions and countries (Bohlinger, 2017; Stenlund, 2010, Adam, 2007). At its widest definition, recognition of prior learning encompasses the recognition of formal, informal and non-formal learning. Wider definitions include also credit transfer procedures between formal institutions; the narrower definitions are limited to recognition and/or assessment of experience-based learning outcomes from non-formal (e.g. work-based or non-formal institutions) and informal (e.g. life experience) settings (Adam, 2007; Evans, 2006).

In this paper, we use the concept *recognition of prior learning* (RPL) as an umbrella concept, and do not differentiate it from other related concepts. We here refer to the Finnish HE practices, where RPL refers to a set of practices and procedures of identifying, assessing and approving prior learning of students and granting study credits based on their prior learning in relation to the learning outcomes defined in the curriculum (Ministry of Education, 2007). In this paper, we focus solely on recognition of learning that takes place outside formal institutions and exclude credit transfer procedures between formal institutions.

In the university level RPL is most commonly used for the purposes of access to a programme (Bohlinger, 2017). However, RPL can also be used for (credit) exemption from part of a programme or a course (Adam, 2007), which is the most common reason for RPL in Finland. The foundations for RPL in the Finnish HE context were laid in the early 1990's by the establishment of the dual model with a separation between research oriented universities (ROU) and universities of applied sciences (UAS) which concentrate on providing professional and vocational education. Today, both the Universities Act (558/2009, Amendment 1172/2014) and the Universities of Applied Sciences Act (932/2014, Amendment 1173/2014) acknowledge the skills and knowledge acquired outside formal educational system. The political reasons for RPL in the Finnish HE include increasing the effectiveness of studies, avoiding overlapping learning and shortening studying times (Ministry of Education, 2007). A call for smoothing of RPL practices was also included in the Implementation plan for the former Government's (2015-2019) key projects and reforms (Prime Minister's Office 2015).

In practice previously gained skills, knowledge and competences are made visible in institutional RPL practices through interviews, workplace observations and simulations of working tasks, oral/written (standards-based) tests, portfolios and product-based methods (Bohlinger, 2017). In the Finnish HE context most commonly used methods are references from employers, portfolios, learning diaries, essays, exams, demonstrations of skills, giving lectures, interviews, and personal study plans (Mäkinen-Streng, 2016). Through those, the individual navigates between experiential and academic knowledge and articulates and translates the learning into the language and knowledge structures of the academic curriculum. (Cooper, Ralphs & Harris, 2017.)

Studification is mainly a Finnish term, launched in 2015, which refers to model where activities organized outside the university are designed to be part of the curriculum. It has similarities to work-based learning, e.g. obligatory or voluntary internships, but it is more than that. Studification is a model for gaining credits for extra-curriculum or cocurriculum activities in a premeditated manner. (Nurkka, 2018; Amkverkkovirta.fi-website.) Within a very short period of time studification has become highly relevant area for Finnish education policy, and the ministry has identified studification as one of the top projects in the Finnish HE development. (Nurkka, 2018, Amkverkkovirta.fi, 2019.)

RPL and studification are aligned with the idea that gaining entrepreneurial competences should be in the centre of entrepreneurship studies. Competences can be seen as capabilities of "applying or using knowledge, skills, abilities, behaviors, and personal characteristics to successfully perform in a given domain" (White & Moore, 2017, p. 100). The key entrepreneurial competences entail e.g. competence to act upon opportunities, ability exploit opportunities even when resources are scarce, bootstrapping or guerrilla actions, to mention some (Morris et al., 2013). And since entrepreneurial competences are more than just skills and knowledge on the domain, those are learned in action, not in the class rooms.

Approach

Context

There are distinct differences between Finnish ROUs and UASs in terms of RPL and studification practices. Practice-focused UAS apply them more frequently, and they form an integral part of students study paths. For example, at UASs the RPL process begins from the student's own initiative, but the tutor teachers help them to find the suitable way for each student. Usually there are two ways to utilize the RPL method, with direct transfer of credits and demonstration by demonstrating knowledge and skills learned from various instances

including courses and degree in a vocational school, work place, own company, free time or hobbies. The student may be requested to supplement the demonstration with a report, an interview, an essay, a learning diary, a portfolio, a practical skills demonstration or a test (Kallberg, 2009). Studification is an integral part of UASs' role as practice-oriented universities, which base their study offer strongly on the needs of regional and workplace needs. Studification process aims to combine the needs of working life, students' career hopes and university's learning goals in a mutually profitable way. (Haapala 2014.) ARENE (2015) has recommended that in all Finnish UAS entrepreneurship should be studificated so that the students have versatile ways of effectuating their studies in or for their own business, i.e. different courses and projects, different learning environments, incubators and accelerators, coopertives, or JA Finland's (Junior Achievement Finland) programmes. ROUs, on the other hand, have instructions and an administrative process for such practices, but they are less frequently promoted by the educational staff. Demonstration processes have similar basis, although emphasis on theoretically oriented demonstration is more prevalent. (Tuomainen 2016.)

Despite the existence of administrative processes, these processes are not fully exploited in Finnish HEIs in the field of entrepreneurship (Huusko et al., 2018). Consequently, The Ministry of Education and Culture has together with rectors from Finnish HEIs (UNIFI, 2016; ARENE, 2015) proposed that students' prior learning and competences in entrepreneurship should be considered as a resource, and consequently, transparent and new practices should be developed for HEIs for both RPL and studification of activities. Additionally, The Finnish Ministry of Education (2009) has set guidelines for EE that point out that, every HEI should have an approved operating method that encourages and provides skills for a career as an entrepreneur, generates innovations and creates favorable conditions for businesses to grow. The updated guidelines from 2017 stress that experimenting, functionality, learning by doing, project work, co-operation with business life, and different assignments, exercises and experiences in entrepreneurship are important means in EE in Finnish HE context. However, the guidelines are interpreted and implemented locally in different fields and the concepts of entrepreneurship and EE are not unequivocal as every teacher has his/her own idea of them. Consequently, EE manifests itself in multiple ways in Finnish ROUs and UASs via basic entrepreneurship courses, in different kinds of programmes, innovation camps, competitions and workshops, in major courses, modules or paths, in different learning environments and platforms, and in RDIprojects (Römer-Paakkanen, 2015).

Research material

The research material comprises of personal and group interviews, generated in 2018-2019, with a total of 30 teaching staff members in 14 Finnish HEIs that offer either degree programmes in entrepreneurship and associated fields (such as small business management and strategy) or integrated programmes, where entrepreneurship is embedded as one of the key learning areas into the official curriculum in non-business disciplines. The research material was collected and is informed by a larger national project funded by the Ministry of Education and Culture (2018-2020) on entrepreneurship and entrepreneurial behavior among HE students in Finland. In the project, the authors together with a group of nine Finnish HEIs representatives collected a large interview data to review, systematize and model different ways HEIs can recognize prior learning of entrepreneurship competences and studificate activities that develop students' entrepreneurship competences.

Data used in this study consists of interviews in 1) seven ROUs that differ in terms of the provision of entrepreneurship curriculum (entrepreneurship major; minor; entrepreneurship-

focused programmes) and the type of university (multi-disciplinary; technical university), and 2) seven UAS that each have different focus of education sector (Table 1). The data is geographically balanced with HEIs all-around Finland.

Table 1 Data collection framework

Research oriented universities (ROU) (7)	Study participants (10)
Multi-disciplinary university Entrepreneurship major (Bachelor, Master and PhD level)	A group interview with head teacher in entrepreneurship major and university teacher in entrepreneurship major
Multi-disciplinary university entrepreneurship minor (Bachelor) and major (Master and PhD level)	A group interview with university teacher in strategy and entrepreneurship and post-doctoral researcher in strategy and entrepreneurship
Multi-disciplinary university Entrepreneurship minor and PhD level	A personal interview with senior lecturer responsible for the entrepreneurship minor
Multi-disciplinary university Entrepreneurship minor	A personal interview with senior lecturer focused on entrepreneurship
Business School Entrepreneurship major (Bachelor, Master and PhD level)	A personal interview with associate professor in entrepreneurship and management
Technical university Entrepreneurship major (Master level)	A group interview with professor in entrepreneurship and head of student counselling
Technical university Entrepreneurship minor	A personal interview with postdoctoral researcher/lecturer
Universities of applied sciences (UAS) (7)	Study participants (20)
Business orientated UAS Business, ICT, hospitality and tourism, experience and wellness (Bachelor and master)	Six personal interviews with four senior lecturers, principal lecturer and study coordinator.
Multidisciplinary UAS Business Administration, Engineering, Culture and Arts and Health Care (Bachelor and master)	Three personal interviews with head of education and research, principal lecturer and degree programme leader. A group interview with head of education and research and three lecturers.
Multidisciplinary UAS Industrial, maritime, services, water and energy technology, logistics, tourism (Bachelor and master)	A group interview with two senior lecturers.
Multidisciplinary UAS Culture, business, technology, natural resources, health care and social services, tourism and catering, humanities (Bachelor and master)	A group interview with senior lecturer and project manager.
Multidisciplinary UAS Nursing, social services, ICT, safety, business, service, restaurant (Bachelor and master)	A personal interview with senior lecturer.
Multidisciplinary UAS Business, engineering, health and social care, ICT, media and performing arts, natural resources (Bachelor and master)	A personal interview with a senior lecturer.
Multidisciplinary UAS Business and administration, arts, sports, agriculture and forestry, tourism, technology, industry and construction, social and health care, welfare, ICT (Bachelor and master)	A personal interview with a senior lecturer.

All interviews followed the same interview protocol including a semi-structured interview frame, and they were recorded and transcribed to secure the accuracy of the information retrieved. Interviews were informed by both pragmatic and theoretical interests towards RPL and studification. First, interviews were to map the extend of the application of RPL and studification practices and the different methods and tools that were used to assess and demonstrate the learning and entrepreneurship competencies as well as to understand existing and potential challenges (e.g. technical, administrative) related to these processes. Second, theoretical interest was focused on the conceptual grounding and usage of theoretical frames of entrepreneurship competences against which the students' gained knowledge and capabilities were compared with in the RPL and studification processes. In the interviews, the participants were invited to freely describe the existing practices and speculate on the possibilities for developing and/or using new tools to aid these practices.

Analysis of the research material

Qualitative content analysis (Eriksson & Kovalainen, 2015) is used in analysing the interviews. First the text extracts, which included issues relevant to our research question, were separated from the data. Then they were categorized and coded based on themes appearing in the talk of the study participants. Categorisations were done first individually by each author and then they were discussed jointly to end up with shared understanding of the findings. Hence, the coding was mostly inductive and data-driven instead of theory-driven, even if the original interview template was based on the existent literature. The aim was to give space and encourage the study participants to articulate their sensemaking of the RPL and studification practices of their home institutions.

We see that the study participants are both making sense of and constructing the reality as they describe their institution's practices. Sensemaking they engage themselves in during the interviews includes both retrospective and future oriented, 'reality' constructing, aspects (Weick, 1995; Brown et al., 2015). Each of the study participants is basing their sensemaking on their own identity, role in the organization, and organizationally and culturally situated bundles of other practices (Gherardi et al., 2007). On the other hand, by emphasizing certain aspects of RPL and studification practices they also do their own identity work (Karreman & Alvesson, 2001) and legitimize their own or their institution's role (Golant & Sillince, 2007).

The study participants were asked to describe the practices their institutions had. Theoretically, for a practice to be a practice, it should be recurrent, socially sustained and institutionalized. However, practices are also transforming as they evolve. (Gherardi, 2011.) One of our outcomes was that in many HEIs, there were no recurrent and institutionalized practices, but things were done in an ad-hoc manner. In respect to the previous, two questions relevant to our data analysis would be, (1) if 'forced' sensemaking of potentially non-existent practices leads to articulation of illusory practices in the interview situation, and (2) does doing things in an ad-hoc manner constitute a practice in itself, if it is recurrent. There were no indications of seeing patterns where there was none. Instead, the study participants quite openly described a lack of specific procedures in their home institutions. As a response to the second question, we see that if doing things in ad-hoc manner is recurrent and it has become a 'taken-for-granted' way of handling RPL requests or designing the studification of co and extra-curricular activities, it constitutes a practice.

Findings

In our analysis of interviews with teaching staff in 14 Finnish HEIs we found both similarities and differences between ROUs and UAS in terms of utilization of RPL and studification

practices and in ways participants made sense of entrepreneurial knowledge as part of the academic curriculum in entrepreneurship. Findings are presented next in four chapters each focusing on thematic areas that present the sense making patterns of the study participants. Broadly speaking, we detected practical and epistemic questions into which sense making was connected to. Practical questions were linked to issues such as teachers' workload, equality of students, and smoothness of RPL and studification processes. Epistemic questions focused on such things as the balance between theoretical and experiential knowledge in entrepreneurship, the epistemic role of universities and the differences in roles between ROUs and UASs in the Finnish HE context.

Making sense of the instrumental value of experiential knowledge in HE degree

All in all, study participants from Finnish ROUs and UASs find it positive that students can develop and utilize their practical experience and skills in their HE studies. Practice-based and experiential learning activities such as project courses and real-life business cases are seen to enable the students to achieve productive learning results by allowing the student to be an active element in the education process and to engage in entrepreneurial action. The interpretation of experiential learning is both instrumental and normative; experiential activities that take place outside the class room are seen as a way to achieve educational objectives as well as to represent an ideal method on how educative processes should unfold in order to support the students' entrepreneurship competence development.

Despite the generally positive attitude, however, the study participants have differing views on the academic value of entrepreneurial knowledge and skills that is acquired via experiential learning experiences outside the official curriculum. The disunity in our data is identified not only between ROUs and UAS, but also among similar type of universities that offer entrepreneurship courses and programmes. On one end, it is recognised that RPL and studification have positive impact in students' study motivation. Students are expected to be more interested in completing courses, when they do not have to study in the class something they are already familiar with or when they can engage in something that is practically oriented.

We are planning to studificate more [entrepreneurial] activities. We know it will spring out a lot learning experiences that can be considered valid, because they take place in the business life. People who are committed to their business do not necessarily graduate, if they decide to fully commit to that path. By doing this we support also their graduation. It provides good learning experiences that should be utilized better to enable students' graduation and not to require theoretical, artificial courses from them. (ROU)

In the extract above, studification is considered a means in a ROU to decrease the drop-out rates by cutting of unnecessary academic programme and consequently, making the learning experience more doable for the students. Participants, who agree along these lines find the utility of RPL and studification in expediting HE studies, eliminating overlapping course content and providing the students with meaningful learning experiences that have educative function in students' skills and abilities development. This is especially the case in the UASs that each have a general RPL process for all studies that start by the students receiving the first instructions when starting their studies.

We do RPL mostly during the students' first six months. We at UAS level have such a common directive. It is not an official decision, but more like an instruction that we should enhance doing this RPL as much as we can. In practice, this means that after orientation week and during it so the tutor teacher helps to start the process. (UAS)

Whilst the recognition of prior learning is a highly supported and encouraged practice at the UAS, the ROUs (with a few exceptions) tend to be less interested in it and have doubts of its usability in a research-oriented educational context. Consequently, on the other end of views, there are doubts and questions of the benefit of such processes. Some think of RPL that it "does not always serve so much the learner – except that the learner gets the study credits" and that "one starts to wonder is this because we must get the students to graduate?" (ROU). Hence, some participants challenge in their interpretation the Ministry's recommendations by indicating that learning at a university should be something more than getting the degree. Additionally, a few find RPL and studification nearly futile or questionable, because ROUs are considered places where one should attend of an interest for self-development and not merely to collect one's degree.

This is not a programme where you can just come and say that 'I have done in my previous studies this, this, and this. So can I have them accepted [in my degree]?' We choose here students who want to learn more and attend our courses. (ROU)

These views are notably among ROUs representatives, who maintain that there needs to be limits as to how much a student can include tailored courses in his degree and how much of it can be approved via RPL processes. Hence, the idea of increasing the integration of independently gained practical entrepreneurial knowledge into the degrees is resisted. Some claim it seems an "after thought, an add-on element", introduced in the university world from the world of "professional education" (ROU). In the interview data, the rational for the resistance expressed is twofold. Firstly, RPL processes can be burdensome for both the teacher and the student. Because of this, some participants try to avoid it and recommend the students to much rather attend the course, or suggest other alternative options that are less bureaucratic. Secondly, teachers are particularly concerned of the balance between theoretical and practical educational content, and want to regulate the degrees. To solve this, a formula is presented in one interview to limit the amount of unstructured entrepreneurial learning.

In postgraduate studies, in principle, you could complete 60 ECTS by attending only transferrable skills courses. We do have some obligatory courses, but you could still take a lot of them. As supervisors we should discuss [with students] 'Maybe you should take the methodology course rather than all of those research commercialization courses", although they can be good, if one intends to take that path. Similarly, we should have some limit here [in RPL], especially if one wants to study entrepreneurship as a minor study. There also has to be something theoretical. (ROU)

Examples above present the extreme ends of interpretation in our data of the function of RPL and studification practices. To conclude, while many HEIs among both ROUs and UASs accept the national policies that put emphasis on accelerating the students graduation, the instrumental value of RPL and studification is partly challenged and limits to the share of experientially gained entrepreneurial knowledge is put forth.

Making sense of the balancing acts between pressures for tailoring and standardization

RPL practice necessitates that the student's experientially gained knowledge, skills and competence must correspond with the learning objectives of the curriculum or programme in a given HEI. If the student does not pass the demonstration, he can complete the course in the regular way in order to acquire the ECTS. In most HEIs, the RPL process is initiated by the students in an electronic study system, where the students fill a standardised application form. The student is responsible (with the support of a teacher, tutor or an administrative person) to demonstrate or prove that he has acquired and possess the academic qualifications. There are

differences between ROUs and UASs in terms of RPL and studification practices. UAS where the aim is to respond more to the needs of the labour market put emphasis on student-centered study paths, albeit as HE institutions also they stress academic qualifications.

We do it very diversely, always according to which is the most meaningful way for each student, and how fast the student wants to do it. [..] This is always tailoring. We are go after some certain needs such as the needs of different actors, the students' own needs, mandator's needs, needs related to teaching, needs of the UAS. (UAS)

Whilst the UASs are putting emphasis on learner-centered and highly idiosyncratic study path tailoring, ROUs are undergoing programme and school level accreditations that increasingly steer them towards standardization. The idea of standardization of evaluation of learning is also introduced in interviews, where study participants suggest administrative faculty should have a pivotal role in the RPL processes in overseeing it is done according to the institutional rules.

I think it is very good that the head of academic and student affairs participates to RPL processes, because she can compare practices in different disciplines. This way, we are in the same line with all other disciplines and do not make too obstinate decisions. So it is good that the university administration is involved in the discussions. (ROU)

In interviews, where the role of administrative staff is stated to be important, the evaluation of the relevance and fit of the student's entrepreneurial knowledge with the academic qualifications is partly externalized. Hence, the idea of experientially gained entrepreneurial knowledge is found something that can be explained in standardized form, compared against a benchmark and evaluated also by a person with little or no role in entrepreneurship education per se. Rational for promoting the standardization is also to ensure that students are treated separately and general guidelines are called for. This is to avoid "students going from door to door to meet professors and teachers, and one gave this and another gave that". (ROU)

Although this interpretation ensures the quality, consistency and equal treatment of students that is called after in the interviews, it also meets an internal conflict: in the interviews, majority of respondents resist an idea of a general frame of entrepreneurship competences against which the student's experientially gained learning could be compared. Instead, the learning is compared against each course objectives. Essentially, RPL is reduced to a process, where the correspondence between academic language and the language of working life is created to enable the study administrators alike to find a fit between them. This is in contrast with views among UAS that emphasise the interpreting act of the teacher in determining the student's qualifications.

That stuff lies specifically on the dynamic entrepreneurship principles, but it is interpretation. You [the teacher that accepts the RPL or studification] must be an expert to do it and you must have experience also. So you cannot do it without any experience. First year teacher cannot do it. (UAS)

There are, still, ROUs that promote the idea of flexibility in HE studying, but not in terms of providing tailored options and evaluations for each student. Flexibility can be directed towards providing different kinds of possibilities for learning in form of curricular or extra-curricular activities, where the university's role is to structure the learning and pre-determine the learning objectives. This approach favours the studification approach over RPL, where the university does not have any control in the circumstances, where the knowledge and competences have been gained. Hence, ROUs are flexible and open to studificate activities such as events and

programmes with education content provided by other actors in the entrepreneurship education ecosystem.

Each party must see the role and added value of the other party. For example, on our side we can promote [to students] that 'Hey, you can get involved in the community via the Society and get to hear stories.' But the other party must explain what the students get so that we can avoid juxtapositions. It is a good starting point when both understand and promote in their own events and occasions that we do this together and that we both carry out our own mission and we are bigger together. (ROU)

To conclude, in the data, both ROUs and UASs rely and call after administrative processes in RPL and studification practices in order to determine how entrepreneurship experience can be fitted to the academic curriculum. On the other hand, while UASs emphasise the role of the teacher in interpreting the relevance of the students' experience case by case, ROUs sense making is also connected to ideas of standardisation and objectivity.

Making sense of the material evidence of entrepreneurial knowledge

In most of the cases, where a HEI offers a course in new venture creation or business planning teachers are willing to recognise the prior experience when a person has established a business or worked in a family business. In these cases that apply a widely accepted definition of entrepreneurship as creating an organisation (Gartner, 1988), the business is considered a measure of the person's ability to accomplish something. Hence, business is considered a result of different variables that are believed to do with the person in question. Among HEIs, however, there is a varying degree of differentiating between the venture and the person, and the ways students are requested to display organisational, personal or social capacities associated with entrepreneurship.

Main means to proof the entrepreneurial knowledge are producing material evidence of both existence and performance of a business including producing business identity code, latest financial statements and an updated business plan. In other cases, on the other hand cases, person's ability to maintain business activities in long term is considered a key indicator of entrepreneurship competences as it self and any documentation is not necessitated. It is assumed that a long career as an entrepreneur is a proof itself of a certain level of competences and thus forms a minimum set of skills to run a business.

Certainly the know-how is very high in many of these cases, where a person has actively run a business. Regarding one case, we did not require to see a business plan, because we could verify that he has indeed run actively a business for 40 years. [..] But usually, we will also review the business plan. (ROU)

In other examples, on the other hand, entrepreneurial knowledge is directly linked to economic imperatives and teachers inspect the financial and business plans to see, if "there is some oddness in the plans" (ROU). Although the students could provide the teachers with evidence of the existence of a business, some study participants find it questionable, if entrepreneurial knowledge can be equated with each other purely on the basis of having a business.

One must remember that there is different types of entrepreneurship. One has run a hotdog stand and other a company with 500 employees. So it is all of this. (UAS)

Also, while most study participants necessitate evidence of activities within the organisation, only a few teachers are focused on the action by the business owner and claim that 'entrepreneurship is more of entrepreneurial thinking than starting a business'. On one

extreme end a ROU participant maintains that students deserve recognition already for taking a change and trying, and no material evidence is required to be presented.

The challenge is that there are so many different kinds of companies. It can be that some are tech-companies, where the development period is longer and the results take longer time to develop. Thus, one should get credits also for the company itself, I mean for trying. (ROU)

In the extract above, trying is equated with being entrepreneurial. This interpretation does not contain any expectations of the business being running or making profit. Entrepreneurial behaviour and life-world become important also in other interviews, where the students are in many cases requested to take part in a personal interview, where a series of questions regarding the business idea, business functions, and personal experiences of running a business are posed.

From the entrepreneurs I ask questions like "Have you had any sleepless nights with your business? Do you have any customers? Have you ever gotten any reclamations from your customers? Do you have any employees? Have you done any HR? (UAS)

In the extract above, the teacher does not only request information of the different company functions to determine, whether it is up and running, but also implies that stress, worry and dealing with customers in difficult situations create periods of entrepreneurial learning (Pittaway, 2004).

To conclude, in the data, different business function and individual's behavioural aspects are used to determine the fit between the entrepreneurial knowledge in relation to the curricular requirements. All in all, both ROUs and UAS accept entrepreneurial knowledge, when the student is interested in connecting it into courses with practical orientation representing the through, for and in approaches in EE.

Making sense of the added value academic requirements bring into EE

In the interviews, participants maintain that the complexity of entrepreneurship as a discipline makes is difficult to demonstrate and verify. Students would have to master several skills areas such as 'creativity techniques, business law, business financials, marketing and sales' (ROU). Hence, to teach entrepreneurship is different to 'teaching accounting in which the teacher teaches one aspect [of business]'. (ROU)

On the other hand, some teachers find experientially gained entrepreneurial knowledge difficult to prove (from the student's side) and verify (from the teacher's side) against what is expected with regards to verifying the critical and analytical skills and mastering the theoretical knowledge provided at the HE level.

We stress that one must know the knowledge basis, too. We are in HE level and that means that one should also understand that we have some theoretical basis, too. One should be able to read real books and studies and understand what there is. And also critical thinking. (UAS)

Study participants struggle with the idea that experientially gained entrepreneurial knowledge provides the students (entrepreneurs) with broader and contextually objective understanding of different business operations or aspect of entrepreneurial activities. Consequently, additionally theoretical knowledge is needed in order for the student to pass the RPL processes.

In specific courses there are topics, questions and views that have become familiar to entrepreneurs due to their entrepreneurial experience. Then, it boils down to if they can prove they can do [something]. It is not automatic that if you have been able to grow your business you know what business growth is in theoretical models. Maybe because of this, there are not so many RPL applications in those topics. Then again, we have received application in topics such as entrepreneurship politics, business succession and venture creation, because they can be packaged more easily. (ROU)

In case of both RPL and studification, the academic requirements are found important. The study participants think that experience is separate from academic learning and through utilization of academic conventions such as writing style and usage of academic literature the experience is "*elevated*" to academically acceptable level of learning. Hence, reflection is suggested as means to transform the experience into academically relevant knowledge (Man & Yu, 2007; Hägg & Politis, 2013; Hägg, 2017).

Scientific reporting is always necessitated no matter what kind of a project activity is concerned. Academic approach is always required so that [the students] can reflect on what they have done. No matter what has been done in it can be reflected into academic level and regarding one's own learning. So sources and list of references are included and so on. (ROU)

In addition to the academic format of reporting, the students are required to "show that [they] have accumulated learning" (ROU). However, any publicly available information that can be used for unstructured and independent self-studying in entrepreneurship is considered potentially distorted and not suitable for the accumulation and deepening of understanding of entrepreneurship. For example, some study participants maintain that academic approach and especially criticality means avoiding fads and trends that simplify entrepreneurship or new venture creation process. Teachers doubt students' ability to deduce larger theories from single cases or examples without academic guidance.

[Participant 1]: We all know that you can google, watch YouTube or whatever, and find content regarding starting a business. But will it be understood that it is only one model, and it has good sides and bad sides. I think the role of university has to be to enable the students to learn to adopt a critical stance and think in which situation something works and does not work. Because rarely this type of critical [view] is available.

[Participant 2): Consult type of literature and talk, related to some isms... [Participant 1]: Yes.

[Participant 2] Although I use in my course business model canvas, there are those who are criticized it. It is not the be-all and end-all truth in developing businesses in the early phases. There are others like this. And what does business model even mean. There is academic literature, research and definitions for it. Understanding all this in addition to doing business. There is a bigger questions here related what is the role of UAS and ours as ROU. I think they should be separated in this regards. (ROU)

In the interviews, a dialogical relationship between theory and experience is presented in two different types of instances. First, participants maintain that theory provided at the university enhances the baseline knowledge and experience the students already possess by improving it and conveying it.

If somebody has been an entrepreneur for ten years of course he has some know-how. But couldn't he benefit from the courses, because not all our courses – when excluding

starting a business course – are very practically oriented? [..] They could come with their experience and attend the more theoretical course and from it they could get more advice and hints instead of puzzling over their know-how alone in reflections against the literature. (ROU)

Second, individuals with business experience are seen as a resource in the class room in the ways they provide their experience-based expertise (phronesis). Consequently, many respondents report that they encourage entrepreneurs to join the courses instead of pushing them towards the RPL processes.

Now RPL leads to a situation where the best experts, in practice I mean, won't attend the course, but instead apply for exemption. As a result, a hefty amount of learning opportunities go underutilized. They won't attend contact lectures and discussions and won't bring their views in it. This is a great loss. I have had several RPL applications in my table, and I have thought that this is a very big problem, because these people are not in the lecture halls discussing and bringing their experience so that the topic would become alive. Because teaching situations are interaction situations and not pouring the information. (ROU)

To conclude, study participants resist the idea of integration of experientially gained entrepreneurial knowledge into the curriculum when there is a strong theoretical orientation (about approach in EE). On the other hand, they find this experience important in terms of the dialogical relationship between theory and practice, and consider that it will bring value in the class room.

Discussion

In our research data consisting of RPL and studification practices reviewed via personal and group interviews with 30 teaching staff members in 14 HEIs in Finland, we noted both similarities and differences between ROUs and UASs in the integration of these practices and in ways the study respondents made sense of the role of entrepreneurial knowledge as part of the academic curriculum in entrepreneurship. To sum, RPL and studification practices are fully integrated into the design of the curriculum and pedagogic processes of educational programmes in UASs, and a student-focused, idiosyncratic approach is favored. On the other hand, ROUs remain skeptical of the role and amount of experientially acquired entrepreneurial knowledge in the curriculum, although administrative processes are in place to allow their use.

In our data, the strong emphasis on learning through action has found its balance in reflective thinking (Hägg, 2017). Study participants both in ROUs and UASs emphasise the importance of the theoretical basis of entrepreneurship tying it closer to other mainstream HE education (Pittaway and Cope, 2007). On the other hand, some study participants proclaim theories are even somewhat useless for entrepreneurs. It can be that emphasizing the importance of theoretical knowledge is a defense reaction to perceived threat to the role and power of the HEIs, or it can be that the study participants see that experientially gained entrepreneurship knowledge and theoretical knowledge are both necessary building blocks for entrepreneurial knowledge. Here, theoretical knowledge is not necessarily opposite to experience-based knowledge. Theories can be seen as generalizations of practices that are used as tools to make sense, reflect against and cope with the everyday challenges that student entrepreneurs encounter (cf. Kolb, 1984).

In the interviews, entrepreneurship is understood in many ways, but emphasis is put on creating an organization (Gartner, 1988) and considering entrepreneurship as behaving

entrepreneurially (Gibb 2005). The sense making of the role of entrepreneurial knowledge is also multidimensional. The findings in the data of both ROUs and UAS highlight specific issues working at different levels when making sense of entrepreneurial knowledge in relation to the curriculum: *theoretical* (denoting entrepreneurship as a discipline), *institutional* (denoting organizational objectives and requirements), *practical* (denoting guidelines and administrative processes) and *HE political* (denoting the role of HEIs in producing entrepreneurial individuals). Especially, the epistemic questions related to control over curriculum are made visible when discussing whether RPL and studification practices are doable or relevant in the frame of EE.

Findings from our study suggest that while Finnish HEIs have taken up the recommendations provided by the Ministry of Education and Culture on providing the HE students with support for self-employment orientations and entrepreneurship in different forms, they partly struggle with adjusting experientially gained and practice-oriented entrepreneurial knowledge with the academic requirements in connection with RPL and studification practices.

With regards to further research, more research is needed on how educators responsible for planning and delivering EE curriculum in HE navigate between different kinds of expectations and make educational decisions in their contexts. For example, more exploration into formal and informal ways of utilization of experientially gained entrepreneurial knowledge in the curriculum could provide one avenue to study this topic more.

References

Adam, S. (2007). Why is the Recognition of Prior Experiential Learning Important and What are the National and Institutional Implications of this for Lifelong Learning? New Challenges in Recognition: The Recognition of Prior Learning. Official Bologna Process Seminar, Riga, Latvia 24-26th January 2007. [online] Available at: http://www.aic.lv/bologna2007/[Accessed 11 March 2019].

Amkverkkovirta.fi (2019). Verkkovirta – New Forms of Studification in Collaboration Between Higher Education and Work Project's Website. Haaga-Helia University of Applied Sciences. [online] Available at: http://www.amkverkkovirta.fi/ [Accessed 5 March 2019].

Andersson, P., Fejes, A., and Sandberg, F. (2013). Introducing Research on Recognition of Prior Learning. *International Journal of Lifelong Education*, 32(4), pp. 405-411.

Andresen, L., Boud, D., and Cohen, R. (2000). Experience-based Learning. *Understanding Adult Education and Training*, 2, pp. 225-239.

ARENE (2015) ARENEn yrittäjyyssuositukset [Entrepreneurship Recommendations by ARENE The Rectors' Conference of Finnish Universities of Applied Sciences] 12.3.2015. [online] Available at: https://www.yrittajat.fi/ [Accesses 1 Oct 2018].

Auno, P., Heikkinen, E., Itkonen, H., Karhu, A., Karjalainen, R-L., Korkealehto, K., Määttä, A., Oikarinen, A., Rajander, T., Ravelin, T., Ruotsalainen, M. and Takala, K. (2016). *Pedagogical Model 2016 – Expertise with Smart Attitude and Joy.* Kajaani University of Applied Sciences publication series B 58 / 2016. [online] Available at: https://www.theseurs.fi [Accesses 1 Oct 2018].

Bohlinger, S. (2017). Comparing Recognition of Prior Learning (RPL) Across Countries. In: Mulder, M., and Winterton, J. (eds.) *Competence-based vocational and professional education. Bridging the Worlds of Work and Education*. Springer, Cham, pp. 589-606.

Brown, A. D., Colville, I., and Pye, A. (2015). Making Sense of Sensemaking in Organization Studies. *Organization Studies*, 36(2), pp. 265-277.

Brush, C. G., Green, P. G. and Strimaitis, J. (2014). Entrepreneurship at Babson College: Curricular, Co-curricular and Executive Education Programmes. In: Michael H. Morris (ed.) *Annals of Entrepreneurship Education and Pedagogy – 2014. In Association with the United States Association for Small Business and Entrepreneurship.* Cheltenham, UK, Northampton, MA, USA: Edward Elgar, pp. 314-323.

Brush, C. G. (2014). Exploring the Concept of an Entrepreneurship Education Ecosystem, In: Hoskinson S. and Kuratko D. F. (eds.), *Innovative Pathways for University Entrepreneurship in the 21st Century. Advances in the Study of Entrepreneurship, Innovation and Economic Growth*, Vol. 24, Emerald, Bingley, UK, pp. 25–39.

Bruyat, C. & Julien, P-A (2001). Defining the Field of Research in Entrepreneurship. *Journal of Business Venturing*, 16(2): pp. 165-180.

Cooper, L., Ralphs, A. and Harris, J. (2017). Recognition of Prior Learning: The Tensions Between its Inclusive Intentions and Constraints on its Implementation, *Studies in Continuing Education*, 39(2), pp. 197-213.

Cope, J. and Watts, G. (2000). Learning by Doing – An Exploration of Experience, Critical Incidents and Reflection in Entrepreneurial Learning. *International Journal of Entrepreneurial Behaviour & Research*, 6(3): pp. 104-124.

Eriksson, P., and Kovalainen, A. (2015). *Qualitative methods in business research: A practical guide to social research.* London, UK: Sage Publications.

Evans, N. (2006). Recognition, Assessment and Accreditation of Prior Experiental Learning. In: Corradi, C., Evans, N. and Valk, A. (eds.) *Recognising Experiental learning: Practices in European Universitites*. Tarto University Press. Estonia.

Gartner, W. B. (1988). "Who is an entrepreneur?" is the Wrong Question. *American Journal of Small Business*, 12(4), pp. 11-32.

Gherardi, S. (2011). Organizational Learning: The Sociology of Practice, 2nd ed. In: Easterby-Smith, M, Lyles, M, A (eds), *Handbook of Organizational Learning and Knowledge Management*. Hoboken, NJ, USA: John Wiley & Sons.

Gherardi, S., Nicolini, D. and Strati, A. (2007). The Passion for Knowing, *Organization*, 14(3), pp. 315-329.

Gibb, A. (2005). The Future of Entrepreneurship Education – Determining the Basis of Coherent Policy and Practice. In: Paula Kyrö and Camille Carrier (eds.) *The Dynamics of Learning Entrepreneurship in a Cross-Cultural University Context*. Entrepreneurship Education Series 2/2005, University of Tampere, pp. 44-67.

Golant, B. D. and Sillince, J. A. (2007). The Constitution of Organizational Legitimacy: A Narrative Perspective. *Organization studies*, 28(8), pp. 1149-1167.

Haapala, A. (2014). Oppiminen TKI-projekteissa. In: Haapala, A. (ed.), *Opinnollistaminen TKI-projekteissa: Lähtökohtia toteutukseen ja kokemuksia käytännöstä*. [Studification in RDI projects: Starting points for implementation and experiences from practices] A: Tutkimuksia ja raportteja – Research Reports 95, Mikkeli: Mikkelin ammattikorkeakoulu, pp. 10-21.

Heinonen, J. & Hytti, U. (2010). Back to Basics: the Role of Teaching in Developing the Entrepreneurial University. *The International Journal of Entrepreneurship and Innovation*, 11: pp. 283-292.

Huusko, M., Vettenniemi, J., Hievanen, R., Tuurnas, A., Hietala, R., Kolhinen, J. and Ruskovaara, E. (2018). *Yrittämään oppii yrittämällä. Yrittäjyys ammatillisessa koulutuksessa ja korkeakouluissa –arviointi*. [One learns entrepreneurship by entrepreneuring. Evaluation of entrepreneurship in vocational and higher education.] Kansallinen Koulutuksen arviointikeskus, Julkaisut 25:2018.

Hägg, G. (2017). Experiential Entrepreneurship Education. Reflective Thinking as a Counterbalance to Action for Developing Entrepreneurial Knowledge. Doctoral dissertation. Lund University. Department of Business Administration Sten K. Johnson Centre for Entrepreneurship.

Hägg, G. and Politis, D. (2013). Learning Through Reflection: The Role of Mentorship in Entrepreneurship Education. In: Catano, A. (ed.) *Proceedings of the Entrepreneurship Summer University at ISCTE-IUL 2013*. Vol. 1. pp. 215-229. [online] Available at https://issuu.com/ [Accessed 21 March 2019].

Jamieson, I. (1984). Schools and Enterprise. In A. G. Watts and P. Morgan (eds.), *Education for Enterprise*. Cambridge: CRAC, Ballinger, pp. 19-27.

Johannisson, B. (1991). University Training for Entrepreneurship: Swedish Approaches. *Entrepreneurship & Regional Development* 3(1): pp. 67-82.

Johnson, C. (1988). Enterprise Education and Training. *British Journal of Education and Work*, 2: pp. 61-65.

Jones, B. and Iredale, N. (2010) Enterprise Education as Pedagogy. *Education+Training*, 52(1): pp. 7-19.

Kallberg, K. (2009). Aiemman osaamisen tunnustamisen lähtökohtia ammattikorkeakoulussa. In: Haltia, P., & Jaakkola, R. (eds.), *Osaaminen esiin: näkökulmia tunnistamiseen ja tunnustamiseen*. [Make the competences visible. Perspectives for recognition and knowledgement]. Haaga-Helian julkaisusarja, Puheenvuoroja 5/2009, Helsinki: Edita. pp. 14-36. [online] Available at: http://www.haaga-helia.fi [Accessed 31 March 2019].

Karreman, D. and Alvesson, M. (2001). Making Newsmakers: Conversional Identity at Work. *Organization Studies* 22(1), pp. 59-89.

Katz, J. A. (2003). The Chronology of American Entrepreneurship Education. *Journal of Business Venturing*, 18(2): pp. 283-300.

Kolb, D.A. (1984). Experiential Learning: Experience as the Source of Learning and Development. Prentice Hall. Englewood Cliffs, NJ.

Kuratko, D. F. (2005). The Emergence of Entrepreneurship Education: Development, Trends, and Challenges. *Entrepreneurship Theory and Practice*, 29(5): pp. 577-597.

Kuratko, D. F. and Morris, M. H. (2018). Examining the Future Trajectory of Entrepreneurship. *Journal of Small Business Management, Special Issue: Entrepreneurship Everywhere: Across Campus, Across Communities and Across Borders* 56(1): pp. 11-23.

Kyrö, P. (2005). Entrepreneurial Learning in a Cross-Cultural Context Challenges Previous Learning Paradigms. In: Kyrö, P. & Carrier, C. (eds.), *The Dynamics of Learning Entrepreneurship in a Cross-Cultural University Context*. Hämeenlinna: University of Tampere

Man, T.W.Y. and Yu, C.W.M. (2007). Social interaction and adolescent's learning in enterprise education: An empirical study. *Education* + *Training*, 49(8/9), pp. 620-633.

Mäkinen-Streng, M. (2016). *Selvitys aiemmin hankitun osaamisen tunnustamisesta suomalaisissa ammattikorkeakouluissa ja yliopistoissa* [Review of recognition of prior learning practices in Finnish Universities of Applied Sciences and Research-oriented Universities]. OKM/7/040/2016.

Ministry of Education (2007) *Aiemmin hankitun osaamisen tunnustaminen korkeakouluissa*. [Recognition of Prior Learning in Higher Education] Opetusministeriön työryhmämuistioita ja selvityksiä 2007:4. Koulutus- ja tiedepolitiikan osasto.

Ministry of Education (2009). Yrittäjyyskasvatuksen suuntaviivat [Guidelines for Entrepreneurship Education]. Opetusministeriö. Koulutus- ja tiedepolitiikan osasto. [online] Available at: https://julkaisut.valtioneuvosto.fi/ [Accessed 21 March 2019].

Ministry Education and Culture (2017). *Koulutuksen yrittäjyyslinjaukset 2017* [Outlines for entrepreneurship in education 2017]. [online] Available at: https://minedu.fi [Accessed 1 Oct 2018].

Miyasaki, N. (2014). Can Universities Really Help Students Start Ventures?, In: Michael H. Morris (ed.) *Annals of Entrepreneurship Education and Pedagogy – 2014. In Association with the United States Association for Small Business and Entrepreneurship.* Cheltenham, UK, Northampton, MA, USA: Edward Elgar, pp. 177-199.

Morris, M. H., Kuratko, D. F. and Cornwall, J. R. (2013). *Entrepreneurship Programs and the Modern University*. Cheltenham, UK, Northampton, MA, USA: Edward Elgar.

Morris, M. H., Webb, J. W., Fu, J., and Singhal, S. (2013). A Competency-based Perspective on Entrepreneurship Education: Conceptual and Empirical Insights. *Journal of Small Business Management*, 51(3), pp. 352-369.

Neck, H., P. G. Greene, and C. G. Brush (2014). *Teaching Entrepreneurship: A Practice-Based Approach*. Cheltenham, UK: Edward Elgar Publishing.

Nurkka, P. (2018). Studification as a Model to Learn Deeper and Faster in Higher Education, Published in the *INTED2018 Conference Proceedings*, pp. 3377-3384.

O'Connor, A. 2013. A conceptual framework for entrepreneurship education policy: Meeting government and economic purposes. Journal of Business Venturing, 28, 546-563.

Pittaway, L. (2004). Simulating Entrepreneurial Learning: Assessing the Utility of Experiential Learning Designs. Lancaster University Management School. Working Paper 2004/049. [online] Available at: http://eprints.lancs.ac.uk/ [Accessed 21 March 2019].

Pittaway, L. and Cope, J., (2007). Simulating Entrepreneurial Learning: Assessing the Utility of Experiential Learning Designs. *Management Learning*, 38(2), pp. 211-233.

Politis, D. (2005). The Process of Entrepreneurial Learning: A Conceptual Framework. *Entrepreneurship Theory and Practice*. 29 (4), pp. 400-424.

Politis, D. (2008). Does Prior Start-up Experience Matter for Entrepreneurs' Learning? A Comparison Between Novice and Habitual Entrepreneurs. *Journal of Small Business and Enterprise Development*, 15(3), pp. 472-489.

Prime Minister's Office (2015). Finland, a land of solutions. Strategic Programme of Prime Minister Juha Sipilä's Government. 29 May 2015. Government Publications 12/2015. Helsinki: Edita Prima.

Rae, D., Martin, L., Antcliff, V. and Hannon, P. (2012). Enterprise and Entrepreneurship in English Higher Education: 2010 and Beyond, *Journal of Small Business and Enterprise Development* 19(3): pp. 380–401.

Römer-Paakkanen, T. (2015). *Yrittäjyyskasvatuksen suuntaviivojen tilan arviointi amksektorilla Suomessa* [State of Guidelines for Entrepreneurship Education in Finnish Universities of Applied Sciences]. Unpublished research paper. Aalto University.

Shekhar, P., Huang-Saad, A. and Libarkin, J. (2018). Examining Differences in Students' Entrepreneurship Self-Efficacy in Curricular and Co-Curricular Entrepreneurship Education Programs, In: Charles H. Matthews and Eric W. Liguori (eds.) *Annals of Entrepreneurship Education and Pedagogy – 2018. In Association with the United States Association for Small Business and Entrepreneurship*, Cheltenham, UK, Northampton, MA, USA: Edward Elgar Publishing, pp. 219-235.

Stenlund, T. (2010). Assessment of Prior Learning in Higher Education: A Review from a Validity Perspective. *Assessment & Evaluation in Higher Education* 35(7), pp. 783-797.

Tomkins, L. and Ulus, E. (2016). 'Oh, was that "Experiential Learning"?!' Spaces, Synergies and Surprises with Kolb's Learning Cycle. *Management Learning*, 47(2): pp. 158–178.

Tuomainen, S. (2016). Kuka haluaa AHOTia yliopistoissa? [Who wants recognition of prior learning in universities?] *Kasvatus*, 4, pp. 387-390.

UNIFI (Universities Finland) (2016). *Korkeakoulujen yrittäjyyssuositukset* [Recommendations for entrepreneurship by higher education institutions]. [online] Available at: http://www.unifi.fi [Accessed 1 Oct 2018].

Weick, K. E. (1995). Sensemaking in organizations, Thousand Oaks, CA: Sage Publications.

White, R. J. and Moore, K. (2016). Application of Competency-Based Learning to Entrepreneurship Education: Integrating Curricular and Cocurricural Elements to Enhance Discipline Mastery. In: Laura A. Wankel and Charles Wankel in collaboration with Jordan Larose and Quincy Greenheck (eds.) *Integrating Curricular and Co-curricular Endeavors to Enhance Students Outcomes*, Bingley, UK: Emerald Group Publishing, pp. 99-118.