

Navigating the challenges in the transfer between experiential and formal learning in entrepreneurship

Kirsi Peura,

FT, yrittäjyysasiamies, tutkijatohtori,

Turun yliopisto, Innovaatiot, yrittäjyys ja koulutusvienti,

kirsi.peura@utu.fi,

p. 050 5027075, Joukahaisenkatu 3-5 B, 20520 Turku

Satu Aaltonen,

VTM, projektitutkija,

Turun yliopisto, Johtamisen ja yrittäjyyden laitos,

satu.aaltonen@utu.fi,

p. 358 50 505 3630, Rehtorinpellonkatu 3, 20500 Turku.

Navigating the challenges in the transfer between experiential and formal learning in entrepreneurship

Abstract

This study focuses on recognition of prior learning and the accreditation of learning demonstrated in some other manner, and investigates how university teachers accept, resist and negotiate transfer between experiential and formal learning in entrepreneurship. This is done in order to add new knowledge in this under-theorized area and to provide insight about recognition and accreditation of learning that still remain underutilized practices in entrepreneurship. Through discursive approach, the study analyzes personal and group interviews done in 2018-2019 with 56 teachers from 24 Finnish universities. According to the analysis, the teachers mobilise three main discourses when rationalizing the applicability of practices related to recognition and accreditation of learning in entrepreneurship: 'good teacherhood', 'disciplinary' and 'university' discourse. The findings highlight, that recognition and accreditation of learning are not merely assessment-based practices. Instead, they challenge the teachers' ideas about learning, university's role and the epistemic questions in entrepreneurship. Accordingly, universities should engage teachers in broader discussion about recognition and accreditation of learning, when aiding their adoption in universities.

Keywords: recognition of prior learning, RPL, accreditation of learning, studification, entrepreneurship, higher education, discourse analysis, universities.

Tiivistelmä

Tämä tutkimus keskittyy aikaisemmin hankitun osaamisen tunnistamiseen ja tunnustamiseen (AHOT, hottaus) ja opinnollistamiseen, sekä tutkii, kuinka korkeakoulujen opettajat hyväksyvät, vastustavat ja neuvottelevat yrittäjyyteen liittyvän kokemuksellisen ja formaalin oppimisen välistä siirtoa. Yrittäjyyden ahointi ja opinnollistaminen ovat tällä hetkellä sekä alituttuja että -hyödynnettyjä käytäntöjä korkea-asteella, mistä syystä tämä tutkimus tähtää uudenlaisen tiedon tuottamiseen niiden ymmärtämiseksi. Tutkimus hyödyntää diskursiivista lähestymistapaa analysoimalla vuosina 2018–2019 kerättyjä henkilö- ja ryhmähaastatteluja, joihin osallistui yhteensä 56 opettajaa 24 suomalaisesta korkeakoulusta. Analyysi osoittaa, että perustellessaan ahoinnin ja opinnollistamisen käyttömahdollisuuksia ja rajoitteita, opettajat mobilisoivat kolme erilaista päädiskurssia: hyvä opettajuus-, oppiainekohtaisuus- sekä yliopisto-diskurssit. Tulokset havainnollistavat, että ahointi ja opinnollistaminen eivät ole pelkästään arviointipohjaisia

menettelyjä. Ne haastavat opettajien käsitykset oppimisesta, yliopiston roolista ja yrittäjyyden episteemisistä kysymyksistä aiheuttaen erilaisia jännitteitä näiden diskurssien sisällä. Käytännön implikaationa todetaan, että mikäli korkeakoulut haluavat edistää ahotoinnin ja opinnollistamisen laajamittaisempaa käyttöönottoa yrittäjyydessä, tulisi niiden ottaa yksittäiset opettajat mukaan ahotoinnin ja opinnollistamisen laajempiin keskusteluihin yhteisen ymmärryksen muodostamiseksi. Avainsanat: ahot, ahointi, hottaus, osaamisen tunnistaminen ja tunnustaminen, opinnollistaminen, yrittäjyys, diskurssianalyysi, korkeakoulut.

Introduction

This study focuses on the recognition of prior learning and accreditation of learning demonstrated in some other manner in entrepreneurship. These processes are also referred to as the assessment, accreditation, recognition, or validation of learning. They represent a variety of practices adopted in higher education institutions (HEIs) across the globe in order to make the learning acquired from experiential learning outside the educational institution visible, and in doing so, allow students to fulfill their academic requirements outside the official curriculum (Stenlund, 2010). The main goal of the recognition of learning is to recognize and acknowledge individuals' already existing competences regardless of how and where they were acquired and award credits for them (e.g., Bohlinger, 2017). Accreditation of learning demonstrated in some other manner, on the other hand, refers to a model wherein the learning activities that take place outside the university are designed to be part of the curriculum in a predetermined manner. This model is mainly used in Finland, and it focuses on defining suitable ways to acquire the intended competences through work or hobbies (Kotila & Mäki, 2015). In this study, we focus solely on learning that takes place outside formal institutions, limiting it to aspects related to the recognition and accreditation of experience-based learning from informal and non-formal settings (Evans, 2006). In these practices, the students' learning is integrated into the degree through the transfer between experiential and formal learning.

Recognition and accreditation of learning (later RAL) are visibly promoted in Finnish higher education (HE) policy. Their normative foundation is based on the need to accelerate the rate at which students enter working life through increasing the effectiveness of their studies and avoiding overlapping learning (Ministry of Education, 2007; Prime Minister's Office, 2015). RAL are promoted particularly in the field of entrepreneurship (UNIFI, 2016; ARENE, 2015), but their use remains lower than expected (Huusko et al., 2018). Entrepreneurship offers a suitable context to study the RAL because the role of experiential learning is recognized both within the entrepreneurship curriculum (e.g., Bell & Bell, 2020) and outside it, in the realm of social learning in entrepreneurship (e.g., Kuratko & Morris, 2018). However, little attention has been paid so far to

the transfer between experiential and formal learning (see, e.g., Williams Middleton et al., 2019; Morris et al., 2013a; White & Moore, 2016).

The transfer between experiential and formal learning poses a variety of challenges on organizational, institutional, cultural, and individual levels (Bohlinger, 2017). At the individual teacher's level, recognition of learning depends on the teacher's values, pedagogical preferences, ideas about an ideal learner, as well as how they perceive epistemological questions in their respective disciplines (Cooper & Ralphs, 2016; Harris & Wihak, 2017). In the Finnish context, the existing research has most often focused on analyzing the RAL from the perspective of HE students or by analyzing HEI practices (Huusko et al., 2018; Mikkola & Haltia, 2019; Mäkinen-Streng et al., 2017; Ministry of Education, 2007). So far, only a few studies have focused on teachers' perspectives in selected Finnish HEIs (see, e.g., Niemelä, 2013; Kiviniemi, 2013), but empirical studies within specific disciplinary fields across the HE sector are still lacking.

To help fill this research gap, this study focuses on the transfer between experiential and formal learning in entrepreneurship from the perspective of teachers. The data consists of personal and group interviews done in 2018–2019 with 56 teachers from 24 Finnish HEIs. In analyzing these interviews with a discursive approach, we asked the following question: *How do teachers accept, resist, or negotiate the transfer between experiential and formal learning through the RAL in entrepreneurship?*

Literature review

Transfer between experiential and formal learning

RAL have been discussed in the existing literature from various perspectives, including, for example, factors exogenous to HEIs, such as the dynamics of the labor market and the role of industrial and professional bodies in negotiating professional qualifications and regulations (Harris & Wihak, 2017). Inter-HEI factors, such as institutional and cultural factors, also affect the preconditions for recognition and accreditation with respect to how high experiential learning is valued and the degree of autonomy enjoyed by teachers when implementing them (Dyson & Keating, 2005; Bohlinger, 2017). Practices related to RAL have been studied particularly in the Finnish context (Kiviniemi, 2013). The focus of this study is on teachers since they play an important role in the RAL (Niemelä, 2013).

In the RAL, evidence of the competences a student has acquired are assembled, mapped, and compared against the learning outcomes in the curriculum. Here, competences are not limited

only to knowledge (Cooper et al., 2017; Harris & Wihak, 2017), but also include specific skills and attitudes related to a domain or topic, such as entrepreneurship (Mulder et al., 2007; Ministry of Education, 2009). To make the various competencies visible and codified to match the academic language, institutional practices are applied using different methods. The most commonly used methods are references from employers, learning diaries, essays, exams, demonstrations of skills, giving lectures and personal study plans (Mäkinen-Streng, 2016; Bohlinger, 2017). A student's claims for receiving credits are subjected to assessment, where the teacher's role is to make judgements as to whether the student's evidence of their competences corresponds with the assessment criteria.

Integration of learning acquired outside the academic world requires from teachers an understanding of the boundaries between experiential and formal learning. As pedagogic practices, the RAL differ from a conventional transmission and assessment of competences because there can be several sources of learning. Accordingly, teachers require a specialized pedagogy to help them successfully navigate different learning and assessment practices and aid the learner in mediating the exchange between experiential and formal learning (Cooper et al., 2016). When applying these practices, teachers' old teaching practices can be challenged and new skills needed. Depending on their personal dispositions, teachers can act either as "champions" of new practices or they can question the role of experiential learning altogether and disregard new practices (Armsby et al., 2006; Harris & Wihak, 2017). In the Finnish context, teachers' intrapreneurial mindset and job satisfaction have proved to predict interest to develop RAL practices (Niemelä, 2013).

Although the disciplinary context does not seemingly have a deterministic effect on the transferability of learning from one context to another, teachers' subjective perceptions regarding the epistemological questions in their respective fields seem to be connected to their willingness to accept and award a credit value for experiential learning. It has also been suggested that a teacher's personal values and commitment to retaining existing teaching and learning models as well as their ideas about an ideal learner affect their disposition towards these practices (Cooper & Ralphs, 2016; Harris & Wihak, 2017).

Transfer between experiential and formal learning in entrepreneurship

Entrepreneurship as a discipline draws from a combination of experiential and formal learning. There is still, however, a prevalent debate on how they ought to be combined (Williams Middleton et al., 2019). This debate is connected with questions related to what entrepreneurship education (EE) is about and what kind of competences it should strive to develop (Toutain & Fayolle, 2017).

Today, EE does not aim to educate students to simply create or develop businesses (Mitchelmore & Rowley, 2010), but also facilitates them in developing an entrepreneurial mindset and coping with any contexts of uncertainty and ambiguity (Toutain & Fayolle, 2017). These approaches relate to the different teaching and learning models, and accordingly, to different entrepreneurial outcomes (Nabi et al., 2017).

The role of practice is particularly emphasized in EE (Neck et al., 2014), and there is common agreement that experiential learning is an essential part of it (Gaggiotti et al., 2020). Experiential learning approaches are most commonly used with the *through* and *for* aspects of EE, which put less focus on delivering information *about* entrepreneurship (Henry et al., 2005; Kyrö, 2008). Instead, these approaches strive to develop entrepreneurship personalities regardless of educational practice and/or prepare student entrepreneurs for a future entrepreneurial career in simulated entrepreneurial learning events. The experiential approach is present also as an *in* approach, where students can learn how real entrepreneurs behave and act in a real business context (Henry et al., 2005).

Experiential approaches are applied in EE within the official curriculum as well outside it, in other social learning contexts. These include experiential co- and extra-curricular activities recognized as important for students' personal development when preparing them for entrepreneurial careers (Williams Middleton et al., 2019; Morris et al., 2013b). Although questions on how to identify, evaluate, and incorporate the learning outcomes gained from extra-/co-curricular learning situations have become topical, thus far most universities have not been able to adequately assess the value of such activities (Williams Middleton et al., 2019; Morris et al., 2013b; White & Moore, 2016). Finland is a unique contrast to this problem. In Finland, the RAL makes it possible to integrate learning from a multitude of different sources into the curriculum. These can include, for example, learning that takes place in activities organized by student-led entrepreneurship societies (Siivonen et al., 2020) or working in one's own company.

Research approach

The research material consists of personal and group interviews done in 2018–2019 with 56 teachers in 24 Finnish HEIs (13 research-oriented universities (ROUs) and 11 universities of applied sciences (UAS)). These HEIs offer degree programs in entrepreneurship and associated fields (e.g., small business management) as well as integrated programs where entrepreneurship is embedded into the curriculum of non-business disciplines (e.g., social work). The research material was collected in a national project funded by the Ministry of Education and Culture (2018–2020) on entrepreneurship and entrepreneurial behavior among HE students.

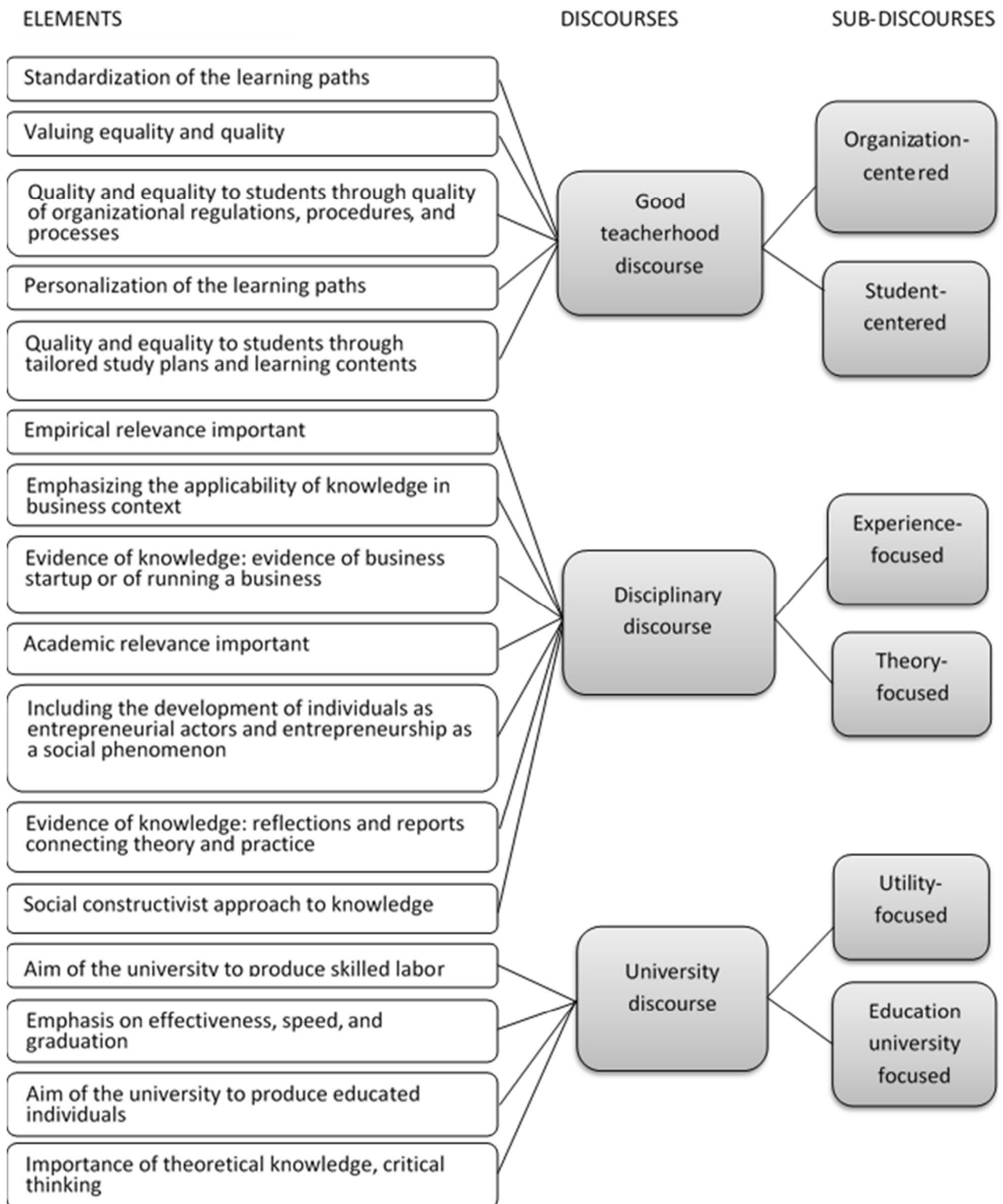
All interviews followed the same interview protocol and included a semi-structured interview frame. They were recorded and transcribed (except for four interviews, where the data consists of the interviewer's notes). In the interviews, teachers were asked to freely tell about and give examples of how and why (or why not) the RAL were applied in an HEI context. This was done in order to understand what works or does not work and to allow the implicit expertise of the teachers to emerge in the interviews (Meuser & Nagel, 2009).

Discourse analysis was applied when analyzing the interviews. It accounts for language as a reality-producing means by looking beyond what is said to consider how things are said and to what effect (Alvesson & Kärreman, 2000). The analysis focused on what kinds of arguments teachers used when assigning meanings to the RAL and how such arguments related to broader discussions. Analysis was done on a macro-discursive level (Alvesson & Kärreman, 2000) by focusing on the dominant discourses that shape the ways RAL are talked about.

When conducting such an inductive, data-driven analysis, first both authors read the transcriptions separately in order to form an overview of the data. Then, the data was coded into initial thematic codes: "practices and principles," "competencies," "evaluation methods," "characteristics of HE," "content and level of studies," "reasoning behind the practices," and "the challenges related to them." Within this categorization system, discourse analysis was conducted to identify how the interviewed teachers accept, resist, and negotiate the transfer between experiential and formal learning in entrepreneurship.

Figure 1

Discursive framework of RAL



The elements constituting the discourses as well as the final discourses identified are presented in Figure 1. In each step, the authors compared notes to ensure the consistency of the interpretation of the data.

Results

We identified three main discourses: *good teacherhood*, *disciplinary discourse* and *university discourse*, each containing two sub-discourses (see Figure 1). The sub-discourses make visible the tensions and even contradictories within the main discourse. It is worth noting that the same discourse can be mobilized both for and against the RAL. The discourses also overlap in the teachers' responses.

Good teacherhood

Good teacherhood discourse is associated with the RAL as part of the teacher-student relationship. Justifications for and against the RAL are based on what is regarded as good teacherhood, through which the best possible education with equal treatment of students is made available. This discourse consists of *organization-centered* and *student-centered* sub-discourses, which build on diverse logics in ensuring the best interests of the student (see examples of each in Table 1). In the former, the practices are at best well-designed and transparent processes that follow the same procedures for each student. In the latter, on the other hand, the RAL are perceived as tools to customize the learning path for each student. Demonstration of the competences as well as the assessment differ accordingly.

Table 1

Good teacherhood discourse

Organization-centered discourse

- *I think it is very good that the head of academic and student affairs participates in recognition of prior learning processes because she/he can compare practices in different disciplines. (ROU)*

Student-centered discourse

- *We do it quite diversely, always according to what is the most meaningful way for each student, and how fast the student wants to do it. [...] This is always tailoring. (UAS)*
-

Quality of learning is sought through standardization in the *organization-centered discourse*. Joint, transparent, and regulation-based processes and procedures in the recognition, demonstration and assessment of experiential learning are valued. The emphasis on standardization is also derived from university-level processes, such as accreditations. The role of management and faculty staff specialized in these processes are considered vital from the quality control perspective. *Student-centered discourse* on the other hand claims that no “one-size-fits-all” model can result in good teacherhood. Instead, it is important to find the best solution for each student, even if that would increase the workload of the teacher.

Equal treatment of students is at the core of both sub-discourses. *Organization-centered discourse* warns that teachers’ ad hoc decisions are risky and can endanger the equal treatment of students and the quality of the process. Variation in students’ learning styles and life situations are taken into consideration by “*providing more versatile options for completing the studies, such as distance studying*” (ROU) rather than through student-level tailoring. *Student-centered discourse* also endorses the advantages and rights of the students, while seeking high-quality learning from a very different direction. This discourse does not enforce the sameness and equivalence of students but supports inclusivity and differences in their nature. This is demonstrated in the ways that teachers talk about different tools, such as personal study plans, as aids to take into consideration students’ different backgrounds, acquired learning, and objectives.

Disciplinary discourse

In the *disciplinary discourse*, the RAL are associated with questions related to the ontological and epistemic essence of entrepreneurship as a disciplinary approach: What should entrepreneurship address? How should entrepreneurship be studied? How should learning associated with it be demonstrated? The disciplinary discourse includes *experience-focused* and *theory-focused* sub-discourses (see an example of each in Table 2).

Experience-focused sub-discourse is anchored in the practical relevance of the skills needed to run a business. It emphasizes learning-by-doing, and the practical business experience. The sub-discourse foregrounds empirical relevance over academic relevance. The role of theoretical knowledge is instrumental, and it becomes valuable only when implemented successfully in practice.

Table 2

Disciplinary discourse: sub-discourses

Experience-focused discourse

- *Certainly, the know-how is very high in many of those 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 had indeed actively run a business for 40 years. [...] But usually, we will also review the business plan. (ROU)*

Theory-focused discourse

- *We stress that one must know the knowledge basis, too. We are at the 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 them. And also, critical thinking [is important]. (UAS)*
-

Theory-focused sub-discourse represents the disciplinary domain more broadly. In the broadest sense, entrepreneurship competences are understood to include not only practical (or technical) but also theoretical as well as social and personal abilities. Here, entrepreneurship is also perceived as a social phenomenon that needs to be studied and understood. Students are expected to learn critical thinking and theoretical knowledge and apply them in their endeavors.

The implications regarding what is seen as an appropriate way to demonstrate one's learning vary accordingly. *Experience-focused* sub-discourse emphasizes objective and measurable evidence of learning, such as a business plan, a mock-up of the product, or proof from the business register. A person's ability to successfully manage one's venture is also considered a relevant indicator of entrepreneurship competencies. *Theory-focused* sub-discourse makes a clear distinction between contextual experience and learning. This leads to encouraging the students to reflect on their learning and to link it to their previous knowledge and academic knowledge. According to this logic, reflective reports that "*show that they have accumulated learning*" (ROU) are valued.

University discourse

University discourse places the question of the relevance of experiential learning at the heart of the debate on the purpose of a university institution. We identified two related sub-discourses: *utility university* and *education university* sub-discourses (see an example of each in Table 3). Teachers employing the *utility university* sub-discourse more often regard the RAL in favorable terms, whereas those teachers with more critical opinions mostly employ the *education university* sub-discourse.

Table 3

University discourse: sub-discourses

Utility university discourse

- *After all, we are raising youth to [join] working life and the society of lifelong learning, and hence, we have to make it visible that there are different kinds of learning. (UAS)*

Education university discourse

- *This is not a program 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 [for my degree]?’ We choose here students who want to learn more and attend our courses. (ROU)*
-

Utility university sub-discourse is based on the premise that the aim of the university is to produce a skilled labor force. It emphasizes effective studies, speedy graduation, and labor market relevance. Ensuring or even expediting the graduation process is critical among student entrepreneurs who run their own businesses and still need to manage their studies. It is inconsequential where and how their competences have been acquired so long as they correspond with the learning objectives laid out in the curriculum.

Education university sub-discourse represents an opposing view: it defends the role of the university in providing an education and transforming students into educated individuals. It emphasizes the intrinsic value of academic knowledge, scientific procedures, and critical thinking. Furthermore, some teachers pointed out that demonstrating a willingness for hard work and an interest in self-development are highly valued qualities in students. The opponents of RAL characterized it as an “*after thought, an add-on element,*” introduced from the world of “*professional education.*” This binary thinking with respect to academic life and working life is more prevalent among teachers at ROUs.

Discussion

The research question in this study was as follows: *How do teachers accept, resist, or negotiate the transfer between experiential and formal learning through the RAL in entrepreneurship?* Through the use of discourse analysis, this study has identified three partly overlapping macro discourses (Alvesson & Karreman, 2000), “good teacherhood discourse,” “disciplinary discourse,” and “university discourse,” as specific ways of speaking about and constructing social reality related to the RAL. With these findings, the study adds to the existing literature by, first, producing a more nuanced understanding of the affordances and constraints related to the RAL from the perspective of teachers via a national dataset. Second, in doing so, the study provides further basis for considering the RAL as more than just assessment-based practices (e.g., Cooper et al., 2016). Third,

the study highlights issues specific to the Finnish HE context especially related to the university as an institution.

We identified several factors as either mitigating against or for the feasibility of the RAL. The ideas overlap, which may be due to them being hierarchical, while approaching RAL from three different levels: individual, disciplinary, institution. Accordingly, the discourses cause tensions by entailing different types of trade-offs. For example, teachers' ways to ensure students' equal treatment in *good teacherhood* discourse interestingly reflect the long-standing discussion whether the fairness and inclusiveness in education is guaranteed through equality or equity. Here, equality refers to same, standardized education for all, and equal education to practices where each student's individual needs are taken into account (Cramer et al., 2018). Following the chosen principle, teachers' ideas, organizational and institutional processes are applied to ensure the rights and benefits of students.

The utility value of the RAL is reflected also in teachers' basic assumptions about the disciplinary basis for (Cooper & Ralphs, 2016; Harris & Wihak, 2017) and epistemic questions related to EE. Based on the findings, the role of experiential learning is ambiguous and controversial, despite continuous discussion on the role of experiential learning in EE (e.g., Bell & Bell, 2020). Although different forms of learning (formal, informal and non-formal) are recognised contributing to the development of entrepreneurship competence (see e.g., Williams Middleton et al., 2019), the idea of credit value of experiential learning taking place outside formal education is not unanimously shared.

Some teachers reported that the practice-oriented approach is inconsistent with their ideal of university teaching, even if they simultaneously recognize that it increases the work-life relevance of EE. The findings relate to the Finnish dual HE system. In universities of applied sciences, the RAL form an integral part of study paths and take into consideration regional and workplace needs (Haapala, 2014). While ROUs, on the other hand, apply them with more emphasis on the theoretical substance of learning (Tuomainen, 2016), and often viewing practical and contextual learning in a derogatory sense. Hence, questions about experiential learning are connected also with the idea of the central mission of university institutions and the traditional university monopoly on knowledge (e.g., Armsby et al., 2006), emphasizing the differentiation between experiential and formal learning.

With regards to implications, when promoting the RAL, universities should take note of the teachers' different attitudes (Niemelä, 2013) and the above factors that can give birth to struggles over what is learning and where it takes place. Ambiguity can make some teachers averse to embracing the RAL. As a practical recommendation, teachers should be involved in open

discussions about these questions within their own universities in such a way that the complexities and problems can be resolved. This is particularly important in ROUs, where the RAL constitute a “knowledge” question challenging the role of the university. Also, when recognizing that the RAL are pedagogic practices (Cooper et al., 2016), the competences related to these practices should be incorporated into teacher training as well as any pedagogical faculty trainings.

With regards to limitations, the HE systems and the practices related to the RAL vary across countries (Stenlund, 2010), hence the findings may not be directly transferrable from the Finnish context to other countries. In addition, this study has analyzed the transfer between experiential and formal learning in entrepreneurship without taking into account in the analysis the variation in the primary focus and purpose of EE, ranging from starting a company to developing life skills and becoming entrepreneurial (Neck & Corbett, 2018). In these different approaches, teachers’ role in facilitating the transfer of learning is integral, yet with drastically different focus from a narrow to a broader view to entrepreneurship competencies. Also, the possible confusion with regards to what and how entrepreneurship should be taught, and specifically how outcomes should be assessed (Morris & Liguori, 2016) may mitigate against or for the feasibility of the RAL in ways this study has not been able to address.

As for further research, first, it would be important to study the differences in RAL in entrepreneurship across different EE approaches mentioned above, as well as in different contexts, such as in the non-business disciplines. Second, while our data is limited in terms of clarifying how teachers recognize and accredit specific entrepreneurship competencies, it would be useful to understand the principles the teachers employ when evaluating respective RAL cases. Knowing this would be relevant due to the essentiality of the assessment methods in RAL (Stenlund, 2010), but also because of the emerging interest in the development of entrepreneurship competency and competence-based approaches (see e.g., Morris et al., 2013b; White & Moore, 2016; Bacigalupo et al., 2016) and the complexity of such competencies (Toutain & Fayolle, 2018). Finally, our findings related to teachers’ roles in the learning process and to the status of the university suggest that relationships of power and control in the RAL represent interesting new research avenues.

Literature

Alvesson, M., & Kärreman, D. (2000). Varieties of discourse: On the study of organizations through discourse analysis. *Human relations*, 53(9), 1125–1149.

ARENE. (2015). *ARENE:n yrittäjyysuositukset 12.3.2015*. <https://www.yrittajat.fi/>

Armsby, P., Costley, C., & Garnett, J. (2006). The legitimisation of knowledge: a work-based learning perspective of APEL. *International Journal of Lifelong Education*, 25(4), 369–383.

Bacigalupo, M., Kampylis, P., Punie, Y., & Van den Brande, G. (2016). *EntreComp: The Entrepreneurship Competence Framework*. Publication Office of the European Union, Luxembourg.

Bell, R., & Bell, H. (2020). Applying educational theory to develop a framework to support the delivery of experiential entrepreneurship education. *Journal of Small Business and Enterprise Development*, 27(6), 987–1004.

Bohlinger, S. (2017). Comparing recognition of prior learning (RPL) across countries. In M. Mulder & J. Winterton (Eds.), *Competence-based vocational and professional education. Bridging the worlds of work and education* (pp. 589–606). Springer International Publishing.

Cooper, L., & Ralphs, R. (Eds.) (2016). *RPL as specialised pedagogy: Crossing the lines*. Human Sciences Research Council.

Cooper, L., Ralphs A., & Harris J. (2016). RPL as specialised pedagogy: Towards a conceptual framework. In L. Cooper & R. Ralphs (Eds.), *RPL as specialised pedagogy: Crossing the lines* (pp. 124–149). Human Sciences Research Council.

Cooper, L., Ralphs, A., & Harris, J. (2017). Recognition of prior learning: The tensions between its inclusive intentions and constraints on its implementation. *Studies in Continuing Education*, 39(2), 197–213.

Cramer, E., Little, M. E., & McHatton, P. A. (2018). Equity, equality, and standardization: Expanding the conversations. *Education and Urban Society*, 50(5), 483–501.

Evans, N. (2006). Recognition, Assessment and accreditation of prior experiential learning. In C. Corradi, N. Evans, & A. Valk (Eds.), *Recognising experiential learning: practices in European universities* (pp. 17–36). Tartu University Press.

Gaggiotti, H., Jarvis, C., & Richards, J. (2020) The texture of entrepreneurship programs: Revisiting experiential entrepreneurship education through the lens of the liminal–liminoid continuum. *Entrepreneurship Education and Pedagogy*, 3(3), 236–264.

Haapala, A. (2014). Oppiminen TKI-projekteissa. In A. Haapala (Ed.), *Opinnollistaminen TKI-projekteissa: Lähtökohtia toteutukseen ja kokemuksia käytännöstä*. A: Tutkimuksia ja raportteja – Research Reports 95 (pp. 10–21). Mikkelin ammattikorkeakoulu.

Harris, J., & Wihak, C. (2017). To what extent do discipline, knowledge domain and curriculum affect the feasibility of the Recognition of Prior Learning (RPL) in higher education? *International Journal of Lifelong Education*, 36(6), 696–712.

Henry, C., Hill, F., & Leitch, C. (2005). Entrepreneurship education and training: Can entrepreneurship be taught? Part I. *Education + Training*, 47(2), 98–111.

Huusko, M., Vettenniemi, J., Hievanen, R., Tuurnas, A., Hietala, R., Kolhinen, J., & Ruskovaara, E. (2018). *Yrittämään oppii yrittämällä. Yrittäjyys ammatillisessa koulutuksessa ja korkeakouluissa -arviointi*. Julkaisut 25: 2018. Kansallinen Koulutuksen arviointikeskus.

Kiviniemi, K. (2013). Aiemmin hankitun osaamisen tunnistaminen ja tunnustaminen korkeakoulutuksen haasteena. In J. T. Hakala & K. Kiviniemi (Eds.), *Vuorovaikutuksen jännitteitä ja oppimisen säröjä – aikuispedagogiikan haasteiden äärellä*. Luokanopettajien aikuiskoulutuksen 25-vuotisjuhla-julkaisu (pp. 163–178). Jyväskylän yliopisto.

Kotila, H., & Mäki, K. (2015). Opiskelija käy töissä – ongelma vai käyttämätön mahdollisuus? In H. Kotila & K. Mäki (Eds.), *21 tapaa tehostaa korkeakouluopintoja* (pp. 135–143). Haaga-Helian julkaisu 2015. Unigrafia, Helsinki.

Kuratko, D. F., & Morris, M. H. (2018). Examining the future trajectory of entrepreneurship. *Journal of Small Business Management*, 56(1), 11–23.

Kyrö, P. (2008). A theoretical framework for teaching and learning entrepreneurship. *International Journal of Business and Globalisation*, 2(1), 39–55.

Meuser, M., & Nagel, U. (2009). The expert interview and changes in knowledge production. In A. Bogner, B. Lieg, & W. Menz (Eds.), *Interviewing Experts* (pp. 184–200). Palgrave Macmillan UK.

Mitchelmore, S., & Rowley, J. (2010). Entrepreneurial competencies: a literature review and development agenda. *International Journal of Entrepreneurial Behaviour & Research*, 16(2), 92–111.

Mikkola, P., & Haltia, P. (2019). *Aiemmin hankitun osaamisen tunnistaminen korkeakouluissa. Selvitys aiemmin hankitun osaamisen tunnistamisen ja tunnustamisen periaatteista ja käytänteistä korkeakouluissa* [Recognition of prior learning in higher education institutions. A review of principles and practices of recognition of prior learning practices in higher education institutions]. Opetus- ja kulttuuriministeriö.

Ministry of Education. (2007). *Aiemmin hankitun osaamisen tunnistaminen korkeakouluissa* [Recognition of prior learning in higher education institutions]. Opetusministeriö.

Ministry of Education. (2009). *Yrittäjyyskasvatuksen suuntaviivat* [Guidelines for Entrepreneurship Education]. Opetusministeriön julkaisuja 2009:7.

Morris, M. H., Kuratko, D. F., & Cornwall, J. R. (2013a). *Entrepreneurship programs and the modern university*. Edward Elgar Publishing.

Morris, M., Webb, J., Fu, J., & Singbal, S. (2013b). A competency-based perspective on entrepreneurship education: conceptual and empirical insights. *Journal of Small Business Management*, 51(3), 352–369.

Morris, M. H., & Liguori, E. (2016). Preface: Teaching reason and the unreasonable. In M. H. Morris, & E. Ligouri (Eds), *Annals of entrepreneurship education and pedagogy* (pp. xiv–xxii). Edward Elgar Publishing.

Mulder, M., Weigel, T., & Collins, K. (2007). The concept of competence in the development of vocational education and training in selected EU member states: a critical analysis. *Journal of Vocational Education & Training*, 59(1), 67–88.

Mäkinen–Streng, M. (2016). *Selvitys aiemmin hankitun osaamisen tunnustamisesta suomalaisissa ammattikorkeakouluissa ja yliopistoissa*. Opetus- ja kulttuuriministeriö.

Mäkinen–Streng, M., Ojala, K., & Haltia, N. (2017). *Opitulle tunnustusta. Eurostudent IV – tutkimuksen artikkelisarja*. Opetus- ja kulttuuriministeriö.

Nabi, G., Liñán, F., Fayolle, A., Krueger, N., & Walmsley, A. (2017). The impact of entrepreneurship education in higher education: A systematic review and research agenda. *Academy of Management Learning & Education*, 16(2), 277–299.

Neck, H., & Corbett, A. C. (2018) The Scholarship of Teaching and Learning Entrepreneurship. *Entrepreneurship Education and Pedagogy*, 1(1), 8–41.

Neck, H., Greene, P., & Brush, C. (2014). Practice-based entrepreneurship education using actionable theory. In M. Morris (Ed.), *Annals of Entrepreneurship Education and Pedagogy* (pp. 3–20). Edward Elgar Publishing.

Niemelä, R. (2013). *Kokemukset ja opettajien väliset erot osaamisen tunnistamisen kehittämisessä. Sisäisen yrittäjyyden, psykologisen omistajuuden ja työn ilon näkökulmasta*. [Dissertation, University of Jyväskylä].

Prime Minister's Office. (2015). *Ratkaisujen Suomi. Pääministeri Juha Sipilän hallituksen strateginen ohjelma. 29.5.2015*. Edita Prima.

Stenlund, T. (2010). Assessment of prior learning in higher education: A review from a validity perspective. *Assessment & Evaluation in Higher Education*, 35(7), 783–797.

Toutain, O., & Fayolle, A. (2017) Labour market uncertainty and career perspectives: Competence in entrepreneurship courses. In M. Mulder (Ed.), *Competence-based Vocational and Professional Education. Bridging the Worlds of Work and Education* (pp. 985–1005). Springer International Publishing.

Tuomainen, S. (2016). Kuka haluaa AHOTia yliopistoissa? *Kasvatus*, 47(4), 387–390.

UNIFI (2016). *Korkeakoulujen yrittäjyysuositukset*. <http://www.unifi.fi>

White, R. J., & Moore, K. (2016). Application of competency-based learning to entrepreneurship education: Integrating curricular and cocurricular elements to enhance discipline mastery. In L. A. Wankel & C. Wankel (Eds.), *Integrating Curricular and Co-curricular Endeavors to Enhance Students Outcomes* (pp. 99–118). Emerald Group Publishing.

Williams Middleton, K., Padilla-Meléndez, A., Lockett, N., Quesada-Pallarès, C., & Jack, S. (2019). The university as an entrepreneurial learning space: The role of socialized learning in developing entrepreneurial competence. *International Journal of Entrepreneurial Behaviour and Research*. 26(5), 887–909.