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ORIGINAL PAPER

Learning in unaccredited internship as development of interns' 'horizontal expertise'

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Abstract

The rise of internships as a form of work experience that students pursue during their degree or after graduation has been accompanied by an upsurge of discussions, critical and favourable, on the role of internships for interns' employment opportunities. There is a need, however, to understand the learning that goes in internship as for many students internship is a setting where work practices are encountered for the first time. Recently it has been suggested that unaccredited internship can be seen as constituting a separate work activity that needs to be examined in its own right. The aim of this article is to contribute to this literature by focusing on the learning challenges that arise in unaccredited internship and identifying the capacities that interns develop as a result of tackling these challenges. To that end, I identify a set of analytical concepts from vocational learning literature developed to understand the challenges and opportunities associated with learning across contexts (i.e. education and work): horizontal expertise, boundary-crossing, recontextualisation and identity-renegotiation. Then I analyse data on learning in unaccredited internships collected from five focus groups and two interviews (18 interns). A dialogic discourse analysis of focus group and interview discourses revealed that the interns in unaccredited internship developed an emerging capacity to learn and work competently across multiple contexts and to initiate and coordinate subsequent cycles of boundary-crossing between education and work. The paper proposes the notion of "interns' horizontal expertise" to describe this emerging capacity that arises from learning in unaccredited internship and continues after the internship and explains how this concept differs from other expressions of horizontal expertise in the literature such as the horizontal expertise of seasoned professionals in inter-professional activities and boundary-crossing in work placements.

Keywords Internship · Horizontal expertise · Boundary-crossing · Focus groups

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Introduction

The rise of internship as a form of work experience that students pursue during their degree or after graduation has been accompanied by an upsurge in discussions – favourable and critical – on the role of internships for students' subsequent employment opportunities. The favourable discussions of internships have emphasised the multiple benefits that internships can have for interns (Ebner et al., 2021; Hora et al., 2020), while the critical sociological literature has pointed out how internships can play a role in reproducing privilege by enabling those with cultural and social resources to benefit the most from internships (Brown, Lauder and Ashton, 2010; Hoskins, Leonard and Wilde, 2020; Leonard and Wilde, 2019). There is, however, a third perspective on internship that foregrounds learning in internship and acknowledges that internships are for many young people "the first places where education and work intersect" (Lundsteen and Edwards, 2013 p.1555) and where they are required to respond to new demands of workplace practices while drawing on their prior learning (ibid.; Guile and Lahiff 2022). According to this perspective, learning in internship is neither a frictionless process that can be taken for granted (as is typically implied in favourable discussions on internship) nor is it a 'special case' that occurs only for those interns with access to high-quality internships as the sociological perspective implies (e.g. Hoskins, Leonard and Wilde 2020). For example, as Lundsteen and Edwards (2013) demonstrated in their research on internships in banking, even highly prestigious and sought-out internships can be poor learning environments where knowledge is intentionally withheld from interns. This paper is situated within the third learning perspective on internship.

The aim of this paper is to contribute to the literature on learning in unaccredited internships that is constitutive of work, independent from higher education degree arrangements and negotiated between the student/recent graduate and the company. When participating in unaccredited internship activities students need to exercise their agency to identify and secure an internship and then create learning opportunities while working in a workplace setting without institutional and pedagogical support. The focus of this paper is to explore the learning challenges that arise in internship and reveal the capacities that interns develop as a result of their engagement in unaccredited internship. In what follows I first identify a set of analytical concepts from vocational learning literature as resources for thinking about the challenges associated with learning in unaccredited internship. Then, I introduce the empirical data from five focus groups on the experience of unaccredited internship, followed by the presentation of results and discussion of the emerging capacity of interns to envision, initiate and accomplish horizontal learning and movement into new practices (i.e. "interns' horizontal expertise").

Learning in internship by moving across boundaries

Internship as a distinct mode of work activity

Within the debates on learning in internships of particular relevance for this paper is the recent discussion on how to facilitate 'connectivity' between education and the workplace through work placements and internships (Kyndt et al, 2022; Billett 2015) and more specifically the argument made in the edited collection was that it is important to distinguish work placements from unaccredited internships (Guile and Lahiff 2022). Briefly, the discussion in the literature on internship has been that internship has become an 'elastic concept' (Leonard and Wilde 2019 p.86) that refers to many forms of short-term or part-time work activity that provide an insight into a profession (e.g. Perri, 2006; Perlin, 2013). In higher education, internships are often referred to as synonyms for work placements or work experience embedded in a degree programme, pursued for credit and where students are allocated to a partner organisation (e.g. British Council 2023; Prospects, 2023; Carter, 2021). The unaccredited internship, however, is typically independent of a degree programme, arranged between the student or recent graduate and an employer directly and commonly involves a selection process.

Guile and Lahiff (2022) argued that from the point of view of vocational learning unaccredited internships represent distinct mode of work activity. What underlies the distinction is the difference between what Leontyev (1978) referred to as 'object' or purpose of activity. In internship the object of activity is commercial and interns develop occupational knowledge and skill by contributing to the commercial tasks and goals that the company sets. In the work placements, the object of activity is educational and students develop occupational knowledge and skills through the completion of assignments designed to prepare students for accreditation and adaptation to the workplace upon graduation. Working and learning in work placement is typically assessed by an employer or lecturer in relation to this educational goal (see also Billett 2015). The argument is that the commercial and educational objects of activity afford different opportunities for learning and developing occupational skills[1].In internship young people can develop occupational knowledge, identity and social capital by first, participating in the selection process and subsequently through 'learning on the fly' and employing their agency to create learning opportunities through co-participation in work (e.g. asking a busy mentor for explanation or feedback, eavesdropping on conversations, socialising with colleagues). Moreover, interns are drawing on degree knowledge as a resource since there is a 'transgressive' relationship between their degree and occupation. In work placement, the outcome of learning is 'connective skills' that enable students/interns to effectively operate in educational and work contexts by integrating curricular and workplace knowledge and their development is scaffolded institutionally and underpinned by

[1] Research on the benefits of volunteering for transition to work also found that volunteering work experience that is self-initiated and career-related has the biggest effect on labour market outcomes see Hoskins, Leonard and Wilde (2020)

various pedagogical models of partnerships between educational and work providers (see also Tynjälä et al. 2022).

Learning across boundaries

To identify important aspects of learning in unaccredited internship I will draw on four concepts from vocational learning literature. These are boundary crossing, recontextualisation, horizontal expertise and identity renegotiation. I selected these concepts for the following reasons. First, all four concepts are founded on the fundamental cultural-historical and activity theory ideas that human learning is profoundly shaped by the setting in which it unfolds (Vygotsky, 1978; Leontyev, 1978). The learning and development are conceptualised here through the dialectic between the practice[2] and individuals whereby the former places demands on the activities of individuals while the latter learns to navigate the demands by developing new competencies and skills (Hedegaard and Edwards, 2014; Edwards, 2010).

Second, the shared assumption is that moving across the boundaries of different sociocultural settings is not only inherently difficult (Lave, 1988) but also potentially beneficial for the learners since it represents an opportunity to develop new skills and capacities (e.g. Beach, 1999; Akkerman and Bakker, 2011). Hence, all four concepts have been developed to capture the different facets of the learning challenges associated with learning *between* the settings of different practices and having to negotiate new demands, resolve tensions that arise, draw on old and develop new knowledge. This is important because learning *in* transition between different practices has received comparatively less attention than learning in educational and work practices (Hedegaard and Edwards, 2014; Bakker and Akkerman, 2019). For example, boundary-crossing (e.g. Tuomi-Gröhn and Engeström, 2003; Akkerman and Bakker, 2011), identity re-negotiation (Beach, 2003) and recontextualisation (Guile, 2011) were developed to enable the analysis of the learning challenges associated with moving *between* the education and work components in VET programmes and propose how 'connectivity' between education and work can be established institutionally (Griffiths and Guile, 2003). The horizontal expertise concept was developed to capture the learning challenges of seasoned professionals associated with the rise of work that entailed working across the boundaries of different teams, units and organisations in contemporary workplaces (Engeström, 2018).

Having established their common assumptions, below I describe these concepts in more detail by focusing on their complementarities.

Boundary-crossing

The concept, inspired by Star and Griesmeyer's (1989) boundary objects - artefacts with a 'bridging' function across practices, was introduced by Engeström and

[2] By practices I follow Edwards (2010 p.6) who argued that practices are historical accumulations of interactions where the purposes of activities are shaped by the practices in which they are set

colleagues (Engeström, Engeström and Kärkkäinen 1995) to attend to the processes that occur when professionals move in and between multiple contexts in the workplaces. In encountering different rules, tools, patterns of working and definitions of expertise boundary-crossers are faced with the challenge of learning to operate in and moving between different activities by re-shaping old and developing new mediating concepts and skills. In the work of Engeström and colleagues boundary-crossing is one of the dimensions of expansive learning (e.g. along with 'knotworking') and predominately a system-level concept that describes learning among, for instance, different care providers in hospital services (Engeström, 2001). More recently, Akkerman and colleagues (Akkerman and Bakker, 2011; Akkerman and Bruining, 2016) described the concept in sociocultural terms as an engagement *with* the boundaries between different practices that results in an expanded repertoire of conceptual, social and dialogical resources available to boundary-crossers. They describe boundaries as "a sociocultural difference leading to a discontinuity in action or interaction, that can carry learning potential" (Akkerman and Bakker, 2011 p.133) and boundary-crossing in terms of experiencing and recognising the boundary between two practices ('identification'), establishing continuity between two sociocultural contexts ('coordination'), extending an old or developing a new perspective on both practices ('reflection') and working collectively to develop new activities ('transformation'). These four mechanisms describe "different ways in which learning can be set in motion when people cross boundaries" (Bakker and Akkerman, 2019 p.356). Akkerman and Bruining (2016) further argued that boundary-crossing at the level of individuals, which is the focus of this paper, is predominantly a process of *transformation* (through identification and reflection) of perspectives on both practices that leads to '*a hybridised position in which previously distinctive* ways of thinking, doing, communicating and feeling are integrated' (Akkerman and Bruining, 2016 p.246).

Recontextualisation

The concept, *recontextualisation* of learning, introduced in CHAT by Van Oers (1998) describes an activity in which existing learning and knowledge associated with one sociocultural practice (e.g. mathematics concepts among pre-schoolers) are realised ('contextualised') in another sociocultural practice (e.g. the preschoolers drawing on their mathematical knowledge while playing shop). Guile (201; 2019) extended the concept for vocational learning as a way to re-think the development of curriculum, pedagogy, workplace practice as well as the development of learners (Guile, 2011; 2019). In particular, the expression of recontextualisation related to learners captures the idea that learners' knowledge and skill (e.g. in higher education) are embedded in and constrained by the context in which they were acquired (e.g. theoretical knowledge of the syllabus) and for this reason when crossing boundaries, the key learning challenge for students/interns is to re-purpose this embedded knowledge in the new workplace context that operates on different implicit rules, norms and values to those of higher education. The re-purposing is facilitated by practices such as attending to reasons that underpin and implications

that follow from actions, concepts and protocols (i.e., professional 'space of reason') in the workplace which will ultimately develop sound professional judgement by enabling the 'commingling' of conceptual and professional knowledge. Unlike boundary-crossing which focuses on a 'gap' between educational and work practice and conceptualises connection "in finite terms" recontextualisation, Guile (2019 p.8) contends is a lifelong process for developing activities that assumes educational and workplace practice stands in a mediated relation which enables researchers to attend to their connections.

Horizontal expertise

The notion of horizontal expertise is another concept introduced by Engeström and colleagues (Engeström, Engeström and Kärkkäinen, 1995) along with boundary-crossing to account for an increasingly important dimension of expertise vital for modern workplaces. Horizontal expertise, they argued, arises in workplaces that require professionals to work across multiple professional communities, respond to conflicting demands and identify solutions to new problems. It, therefore, refers to an outcome of recursive boundary-crossing activities in modern workplaces and is manifested as a capacity to identify, negotiate, combine and orchestrate resources and activities to work on hybrid problems (Engeström, 2018). What underpins this notion of expertise is a broader argument that learning across the boundaries of different practices enables the development of "new layers of symbolic mediation" (Beach, 2003 p.55) which can transform learners' perspective on the world and enable them to envision and chart a new course of action (Engeström, 1996).

Identity re-negotiation

Whereas the above three learning processes focus on knowledge and skill development, some researchers have helpfully highlighted the role of learner identity in moving between practices. One of the stronger versions of the argument can be found in the metaphor of learning as apprenticeship which draws attention to the fact that 'the development of identity in relation to others' identities is more fundamental than knowledge or mastery' (Lave, 2008 p. 284). Within sociocultural discussions, this work was taken forward by Beach (2003) with his concept of 'consequential transition' which depicts how a movement between education and work can be 'consequential' for the learner by enabling him or her to create new relations with workplace activities, inhabit new positions in the world and negotiate old ways of doing and being. Identity re-negotiation is thus considered to be part and parcel of vocational learning more generally (Ackerman and Bakker, 2011) and learning in internships more specifically (Popov, 2020).

The accrued insights from concepts suggest that in unaccredited internships young people may encounter the opportunities and challenges to (i) make sense of the differences between the cultures of higher education and work and set in motion learning that will lead to a 'hybrid' knowledge about both practices (ii) modify and adapt what has been learned in education to meet work-related tasks and demands while developing

professional judgement (iii) embrace a particular set of values, priorities and perspectives on the world of work and their place in it, and (iv) develop a capacity to work horizontally or negotiate meanings, tools, and forms of participation across contexts by working alongside professionals for whom this way of working is the norm. In the next section, I show how these four concepts have helped guide the analysis of the empirical study of the unaccredited internship experience as a set of sensitising concepts

The Study

The data I present here come from a mixed methods study of student internships (Popov, 2019). The quantitative study found important differences in how these students who completed unaccredited internship and students without internship experience experienced their first full-time job five years upon graduation. The aim of the qualitative study on which this paper draws was to focus on learning in internship and explore what according to interns was significant and valuable takeaway that shaped their subsequent post-internship career trajectories. The qualitative study entailed five focus groups and two interviews with 18 students in total.

Methodology

The qualitative study was informed by the dialogical focus group methodology of Markova et al (2007). The methodological approach suggests that focus groups as methods of data collection provide a window into how societal opportunities and social knowledge are contextualised and manifested in the experience of individual participants. This is because focus groups are distinct communicative types of activity which enable the circulation of varied societal ideas, discourses, and knowledge, to jointly construct a topic. As such, focus groups, as dialogical constructions, operate as a 'society in miniature' and provide insights into personalised knowledge and experience as well as societal discourses around a topic of conversation such as internship experience. They have 'double dialogicality' since meaning is constructed in relation to the situated interaction within group and in relation to the experience of participants with the topic of discussion (see Markova et al., 2007). Hence, one of the main advantages of focus groups, as opposed to individual interviews, is that it provides opportunities for participants to respond, agree and contrast each others' opinions, statements and experiences. This was one of the main reasons behind the choice of focus group method for data analysis. Furthermore, the dialogical focus group methodology provided an underpinning argument that focus groups are appropriate sites of group reflection on the experience of interns before, during and after the internship.

Research participants

There were 18 participants in the research. They were divided into five focus groups (16 participants) and two participants preferred to be interviewed separately. The participant sample, while not large, offered in-depth and diverse insights into the

internship experience and pathways of students at London universities from a variety of degrees. This group of participants is not easy to reach (see also Guile and Lahiff, 2022) and there was high attrition over the course of arranging a suitable date for focus groups. For gender, degree, internship sector and year of studies breakdown see Table 1 in Appendix 1. Participants were recruited with the help of the University Careers Service. Participants were 'self-selecting' for the study by responding to an email advertising the research, the other selection criteria were that (i) participants had had experience of at least one internship in the UK that they had independently secured and that (ii) they were either current students or recent BA or MA graduates. This provided a common basis for discussion or what is referred to in the literature as 'group homogeneity' (Bloor, Frankland et al., 2001). The composition of focus groups was not predetermined and depended on the availability of students and graduates. All of the participants had secured at least one of the internships independently and all of the internships were paid the minimum wage or more. The participants had diverse academic backgrounds including social science, engineering, liberal arts, and economics. Seven were enrolled in a post-graduate degree at the time while eleven were undergraduate students.

Focus group and interview method

The focus group discussions were 2 hours long. The discussion was semi-structured using a list of predetermined prompts for discussion. It followed the ethical guidance (e.g. anonymity, confidentiality, verbal code of conduct) in line with the ethical principles of focus group research (Bloor, Frankland et al. 2001). The following prompts guided the focus group discussion: reasons for deciding to do an internship, insights, understandings and questions that they took away about the work performed during the internship, and the effect that the internship had on their future plans. These prompts enabled participants to actively reflect on: the importance and value they assigned to their internship experience, what they learned from participating in the workplace in the internship and from their short-term immersion in occupational practice, and the effects the internship had on their future plans as related to their degree and their career plans.

Data analysis

Data analysis followed the coding procedure as suggested by Markova and colleagues (2007) which entailed reading through the transcripts, labelling the topical episodes or stretches of dialogue around a topic that emerged over the course of the discussion, grouping the topical episodes under the same overarching 'theme' (e.g. the theme that internship enables you to learn about yourself), and comparing the themes across all focus groups. Repetitive themes were selected and analysed in relation to the four concepts (boundary-crossing, recontextualisation, horizontal expertise, identity re-negotaition). The procedure for the analysis of interview transcripts followed the same method. An account of how the themes were built on and elaborated within the dynamic of a focus group is an important aspect of dialogical

methodology but beyond the scope of the paper. What has emerged from a careful reading of themes are the two meta-themes presented below that cut across the four concepts which I present in the next section and reflect on in the discussion.

Findings

Two overarching themes about learning in unaccredited internship were identified. These were (i) learning in internship as a negotiation of personal and professional identity and expertise and (ii) learning in internship as a resource for subsequent activities.

Negotiating intern identity and expertise in professional practice

In the transcripts the interns shared how they gained valuable insights in internship by working with and alongside colleagues, managers, and team members. These insights were about (i) professional expertise and (ii) their own knowledge and expertise and ability to contribute at work. The three quotes below illustrate how interns have come to think of their knowledge, skills and capacities as valuable and of themselves as competent as a result of their internship experience. Additionally, they suggested their ideas of what professional expertise entails were transformed by engaging in collective work activities.

> Bao: I think in the beginning I struggled with making suggestions because we were developing something and there was like a week where I just thought we were doing the wrong things but I thought they must know better than I did, and it turned out, they didn't, but it took me like a week to like say 'hey, I think we forgot something'. So it was a bit, I trusted them, I was too shy to speak out.

In the quote Bao describes how he learned to offer his expertise as an intern and overcome the barrier of feeling like an observer on the periphery of the workplace practice by engaging in activities such as offering feedback and pointing out mistakes with his colleagues and mentors.

> Kiersten: They actually have a shortage of electronic engineers, so I actually had, at some point like part owners would come up to me and ask me to explain their circuit diagrams to them, because they'd been given to them by suppliers, they had no idea what they did. So he was like 'do we need all this or not, or is he just selling me this when we don't actually need it?' I'm like 'I'm an intern, I shouldn't have this responsibility.

Similarly, in this quote, Kiersten shares an episode in which she learned that her expertise as intern was needed and valued in the company she interned for, as well realising the tension inherent in the role of intern in a commercial setting around 'having responsibility' for a task as well as not fully belonging to the organisation in a way that a new employee or a graduate recruit would. Her identity as an intern on

the periphery of professional practices was challenged through her immersion in the ongoing work in the practice of an organisation.

> Tom: It's like the people who have employed you, a lot of the time they're still, just other people, and you have to get used to that because sort of you think 'oh they're all professionals' and 'they all know what they're doing', but they don't, they don't (laughter). There's plenty of people who you will work with in internships who are actually less competent than you despite the fact that you're like an intern (…) When you go into a place you have to learn not to be intimidated because not everyone's like terrifying and scary like they seem to be at first because but you can bring them up and be like 'no, no, that's not it' (laughs) and it's okay.

Echoing some of the topics raised by Bao and Kiersten, Tom provides a summary of how he reconsidered his representation of an expert as an infallible and all-knowing specialist. Instead, what is emerging in the discourse of Tom (but also Bao and Kiersten) is an image of experts who work on devising new solutions to problems by figuring things out with the help of others in the team including the interns. This is an example of the double dialogicalsity of focus groups (Markova et al., 2007) where situated meaning in a focus group is developed through the contribution of each participant with their knowledge and experience who, in this case, agreed and built on each others' ideas.

In sum, the experience of interns situated in a commercial activity positions them as novices required to contribute to ongoing work and develop related skills and capabilities on the go. This expectation to contribute to ongoing tasks in real-time and interns' successful response to these demands can reshape how interns think of themselves (e.g. their skills and capacities) as well as the expertise of others. In the case of the former, the interns were re-thinking their role as mere visitors in practice located at the periphery (e.g. observing; not having responsibilities) to visitors capable of contributing to ongoing work in occupationally specific ways (e.g. having the insights, spotting mistakes, taking responsibility). This, as is also evident in the next section, contributes to their sense of accomplishment and acts as a motivating force to seek out new activities. In the case of the latter, the insight is that the expertise others had to offer to the team does not always entail the standard vertical view of expertise as high levels of self-contained competence, but rather unfolds relationally. In that sense, the professionals do not have all the answers or know what the next course of action is but need to rely on other colleagues, other professionals and even at times - interns.

Learning in internship as a developing confidence and capacity to move forward in career-related activities

This theme depicts the new insights research participants developed by grappling with the challenges associated with learning in internship such as boundary-crossing,

re-contextualisation and identity re-negotiation in internship and how these insights re-positioned them towards existing and new activities.

> Christine: In my course you can tell by looking at the people if they have done an internship or not because they think about the industry in a more relaxed way but are less happy with the degree because the style is so different (…) When you come back [from an internship] you realise so many changes and for me it was I can't wait to get back to the industry because it's very different from sitting in the library and learning, like actually doing and using what you've already learned, it was much more satisfying for me. Now when I have a problem I think about it and I can imagine how that would feed into something, so I'm really interested in it and put a lot more work in it, also I'm more behind the work. But then, when I realise 'oh this task, I'm never going to see it like this' because I know exactly that someone else is going to do market research, and there's always going to be a whole team of market researchers so it's not one of the necessary skills that I need.

Christine discussed how an internship in a small company that employs chemical engineers enabled her to identify differences between educational and workplace activities and draw on her degree-based knowledge to work effectively in the workplace. Although implicit, the quote also suggests Christine was aligning her identity as a student and as a future chemical engineer since after the internship Christine was able to imagine herself in an occupational role and bring this as a resource to work on tasks and activities in her degree. Additionally, the internship made Christine develop confidence in her capacities to work competently in the future in the domain of chemical engineering and feel more excited and relaxed about anticipated transitions to full-time work. In weaving the insights together, Christine recognised the chemical engineering profession is for her and began engaging with her degree as a budding professional rather than a student.

> Hugo: It [the internship] made me reconsider everything. I knew instantly that it didn't matter really what I studied at uni. Like as long as I had some sort of credential or some way of justifying that I would be good working for a team in some sort of company I knew they would teach me the rest. So I just started doing things that I really wanted. I've always wanted to do proper economic development, proper environmental economics, learn a little bit of modelling, new programs, all of these things, I was like 'okay I'm gonna literally going to study what I like, I'm not going to bother about so much like during my degree about getting a job at the end. But yeah, I mean not to say that I'm not going to try to apply to a graduate programme or work for a little bit, but I definitely want to do new things and definitely in education, sort of explore new horizons, new ideas, new methods, and even soft skills

Hugo is a final year student of an interdisciplinary programme for whom internships and the year abroad transformed his perspective on work, education as well as on his subsequent plans upon graduation. The boundary-crossing in the internship enabled him to develop a new understanding of how he can develop expertise through learning on the job which consequently re-positioned him towards his degree. He saw his degree in a new light as a site where his burgeoning interests, preferences and self-understandings can be explored and developed rather than as means to secure employment. This insight shaped his plans and intentions for the final year of studies and graduation.

In the following excerpts focus group participants Nina, Tina and Tom discuss how the workplace, occupational and personal insights and skills related to internship informed their subsequent plans for engaging in new activities. The learning in internship gave them confidence to work competently in an occupation specific way and consequently they sought or were planning to seek new educational and work opportunities.

> Nina: For me, it was really good to write in a different way [in the internship]. I was writing articles for newspapers, and it gave me kind of a confidence to feel like I was capable of doing that, and I feel less worried about going out after my degree because I've had experience of being in that world, enjoyed it, and succeeded in what I was doing. I think that by realising the applicability of what you're doing to other area kind of empowers you (…) It gave me confidence to assert myself more in university life, now I'm part of a university journal and I do quite a lot of articles for them.

Here Nina discusses how performing competently at work and being able to recontextualise some of the skills from her degree in English language and literature in a PR agency encouraged her to identify new goals and seek other more challenging activities that were not directly related to her internship. Working competently in an occupation-specific way in internship developed her capabilities to respond to the workplace demands effectively and to recontextualisise her existing skills. This was 'empowering' and boosted her 'confidence' to exercise her agency and seek recognition in a new activity by writing articles for a magazine at her University.

> Tina: After I did the lab-based internship I knew I didn't want to work in that, I didn't want a job where I would be in a lab all the time. I think the greatest take away from internships is knowing that different organisations work differently and that you have an ability to adapt to different organisations.

In this excerpt, Tina suggests how her internship experience was an opportunity for her, first, to reflect on her degree and learn that a particular occupational pathway was not for her (i.e., to reflect and transform her position on engineering practice and re-negotiate her identity). Second, to develop an understanding of work as occupationally and organisationally specific and learn that she is capable of varying her participation and contribution to meet the specific requirements. This encouraged

her to identify new goals, engage in new cycles of boundary crossing and begin a new professional trajectory by enrolling in a postgraduate degree in international development.

> Tom: I was starting out at Uni being quite interested in the whole management consultancy thing and then I worked in an environment where there's basically only like McKinsey graduates and I just didn't feel that we created any value to anyone (…) and then I went back to where I originally started working for a film production company. They are not even advertised as internships so you need to figure out if it works for you, so you just go on and email people and sometimes you get an email back, or you just meet your boss for coffee and they give you an email and then you meet another person for coffee.

Tom describes how he learned to exercise his agency to create opportunities for boundary-crossing in different industries. He decided to take an internship in publishing after an internship in management consulting where he realised that the values and interests of management consulting practice did not align with his own beliefs and motives. From navigating internships in different industries he learned that what constitutes an internship can vary significantly between industries and places different demands on interns when it comes to negotiating access. He compares his experience in management consulting where internships are advertised well in advance, the selection process is routinised and largely transparent with the creative industries where aspiring interns like him had to proactively search and create work opportunities through their network.

The above excerpts show that the internship opportunity helped develop new insights and knowledge about their degree, the profession they wish to join, themselves and their future plans. In addition to transforming their perspectives on practices of education and work, the interns were also transforming how they subsequently engaged in existing and new activities. They were developing a capacity to combine and negotiate novel insights, skills and goals to develop their participation in existing activities further or to engage in new ones. The key aspect of this theme revolves around an agentive capacity to negotiate opportunities by drawing on the insights and skills that from learning in internship in order to devise and execute new plans and goals for their careers.

Discussion: Learning in internship as developing an expression of 'horizontal expertise'

In this paper I built on the idea that occupational learning in unaccredited internship situated in a productive and commercial context needs to be examined in its own right as a distinct form of work activity (Guile and Lahiff, 2022). I selected four concepts from the literature on vocational learning attentive to the challenges of learning at the boundary between education and work (boundary-crossing,

recontextualization and identity re-negotiation) and emerging forms of expertise of contemporary workplaces (horizontal expertise) as sensitising concepts to shed light on different facets of individually negotiated movement between education and work that is typical for unaccredited internships.

The data analysis revealed that interns, first, developed new insights about (a) *professional practice* - a sector and professional domain of the internship such as understanding the underpinning professional values and motives (Tom, Tina), (b) *the degree* they were pursuing and educational activities (Christine, Hugo, Nina) and (c) their *motives,* competencies, preferences and capacities (Christine, Nina). This aligns with the salient aspects of learning mechanisms to address learning challenges in an unaccredited internship captured by boundary crossing, recontextualisation and identity re-negotiation

Second, the interns developed a capacity to draw on these threefold insights as a resource to, on the one hand, develop a clearer sense of direction in which they wanted to move next in their emerging careers (Tina, Christine, Hugo, Tom) and, on the other, feel reassured, confident and emboldened to take their existing and new plans forward, initiate subsequent boundary crossing and engage in new activities (Nina, Hugo, Kiersten, Christine). This suggests that interns develop their transitional practices in existing and new activities through the development of "new layers of symbolic mediation" (Beach, 2003 p. 55), the refining of their objects of activity, and developing motives and agency to propel their professional learning forward (see also Edwards et al., 2019). The research participants have continued to employ their agency to create learning opportunities (Guile and Lahiff 2022) beyond the internship by synthesising what they have learned about the work, their expertise, themselves and use it as a resource to create new and refine old plans and actions for subsequent boundary-crossing to work and education and professional learning. This new insight echoes Walker and Nocon's (2007) longitudinal research on marginalised youth whose learning in after-school practices affirmed their capacity as competent boundary crossers and assisted them to "move with ease" into new contexts by extending their competences into new domains (p.152). Moreover, their discussion of the actions and plans following internship revealed that the direction of the participants' transitions across boundaries takes an iterative, unfolding and emergent direction.This differs from the traditional assumption that internship is an activity that facilitates vertical development and learning within an occupation (i.e., from accumulating vocational 'theory' to applying it in 'practice' and from temporary to full participation and employment in a community of practice). As short-term visitors of the workplace, the interns were developing occupational understanding and reasoning, as well as contextualising these insights forward to create new learning opportunities and refine and revise their plans and actions to prepare for the next cycle of transition beyond an internship.

I suggest the term 'interns' horizontal expertise' to refer to this agentive capacity that emerges from the synthesis and extrapolation from the context-specific occupational, degree and workplace insights, lasts beyond the length of the internship and informs interns' future boundary-crossing activities. I contend

that the notion of interns' horizontal expertise can capture the intertwined ideas that (i) horizontal learning and development across contexts underpin all three sets of learning challenges in unaccredited internship (i.e. boundary-crossing, recontextualisation and identity-renegotiation), (ii) the interns are 'visitors' in the practices where the horizontal way of working with others (e.g. clients, suppliers, external stakeholders) are increasingly the norm (as Engeström's concept of horizontal expertise suggests) and (iii) the novel insights, knowledge and skills act as a resource for agentic professional development and enable students to exercise their capacity to envision, plan and execute other learning activities such as subsequent transitions to work and/or education (e.g. through their post-graduate study, full time work, graduate schemes).

The significance of these findings is threefold. First, they suggest that learning in an internship can be conceptualised as a more encompassing process than learning how to integrate oneself into the company and act competently in organisational practices (Chue and Säljö, 2022; Guile and Lahiff 2022) since it has a prospective dimension that orients interns towards the future creation of a distinct occupational pathway. Second, it suggests that this capacity to act horizontally is neither lost nor unproblematically transferred from internship but rather continually realised - contextualised and recontextualised in subsequent activities in institutional practices (Walker and Nocon 2007). Thirdly, showing the emergence of the horizontal expertise of interns enables us to build a conceptual bridge with the work on the horizontal expertise of seasoned professionals. Interns' horizontal expertise can be understood as an additional expression of Engeström's (2018 p.11) notion of horizontal expertise that shares with the latter a general idea that "…translations and negotiations are of central importance" when participating across contexts. There are clear affinities between the experts' and interns' horizontal expertise since both are related to the capacity to address learning challenges and negotiate different traditions, tools, patterns of working and concepts of expert knowledge. Furthermore, interns are learning in the workplaces where Engeström's experts reside – workplaces that are undergoing rapid transformations, experiencing disturbances and breaks and experts who work relationally to respond to these problems and come up with solutions. However, interns' fleeting participation in an occupational practice and emerging core expertise make interns' horizontal expertise a distinctive, more specific expression of horizontal expertise that concerns budding professionals.

In conclusion, by focusing on the learning of interns that occurs across social practices it is possible to understand how contemporary unaccredited internships can contribute to the emergence and development of interns' horizontal expertise and how this type of expertise can be an important resource for joining and thriving in many contemporary workplaces and industries. I recommend future researchers interested in the topic address some of the limitations of the research design by, for instance, expanding the number of research participants, varying group composition, size and dynamic, (e.g. participants from the same degree as well as mixed groups, smaller and larger group), changing the discussion prompts and including a longitudinal design which follows young people across different work activities.

Appendix

Table 1 Research participants: degree, year of study and internship sector

	Focus Group	Pseudonym	Degree Area	Year	Internship Sector
1	1	Hugo	Interdisciplinary degree : Economics with Neuroscience (BA)	3rd Year undergraduate	Fund Management (sales and marketing); Investment Banking (Operations); Corporate Banking (Risk)
2		John	Electrical and Electronic Engineering (BA)	2nd year undergraduate	Acoustic Engineering Company
3		Darta	Information Management (BA)	3rd year undergraduate	Multinational Tech Company (Digital Marketing Department); Digital Company (Marketing Department)
4		Christine	Chemical Engineering	3rd year undergraduate	Two chemical engineering companies of different size and scope
5	2	Kiersten	Electrical and Electronic Engineering (BA)	4th year undergraduate	Large automative company
6		Bao	Electrical and Electronic Engineering (BA)	3rd year undergraduate	University; small consulting company
7		Tom	Liberal Arts (BA)	3rd year undergraduate	Management Consulting; Film and Publishing Industry
8	3	Tina	Engineering; (BA) Sustainable International; Development (MA)	Post-graduate student (MA)	Manufacturing company for sustainable material
9		Sandra	History (BA, MA)	Post-graduate student (MA)	Heritage and Museum
10		Anna	Interdisciplinary Degree: Liberal Arts (BA)	2nd year undergraduate	Charitable Organisation
11	4	Kho	Financial Systems	Post-graduate student (MA)	Programming; Banking
12		Stella	Economic Policy	Post-graduate student (MA)	Central Bank; Embassy
13		Elisa	Interdisciplinary Degree: Liberal Arts (BA)	3rd Year undergraduate	Heritage and Museum

	Focus Group	Pseudonym	Degree Area	Year	Internship Sector
14	5	Sofia	Public Management	Post-graduate student (MA)	Multinational company - PR department
15		Sarah	Journalism and Media	Post-graduate student (MA)	Consulate (Policy Analysis)
16		Andreas	Public Management	Post-graduate student (MA)	Corporate Communication
17	6	Mona	International Law	3rd Year undergraduate	A Court; Corporate Law
18	7	Nina	English Language and Literature	2nd year undergraduate	PR in a Charity A University-based magazine

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Availability of data and materials Supporting data are not publicly available.

Declarations

Ethics approval and consent to participate The empirical work has been approved by the Ethical Committee of the Institute of Education (now Faculty of Education, University College London) as part of the authors' Doctoral thesis.

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