Professional Identity of Faculty in Higher Education: Developing a Measure to Inform Faculty Development Practice and Facilitate Flourishing.

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Doctor of Education

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Declaration
I, Ruth Elizabeth Puhr, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that these sources have been indicated in the thesis.

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(Excluding abstract, declaration, acknowledgements, reflective and impact statements, acronyms and initialisms, references, and appendices)
Abstract

This research explores the professional identity of faculty in higher education and the relationships between these identities and the extent to which faculty are flourishing in the workplace. It develops, content validates, and tests a measure of faculty professional identity, integrating the new measure with the workplace PERMA profiler in an instrument designed to examine the relationship between professional identity and flourishing. Finally, it interrogates the utility of the new measure for development purposes at individual, group, and institutional levels of higher education.

As a pragmatic study with a mixed methods multi-phase design, the research engages qualitative and quantitative data, collected in four phases, to address its aims. A conceptual overview gleaned from the literature is first enhanced with empirical insights gathered from faculty developers in focus groups using the nominal group technique. Potential dimensions and items are developed for a measure, and these are subjected to a content validation process by experts and revised accordingly. The new measure is used, along with the workplace PERMA profiler, to collect instrument testing data from a small sample of faculty. Finally, follow-up focus group discussions with faculty developers explore the utility of the measure.

The findings demonstrate a strong relationship between higher education faculty professional identity and flourishing. The potential utility of the new measure goes beyond practice-based faculty development initiatives at individual, group, and institutional levels to encompass an innovative, adaptive, person-centred approach to development, which is both data-informed and focused on fostering flourishing identities. At institutional level, the measure might be leveraged to inform strategy with faculty developers contributing as third-space interpretational gatekeepers.
Impact Statement

The process of undertaking this research has had a significant impact on my own professional identity, precipitating opportunities for academic publications and stimulating me to take on several areas of responsibility in my institution and the broader Swiss higher education context. In addition, I believe this thesis has the potential to contribute to both knowledge and practice in several ways, detailed below.

My long-standing interest in a measure of faculty professional identity was manifested in a small-scale study I conducted in 2019. The pervasive reverberations of the COVID-19 pandemic on every aspect of teaching practice in higher education served to strengthen my conviction that a measure of faculty professional identity might have considerable utility, providing insights both for individual faculty and the faculty developers who support them. Whether to stimulate awareness, to inform individual goal setting, or as a diagnostic tool, I believed that a measure might provide a baseline from which to build. This thesis not only confirmed this potential utility, but demonstrated the relationship between professional identity and flourishing, and revealed a potential to significantly broaden the scope of faculty development practice in both individual and group contexts by shifting the focus from the doing to the being of faculty work.

At institutional level, there is noteworthy potential for the measure to provide HEIs with cultural insights to inform strategic decision-making and foster individual and collective flourishing. In a VUCA world and a higher education sector undergoing rapid and ongoing transformation, applying a data-driven approach that considers faculty identities and empowers faculty developers as the gatekeepers of valuable but sensitive data might alleviate accusations of managerialism and ensure that powerful political and market forces such as consumerism are tempered by an awareness of strengths and weaknesses in organisational culture.

From a methodological perspective, this thesis offers an example of a pragmatic multi-phase mixed methods research (MMR) design in which qualitative and quantitative methods are integrated to ensure that the subtle nuances of individual participant voices interact with the precision of statistical analysis.
Although MMR is increasingly appreciated for its anti-dualist flexibility, there continues to be a dearth of research leveraging the potential of MMR in the field of Education and this thesis provides an example of a multi-phase MMR design that might inspire others. In addition, the purposefully designed virtual collaborative wall to facilitate focus group discussion with the nominal group technique was a successful innovation in this thesis which has potential for publication.

The limitations of the thesis include the geo-specificity of the research; a lack of full construct validation; and concerns about potential misuse of the measure and possible misinterpretation of the data. Despite these limitations, the potential utility of the measure developed in this thesis at several levels of application provides compelling arguments for its dissemination and operationalisation in the Swiss higher education context, and its further development to ensure international applicability.
Reflective Statement

As a steadfast and dedicated advocate for reflective practice, I am a self-confessed compulsive keeper of three discreet journals: a personal diary which has provided me with unwavering lifelong support; a professional journal which has enabled the cathartic and, I hope, rational processing of my complex work life; and finally, a research journal, which I began at the beginning of my doctoral studies to meticulously catalogue what I anticipated would be a transformative journey.

When I started the EdD program, I had been lecturing in Higher Education for ten years and had moved into a role in faculty development some months before. Suffering from imposter syndrome, I plunged into the literature on various aspects of my role to ensure I was taking a research-informed approach. At home, my recently emptied nest ensured that I was able to devote more time to this than was perhaps reasonable. I realised that some of my questions required data specific to my institution, and I threw myself into this too. My motivation to consider embarking on a doctoral program was layered and included: my passion for my area of work, my hunger for research skills, my need for professional legitimacy, and my romantic ideal of revisiting my younger self and the carefree student days of my twenties. The reputation of University College London (UCL) and the design of the EdD programme with its focus on professional practice appealed to me. I applied and was accepted.

Having consulted the schedule for the taught modules of the first year, I booked a series of 7am flights from Geneva to London and ordered my copy of ‘Exploring Professionalism’ (Bryan Cunningham et al., 2008). I found the theorizing of tensions with which I was familiar fascinating: supercomplexity (Barnett, 2008); the imaginative professional (Power, 2008); micropolitics (Morley, 2008); the powers of managerialism and consumerism (Ball, 2008); and ethical dilemmas (Lunt, 2008) all contributed to my choice of topic for the assessed paper I wrote at the end of the first taught module – Foundations of Professionalism (FoP) – in which I explored the professional identities of a group of faculty in my institution. I delved into the literature on hospitality management education and found a rich discourse at once existential and practical (Airey & Tribe, 2000; Dianne. Dredge et
I also discovered the joys of working with Mendeley reference management software. By the end of the module, I was confidently immersed in my EdD studies and dared to coin a new term to capture the shared identity of the group of faculty I was studying; the *superimposed multi-faceted professional* (Puhr, 2019c).

My first opportunity to disseminate my doctoral work came as I completed my FoP assignment. I was invited to present a practice example paper at a Scholarship of Teaching and Learning (SoTL) conference in Switzerland. I used the opportunity to present my work on multifaceted professional identities (Puhr, 2019d). This fuelled my appetite for the potent world of interactive academic knowledge generation, and I have availed of every opportunity to participate in conferences both as an attendee and a presenter during the remainder of my doctoral journey.

As a Swiss resident, I chose the convenient option of studying online for the second taught module – Methods of Enquiry 1 (MoE1). This seemed like a sensible choice, and it was an interesting experience, but not one I would willingly repeat. Although the Institute of Education (IOE) had a very well-designed online course for MoE1, my EdD cohort had become a tight-knot support community during FoP, and I missed the informal exchanges which had proved invaluable with my fellow EdD aspirants. In addition, many UCL library resources and research training programme (RTP) courses were not available online when I chose to take the MoE1 module from a distance. This would all change in 2020, but I sometimes struggled to access resources in 2019.

I found the interrogation of epistemological positions both intriguing and daunting and my reading became more disparate as I grappled with diverse methodologies, theoretical perspectives, and philosophical positions, indulging my curiosity. Selecting a topic for the MoE1 assignment helped narrow my focus and the exercise of writing a research proposal was so unlike that of the FoP assignment, that I felt both stimulated and stretched. By choosing to investigate the experience of faculty tutoring on an online, asynchronous, student-paced course, I further developed my interest in the professional identity of faculty, but with a focus on innovative higher education teaching practice.
With Methods of Enquiry 2 (MoE2) – the last of the three taught modules in the first year of the EdD programme – came the opportunity to complete a small-scale research project involving data collection. While many in my cohort carried out the research they had proposed in MoE1, I had become fascinated with the layered, complex, and diverse professional identities of the faculty I was working with and I was frustrated by the lack of a measure to offer insights into these identities. I set about developing and content validating a simple measure. The study suggested that a measure could be developed and that such an instrument could be useful. I was completely seduced by the research process. The desk research of FoP and MoE1 had been fascinating, but I found the entire primary research process, from ethical approval and data collection to writing up findings and recommendations profoundly rewarding.

During the second year of the EdD program, I still suffered from occasional bouts of imposter syndrome, but my confidence was growing, and my academic voice was taking shape. In February 2020, I was invited back to the SoTL conference I had presented at the previous year. Although I did not conduct the research proposed in MoE1, I took the opportunity to present my initial analysis of the online course design that would have been the focus of the study (Puhr, 2020). The experience further validated my burgeoning confidence.

I was ready to start work on my Institution Focused Study (IFS). Although it is not compulsory to focus on a specific institution in the IFS, and for some of my EdD cohort it was not possible, I was keen to tackle the challenges of being an insider researcher. My employer enthusiastically agreed to allow me to avail of my institution as my research site. I began to investigate the relationship between students’ acquisition of competencies during their undergraduate degree and graduate work readiness. In the end, my insider research took place inside my home, with the world locked down in the grip of a global pandemic. I was hesitant about whether to proceed, but my supervisors encouraged me. I completed RTP courses on quantitative analysis, qualitative analysis, mixed methods research, and case study design, as well as courses on a range of digital tools needed to complete the research. I had already applied for and received ethical approval. I decided I had nothing to lose.
My IFS mixed methods research design involved inviting our graduating students to complete an online questionnaire followed by focus group discussions. With our highly international population of students now dispersed around the world, time zones and potential connectivity issues obliged me to replace focus groups with interviews. The IFS became a refuge at a time when my work supporting faculty had become all-consuming. Students who participated in the research shared that they enjoyed the experience, and the findings were used to review undergraduate competencies at my institution. In addition, I successfully published partial findings in a peer-reviewed academic journal (Puhr, 2021b) having presented the paper at an online conference in February 2021 (Puhr, 2021a).

Taking on a mixed methods study for the IFS was no small undertaking but I had begun to mould my stance as a pragmatist as a result of my wide reading during MoE1 and MoE2. I found that the theories of Pierce (1868), James (1890, 1901), and Dewey (1929) have remained remarkably relevant in the twenty-first century (Morgan, 2007, 2014; Ormerod, 2006). Discovering the principles of pragmatism felt like coming home. Mixed methods is a natural fit for a pragmatic researcher, since the posing of research questions can take the broadest view of a problem (Duram, 2012) and I have found the process of becoming a pragmatic mixed methods researcher during my EdD to be the most transformative aspect of my doctoral journey.

The thesis allowed me to draw together and augment the philosophical, theoretical, and applied learning I had assembled during the EdD journey. Returning to my initial interest in the professional identities of faculty in higher education, I addressed some of the limitations of the small-scale study I had conducted during MoE2. By drawing on a broader base of literature and integrating qualitative data gathered from faculty developers in the instrument design, I achieved a more comprehensive and robust draft measure of faculty professional identity. This was further improved following the participation of experts in a rigorous quantitative content validation. Finally, data collected from faculty using the revised measure made it possible to interrogate the relationship between professional identity and flourishing and to the explore potential utility of the measure with faculty developers.
The EdD has transformed the way I frame and approach problems and equipped me with a versatile toolkit of vocabulary and approaches so that I feel comfortable in a wide range of academic contexts. Towards the end of 2021, I was immersed in planning the data collection for my thesis. A colleague and I were chatting about the results of a faculty survey I had conducted one year earlier, during the height of the COVID-19 pandemic. I had been surprised by the upbeat determination and resilience evidenced in the survey results and wondered how faculty were doing one year later. My colleague shared my curiosity. By August 2022, we were presenting the findings of our study exploring the lived experience of faculty using interpretative phenomenological analysis (IPA) at the Academy of Management (AOM) conference in Seattle. Our paper was part of an award-winning symposium (Agogue et al., 2022) and has been accepted for publication in an edited book by Springer International Publishing (Germanier & Puhr, 2023).

The EdD celebrated 25 years at the Institute of Education on 4 July 2022. As part of the celebrations, a panel discussion was held to consider the ways in which the EdD can contribute to positive educational transformations in individual educational professionals, in the contexts in which they work, and in education more broadly. Participants included faculty and graduates, and it was my privilege to participate as a current student. During the discussion, I described myself as an “EdD poster girl” and I went on to explain why I had arrived at this self-image. As a professional doctorate, it is anticipated that the EdD will have some impact on one’s profession. In my case, it is almost impossible to overstate this impact. At the beginning of my doctoral journey, I was a working as a part-time faculty development advisor endeavouring to use a research-informed approach in my practice. Four years later, I have grown in confidence and competence and learned the value of critical friends, of whom I now have many. I am juggling the writing-up of my thesis with a full-time role as Quality Assurance and Academic Development with significant institutional responsibilities and oversight. My own challenging experience with online learning informed some of the institutional measures we took to support our students during emergency remote learning in 2020. I became a Principal Fellow of the Higher Education Academy (PFHEA) in 2021 and President of the Swiss Faculty Development Network (SFDN) in 2022. While these titles are
impressive, they reflect a much deeper and broader engagement with my professional practice which has been facilitated by the EdD and goes to the heart of my transformation.
Acknowledgements

Researching and writing this thesis has been a joyful if challenging journey. As I have laboured to “hammer my thoughts into unity,” as Yeats so aptly described the toil of drawing together disparate interests and theories, I have been fortunate in having the support and encouragement of two remarkable supervisors, Gwyneth Hughes and Sam Smidt. Their gentle nudging when I faltered, and their constant thoughtful feedback have been invaluable.

Among my colleagues, I am especially grateful to Albian and Rachel, my critical friends, and to Christine, for her unflagging belief in my ability to juggle successfully. Outside my institution, special thanks go to my network of Swiss Faculty Development Network colleagues for generously sharing their time and precious insights in two rounds of focus group discussions.

To my husband, Chris and my sons, Will and Thomas – thank you for being my mainstay and for never once complaining.

Finally, to my parents, Maura and Liam and my siblings, Dara, Norma, and Ian – you are my roots, my source, and my guiding light.
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<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>AES</td>
<td>Advanced Encryption Standard</td>
</tr>
<tr>
<td>BERA</td>
<td>British Education Research Association</td>
</tr>
<tr>
<td>CoP</td>
<td>Community of Practice</td>
</tr>
<tr>
<td>CV1, CV2... CV5</td>
<td>Refers to a Content Validator</td>
</tr>
<tr>
<td>CVR</td>
<td>Content Validity Ratio</td>
</tr>
<tr>
<td>D-FVI/Ave</td>
<td>Average Factorial Validity Index for items in a Dimension</td>
</tr>
<tr>
<td>EdD</td>
<td>Doctor of Education</td>
</tr>
<tr>
<td>EHEA</td>
<td>European Higher Education Area</td>
</tr>
<tr>
<td>FG1, FG2</td>
<td>Refers to a Focus Group</td>
</tr>
<tr>
<td>FFG1, FFG2</td>
<td>Refers to a Follow-up Focus Group</td>
</tr>
<tr>
<td>FoP</td>
<td>Foundations of Professionalism</td>
</tr>
<tr>
<td>GDPR</td>
<td>General Data Protection Regulations</td>
</tr>
<tr>
<td>HEI</td>
<td>Higher Education Institution</td>
</tr>
<tr>
<td>I-CVI</td>
<td>Item Content Validity Index</td>
</tr>
<tr>
<td>I-FVI</td>
<td>Item Factorial Validity Index</td>
</tr>
<tr>
<td>IFS</td>
<td>Institution Focused Study</td>
</tr>
<tr>
<td>IOE</td>
<td>Institute of Education</td>
</tr>
<tr>
<td>IPA</td>
<td>Interpretative Phenomenological Analysis</td>
</tr>
<tr>
<td>IRA</td>
<td>Inter Rater Agreement</td>
</tr>
<tr>
<td>M-CVI/Ave</td>
<td>Average Content Validity Index for items in a Measure</td>
</tr>
<tr>
<td>M-CVI/UA</td>
<td>The number of items in a measure with an I-CVI of 1 (universal agreement) divided by the total number of items</td>
</tr>
<tr>
<td>M-FVI/Ave</td>
<td>Average Factorial Validity Index for items in a Measure</td>
</tr>
<tr>
<td>MMR</td>
<td>Mixed Methods Research</td>
</tr>
<tr>
<td>MoE1</td>
<td>Methods of Enquiry 1</td>
</tr>
<tr>
<td>MoE2</td>
<td>Methods of Enquiry 2</td>
</tr>
<tr>
<td>MS</td>
<td>Microsoft</td>
</tr>
<tr>
<td>NECHE</td>
<td>New England Commission of Higher Education</td>
</tr>
<tr>
<td>NGT</td>
<td>Nominal Group Technique</td>
</tr>
</tbody>
</table>
PERMA  Positive emotion, Engagement, Relationships, Meaning, Accomplishment
PIT  Pragmatic Identity Theory
PFHEA  Principal Fellow of the Higher Education Academy
Q1, Q2... Q64  Refers to proposed items during content validation
QUAL  First priority qualitative data
quan  Second priority quantitative data
RQ  Research Question
RTP  Research Training Programme
SFDN  Swiss Faculty Development Network
SIT  Social Identity Theory
SoTL  Scholarship of Teaching and Learning
UCL  University College London
UK  United Kingdom
US  United States
VUCA  Volatility, Uncertainty, Complexity, and Ambiguity
VUCA 2.0  Vision, Understanding, Courage, and Adaptability
Chapter 1 – Introduction, Aims and Rationale

1.1 Introduction

This chapter situates the research by laying out the aims of the thesis and providing a rationale to illustrate the importance of and need for this study. The specific practice-based context which informed the empirical setting in which the research was conducted, and the scope of the study are elucidated. The research questions are framed by the philosophical perspectives which both shaped and underpinned the study and these are outlined in this chapter. Finally, a structural overview of the thesis is provided to orient the reader.

1.2 Aims of the Research

The aims of this research are two-fold and have grown from a primary objective to inform the practice of faculty developers in facilitating the sustained development of robust, flourishing faculty. The first aim is to develop an instrument with which to enhance understandings of the complex multi-dimensional professional identities of higher education faculty. The second aim is to determine the potential utility of the instrument by investigating whether identifying individual and collective strengths and weaknesses in faculty professional identities might meaningfully inform the practice of faculty developers and facilitate flourishing.

1.2.1 Scope of the Research

It is important at this point to clarify the scope of this research as well as some of the assumptions upon which the study is based. First, I make a clear distinction between academic identity – about which much has been written – and professional identity of higher education faculty. This distinction is not arbitrary and was born of observations and conversations which took place during my professional practice and through which it became apparent that while most academics see themselves as belonging to a group entitled faculty, not all members of faculty see themselves as academics. Thus, while the large body of literature covering academic identity has much to offer in terms of understanding the professional identities of faculty, the exclusive nature of the construct of academic
identity necessitated a broader investigation of faculty professional identity for this research.

In addition, while higher education faculty often practice in international as well as local contexts, I recognise that there may be important inconsistencies between higher education systems in different countries and indeed between institutions within any one system. This awareness, along with my professional context and my immediate professional network of faculty developers in other higher education institutions (HEI) in Switzerland, has informed my decision to focus on data collected within the Swiss higher education system in this thesis.

However, it is my hope that the findings of this research might also prove relevant for the international higher education context, and I anticipate that the instrument developed might be either operational or adaptable for other contexts. Thus, the literature reviewed in the next chapter is not geographically specific.

1.3 Rationale for the Research

There is general agreement that professional identity is a complex construct which underpins every aspect of professional life (Carr-Saunders & Wilson, 1933; Crook, 2008; Cunningham et al., 2008; Derrick, 2013; Downie, 1990; Freidson, 2001; Hoyle & John, 1995; Klass, 1961; Lunt, 2008; Millerson, 1964; Noordegraaf, 2007; Wright, 1951). Constantly changing and evolving, professional identity is constructed and shaped over time and may be deconstructed and reconstructed or indeed consolidated and strengthened. Despite this apparent fluidity, the resilient professional flourishes, sustains a robust professional identity, and is not overwhelmed by disruption, but tends to appreciate the potential for improvement often embedded in change and has the capability and the confidence to take appropriate and considered steps towards embracing change (Derrick, 2018; Turner et al., 2016). My understanding of both the complexity and fluidity of professional identities on the one hand, and my awareness of the need for flourishing faculty on the other, provide the rationale for this research.

Flourishing and resilience imply individual personal wellbeing, a capacity to take care of oneself and the ability to maintain a solid inner strength as well as the necessary reserves of energy required to adapt to the challenging opportunities
that change may bring (Mansfield et al., 2016; Turner et al., 2016). Individual flourishing and wellbeing also has a profoundly positive impact on the social settings in which individuals interact resulting in collective flourishing (Peng, 2017; Wenger, 2010). In the case of faculty, their professional practice involves building collaborative relationships both within and beyond the institution, but also implies complex processes underpinning the very particular power-based dynamic at the heart of relationships between faculty and their students, dubbed *othering* by Struthers (2018).

If the professional identity of faculty is to be nurtured and shaped towards flourishing and resilience, it must first of all be understood both by the faculty themselves and by those involved in supporting and developing faculty (Taylor, 2007). Many discursive approaches are already used in faculty development to foster faculty self-awareness (Amott, 2016; Brown, 2017; Land, 2007; Steinert et al., 2019). While these are of great value, they are often time consuming and may be met with cynical resistance by faculty (Land, 2007). A “need for ... new concepts, theories, and frameworks for understanding professional or occupational identities in higher education” was identified by Henkel (2010, p. 7) and the complex multidimensional structure of academic identities is highlighted in Feather’s “theoretical model of academic identity” (2015, p. 330).

This research aims to provide a new approach to facilitating the explicit identification and articulation of the complex multiple dimensions inherent in the professional identities of faculty. DeVellis (2017) argues that “the reasoning involved in determining how to quantify a phenomenon of interest sheds new light on the phenomenon itself” (p. 2). He acknowledges that a measure may be “an imperfect window into nature’s truths” (p. 5) but, if carefully designed, “measures are, in a sense, quantitative metaphors for the underlying concepts” (p. 246). I posit that investigating the dimensions and contextual factors which constitute and impact faculty identities has the potential to be illuminating and empowering individually and collectively and might inform appropriate needs-based development initiatives (Abu-Alruz & Khasawneh, 2013; Land, 2007).

This research proposes developing a measure of faculty identity which might provide an accessible overview for faculty, fuelling self-awareness by prompting the
reflections associated with reflective practice (Schön, 1983). It might also offer valuable individual and collective data to faculty developers, as they endeavour to promote the practical wisdom of *phronesis* (Lunenberg & Korthagen, 2009). It is not intended to replace discursive, reflective, and narrative approaches, but to act as a catalyst, informing conversation and reflection. At an institutional level, aggregated data might reveal institutional strengths as well as weaknesses which could be tackled strategically. The intention is not to produce a strict psychometric measure which might be reductive and result in the negative perceptions associated with managerialism. Rather, the instrument might potentially offer valuable insights into identities and flourishing by identifying areas that are robust, thriving, and strong as well as those that are of fragile, unstable, and vulnerable, requiring support and development.

I took some tentative steps towards developing such a measure during the first year of my doctoral journey. My small-scale study (Puhr, 2019a) concluded that the development of a validated instrument would be a valuable contribution to understandings of faculty professional identity.

**1.4 Context for the Study**

The volatility, uncertainty, complexity, and ambiguity (VUCA) of contemporary life have been acknowledged for decades (Barber, 1992; Bennett & Lemoine, 2014; Bennis & Nanus, 1985) but the current global economic and geopolitical situation is particularly acute. In addition, the specific challenges faced by university faculty, the institutions to which they belong and the broader global higher education context in the twenty-first century have been the subject of significant disquiet amongst higher education professionals (Barnett, 2008; Cohen, 2021; Feather, 2015; Henkel, 2010; Locke et al., 2016; Whitchurch, 2013). Forces including consumerism, managerialism, exponential growth, diversification, and technological advancement in the knowledge economy have all contributed to the collective angst (Anderson, 2009; Barnett, 2008; Henkel, 2010; Kang, 2013; Mansbach & Austin, 2018; Regan et al., 2012; Westbrook, 2006).

In this context, it is almost impossible to overstate the impact that the global COVID-19 pandemic has had on the professional practice of faculty in higher
education. Eisele (2020) claims that the anguish brought about by such a sudden, dramatic, and far-reaching event may impact flourishing and result in individuals and groups finding themselves in the drained and joyless state of languishing, with some struggling and others surrendering. Thus, it is more important than ever to interrogate the nature of faculty professional identities with a view to understanding why, for some, the challenges of the global pandemic have stimulated innovation and generated opportunities for exploring and improving practice (Agogue et al., 2022), while for others, the experience has been devastating to their sense of self (Marek et al., 2021).

1.4.1 Professional Context

My experience of higher education spans several systems over almost thirty years. My own higher education studies took place in Ireland and the United Kingdom (UK), and I returned to the UK to pursue my doctoral studies. Before moving to Switzerland in 1999, I managed education and outreach projects for a large touring theatre in the UK – a role which provided fascinating insights into the symbiotic relationships between arts organisations and a range of education institutions including several universities. Although I work at Les Roches, a small private HEI specialised in hospitality management in Switzerland, this research draws on my experience of the wider higher education context in Switzerland and beyond. Les Roches has a branch campus in Spain and has relationships with institutions in the United States (US), the Philippines, Thailand, South Africa, and India. Its programs are recognised by the Swiss cantonal authority and it is institutionally accredited by the New England Commission of Higher Education (NECHE), which provides accreditation for several American HEIs including Brown University and Berklee College of Music as well as a limited number of international HEIs. In addition to my institutional working context, I serve as President of the board of the Swiss Faculty Development Network (SFDN), which supports development activity in HEIs in Switzerland.

My interest in the concept of professional identity is based on observations and reflections accumulated in my various roles in higher education. As a member of faculty between 2004 and 2018, I became aware that faculty did not necessarily
share a common understanding of their own professional identity. Disparate perspectives resulted in tensions and misunderstandings, and I noticed many ‘fault-lines’ in the discourse. These included disciplinary orientation, the importance of research activity, and whether one’s background was more rooted in academia or industry.

In 2018, I moved into a development position, initially that of Faculty Development Advisor and, in 2020, Head of Teaching and Learning Development. I am now Head of Quality Assurance and Academic Development. Land (2007) conceptualises development work as “negotiating stances” (p. 135) in a “cauldron of change” (p. 136) but the work itself tends to focus on practice – offering approaches, models, and tools to understand and improve what faculty do in their teaching practice (Sklar, 2016). I returned to the classroom in 2021, taking on the teaching of a graduate course during the global pandemic. Thus, my current role includes, development, quality assurance, policy development, teaching, and research. I represent many different things to a variety of people in a range of contexts and this fluidity has been instrumental in fuelling my interest in identity in the workplace. Outside my institution, my role as President of the SFDN, a member of the International Consortium for Educational Development (ICED) in 2022, has provided nuanced insights into a wide array of HEI contexts, and I am fascinated by the shared challenges faced by HEIs in Switzerland and beyond, as well as their sometimes considerable differences.

Having read that increasing differentiation in faculty identities would favour a tailored approach to development (Locke et al., 2016), I searched in vain for a measure that would benchmark identities, illustrate dimensions, and facilitate the purposeful design of development initiatives. In my work with students using the VIA classification of character strengths (Peterson & Seligman, 2004), I observed the potential of having an overview of multiple dimensions in focusing discussions regarding development. Nias (1989) claims that faculty with robust professional identities are more inclined to engage with development, are better able to handle change and are more likely to innovate in their teaching practice. I hoped that by understanding the strengths and weaknesses of the dimensions of faculty identities, I might be able to provide more specific and appropriate support, both to
individuals and groups. I assumed that an instrument to capture the dimensional components of professional identity might inform the selection of appropriate and relevant methods and approaches, and I was frustrated that such an instrument was not available.

While professional identity measures exist for many other professions (Barbour & Lammers, 2015; Eason et al., 2018; Woo, 2013), measures for the teaching profession tend to focus on professional identity construction of newly qualified individuals entering the profession and are contextualised in primary and secondary education (Beijaard, 1995; Beijaard et al., 2000, 2004; Canrinus et al., 2011; Hanna et al., 2019, 2020; Tan et al., 2017). I found that professional identity measures tend to include dimensions relating to self in role, such as belonging and pride; competence, such as expertise and credibility; and social, such as relationships (Puhr, 2019a). Hanna et al. (2019) reviewed 20 studies measuring teacher identity, mostly in the context of secondary education, and found six main domains: self-image, motivation, commitment, self-efficacy, task perception, and job satisfaction. However, existing measures in the context of higher education (Moore & Hofman, 1988; Noi et al., 2016) are context-specific and lack validation.

In the absence of a suitable measure, I have worked with faculty using a range of reflective practice tools including the teaching perspectives inventory (Pratt, D, 1998; Pratt et al., 2001), professional life history narratives (Amott, 2018), and the self-care inventory (T. M. Skovholt, 2016). Steinert et al. (2019) advocate similar approaches to strengthen professional identity through faculty development. However, (Land, 2007) suggests that the growing pressure on faculty to attend, record, and report participation in faculty development results in a risk that faculty development might be seen as a bureaucratic obligation. There is a need for initiatives which are adaptive and perceived as relevant and worthwhile by faculty (McCune, 2021). I hope that an accessible and easy-to-use instrument which might reveal previously inconspicuous or concealed aspects of a higher education teaching identities might prove illuminating and contribute to a new data-informed adaptive approach to faculty development.
1.3.2 The Swiss Higher Education Context

This research is situated in the Swiss higher education system which has much in common with the systems and structures of other European countries. As a signatory of the 1999 Bologna Accord, Switzerland falls within the vast European Higher Education Area (EHEA) which ensures comparability of standards of qualifications between systems based on a framework of three cycles of qualification in higher education. For the purposes of my research, higher education policy and governance are of interest only insofar as they influence the professional identities of faculty and the similarities and differences between Switzerland and other higher education systems.

The European-wide tendency towards a unified system which integrates traditional universities and more applied and vocationally oriented HEIs while allowing for differentiation is evident in the Swiss system where the names of institutions denote differences in disciplines and approaches (Denzler, 2014). Both academic drift, in which institutions with an applied focus attempt to raise their academic profile, and vocational drift, in which institutions attempt to become more applied in order to raise funding or improve their employability profile, are commonplace in European systems (Teichler, 2006) and can be observed in the Swiss higher education system where they might be experienced as disruptive and destabilising (Denzler, 2014; Weber et al., 2010). Thus, the tensions between systemic and institutional change and the identities of faculty engaged in professional practice within these systems and institutions is an area of interest for this research.

1.5 Research Questions

This thesis aims to address the need for a measure which would provide meaningful insights with which to understand the professional identity of higher education faculty by identifying inherent dimensional strengths, weaknesses, and contextual influencing factors. Descriptive in nature, the research aims to illustrate the characteristics of faculty professional identity, providing individual faculty with a basis for reflection; faculty developers with insights which might inform the design of development initiatives; and institutions with aggregated data which
might inform strategic decision making. Although I do not intend to explore how or why identities are formed, this research is also analytical in that it intends to discover and measure dimensions, contextual factors, and the relationships between them with a view to informing appropriate development initiatives.

The following research questions have been formulated to address the aims of the study:

RQ1  What dimensions and contextual factors contribute to the professional identity of higher education faculty?

RQ2  Can a measure of professional identity for higher education faculty be developed, to provide insights into faculty identities and the extent to which they are flourishing?

RQ3  How might a measure of professional identity be used to inform individual and collective faculty development initiatives and foster flourishing?

1.5.1 Framing the Study

The concept of identity has generated significant bodies of research in several disciplines, each of which has discipline-specific approaches to defining the concept, understanding identity formation, exploring the influence of social factors on identity, and interrogating the ways in which identity might be contested, fractured, or indeed strengthened. Sociologists tend to consider broad social influences on identities, while psychologists are more interested in one’s inherent sense of self. Anthropology, to which I have a natural leaning given my background as an ethnomusicologist, focuses on the role of culture in the shaping of identities. Merry (2010) critiques all of these, accusing psychology, which dominates identity studies as well as research on flourishing, of having weak theoretical foundations. Sociological studies, Merry contends, are often empirically inadequate, and he accuses anthropology of indulging in essentialism. Holland et al. (1998) assert that, by situating identity as lived in and through activity, an interdisciplinary approach is appropriate. Chia et al., (2020) argue that professional flourishing, both individually and collectively, is contingent upon a range of organisational factors. Thus, the primacy of the institutional contexts in which higher education faculty formulate,
enact, and negotiate their professional identities has resulted in a framing of this study in sociological and anthropological rather than psychological terms.

1.6 Philosophical Perspective

The philosophical perspective of this thesis builds on research conducted during the first two years of my doctoral studies as well as my previous MA and MSc studies. Pragmatism is particularly well suited to investigating the slippery concept of identity about which “there is no secure knowledge” (Brown, 2017, p. 307), whether because identity is constantly in a state of flux (D. Holland et al., 1998); because of the potential dissonance between who we claim we are and what we do (Lawler, 2014); or indeed due to the various selves which we enact, some self-consciously managed and others spontaneously natural (Goffman, 1959/1990).

1.6.1 Axiological, Ontological and Epistemological Considerations

The axiological orientation of this study acknowledges that all inquiry is value-laden and subject to inherent biases (Morgan, 2014). Pragmatic research interrogates time and context dependent phenomena interpretatively within a self-conscious and self-critical frame (Ormerod, 2006) taking an anti-dogmatic stance and adopting both objective and subjective perspectives (Robson & McCartan, 2016) which might be applied to professional identity and flourishing.

Pragmatism posits that our beliefs are informed by a recurring cycle of action and reflection and rejects dualist ontological positions about the nature of reality (Morgan, 2014). In this study, rather than attempting to design an instrument with which to measure the true value of a fixed immutable reality, I acknowledge that reality is contextualised and endeavour to identify and measure the construct as a bridge between concept and reality which cannot be divorced from either context or practice. Framed pragmatically, “coherence and utility rather than truth are the objectives of a psychological measure” (Guyon et al., 2018, p. 158).

Asserting that knowledge arises from actions, situations, and consequences (Creswell & Poth, 2017; Pansiri, 2005), the pragmatic epistemological stance treats knowledge as tentative. The pragmatist examines theory through an instrumental lens, seeking workability and applicability, and maintaining the primacy of situated
lived experience (Johnson & Onwuegbuzie, 2004; Ormerod, 2006; Robson & McCartan, 2016). As a philosophical stance, pragmatism is ideally suited to the study of “any concept that has application in the real world lying in the relations that link the experiential conditions of application with observable results” (Ormerod, 2006, p. 892).

Pragmatism proposes a practical, problem-solving philosophy (Creswell & Poth, 2017), switching between inductive and deductive processes to embrace a versatile abductive logic (Bazeley, 2018). The pragmatic interpretative paradigm provides an agile analytical perspective with which to interrogate complex relationships and dynamic social structures contained in recursive processes by considering a range of strategies and methods based on the needs of a research problem and rejecting all forms of dualism (Farjoun et al., 2015). A pragmatist addresses the seemingly contradictory process of measuring non-quantitative constructs by acknowledging that the construct is not defined by the measure. Rather, the theoretical framework and conceptualisation of the construct are represented by the measure (Guyon et al., 2018). Thus, a measure of this sort “faithfully represents the [construct] in the sense that the numerical values have a meaning in relation to the practical framework” (Guyon et al., 2018, p. 160).

1.7 Structural Overview of the Thesis

An outline of the thesis is provided in the form of a summary of each chapter to offer an accessible overview and facilitate the orientation of the reader.

Chapter 1 introduces the research and provides the aims, rationale, and research questions, situating the study in the context Swiss HEIs, and laying out a multidisciplinary framework as well as a pragmatic philosophical position.

Chapter 2 examines literature of relevance, problematizing key concepts such as identity, professionalism, and the higher education context. Flourishing is also interrogated, as is the potential role of faculty development in fostering flourishing. Theoretical lenses which have influenced the research are also detailed and a summary of concepts and contextual factors is developed.

Chapter 3 addresses the research design and the mixed-methods multi-phase approach chosen, demonstrating the coherence of the methods selected
with both the research questions and the philosophical stance outlined in Chapter 1. Data collection, analytical techniques, and methodological limitations are all explored, as well as ethical considerations.

Chapter 4 presents and scrutinizes the instrument design process. An inductive analysis of qualitative data collected using the nominal group technique in focus groups in the first phase of the research is conducted. The results are then subjected to a comparative analysis drawing on the conceptual framework developed in Chapter 2. The emergent dimensions of this comparative analysis inform the generation of appropriate indicators and the drafting of potential items for a new measure of the professional identity of higher education faculty.

Chapter 5 addresses the challenge of validation by conducting an initial content validation of the measure. Quantitative and qualitative data collected from a panel of experts are used to evaluate the representativeness, clarity, and dimensional relevance of the items developed in Chapter 4 using established indices and techniques. The measure is revised, and a new measure proposed based on the recommendations of the content validation process.

Chapter 6 combines the content validated and revised new measure of faculty professional identity with the PERMA measure of flourishing and explores the utility of the instrument in two phases. The first involves statistically analysing and visualising a small sample of data collected to test the new measure of faculty professional identity and the relationship between professional identity and faculty flourishing. The second takes data gathered in follow-up focus groups and subjects the data to a rigorous thematic analysis to evaluate how the instrument might be utilized by faculty developers to support faculty and institutions, and foster individual and collective flourishing.

Chapter 7 concludes this thesis and includes a discussion of my findings along with the limitations of the research and recommendations for further study. The research questions are each addressed to appraise the extent to which the thesis responds to them. The chapter also outlines the contributions of the research to the field of study as well as to professional practice and covers my plans for dissemination.
1.8 Conclusion

This introductory chapter has provided an overview of the aims, rationale, and context of this thesis. The resulting research questions and framework provide clear lines of inquiry for the research. By choosing to include my philosophical positioning in this chapter, I am consciously affirming an inclusive pragmatic stance which embraces diverse disciplinary, theoretical, and methodological orientations insofar as they are pertinent to the research questions throughout the following chapters. In the next chapter, theories and extant research relevant to the construct of faculty professional identity and the concept of flourishing in the context of higher education are scrutinized.
Chapter 2 – Review of the Literature & Theoretical Framework

2.1 Introduction

The previous chapter laid out the aims, scope, and rationale for the research. It also delineated research questions, framed the context of the study, and provided an overview of my pragmatic stance. DeVellis (2017) argues that “The more researchers know about the phenomena in which they are interested, the abstract relationships that exist among hypothetical constructs, and the quantitative tools available to them, the better equipped they are to develop reliable, valid, and usable scales” (p. 13).

This chapter interrogates the literature to delineate key concepts and theories in the field of study. The first of these involves defining the construct of identity by considering general identity theories utilising the lenses of both social identity theory and organisational identification. Professional identity, a construct specifically associated with the identities of professionals in their professional practice is then delineated as is the concept of professionalism. The discussion moves on to the context of higher education institutions. Academic identity is addressed as a construct having much in common with the professional identity of faculty and both academic and faculty identities are critically situated in the multiplicity of professional identities in higher education.

The contested nature of professional identities is explored by addressing the factors which constitute, influence, and threaten professionalism in general and higher education teaching professionals in particular. The concept of flourishing is also examined in relation to robust and resilient professional identities as is the role of faculty development in supporting and nurturing a culture of flourishing and fostering flourishing faculty identities.

Several theoretical frameworks have shaped this study, including Levitan & Carr-Chellman’s pragmatic identity theory; Holland et al.’s agency, power, and privilege in figured worlds; Bourdieu’s capital, habitus, and field; and Wenger’s communities of practice. They were instrumental in framing my critical understanding of the construct of professional identity in the context of higher education.
While the literature examined in this review brings together a rich historical context as well as contemporary perspectives, this review is not intended to be exhaustive. Instead, it sets out to both contextualise this study and to draw out pertinent theories and concepts.

2.2 Identity Theory: Defining the Construct

Identity can be seen as an interplay between how we see ourselves and how we are seen by others (Merry, 2010; Monrouxe & Poole, 2013). What we have in common with others is constantly in conversation with what sets us apart (Coupland & Brown, 2012). Thus, identities are dynamic, contested, and highly dependent on context (Lamont & Nordberg, 2014). It is not surprising then that identity theories are found in several disciplines including anthropology, psychology, and sociology and it can be argued that a universal definition of identity is neither possible nor desirable, but that identity should instead be treated as a question (Lawler, 2014). This notion of questioning identity rather than taking it for granted as an unremarkable backdrop is appealing to me because it implies that there is something difficult, complex, and of interest to question.

For the purposes of this research, which is situated in the context of higher education and interrogates the nature of identities formed by professional teaching practice, among the myriad definitions of identity, I find the following, proposed by Merry (2010), to be most closely aligned with my aims in this study:

Identity normally refers to the complex and ever-evolving expressions of self-understanding that describe how persons relate, and form attachments, to their historical–social–cultural environment over a lifetime and consciously or unconsciously arrange their priorities and commitments to reflect those, sometimes conflicting, attachments (p. 153)

This definition is coherent with the various theoretical frameworks, discussed in detail below, which have influenced the evolution of my reflections regarding the faculty I have supported in my professional role as a faculty developer. It evokes the complex interplay between relationships, contexts and activity and acknowledges that these may evolve over time. It also includes the notion of dissonance(s) as
potentially potent and this aligns with Lawler’s position of treating identity as a question (Lawler, 2014).

Although my research is firmly anchored in the present, the specific context of higher education is entrenched in a long, prestigious history. Taylor (2007) suggests that four distinct historical understandings of identity combine to underpin contemporary identification processes, resulting in complex, multiple and sometimes conflicted constructs. In the first of these, identities are adopted or “taken on through shared practices” (p. 28). The second, rooted in the writings of Descartes, involves a forging of identity through “work on the self” (p. 28) suggesting a more reflective and individual process, while the third, drawing on the work Hegel and Freud, involves the emotional and shared work of co-construction. Finally, the fourth position, that of post-modernists such as Foucault, contests the existence of a ‘self’ (Merry, 2010) and views identity as constantly under construction, seeking stability yet existentially fragmented (see Taylor, 2007). While I do not claim that these historical understandings are explicitly present, I am assuming that a contradictory subtext may be implicit in identities.

Given that professional identities are shared by members of the same profession and that these identities interact in organisational, institutional, and societal contexts, key constructs of social and organisational identity will be addressed before I turn my attention to professionalism and professional identity. These various theoretical perspectives will be reviewed to determine how they might contribute to a framing of the hierarchical, interactional, social classification inherent in identities (Jenkins, 2014).

2.2.1 Social Identity Theory

“Identities are caught in webs of power and political interest” (Coupland & Brown, 2012, p. 2). Indeed, Lawler (2014) contends that all identities are political and that any analysis of identity must address power relations and historical contexts in which identities are formed. In addition, the idea of one true or authentic self has been eroded by theories acknowledging that an individual may have several identities, each adapted for specific contexts and relationships (Goffman, 1990). This is not a novel claim – in 1623, Shakespeare wrote “All the
world’s a stage, and all the men and women merely players. They have their exits and their entrances, and one man in his time plays many parts” (Shakespeare, 1623/2019, 2.7.146-149). The metaphor resonates with teaching in higher education, where the lecture theatre offers a stage upon which faculty enact the role of the expert in a highly stratified social context. Gallagher (2019), in her exploratory study entitled I teach, therefore I am, found that professional character traits of higher education faculty are often very different from their non-teaching personas.

Social identity theory (SIT) provides principles with which to explain and examine socially enacted identities: categorization, in which belonging to an in-group shapes identity; salience, which determines the prominence of an identity based on context; social comparison, which nurtures status and fosters in-group favouritism; and positive distinctiveness, which distinguishes the in-group in positive ways from the out-group, generating self-esteem (Scheepers & Ellemers, 2019; Trepte & Loy, 2017). Other key concepts in SIT include permeability, the ability to move between groups; legitimacy, perceived fairness of group membership; and stability, the likelihood of change. These all contribute to dynamic processes of individual mobility, social creativity, social competition, and stereotyping (Trepte & Loy, 2017). Dimensions used to measure in-group identification include solidarity, satisfaction, centrality, individual self-stereotyping, and in-group homogeneity (Leach et al., 2008) and these may be of value in understanding faculty identities, delineating faculty self-definitions and the extent to which they self-invest in these definitions.

2.2.2 Organisational Identification

Many professional identities exist in the context of organisations and institutions, the influence of which may be considerable. Organisational identification refers to “the ways people draw on their membership of organizations... [and] the extent to which an individual perceives unity between him or herself and a collective” (Brown, 2017, p. 296). This can be a highly complex and sometimes fraught process as “organisations are constituted in implicit behavioural norms and customs, in explicit rules and procedures, in criteria for
recruitment, in divisions of labour, in hierarchies of control and authority, and in shared objectives” (Jenkins, 2014, p. 11) which may not always be apparent or explicit, but result in people categorising themselves and others in processes that are rarely disinterested. Thus, organisations are built on powerful espoused belief systems and underlying assumptions (Schein, 2010). Barbour & Lammers (2015) claim that “communication about and of such beliefs aligns and sustains diverse organizations and individuals into the relatively stable human arrangements we recognize as institutions” (p. 7).

Levin & Shaker (2011) claim that “the university is a powerful instrument for institutionalization of professionalism” (p. 1464) and Delanty (2007) asserts that “the institutional logic of higher education makes it a fertile ground for the production of identities” (p. 132). In Gappa's (2010) model of faculty work, which is covered in more detail below, reciprocal institutional relationships and shared responsibility between faculty and the institution’s administration are the two key factors influencing faculty work.

Five approaches to studying organisational identification are theorized by Brown (2017): discursive – represented in language use; dramaturgical – enacted; symbolic – found in the use of artefacts; socio-cognitive – constituted through sensemaking; and psychodynamic – taking place in the unconscious ego. SIT, with its focus on the socio-cognitive approach, which has been used in the development of many quantitative instruments, has obvious applications for this research. However, Brown criticises the myopic dominance of SIT as a theoretical approach for examining identity in organisations and advocates mixing approaches to stimulate richer insights. Claiming that SIT may favour a view of identity as “ascribed to individuals by historical forces and institutional structures” (p. 308), Brown suggests that dramaturgical and symbolic studies may accentuate individual agency. The profusion of rituals, such as academic conferences and graduation ceremonies, and artefacts, such as logo-branded library cards and academic robes, in HEIs provides a strong rationale for investigating the inclusion of dramaturgical and symbolic components in the development or operationalisation of a measure with a view to illustrating potentially potent tensions between structure and agency.
The pragmatic orientation of my research offers an appropriate problem-solving lens with which to understand organisations, particularly in the modern VUCA context. Farjoun et al., (2015) argue that pragmatism “supplants the simplifying assumptions” (p. 1797) of established organisational models. They contend that the pragmatic model of human nature is a balanced interplay of emotion, habit, and deliberation in which agency and structure interpenetrate and coexist. Institutions, and the social structures of identity and cultural categories, become both constraining and enabling as generators of change and innovation. They further advance that institutional persistence requires explanation rather than being taken for granted, arguing that institutionalisation can provide a strategic advantage where change and stability are interlinked.

2.3 Professional Identity and Professionalism

Although the influence of the social entities of organisation or institution on professionals is considerable, professional identity is founded in an individual’s self-concept of who they are in their professional role and comprises beliefs, knowledge, values, experiences, and assumptions regarding the characteristics that differentiate one’s profession from others (M. Clarke et al., 2013; Feather, 2015; Lamont & Nordberg, 2014; Land, 2007; Taylor, 2007). Thus, one’s professional identity is delineated not only by professional practice and activity, encompassing purpose, competence, and validity, but also by a sense of belonging (Beijaard et al., 2004; Canrinus et al., 2011; Noi et al., 2016). Underpinned by theories ranging from Foucault’s power relations to Lave and Wenger’s communities of practice and from Schön’s reflective practice to Mezirow’s transformative learning (see Trede et al., 2012), research on professional identity tends to be specific to a particular profession and the positionality of different professions in relation to institutions may vary (Barbour & Lammers, 2015).

In addition, public perceptions and discourses may exert a powerful influence on individual professional identities. Although they shift over time, contemporary perspectives are informed by the formidable shadow of the past. In his 1932 speech What is a Profession?, Harvard Professor E.B. Wilson deflected the question posed, choosing instead to discuss its contentious nature in an institution
where medics were spurning the claims of business graduates to join the elite ranks of the professions (Wilson, 1932). Hoyle and John (1995) traced the debate around the validity of professions to Abraham Flexner who, in 1915, questioned the legitimacy of social work as a profession (Flexner, 1915). In the intervening century, many definitions including criteria for the validation of professions have been proffered, yet the debate continues (see Derrick, 2013; Hoyle & John, 1995). Although law, medicine, and divinity are the only occupations to have been historically associated with the term profession, those teaching in higher education have never had their professional legitimacy questioned, probably by virtue of the fact that they provide a legitimate education for all three of the historically established professions (Klass, 1961).

There is an established consensus regarding the core characteristics manifested by the professions (Carr-Saunders & Wilson, 1933; Freidson, 2001; Hoyle, 1982; Klass, 1961; Millerson, 1964; Wright, 1951) and these include “the unselfish provision of a public service which requires training and education in specialist knowledge and skills, all of which are both regulated by the profession itself and recognised by the government” (Puhr, 2019c, p. 9). Attempts by several authors to encapsulate all of the above have resulted in the “ideal-typical” professional (Freidson, 2001, p. 30) who makes discretionary use of specialist knowledge. Other assertions including the importance of a service mind-set underpinned by sincerity (Wright, 1951); the pre-eminence of relationships in the provision of service (Downie, 1990); and the value of trust founded on a code of ethics (Klass, 1961). Hoyle and John (1995) note that knowledge, responsibility, and autonomy are the three characteristics most often included in any attempt to define the professions. More recently the intrinsic ambivalence of professionalism and the elusiveness of the real or pure professional has been acknowledged (Noordegraaf, 2007), and this underlines the need to identify the dimensions that constitute a professional identity for faculty and examine the extent to which these identities are flourishing.
2.3.1 Credibility, Status, and the Symbolic Power of Titles

Clearly delineated ranks and roles as well as the practices of credentialism and elitism characterise the professions and have also given rise to notable public censure (Freidson, 2001). Higher education, a context in which titles are revered, shares these characteristics and faculty will usually hold a prestigious qualification in their area of expertise. However, many do not have a formal teaching practice-oriented qualification. Etzioni, (1969) queried the validity of such occupations, employing the term semi-profession. However, Downie (1990) warns against limiting the criteria for professional legitimacy to those required by medicine and law. Indeed, these professions do not oblige their members to engage in continued professional development, often considered standard practice in the maintaining of professional excellence in teaching (Hoyle & John, 1995).

Occupational titles represent powerfully meaningful symbols and are widely recognized as benchmarks of identity (Caza & Creary, 2016; Douglas, 2013), indicating rank and role, displayed on organisational charts and business cards and included in contracts. Douglas (2013) argues that a professional identity is constructed based on a title. On a family vacation in Austria, I witnessed an exchange which anecdotally illustrated the potency of titles: My father-in-law held two doctorates – one in Law, the other in Economics. On checking into a hotel where he had previously stayed while attending a professional conference, he was addressed as “Doctor Doctor”. But, more remarkably, his wife was addressed as “Frau Doctor Doctor”. When I later queried the reason for this practice, the explanation given was two-fold: titles are a mark of respect; and, while not always the case, there may be an expectation of a recognition of status on the part of the titled individual (and, in this case, his wife).

2.4 Professional Identities in Higher Education

While many different professionals interact in higher education institutions generating a complex web of relationships, two types of professionals dominate the literature: the academic, engaged in research and teaching; and the non-academic, engaged in administration, management, and various support functions (see Gordon & Whitchurch, 2010). This dualistic environment has been likened to a
theatre with the academic on the stage and all other roles working behind the scenes (K. Lewis, 2014). A model of meaningful faculty work proposed by Gappa et al. (2007) relies upon reciprocal institutional relationships and shared responsibility between faculty and administrators, but this dualism is currently undergoing a dramatic transformation as the line separating the two groups blurs (Cohen, 2021; Locke et al., 2016; Whitchurch, 2008).

2.4.1 Academic Identity

In *Homo Academicus*, Bourdieu (1988) wrote of the prestige associated with research activity at French universities. Academic identity continues to provide a lens with which to interrogate the professional identities of those faculty engaged in the two main areas of activity characterized by the researcher-teacher duality inherent in academic identity (Feather, 2015; K. Lewis, 2014) and Clarke et al. (2015) conceptualize six sometimes overlapping roles woven together in academic identity: teaching, research, managing, writing, networking, and upskilling.

The evolving professional identity of academics has been the subject of significant debate (Davey, 2013; Freidson, 2001; Morley, 2008; Whitchurch, 2008) much of which revolves around a dispirited discourse decrying a perceived decline in higher education, a decline which Taylor (2007) claims is rooted in nostalgia. Macfarlane (2016) partially concurs, pointing out the biased positionality of researchers investigating academic identities. Nonetheless, it is undeniable that a heavy melancholy has gradually taken hold among academics (Knights & Clarke, 2014; Miller, 2007; Nixon, 1996; Smith et al., 2016; Sutton, 2017).

Given that many higher education faculty are not engaged in research, the term *academic identity* is not inclusive of all faculty teaching in higher education. In addition, the fragmentation and re-allocating of roles in universities (Gordon & Whitchurch, 2010) would suggest that an increasing number of faculty may find that the term fails to represent them. “The relationships between research and teaching are now highly complex and cannot be simply represented as an obvious synergy or a straightforward relation of tension and competition between the two” (McCune, 2021, p. 21). McCune observes that an academic, particularly in a research-intensive institution, may feel that a strong teaching identity is negatively
perceived. Yet until the early 1980s the term university teacher rather than academic prevailed in higher education journals (Macfarlane, 2016).

Although the term may be problematic, the literature on academic identity discusses characteristics shared between academics and those faculty not engaged in research providing rich conceptualizations which are of value to this thesis. These include context; teacher identity; and social, multifaceted identities in which facets overlap and are potentially in tension (Billot, 2010; McCune, 2021; van Lankveld et al., 2017). Not least of these is the distinctiveness of each discipline in framing much of the epistemic codes of practice and behaviours of members of the faculty community in each discipline (Henkel, 2010). This identification with discipline may explain the findings of an Israeli study, that individuals who identify positively with their respective institutions simultaneously strongly criticize the same institutions (see Moore & Hofman 1988). In addition, deeply embedded values including academic freedom; collegiality; individual autonomy; and public service through the creation, scrutiny, and custodianship of knowledge inform academic identities, and these values are shared across the research-teaching boundary (M. Clarke et al., 2013; Drennan et al., 2017; Gappa, 2010).

2.4.2 The Multiplicity of Professional Identities in Higher Education

Institutions of higher education have become intricately layered tapestries of structures, roles, and relationships, which interact and overlap in what Henseke et al. (2021) dub a multiverse or pluriverse. Terminologies and conceptualizations have recently emerged in research attempting to both explore and rationalise the complex professional identities which such environments have generated (Caza & Creary, 2016; Whitchurch, 2013; J. Williams, 2013). Hybrid, multi-faceted and third-space professionals all coexist in the contemporary university and these terminologies may serve to clarify and demystify the nature of identities as well as empowering individuals. Finding a suitable vocabulary with which to discuss higher education faculty is an important first step in understanding those who confound traditional categorizations.

Hybrid professions are adaptable and versatile and have been forged through both the instabilities and the complexities of their professional
environments, making meaningful “connections between work, organizational action, and outside worlds” (Noordegraaf, 2007, p. 776). Multifaceted identities abound in higher education, where my own role in teaching and learning development, with responsibility for the learning management system, the library and faculty development, while continuing with research projects and a small teaching load is not untypical (Brown, 2017; M. Clarke et al., 2013; McCune, 2021). Third-space is a particularly useful term in the context of higher education, where professional roles which straddle the academic-administrative divide are increasingly common (Whitchurch, 2008), raising questions regarding not only boundaries, but also credibility, power, legitimacy and knowledge (Whitchurch, 2018).

2.4.3 Higher Education Teaching Professionals: Defining Faculty Identity

Titles assigned to faculty in higher education include Professor, Reader, Lecturer, and Instructor, each of which is divided into several sub-categories. Although these coexist in higher education where they all refer to roles involving “the creation and transmission of knowledge” (Hao, 2016), the plethora of titles hints at the importance of hierarchies and status, as suggested by Jenkins (2014), as well as implying a nuanced differentiation between individuals. In practice, titles denote divergent research and teaching roles and the career trajectories upon which they are based as well as the statuses they imply have become increasingly varied and less predictable in the twenty-first century (Locke et al., 2016), so that faculty developers can no longer presume a well-trodden pathway or trajectory of experience based on title.

The terms hybrid and multifaceted may be applied to the layered professional identities of faculty given that their knowledge bases involve the “hybrid integration of both content and process” (Davey, 2013, p. 98). The discipline-specific expertise which is often validated by a university qualification constitutes content knowledge and informs the scholarly identity of faculty (Downie, 1990) often realised in research activity. Meanwhile, the expertise required in transmitting knowledge and facilitating the acquisition of skills constitutes process knowledge. A teaching identity in higher education can also be
conceptualised as a merging of professions, where the second profession selectively utilises appropriate expertise acquired from the first (Bostock & Baume, 2016). My prior Doctor of Education (EdD) work problematized the multi-faceted professional identities commonly working alongside one another in higher education teaching faculty by grouping those teaching in higher education into three broad categories based on the practical interactions of the multiple facets of their identities (Puhr, 2019c):

- **Sequential multi-faceted professionals** use their first profession to cultivate and inform their second, practicing them sequentially. They bring a wealth of experience to their university teaching but may struggle to maintain the practice-based expertise of their former profession while adopting a new identity as a member of higher education faculty.

- **Parallel multi-faceted professionals** engage in two professions simultaneously but in parallel. Their professions remain distinct but complimentary and may benefit from practical synergies and cross-fertilization. The academic engaged in research and teaching is often a parallel multi-faceted professional, but they may struggle to negotiate the demands of their two parallel roles.

- **Superimposed multi-faceted professionals** engage in two professions simultaneously. For these individuals their two professional identities coexist spatially and temporally. This can lead to an enhanced complex professional identity where both identities are strengthened by their coexistence. However, the sometimes-contradictory demands of juggling, for example, laboratory work with the practice-based teaching of students, can prove challenging.

The tensions and dilemmas inherent in intricately layered identities can prove fractious and an experienced and critically astute self-awareness is required for “the construction and management of the modern pluralistic professional identity” (Caza & Creary, 2016, p. 3). Nevgi & Löfström (2015), in their exploratory study of the development of higher education teacher identities in research-intensive
contexts, highlighted the importance of self-awareness and found that a willingness to engage in reflection was crucial to the development of a teaching identity.

The paucity of research investigating what makes teaching in higher education meaningful is highlighted by McCune (2021). Moore & Hofman (1988) conceptualized dimensions of faculty professional identity which include centrality, valence, consonance, solidarity, and self-presentation. However, their study is geographically specific and may be dated. A systematic literature review by van Lankveld et al. (2017) found four strengthening or constraining factors influencing faculty teaching identities: direct work environment; wider higher education context; contact with students; and development activities. They further identified five underlying psychological processes: appreciation; connectedness; competence; commitment; and perceived future career trajectory. The literature they reviewed focuses on identity formation, but the conceptualisation of factors and processes may also be relevant to evolving identities and merits investigation. The ongoing upheaval in higher education further justifies the investigation of identity dimensions which integrate historical and contemporary perspectives.

There is a general consensus that institutions play a central role in professional identity construction of teachers (Beijaard et al., 2004) but Whitchurch (2008) is not alone in asserting that “shifting identities and blurring boundaries” (p. 377) in higher education have resulted in an eroding of the established authority of institutional structures in forging identities, so that the relationships and networks that inform social identities now play an increasingly important role (see Cohen, 2021; Henkel, 2010). Gelfand (2018) would characterize this as the loosening of a previously tight culture, a process that is not always comfortable for those implicated.

2.5 The Professions Under Attack

The shifting and blurring of identities and boundaries in higher education may be experienced as an existential threat by some, but the perception that the professions are under attack extends beyond the higher education context. The rewards experienced by professionals are numerous and include status, privilege, and above-average levels of remuneration. But, with these social advantages come
public expectations of responsibility and accountability. Since the 1950s, the elevated social position of the professions has been gradually undermined (Pellegrino, 1983), and this erosion can be attributed to a range of factors: Derrick (2013) points to public perceptions of an exclusive and elitist culture while Klass (1961) and later, Freidson (2001) cite the excessive earnings of professionals as a source of public disdain. A general contesting of the value and legitimacy of the knowledge held by professionals has also been observed (Barnett, 2008).

Perhaps most damaging of all to the status and reputation of the professions has been the response of the professions themselves to cases of misconduct within their ranks. SIT claims that the misbehaviour of in-group members should result in feelings of guilt and shame (Scheepers & Ellemers, 2019). However, some cases of misconduct have generated substantial media coverage of both the individuals and the profession involved, and have resulted in accusations of protectionism and a glaring lack of accountability (Lunt, 2008). This fall from grace and the accompanying sense that the professions are under attack has resulted in a profound questioning of the purpose of the professions (Downie, 1990; Hargreaves, 2000; Noordegraaf, 2007; Seddon et al., 2013).

Higher education has not been immune to the effects of the shifting public discourse regarding the professions with Barnett coining the term supercomplexity to evoke an age in which the status, legitimacy, and perceived relevance of expertise are being eroded (Barnett, 2008). In an economy where knowledge is both under threat and more accessible, innovative models of learning are challenging established teaching practices (Siemens, 2005) and the essential purpose of an educator, “causing students to learn” (Giusti & Hogg, 1973, p. 182) is being disrupted by forces ranging from the democratisation of knowledge on the internet to the curation of knowledge on learning management systems. Several studies suggest that these transformative trends will continue (Anderson, 2009; Mansbach & Austin, 2018) and my research into faculty lived experience as they negotiated remote and HyFlex teaching during a global pandemic suggest that this has become increasingly the case (Agogue et al., 2022). In this context, the renegotiating of boundaries in higher education, including those delineating disciplines and separating academic and non-academic knowledge may be
experienced as deeply unsettling and destabilising by those whose professional identities are associated with these boundaries (Cohen, 2021; Whitchurch, 2008).

Other factors which have contributed to the malaise in higher education include the rise in managerialism, evident among the professions in general (see Freidson, 2001; Green, 2009; Morley, 2008; Noordegraaf, 2007; Whitty, 2008) as well as in higher education in particular (see Bostock & Baume, 2016; Sachs, 2001). The disquiet has also been propelled by the potent market force of consumerism (Bauman, 2005; Bunce et al., 2017; Freidson, 2001; Andrew Hargreaves & Fullan, 2013). Negotiating the pressures of employer expectations of graduates (Caton, 2014; Jackson et al., 2013) and the additional complications brought about by globalisation have exacerbated the complexity of the higher education context (Dredge et al., 2014b; Jones, 2013).

The impact of the global pandemic in 2020, in the already turbulent higher education landscape outlined above, has resulted in an unprecedented assault on every aspect of faculty working practice. With little time to prepare, faculty, many of whom had no previous experience of online teaching, found themselves in the disorientating world of the virtual classroom, a world where students sometimes view clothing as optional and the notion of multitasking is stretched to its limits, as described in entertaining detail by Brustein (2018). While some faculty thrived, rising admirably to the challenge, others suffered extreme anguish and their identities have been negatively marked by the experience (Agogue et al., 2022).

This research, which seeks to provide both faculty and developers with insights which might lead to a strengthening of identities, is concerned with not only the components of identities, but also the extent to which identities are robust, resilient, and thriving.

2.6 Fostering Flourishing Professional Identities

There are many perspectives and approaches which might reinforce and consolidate robust, resilient and thriving professional identities; Barnett’s *authentic professional* is equipped to face the challenges of *supercomplexity* (Barnett, 2008) by constantly nurturing a pursuit of practical wisdom and applying astute creativity to an accumulated expertise while remaining ethically irreproachable; the
democratic professionalism described by Whitty (2008) is enhanced by Derrick (2013) in a call for interdisciplinary collaborative approaches which challenge and cross established boundaries; the power of reflective practice coupled with the humility required to acknowledge one’s fallibility are hallmarks of the imaginative professional (Power, 2008), who is equipped with a sophisticated relational and dispositional awareness which is spatially and temporally contextualised. Combining the capabilities of the authentic, democratic and imaginative professionals, it is clear that the adaptive resilient professional is a practitioner who possesses nuanced self-awareness and agency without being alone (Pilkington, 2016).

An established cornerstone of Deweyan pragmatic philosophy, flourishing can be understood as a key component in the mutual understanding of shared communities or institutions designed to ensure that every individual thrives (Beauclair, 2010; Legg & Hookway, 2020). Contemporary understandings of the term have their roots in positive psychology. Ryff (1989, 1995) produced a theoretically informed conceptualization of well-being which consisted of autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. Several studies further explored well-being and flourishing in relation to mental health (Lee & Keyes, 1998; Ryff & Keyes, 1995; Ryff & Singer, 1998), and Keyes (2002) conceptualized flourishing as a state of complete mental health and well-being, characterised by positive emotion, and high levels of psychological and social functioning. The absence of these positive parameters, a drained and joyless state, was dubbed languishing. The impact of the global pandemic has been linked to an increase in individual and collective languishing (Grant, 2021). A surrender-struggle continuum, proposed by Eisele (2020) to complement the flourishing-languishing mental health continuum, facilitates interpretations of the nature of languishing, so that appropriate support can be provided.

Several scales and measures of flourishing have been proposed (see Hone et al., 2014). The PERMA model of flourishing (Seligman, 2011, 2018) offers a widely adopted conceptualisation constituted of five pillars: Positive emotion, Engagement, Relationships, Meaning and Accomplishment. The workplace PERMA
profiler (Kern, 2014), based on the general PERMA profiler (Butler & Kern, 2016), highlights the compatibility of flourishing and professional identity and illustrates the particular suitability of PERMA for this research. I propose that any strengthening of professional identity might also result in a fostering of flourishing both at an individual and societal level. The concept of flourishing will therefore be integrated into the development of an instrument to measure higher education faculty professional identity, and an appraisal of the utility of the measure will include an evaluation of the extent to which the data can be used to design faculty development initiatives aimed at fostering flourishing.

Although my interest in a professional identity measure pre-dated the current global crisis, it is my hope that providing a tool to help identify the needs of faculty might play a role in addressing some of the VUCA challenges ahead. Cohen (2021) argues that, in a time of rapid change and intense disruption in higher education, faculty can maintain flourishing professional identities which evolve to meet the demands of reconstrued and reshaped academic boundaries, provided they receive adaptive and appropriate support. Indeed, a recent study suggests that reframing the way academics approach writing and publishing can lead to flourishing (Heron et al., 2021). Similar findings in relation to the proliferation of online teaching show that, although acutely destabilising for some faculty (McCann & Holt, 2009), there are rich and varied benefits in terms of professional growth to be gleaned from the experience (Mansbach & Austin, 2018). My own research into faculty lived experience as they negotiated remote and HyFlex teaching during a global pandemic confirmed these findings and recommended timely, adaptive, and individually tailored support for faculty (Agogue et al., 2022).

2.6.1 The Role of Faculty Development

Steinert et al. (2019) define faculty development “to include all activities faculty members pursue to improve their knowledge, skills, and behaviours as teachers and educators, leaders and managers, and researchers and scholars, in both individual and group settings” (p. 963). This definition appeals to me as it places faculty development in the hands of the faculty themselves, providing agency and autonomy for individual faculty, and implying that faculty developers
play a supportive and facilitating role. It also acknowledges the multiplicity of activities in which faculty may be involved, resulting in the multi-faceted identities discussed above. The same authors further assert that faculty development can have a profound impact on higher education teaching identities, with the power to support and strengthen established identities, or awaken and develop those that are burgeoning. In their systematic literature review, van Lankveld et al. (2017) found eleven articles asserting that development activities strengthen teacher identities in higher education faculty and Gappa et al. (2007) include both flexibility and professional growth among the five essential elements in their model of meaningful faculty work.

Four aspects of faculty development were proposed by Centra (1989) and they encompass personal, instructional, organisational, and professional growth. These continue to inform understandings of the role of faculty development in the twenty-first century (see Amundsen et al., 2005; McAlpine et al., 2007). However, the work of faculty developers with faculty has tended to focus heavily on the instructional, practice-based pillar of Centra’s model as discussed and theoretically interrogated by McAlpine et al. (2007) and evidenced in the influential Guide to Faculty Development (Gillespie & Robertson, 2010). The role of developers has evolved over time, from a focus on tactical, individual teaching practice, to strategic, organisationally coherent learning culture (Debowski, 2014; Gibbs, 2013; Mårtensson & Roxå, 2021; McGrath, 2020). However, the primacy, described by Gibbs (2013), of manuals and guides providing practical advice persists (Marek et al., 2021).

A heavy concentration on the ‘doing’ of teaching in development activities is quite natural given the exposed and public nature of faculty work (Barrow & Grant, 2012; Way, 2016) combined with the fact that most faculty, although experts in their discipline, are not trained to teach (Gunersel et al., 2013). However, the focus on practice belies the importance of the underlying ‘being’ of identity (Way, 2016) and fails to acknowledge the role of emotions in teaching (Gibbs, 2013). Gunersel et al. (2013) claim that the self-authorship of a higher education teaching identity can be a lonely and daunting endeavour, and they find that collaborative forms of faculty development are highly beneficial to this process. However, Locke et al. 
(2016) caution that standardised one-size-fits-all faculty development programs may not meet the needs of faculty with increasingly diverse backgrounds, suggesting that there is also a need for providing tailored and targeted support to meet the needs of individual faculty. Billot & King (2017) found that one-size-fits-all training that focuses on doing does not prepare faculty adequately. They advocate for programmes that focus on encouraging socialisation, and providing support mechanisms and platforms for faculty. Sotto-Santiago et al. (2019) concur, pointing to the specific needs of historically marginalized faculty and advocating a tailored approach.

In addition to focusing on practice, faculty developers tend to prioritise the needs of new faculty members (Way, 2016). Way points out the lifelong need for development and claims that an explicit recognition of the interaction of identity and practice is needed, asserting that the fear and trepidation experienced by even the most experienced faculty can be negated by the enhanced sense of control and efficacy that a strong awareness of identity provides. Day & Gu (2007) concur, and their study, which focuses on primary and secondary teachers, warns that teaching professionals are susceptible to diminishing effectiveness later in their careers. Identifying both individual and shared specific needs might be a potential application of a measure of faculty professional identities.

In 2013, Austin & Sorcinelli predicted that faculty development would become a strategic lever, playing an increasingly important role in institutional effectiveness and excellence. The challenges of living and working in a VUCA world, as recounted by Bennett & Lemoine (2014) found a conceptual response in Vision, Understanding, Courage, and Adaptability, dubbed VUCA 2.0 (George, 2017). The global pandemic placed faculty developers in the spotlight and demonstrated the support that they could provide in facilitating agility and assuring quality in teaching and learning (Dumont, 2021). The timing of my research is quite fortuitous and has the potential to offer faculty developers a highly accessible insight into the nature and strength of faculty identity, by individual members of higher education faculty and HEI leadership, at a time when faculty development has never been in higher demand (see Debowski, 2014; Gibbs, 2013; Mårtensson & Roxå, 2021; McGrath,
2020; Pleschová et al., 2021; Sugrue et al., 2018; Sutherland, 2018; van der Rijst et al., 2022).

2.7 Theoretical Framework

My understanding of identity is rooted in my pragmatic stance, already outlined in the previous chapter. The theories discussed below are presented in conversation with one another and with the concepts and constructs reviewed in the previous sections of this chapter.

2.7.1 Pragmatic Identity Theory

Pragmatic identity theory (PIT), as conceptualized by Levitan & Carr-Chellman (2018), combines a range of historical and contemporary identity theories (Burke & Stets, 2009; Mead, 1934; Stets & Serpe, 2013; Stets & Trettevik, 2014) with the work of Dewey (1929) on human flourishing; Peirce (1868) on the importance of context as well as the fallible, correctable nature of being; and James (1890, 1901) on sources of self-awareness. PIT provides an anti-essentialist theory based on the primacy of change, growth and relationships, where “identities are malleable and embedded in context” (Levitan & Carr-Chellman, 2018, p. 147). It posits that identities are a dynamic accumulation of the taken-on, the constructed, and the imposed and rejects the psychogenetic-sociogenetic dichotomy underpinning much of the research on identity by acknowledging that subjective agency is in constant negotiation with social structures. The literature reviewed above shares this positioning by engaging with sociological, psychological, and anthropological perspectives.

PIT consists of four premises (see Levitan & Carr-Chellman, 2018): that three influences inform identities – self-concept, impulses, and collective understandings; that each individual forges multiple identities which may differ in longevity and may be variously salient or prevalent in any given situation; that identities are deeply emotional in nature; and that identities vary in stability and malleability. These premises resonate with the pillars of the PERMA model of flourishing, encouraging a practical awareness of identity as both individually subjective and socially intersubjective.
PIT further contends that an individual’s multiple identities are embodied, context dependent and may be categorised as role, group or personal (Levitan & Carr-Chellman, 2018). When applied to higher education faculty, PIT reveals some of the inherent complexities in identities: an individual’s role may include educator, researcher, and program manager; they may identify with more than one group such as a research team, faculty, and management; and their personal self-concept may include traits such as intellectual, caring, and meticulous. These all cohabit within one professional identity where their salience, prevalence, and longevity fluctuate. Given the dynamic and emotionally charged nature of identities, a measure might present explicit actionable insights, and PIT’s assertion that identities are malleable supports the view that the measure may have developmental potential.

2.7.2 Agency, Power, and Privilege in Figured Worlds

Despite an anthropological orientation, Holland et al. (1998) share a pragmatic rejection of the psychogenetic-sociogenetic dichotomy and formulate their concept of figured worlds based on identity in practice. The authors acknowledge those critics who view the anthropological lens as flawed and essentialist (see Merry, 2010) claiming that the discipline, under the heavy influence of Bourdieu, has undergone a transformation, moving away from striving to identify and describe coherent rule-bound cultures, towards the altogether messier domains of contest and struggle in complex contexts.

The forces of agency, power, and privilege wield extensive influence in figured worlds as intimate inner processes are enacted in “practices and activities situated in historically contingent, socially enacted, culturally constructed «worlds»” (Holland et al., 1998, p. 7). Even in situations where agency is weak or contested, it is present and active in the “space of authoring” (p. 272) in which personal authorship is informed by social efficacy. The figured world as a “realm of interpretation” (p. 52) holds natural appeal for me given my background as an ethnomusicologist, but it also provides a useful framework with which to interrogate identities in higher education institutions, where position, status, and rank play crucial roles. It is my hope that a measure of faculty professional identity
will make explicit the relationships between these omnipresent, but often unspoken, potential sources of tension, facilitating processes of reflection and negotiation.

2.7.3 Bourdieu’s Field, Habitus and Capital

Bourdieu’s concept of field heavily influenced the figured world discussed above (Holland et al., 1998) and provides a framework with which to interrogate professional identities situated in HEIs. Bourdieu’s practice theory positions practice as mediating between structure and agency (Bourdieu, 1977a). The habitus is pertinent in considering the values, beliefs, and behaviours which inform professional practice. Defined by Bourdieu as “… a system of shared dispositions and cognitive structures which generates perceptions, appreciations, and actions” (Bourdieu, 1988, p. 279), the habitus is established and stable but also subject to modification by means of the gradual adoption of individual improvisations. It extends to awareness of the value of behaviours including the spoken word in different situations (Bourdieu, 1977b). Because the habitus is constituted only in embodied practice and is often both arbitrary and subconscious (Webb et al., 2002), it can be used to consider accepted codes of behaviour among professionals.

The Bourdieusian concept of capital encompasses both material and abstract objects, artifacts, and attributes which may have intrinsic or symbolic value in a social setting (Webb et al., 2002). Capital is thus a useful concept in considering hierarchies, power, and status in the context of higher education institutions, especially given that some legitimate authority is needed to designate the value of symbolic capital.

The extent to which the implicit concepts and constructs of Bourdieu’s field, habitus, and capital, and Holland et al.’s figured worlds, can be elucidated by a measure and used to inform faculty development, will be probed in later chapters.

2.7.4 Communities of Practice and Boundaries

The higher education context, by virtue of its quasi-tribal grouping of faculty by discipline (Amott, 2016; D. Holland et al., 1998), lends itself particularly well to the concept of community of practice (CoP) as conceptualised by Wenger (1998) and Lave & Wenger (2001). In a higher education environment in which boundaries
are contested, renegotiated, and crossed (Cohen, 2021; Whitchurch, 2008) and boundary-spanning identities are commonplace (Cohen, 2021), McAlpine et al. (2007) question the utility of CoPs. However, Wenger’s original conceptualisation of CoPs (1998) does not preclude membership of multiple communities and he believed that identity plays a crucial role in providing a bridge between the individual and their social context.

Despite an increasing interdisciplinarity in higher education, powerful epistemic identification processes based on discipline continue to dominate. While it may be beyond the scope of a measure to ascertain the role of interdisciplinarity and boundaries in faculty identities, the potent impact of disciplinary allegiance and associated relationships are expected to feature.

2.8 Revisiting the Research Questions

Three research questions were initially framed and stated in Chapter 1 based on the aims of this study. In revisiting the research questions here, my aim is to underline the pertinence of the literature reviewed to the questions posed.

RQ1 asks, “What dimensions and contextual factors contribute to the professional identity of higher education faculty?” An initial list of characteristics, traits, attributes, facets, and distinctive qualities associated with the key concepts of social identity, professionalism, institutional and higher education context, and flourishing was compiled from the literature reviewed. These were arranged, along with their definitions and sources, into a summary of concepts and contextual factors (see Appendix 1). SimpleMindPro Version 1.29.1 was used to interrogate the summary and arrange the concepts and contextual factors on an illustrative mind map (see Figure 2.1).
Together, the summary and mind map encapsulate and illustrate the literature reviewed. Social identity includes individual dimensions, such as self-categorization and centrality, alongside the more social, including solidarity and ingroup homogeneity. Research on professionalism reiterates the importance of legitimacy, adding dimensions including shared beliefs, and ethics. The higher education context illuminates the multi-faceted nature of identities; specifies core values such as collegiality and academic freedom; and underlines the complex webs of relationships involved in the university context. Finally, the concept of flourishing reiterates the importance of some of the key components of engagement, relationships, meaning, and accomplishment and introduces the dimension of positive emotions. The methodology in Chapter 3 outlines how this summary might be applicable in the development and evaluation of a measure.

Figure 2.2 provides a conceptual framework which emerged from the summary and mind map, illustrating how the interactive relationship between aspects of social identity and professionalism are embedded in the organisational identity of the institution and the wider higher education context. The five pillars of the PERMA flourishing model form an outer shell both benefitting and shielding individual members of faculty, social faculty groupings, and institutions. The visual
representation provides a potential resource to stimulate the development of a dimensional map for the measure.

**Figure 2.2**

*Conceptual Framework: Professional Identity of Higher Education Faculty*

RQ2 specifically addresses the primary aim of this research by asking, “Can a measure of professional identity for higher education faculty be developed, to provide insights into faculty identities and the extent to which they are flourishing?” While research on academic identity is abundant, the paucity of current research focused specifically on teaching identities in higher education and the lack of a dimensional map or measure to illustrate these identities points to the potential value of this research. Although developing a measure for a complex multi-dimensional construct is challenging, Barbour & Lammers (2015) explain the multiple ways in which professional identity measures can be of value particularly in illuminating professional identities in organisations where dissonances may exist between professional and institutional logics. In addition, the quantitative data provided by a measure can greatly enhance the validity, contextualization, and interpretation of qualitative studies (Miller et al., 2011) which abound in the field of education.
RQ3 interrogates the utility of the research: “How might a measure of professional identity be used to inform individual and collective faculty development initiatives and foster flourishing?” The literature reviewed illustrates the tendency of faculty development to focus on the activity of professional practice rather than the embodied identity epitomized by the practice. Research suggests that insights into the dimensions and contextual factors which are hidden within professional identities might draw attention to how these identities underpin professional practice, particularly in contested or changing contexts (Barbour & Lammers, 2015). The same authors claim that the nesting of professional identities in organisations is often over-simplified. A measure might illustrate the nuanced differences in the “extent to which organizational and professional identity mesh” (p. 17). This has significant potential value for faculty developers, who often occupy a third-space (Whitchurch, 2013) between management and faculty and face the challenge to provide “personalised, professional scaffolding for scholarly development, ... monitor its effectiveness,” and ultimately “build a more supportive academic culture.” (Billot & King, 2017, p. 612).

2.9 Conclusion

The review of the literature endeavoured to provide conceptual and theoretical underpinnings with which to address the research questions. By examining approaches to identity in general and professional identity in particular, the often-divergent perspectives associated with the stances of several disciplines in the social sciences became apparent. The nature of professionalism and the sometimes-contested legitimacy, credibility, and status of professions demonstrated the uneasy position of professionals in contemporary society. The context of higher education, a complex environment of shifting landscapes, where academic identity is perceived as being eroded and new identities associated with hybrid roles abound, was probed. The possibility for flourishing professional identities in these unstable and disrupted circumstances and the potential for faculty development to play a critical role in fostering flourishing was explored. The concepts of several complementary yet distinct theories were appraised to
establish a theoretical basis for the research, illustrate my reading of the interplay between agency and structure and clarify my pragmatic orientation as well as my applied interpretation of concepts including *figured worlds, habitus, and capital*. Finally, by returning to the research questions, I have probed the literature reviewed to partially respond to the questions and to reinforce the rationale underpinning this study.
Chapter 3 – Research Design and Methodology

3.1 Introduction

The pragmatic stance outlined in the introductory chapter underpins the research design and methodology of this thesis (see Section 1.6). Pragmatism enables the interdisciplinary drawing together of theories relating to professionalism, SIT, organisational identity and flourishing. In addition, PIT, discussed in Chapter 2, supports the assumption that identities are malleable and demonstrates that pragmatism is ideally suited to an investigation of complex identities situated in a practice context (see Section 2.7.1).

The purpose and aims of the study informed the formulation of three research questions in Chapter 1. These research questions were revisited in Chapter 2 following a review of a range of relevant literatures and theories. Guided by pragmatism, the research questions determined the research design and methods chosen. This chapter applies pragmatic principles to the design of a multi-phase mixed methods research strategy in the development of a new measure of the professional identity of faculty in higher education.

3.2 Research Design

A pragmatic stance is typified by an awareness that knowledge is both fallible and mutable; an expectation that theory should be applicable — informing and serving practice; and an assumption, therefore, that the relevance and validity of theory is evidenced in experience, action, and outcomes. In adhering to “a philosophy that supports paradigm integration” (Johnson et al., 2007, p. 125), the pragmatist probes theories and selects methods to frame and address their research questions.

Pragmatism and mixed methods research (MMR) are natural accomplices, particularly in instrument design where “multiple worldviews are used... and the worldviews shift from one phase to the other” (Creswell & Plano Clark, 2011, p. 87). An integrated and purposeful mixing of qualitative and quantitative data is inherent in many definitions of MMR (see Johnson et al., 2007) and this mixing may take place during one or more of the stages of data collection, analysis, and interpretation. The five purposes of mixed methods design conceptualised by Greene, Caracelli, &
Graham (1989), provide an overview with which this study can be categorized as combining qualitative and quantitative methods for the purpose of development. In Bryman’s more granular typology (Bryman, 2006) the purpose of this research is both instrument development “in which qualitative research is employed to develop questionnaire items” (Bryman, 2006, p. 106), and utility, in that the resulting instrument is examined for its potential to inform faculty development.

The four central MMR design choices detailed by Creswell & Plano Clark (2011) were used to ensure a clear framing of the research design: the level of interaction considers the extent to which the different types of data interact or remain independent; priority refers to the relative importance of the different methods in addressing the research questions; timing addresses the order in which the results of the data are used rather than when they are collected; and the point of interface refers to the process of mixing or integrating of qualitative and quantitative strands. The four choices are addressed as follows:

1. Level of interaction – qualitative and quantitative data are interactive. Although collected and analysed separately, the results of each phase were used in the design of the next.

2. Priority – the qualitative phases of this study take priority, as they serve the dual purpose of informing the design of both the measure and the quantitative survey instrument; and ensuring their utility. The quantitative phases also serve two purposes: content validation of the new measure; and testing the instrument with a small sample. These take second priority.

3. Timing – the use of results for all data gathered are sequential: qualitative data was collected first and analysed as part of the design of the new measure; the measure was then content validated and revised; the revised measure was used to collect data using an online survey instrument; and the utility of both the measure and the instrument was investigated.

4. Point of interface – mixing occurs during data collection in this research. Qualitative data collected in the first phase informed the design of a measure which was content validated in a quantitative second phase. A third quantitative phase collected data using the validated measure in a survey instrument. A final qualitative phase investigated the utility of the new
measure and survey instrument based on data collected using the instrument. As the main aims of this thesis are to design a new quantitative measure and data collection instrument, and investigate their potential utility, the qualitative data used in the design and utility evaluation of the measure and instrument are dominant. The resulting research design is categorised by Creswell & Plano Clark (2011) as a multi-phase exploratory sequential QUAL-quan-quan-QUAL strategy (where QUAL is dominant qualitative data and quan is subordinate quantitative data), illustrating the four central choices of the research.

3.3 Methods

The specific methods selected and detailed below were chosen based on their suitability for each phase of the multi-phase mixed-methods strategy. Four sets of primary data were collected to meet the needs of the research: in the first instrument design phase, qualitative data was collected to inform the design of a quantitative data collection instrument; in the second and third quantitative phases, the newly developed items were the subject of a content validity study and the newly designed instrument was used to collect a small sample of data; in the fourth and final phase, qualitative data was collected to investigate the potential utility of the quantitative instrument.

The sampling methods for data collection involved elements of non-probability purposive and snowball sampling strategies, considered appropriate for research where a specific participant profile is required (Bryman, 2012; Robson & McCartan, 2016). The specific method and the criteria for sampling varied for each phase of the research, as detailed below.

The techniques employed to interpret and analyse the data collected reflect the different types of data and the needs of the research questions. Methods include coding and thematic analysis of qualitative data; comparative conceptual analysis of literature and qualitative data; and both descriptive and inferential statistical analyses of quantitative data.

The graphic representation in Figure 3.1 is intended to illustrate the mixed methods sequential exploratory QUAL-quan-quan-QUAL design as recommended by
Ivankova et al. (2006). The four phases of data collection and analysis in the research design are represented, as are the procedures involved and product of each phase.

**Figure 3.1**

*Mixed Methods Sequential Exploratory QUAL-quan-quan-QUAL Design*

<table>
<thead>
<tr>
<th>Phase</th>
<th>Procedure</th>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Instrument Development</strong></td>
<td>QUALITATIVE data collection</td>
<td>Focus Groups using Nominal Group Technique ( (n = 10) )</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Data cleaning, integration &amp; pseudonymizing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Coding, mapping of themes to conceptual framework, item generation</td>
</tr>
<tr>
<td>2. <strong>Content Validity Study</strong></td>
<td>quantitative data collection</td>
<td>Content validity study online survey of experts ( (n = 6) )</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Data cleaning &amp; screening in MS Excel IRA, I-CVI, M-CVI/UA, M-CVI/Ave, I-FVI, D-FVI/Ave, coding of comments</td>
</tr>
<tr>
<td></td>
<td>quantitative data analysis</td>
<td>Testing new measure with Swiss HE Faculty ( (n = 32) )</td>
</tr>
<tr>
<td></td>
<td>quantitative data collection</td>
<td>Data screening in MS Excel</td>
</tr>
<tr>
<td></td>
<td></td>
<td>New variables computed, descriptive and inferential statistics in SPSS and Excel multivariate graphic representations</td>
</tr>
<tr>
<td></td>
<td>quantitative data analysis</td>
<td>Follow-up focus groups to evaluate potential utility ( (n = 9) )</td>
</tr>
<tr>
<td>3. <strong>Instrument Testing</strong></td>
<td>quantitative data collection</td>
<td>Data cleaning &amp; pseudonymizing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Coding, theme development, discussion</td>
</tr>
<tr>
<td></td>
<td>4. <strong>Utility Evaluation</strong></td>
<td>QUALITATIVE data analysis</td>
</tr>
</tbody>
</table>
3.3.1 Instrument Design

RQ2 asks whether a measure of professional identity for higher education faculty, which provides insights into faculty identities and the extent to which they are flourishing, can be developed. The measurement of complex constructs requires carefully executed instrument development (DeVellis, 2017; Hinkin, 2005). The formulation of a conceptual framework and an initial mapping of possible dimensions based on the literature, as recommended by De Vaus (2014), was conducted in Chapter 2. The resulting summary of concepts and contextual factors (see Figure 2.1 and Appendix 1) was incorporated in the development of potential indicators and survey items along with primary qualitative data collected in structured focus groups with Swiss faculty developers.

3.3.1.1 Data Collection. The SFDN is a dynamic and vocal community in which some voices tend to dominate conversations, while others remain in the background. In addition, members share many common interests and passions. As a result, steering a conversation so that it remains focused can be challenging. The nominal group technique (NGT), designed by Delbecq & Van De Van (1971) was quickly recognised by researchers as an excellent consensus method, in particular for collaborative decision making (Bartunek & Murninghan, 1984), and the approach provides a rigorous and structured but highly adaptable alternative to the Delphi method (McMillan et al., 2016). My decision to use NGT was taken to ensure a balanced representation of viewpoints and voices using a structured and focused approach that would avoid straying from the task at hand.

NGT involves four stages: silent generation, in which individuals generate ideas anonymously; round robin, in which ideas are shared in a systematic sequence, one idea at a time; clarification, in which ideas are discussed and may be grouped, altered, or eliminated; and ranking, in which voting takes place and ideas are rated and selected. Unlike the Delphi method, in which participants typically remain anonymous, NGT participants meet following the first anonymous silent generation stage. While the individual silent stage is seen as an important advantage over brainstorming techniques, reducing the risk of conformity bias (Boddy, 2012), the round robin and clarification stages require participants to meet and engage in structured discussion. Virtual data collection using Microsoft (MS) Teams ensured
that physical distance was not an obstacle to participation. Mural, a digital workspace for virtual collaboration was selected to facilitate all stages of the NGT in combination with MS Teams, as it allows the possibility of having participants work blindly, so that ideas can be developed anonymously and independently as required by the first stage of the NGT, before sharing and clarifying as a group in the second and third stages. Participants can again work blindly in the final ranking stage.

DeVellis (2017) cautions that asking participants to give their opinions regarding an abstract and unobservable construct might intimidate or confuse some participants and hinder participation. To ensure that participants were not alienated by being asked to discuss an intangible phenomenon that influences behaviour, a working definition of the construct of faculty professional identity and a conceptual overview based on the summary of concepts and contextual factors (see Figure 2.1) was shared with participants in Mural.

A pilot focus group was conducted with two critical friends, both faculty members at a Swiss HEI, involved in faculty development work, and familiar with my research. The pilot was designed to ensure that the NGT strategy could be managed in a virtual context; to check that instructions were clear and that practical issues such as timing were appropriately planned and managed; and to flag any potential problems with navigation and NGT task completion in Mural. Conducted on MS Teams, the pilot lasted 80 minutes and the participants suggested that limiting the number of participants to five per focus group would be advisable based on the format of the NGT.

Pilot participants commented on the appeal of the Mural workspace and the ease of use in navigating and completing tasks. They particularly noted the usefulness of having a conceptual framework, given the abstract nature of the construct. They recommended that both questions and examples be included as prompts for the generation of ideas. They suggested removing flourishing from the conceptual overview – fearing that it might confuse participants. It is worth noting that the pilot participants exhibited behaviours that were later repeated in both focus groups during group sharing, offering detailed explanations during the round robin stage of the NGT and looking for connections between ideas. This resulted in a clustering of
ideas in the group sharing space and there was little need for clarification in the serial discussion stage.

The design of the NGT virtual collaboration space in Mural was adjusted based on pilot study feedback. Figure 3.2 provides a screen-capture of the collaboration space and includes: an overview of the NGT structure followed by a detailed explanation of each step; NGT rules; a working definition of the construct of faculty professional identity and a conceptual overview (with Flourishing removed); a silent generation space with a set of post-it notes for each participant; and a group sharing space. The post-it notes and voting buttons assigned to each participant were colour-coded so that individual contributions could be easily identified.

**Figure 3.2**

### Design of Virtual Collaboration Space for NGT Focus Groups in Mural

#### Flourishing Faculty Professional Identity: Focus Group

**Nominal Group Technique Rules**

1. **Let's get started**
   - **Nominal Group Technique (NGT)** is a facilitator-driven, non-hierarchical process used to develop a collective view of a complex issue.
   - **Purpose**: To bring structure to the creative thinking process by allowing ideas to be contributed and prioritized.

2. **Overview**
   - **Purpose**: To provide an understanding of the context and objectives of the NGT session.

3. **Proper Participation**
   - **Purpose**: To ensure that all participants are engaged and contribute to the discussion.

4. **Structured Discussion**
   - **Purpose**: To facilitate a systematic approach to idea generation and prioritization.

5. **DRAG**
   - **Purpose**: To provide a method for organizing ideas into a prioritized list.

6. **Conclusion**
   - **Purpose**: To summarize the key findings and next steps.

**Faculty Professional Identity: A Conceptual Framework**

**Definition**

- **Professional Identity**: One's sense of self as a member of a profession based on a set of beliefs, values, motives, attitudes, and understandings about one's professional role.

**Constructs**

- **Meaning**
  - **Engagement**
  - **Positive Emotions**
  - **Relationships**
  - **Accomplishment**
  - **Belonging**

**PERMA Model (Seligman, 2011)**

1. **Meaning**: Experiences that provide a sense of purpose and fulfillment.
2. **Engagement**: Activities that are enjoyable and stimulating.
3. **Positive Emotions**: Feelings such as happiness and contentment.
4. **Relationships**: Connections with others that are supportive and meaningful.
5. **Accomplishment**: Achievements that enhance one's sense of self-worth and competence.
6. **Belonging**: A feeling of connection and inclusion within a community.

**Participants and Sampling**

The Swiss higher education system includes both public and private institutions. In addition to universities covering a broad range of disciplines, there are specialist research-intensive institutions focused particularly on the sciences, business schools, and vocationally oriented institutions covering disciplines ranging from music to health sciences. Type of institution,
gender, age, and nationality of participants were taken into consideration to ensure the representativeness of the sample. I leveraged my professional network to identify and approach potential participants by email (see Appendix 2) including an information sheet (see Appendix 3) and a link to an online MS Form containing the consent form and an invitation to indicate availability (see Appendix 4). Of the fourteen potential participants contacted by email, ten responded positively \( (n = 10) \) and these were divided into two NGT focus groups. Although McMillan et al. (2014) recommend seven participants per group, the pilot participants advised that five would be an optimal number.

3.3.1.3 Data Analysis. The summary of concepts and contextual factors (see Figure 2.1 and Appendix 1) and the conceptual framework (see Figure 2.2), both developed in Chapter 2, represent the first stage in the design of a new measure (De Vaus, 2002; Lynn, 1986). Initial draft transcriptions of the focus group data were generated using Otter.ai transcription software. These were then meticulously pseudonymized and cleaned to ensure accuracy and to remove any details that might identify the participants. The edited transcriptions were imported into MAXQDA Analytics Pro 2020 and the content of each of the Mural post-it notes was manually copied and pasted into the appropriate position in the transcriptions. Each of these was highlighted in colours corresponding to those used in Mural. Points allocated during the voting stage of the NGT were also added and colour coded (see Figure 3.3).

![Figure 3.3](image)

NGT Focus Group Data Sample Including Colour-Coded Mural Content

Although the summary of concepts and contextual factors and the conceptual framework I had development based on the literature reviewed was used to frame the NGT prompts and ensure that participants worked from a shared operational understanding of the construct, I did not want to use this as an initial deductive codebook, fearing that it might overly influence my analysis of the data. Instead, I used techniques associated with grounded theory (Charmaz, 2006), choosing an
exploratory, inductive approach to coding the data. This involved combing through the focus group transcriptions several times in an iterative process, with all codes generated in response to the data and iteratively reviewed to ensure accuracy and representativeness. During the initial code generation process, new codes were assigned to extracts as I worked through the data. From this initial intuitive process, patterns emerged, and I combed through the data a second time, identifying relationships, merging some codes, and arranging others into code families in what Charmaz might consider a combination of focused and axial coding, in which codes were categorized in a branching hierarchy (see Figure 3.4). A sample of coded data can be found in Appendix 12. The merging of codes is reflected in code memos which I wrote organically, to track the merging process.

Figure 3.4

*Example of an NGT Focus Group Code Family in MAXQDA*

![Code Family Example](image)

The complete code book (see Appendix 13) was used to map the concepts and contextual factors of the conceptual framework developed in Chapter 2 (see Figure 2.1, Figure 2.2, and Appendix 1) to the codes of the NGT focus groups. Emergent dimensions formed the basis of an item generation process which included combing extant measures of teacher identities and NGT data to ensure that the items generated would represent the already established body of knowledge, as recommended by De Vaus (2014), and the specific insights of faculty developers.

### 3.3.2 Content Validation

A lack of rigorous content validation as a first step in establishing construct validity of a new measure is a common weakness in design (Hinkin, 2005). A content validity study can determine “the extent to which the sampled items adequately reflect the domain and operational definition of the construct” (Almanasreh, Moles, & Chen, 2019, p. 215). Content validity can refer to face validity, an ‘at face value’ subjective evaluation of validity (Nevo, 1985), or logical
validity, a methodical evaluation of each item for construct representativeness, clarity, and dimensional relevance, as well as an overall evaluation of the whole measure, by a panel of experts using an assessment instrument (McGartland Rubio, 2004). The more rigorous qualities of logical validity determined its use in this study.

3.3.2.1 Data Collection. A content validity evaluation instrument in the form of a questionnaire was designed using Qualtrics online survey software (see Appendix 5 for the complete content validity evaluation instrument). Following an information sheet (Appendix 3) and a consent form (Appendix 4), an operational definition of the construct and each of the dimensions was provided (Appendix 6). Survey instructions (Appendix 7) explained that content validators should evaluate each item for construct representativeness and clarity; select the most relevant dimension from a drop-down list; and provide comments or suggestions for revision. These criteria were arranged in a side-by-side question format next to each item (see Figure 3.5). An additional open-ended text entry question relating to overall design and comprehensiveness of the entire measure was included at the end of the survey.

Figure 3.5
Side-by-Side Question in Qualtrics

<table>
<thead>
<tr>
<th>Item represents faculty professional identity</th>
<th>Clarity of item</th>
<th>Dimensional relevance</th>
<th>Comments &amp; Suggested revisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = not at all representative, 2 = major revisions required, 3 = minor revisions required, 4 = representative</td>
<td>1 = not at all clear, 2 = major revisions required, 3 = minor revisions required, 4 = clear</td>
<td>(please select the most appropriate dimension from the drop-down list)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

3.3.2.2 Participants and Sampling. For content validation, the number of experts required is discussed in several studies and a minimum of three is generally advised with a higher number leading to a more robust outcome (Almanasreh et al., 2019; Lynn, 1986; McGartland Rubio et al., 2003). The recommended criteria for sampling of panel experts include specialist knowledge of the construct in question. In the case of this study, construct expertise includes an understanding of identity as a psychological, social, and cultural construct, and a situated contextual knowledge of HEIs. A balance between experts with construct knowledge and survey design
expertise, ideally three of each, is advocated by Rubio et al. (2003). Leveraging my professional network, I identified potential content validators, all of whom have both survey design and construct expertise. I approached potential participants by email (see Appendix 2) including an information sheet (see Appendix 3). Of the six potential participants contacted by email, all responded positively ($n = 6$).

3.3.2.3 Data Analysis. Content validation data included both quantitative and qualitative data. All data was imported into MS Excel for Mac version 16.59 and subjected to a cleaning process in which the anonymity of the data was verified, and missing data addressed. One response was removed during the analysis, as it differed significantly from the other five in rating for representativeness and clarity and was incomplete.

Interrater agreement (IRA) was calculated for each item for representativeness and clarity. IRA is calculated by tallying the number of scores of 3 or 4 for each item (see Figure 3.5 above) and dividing this by the number of experts. The IRA score for representativeness provides the content validity index for the item (I-CVI), widely acknowledged to be the most reliable gauge of content validity (Almanasreh et al., 2019; McGartland Rubio, 2004; Polit et al., 2007). There are two methods of evaluating the CVI of the entire measure: M-CVI/Ave is calculated by taking the sum of the I-CVIs divided by the number of items; or universal agreement (M-CVI/UA) is calculated by tallying the number of items achieving an I-CVI equal to 1 and dividing this by the total number of items. The IRA score for clarity for the entire measure is calculated by taking the sum of the item IRA scores divided by the number of items.

Lawsche (1975) recommends using the content validity ratio (CVR) to examine the dimensional relevance of individual items as “essential”, “useful, but not essential” or “not necessary” to their assigned dimension. Alternatively, the more rigorous factorial validity index (FVI) requires that content validators assign each item to the dimension they consider most relevant (McGartland Rubio et al., 2003). The item FVI (I-FVI) is then calculated by counting the number of experts who assign the item to the dimension for which it was developed and dividing by the total number of experts. Similar to the M-CVI/Ave, the FVI for each dimension (D-FVI/Ave) is calculated by taking the sum of the I-FVIs for the items in a dimension.
divided by the number of items. Although other inter-rater agreement indices exist, Almanasreh et al. (2019) question the robustness of their design for content validation and the FVI method for establishing dimensional relevance is used in this study.

Qualitative data, in the form of comments and suggestions for the revision of individual items and evaluations of the overall design and comprehensiveness of the measure, were assembled and labelled by content validator (CV1, CV2... CV5) and according to either the item they referred to (Q1, Q2... Q64) or the entire measure (M). The data was tallied by both sets of labels and subjected to a data-driven inductive thematic analysis (Boyatzis, 1998; Braun & Clarke, 2012; Wahyuni, 2012). In the first of three stages, manual open coding was conducted to identify emerging themes. Axial coding followed, in which the labelled data was deconstructed and reassembled according to theme, including the colour-coding of words and phrases to substantiate the assigning of themes and facilitate the interpretation of the rearranged text in a final selective coding stage (see Appendix 14). Boeije (2002) advocates this iterative approach for large data sets. Although the qualitative data provided by content validators was not voluminous in this study, I deemed a full analysis of the unstructured raw data important for the completion of a thorough content validation.

3.3.3 Instrument Testing

Content validation is usually followed by full construct validation in which data is collected using the new instrument and subjected to a range of statistical tests. Preliminary exploratory factor analysis, confirmatory factor analysis, and an internal consistency assessment for reliability are all standard methods in construct validation (Barbour & Lammers, 2015; Germain, 2006; Hinkin, 2005; Tan et al., 2017). Multilevel confirmatory factor analysis may be used to gauge differences caused by the nesting of faculty within different institutions (Barbour & Lammers, 2015) while structural equation modelling tests the relationships between dimensions (T. G. Morrison et al., 2017; Weston & Gore, 2006).

Given that a primary aim of this exploratory research is establishing the potential utility of the measure and instrument developed, full construct validation
was deemed beyond the scope of this thesis. Instead, a small sample of instrument testing data was gathered with which to examine the potential utility of new instrument.

3.3.3.1 Data Collection. A questionnaire was designed using Qualtrics online survey software (see Appendix 8 for the complete instrument testing questionnaire survey). Following an information sheet (Appendix 3) and a consent form (Appendix 4) the questionnaire included a set of demographic questions; the newly developed and content validated items to measure the professional identity of higher education faculty; and the validated Workplace PERMA Profiler (Kern, 2014) to measure flourishing. Oppenheim (1992) asserts that every aspect of a questionnaire should be tested on small samples to ensure overall usability. Including demographic questions and the measure of flourishing in the design of the questionnaire was intended to facilitate a meaningful evaluation of the utility of the entire instrument in the final phase of the research.

Researchers have many options available when designing scales for attitude measurement (see Mehra, 2017). The layout of a questionnaire and the design of a rating scale – including the number of response categories; category labels; and scale orientation – have significant impacts on the validity of responses (De Vaus, 2014; DeVellis, 2017; Foddy, 1993; Hinkin, 2005; Lietz, 2008). Many of these aspects have been evaluated, ranging from number of scale points (Taherdoost, 2019) to the order of verbal labels and numerical values (Hartley & Betts, 2010).

In deciding on scale design, I evaluated the Workplace PERMA Profiler (Kern, 2014) to ascertain whether the same approach to scaling and layout might be adapted for the new measure. Kern’s profiler uses an 11-point rating scale, ranging from 0 to 10 with radial buttons and end-point labels. While Kern acknowledges that her method has generated some criticism and accepts that the scale may need to be adapted for different populations or to integrate other scales, she points out that the scale has been fully validated in the format presented. McKelvie (1978) and Hinkin (2005) suggest that there is no advantage to be gained by having many categories. However, Foddy (1993) claims that, in measuring attitudes, a larger number of categories with a minimal use of labels is optimal, and Alwin (1997) found 11-point thermometer scales to have consistently higher reliability and
validity coefficients than 7-point fully labelled Likert scales. In a recent comparison of 7-point, 11-point, and the increasingly popular visual analog scale, (Lewis & Erdinç, 2017) found no measurement advantage associated with the methods.

The Workplace PERMA Profiler uses an ascending scale (0 = never ... 10 = always). Hartley & Betts studied the effect of scale order and labelling on responses and found that a descending scale from a positive label and high rating on the left to a negative label and low rating on the right can lead to significantly higher scores. In a similar study, Hofmans et al. (2007) found that a descending scale orientation positively influenced a tendency to select the most extreme option. These studies suggest that an ascending scale from a negative label and low rating may be more reliable. However, Hartley & Betts caution that participants may misread an ascending scale and advise carefully crafting questionnaires to negate respondent biases. This is achieved in the Workplace PERMA Profiler by varying end-point labels and curating items in groups. Kern uses three different end-point labels to ensure their relevance for various items (0 = never / terrible / not at all; 10 = always / excellent / completely) as recommended by Foddy (1993). As well as curating items in groups based on suitability of end-point labels, Kern uses groups to ensure that items measuring the same dimension are not positioned close to one another.

Following a full evaluation of suitability, Kern’s approach to scaling and layout was fully adopted for the new measure of faculty professional identity. In addition to ensuring coherence and clarity for respondents, this may offer opportunities to further reduce the number of items in the measure, should the utility of combining a measure of identity with a measure of flourishing be established. I anticipated that some dimensions of PERMA, in particular meaning and relationships, might correlate with purpose and relationships with colleagues, dimensions of faculty professional identity. Two of the three end-point labels used in the workplace PERMA profiler were adopted for the faculty professional identity measure (never ... always; not at all ... completely) and two were added (strongly disagree ... strongly agree; not at all like me ... very much like me). Figure 3.6 provides an example of the respondent’s view of the layout of items with the 11-point rating scale and end-point labels in Qualtrics. A full overview of the grouping
of items including the end-point labels assigned to item groups is provided in Appendix 9.

**Figure 3.6**

*11-Point Scale with Radial Buttons and End-Point Labels in Qualtrics*

<table>
<thead>
<tr>
<th>In general...</th>
<th>Never</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel part of a community of faculty.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>Always</td>
</tr>
<tr>
<td>I enjoy working collaboratively with colleagues.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>Always</td>
</tr>
<tr>
<td>I am comfortable interacting with students.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>Always</td>
</tr>
</tbody>
</table>

**3.3.3.2 Participants and Sampling.** To ensure that the data collected during instrument testing would be relevant in the final utility evaluation phase of the research, faculty sampled came from the same institutions as the faculty developers who took part in the NGT focus groups. Using a snowball sampling strategy, the assistance of participants from the NGT focus groups was solicited to invite faculty from their institutions to participate anonymously in the testing of the instrument by sharing a link to the online questionnaire (see Appendix 2) and an information sheet (see Appendix 3). Assuming a predicted response rate or 15% (Bryman, 2012), each NGT participant was asked to invite up to 100 faculty to participate in the online survey. The response rate was lower than anticipated, and this may be of interest in considering how to operationalise the instrument for faculty development purposes. Of the 50 survey responses received, 18 were incomplete and discarded. Despite the small sample size, the retained responses \( n = 32 \) sufficed for data analysis and provided an adequate variety of data for discussion in the final utility evaluation phase of the study.

**3.3.3.3 Data Analysis.** A file containing numerical values for the quantitative data collected was exported from Qualtrics and imported into MS Excel for Mac version 16.59. The 18 incomplete responses were discarded. For the remaining 32 responses \( n = 32 \), three items with the wording “It is challenging...” were reverse scored. New variables were computed for the 14 professional identity dimensions and the five PERMA domains by combining and taking the average score of the items assigned to each dimension/domain. Although negative emotions and health are not part of the PERMA model, Kerns includes these domains as well as a single
Loneliness item in the Workplace PERMA Profiler as components of interest in overall wellbeing.

The dataset, including new variables, was imported into IBM SPSS Statistics version 28.0.0.0 (190) for further analysis. The intention was not to conduct an exhaustive variety of inferential statistical tests. Rather, the analysis focused on the reliability of the measure and the relationship between professional identity and flourishing.

Cronbach’s alpha was calculated for all 14 professional identity dimensions and five PERMA domains. Alpha reliability for new variables computed for professional identity and PERMA was also calculated. Negative emotions, Health and Loneliness were not included in these reliability analyses. Correlational relationships between professional identity, PERMA flourishing, and health were tested.

Various graphic representations of multivariate data can be generated in MS Excel. Kerns (2014) recommends bar graphs for displaying PERMA data, as shown in the example in Figure 3.7. Given that faculty professional identity has 14 dimensions, I also explored radar/spider graph, as shown in the example in Figure 3.8, as a potentially more compact alternative to bar graphs (Cisneros, 2021).

**Figure 3.7**

*PERMA Flourishing (Bar Graph)*
3.4 Utility Evaluation

3.3.4.1 Data Collection. The utility of the measure for faculty development purposes is the focus of RQ3. In the final phase of data collection, the NGT participants were invited to return for a second, unstructured focus group discussion to explore the utility of the new measure following instrument testing. These focus group discussions were planned so that developers could explore data provided from instrument testing (see Appendix 10) and discuss how the results might facilitate the tailoring of faculty development initiatives for individuals, groups, and institutions. The question guide (see Appendix 11) included an introductory descriptive overview of the research process following the NGT focus groups four months earlier; an explanation of the data sample provided; and loosely structured questions about how the data might be interpreted, aggregated, shared, and used for faculty development purposes.

3.3.4.2 Participants and Sampling. All ten participants in the initial NGT focus groups were invited by email to participate in the final phase of the research (see Appendix 2), a follow-up focus group discussion. The email contained a link to
an online MS Form containing the consent form and an invitation to indicate availability (see Appendix 4). Of the ten NGT focus group participants invited, nine agreed to participate \( (n = 9) \). The distribution of participants across the two focus groups differed from the first phase of the research as it was, once again, based on the availability of the participants.

3.3.4.3 Data Analysis. Draft transcriptions of the follow-up focus group data were generated automatically within my password protected UCL MS Teams account during the recording process. These were then meticulously pseudonymised and cleaned to ensure accuracy and to remove any details that might identify the participants. The edited transcriptions were imported into MAXQDA Analytics Pro 2020.

In the instrument design phase of this research, an exploratory iterative inductive coding process was used on the NGT focus group data to generate a codebook which could then be comparatively mapped to a summary of concepts and contextual factors (see Section 3.3.1.3). The follow-up focus group data also involved an initial inductive coding process, but this was followed by a rich interpretative data-driven thematic analysis as detailed by Braun & Clarke (2006, 2012, 2013) to investigate thematically the potential utility of the instrument for faculty development purposes. The six steps of thematic analysis recommended by Braun & Clark (2006) provide a systematic approach which I adapted as detailed in Table 3.1.
Table 3.1

*Six Steps of Thematic Analysis*

<table>
<thead>
<tr>
<th>Step</th>
<th>Description of the process</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Familiarizing yourself with your data</td>
<td>Data transcription; reading; pseudonymising; cleaning.</td>
</tr>
<tr>
<td>2. Generating initial codes</td>
<td>Coding interesting segments of data systematically in several iterative steps; refining codes with each iteration.</td>
</tr>
<tr>
<td>3. Searching for themes</td>
<td>Collating codes into potential themes; generating a draft of thematic outline.</td>
</tr>
<tr>
<td>4. Reviewing themes</td>
<td>Checking if the themes work on the two levels of coded extracts (level 1) and entire data set (level 2); generating a thematic map of the analysis.</td>
</tr>
<tr>
<td>5. Defining and naming themes</td>
<td>Refining the specifics of each theme; developing the story of the analysis; generating definitions for each theme.</td>
</tr>
<tr>
<td>6. Producing the report</td>
<td>Selection of vivid, compelling extracts; integration of literature; addressing of research question(s); producing a scholarly report.</td>
</tr>
</tbody>
</table>

*Note.* Adapted from “Using Thematic Analysis in Psychology” by V. Braun & V. Clarke, 2006, *Qualitative Research in Psychology, 3*(2), 77–101. Copyright 2006 by Routledge

### 3.4 Ethical Considerations

The research adhered to the ethical guidelines of the British Education Research Association (BERA, 2018). The data collection process included measures to ensure that confidentiality was safeguarded, and that the anonymity of participants was protected. Information sheets (Appendix 3) and consent forms (Appendix 4) were adapted for each phase of data collection and ensured that all participants gave their fully informed consent before taking part; appreciated the purpose and scope of the research; and understood their right to withdraw.

The mixed-methods research design included the gathering of qualitative data in which participants may inadvertently reveal their identities (Wahyuni, 2012). The processes of transcribing and preparing the data included meticulous cleaning, in which any potential for identification was removed or masked with the help of pseudonyms. In addition to being given an information sheet in advance of giving
their written consent, focus group participants were specifically reminded in person of their right to withdraw from the study at any time.

I work in the context of a Swiss higher education institution and serve on the board of the SFDN. Thus, my professional context provided an immediately accessible network of potential research participants. This privileged access of the insider researcher is well-documented (Dhillon & Thomas, 2019; Loxley & Seery, 2008; Malone, 2003; Mercer, 2007; Perryman, 2011), but insider research also precipitates a range ethical challenges, particularly in qualitative studies, where bias, trust, and power dynamics might compromise the integrity of the research (Bonner & Tolhurst, 2002; Malone, 2003; Mercer, 2007; Robson & McCartan, 2016). Although I leveraged my professional network to invite faculty developers to participate in focus groups in both the instrument development and utility evaluation phases of the study, these were not colleagues with whom I work directly. Quantitative data collected from faculty at my institution was collected anonymously in the content validation and instrument testing phases and the dynamics of my working relationship with colleagues did not impact this study.

3.4.1 Data Management and Security

All data was securely stored on the FileVault protected hard drive of my personal MacBook Pro using a 128-bit Advanced Encryption Standard (AES) encryption with a 256-bit key. A Time Machine back up of my MacBook Pro is held on an encrypted and password-protected external hard-disk. In addition, all data was synced with and backed up to my secure University College London (UCL) OneDrive for Business account using BitLocker and per-file AES 256-bit encryption.

Participant information sheets and consent forms ensured that all participants were aware that the data would be stored only for the duration of my doctoral research, after which it would be deleted. Focus-group participants further understood that they could withdraw and/or request to have their personal data removed at any stage during the research. All focus group data was pseudonymised following transcription. Questionnaire responses were collected anonymously. Comments gathered in questionnaires were carefully cleaned to ensure that respondents did not inadvertently identify themselves.
Audio-recordings of focus groups were made using my password-protected UCL MS Teams account. NGT recordings were transcribed using Otter.ai, an online transcription service. All files were immediately deleted from my password protected Otter.ai account following the download of transcriptions. Follow-up focus group transcriptions were generated automatically within my password protected UCL MS Teams account.

All personal data collected was stored and processed in full compliance with General Data Protection Regulations (GDPR) overseen by UCL’s Data Protection Office.

3.5 Methodological Limitations

An important limitation of this research is that the new measure is not fully construct validated. The size and scope of an EdD thesis necessitated that I make a choice between full construct validation, which involves collecting a large sample of data using the content validated measure and conducting rigorous statistical tests to establish the construct validity of the measure; or utility evaluation, which involves collecting a small sample and using this data to explore the potential utility of the measure in a qualitative phase of data collection.

The small sample of instrument testing data has limitations related to the generalisability of findings. In addition to permitting full construct validation, a large sample would have made generalisations about the Swiss higher education context possible, as well as allowing analyses of the potential impact of demographic factors such as gender, age, and nationality on professional identity.

Insider research presents the researcher with particular benefits and challenges, outlined in Section 3.4. Although I did not conduct this research with the institution in which I work, I utilised my privileged access to a range of expertise and perspectives at various stages of my research. Aware that qualitative methodologies present insider research challenges including biases and power balance in relationships (Malone, 2003; Mercer, 2007; Robson & McCartan, 2016), I deliberately avoided inviting colleagues in my institution to participate in focus groups. Although the pilot for the NGT focus groups was conducted with two critical friends who are faculty members in my institution, potential focus group
participants were identified by leveraging my professional network of educational
developers in Swiss HEIs outside my institution. For the collection of quantitative
data, where insider research presents fewer risks, content validators included
colleagues with appropriate expertise, and I invited faculty with whom I work to
anonymously participate in the testing of the instrument following content
validation.

3.6 Conclusion

In this chapter, the choice of a mixed methods research design has been
detailed and justified. Guided by the research questions and my pragmatic stance, I
have discussed my approaches to data collection, sampling, and analysis in this
multi-phase study. I have also addressed ethical issues and methodological
limitations that have arisen. The three chapters which follow utilize the methods
detailed above and cover the development of a measure of faculty professional
identity; the content validation process; and the evaluation of the utility of the
measure.
Chapter 4 – Developing a Measure

4.1 Introduction

The process of developing a measure of higher education faculty professional identity began with defining the construct and delineating a summary of concepts and contextual factors in Chapter 2 (see Figure 2.1 and Appendix 1) as recommended by De Vaus (2014). This chapter details the integration of primary qualitative data in the development process.

A thorough exploratory inductive analysis of qualitative focus group data provided a code book. This was mapped to the summary of concepts and contextual factors gleaned from the literature reviewed in Chapter 2. The resulting emergent dimensions were used to inform item generation.

4.2 NGT Results and Analysis

The presentation and analysis of NGT focus group results includes a discussion of NGT participation to determine whether a balanced representation of viewpoints was achieved. The inductive coding which formed the basis for the dimensional mapping and item generation is then presented and discussed.

4.2.1 NGT Participation

In selecting NGT as a structured framework for the focus groups with faculty developers, my objectives were twofold: to ensure that discussions would remain focused on indicators of faculty professional identity; and to ensure that all participants contributed and avoid individual voices dominating the discussion.

FG1 lasted 90 minutes and FG2 was slightly longer, at 100 minutes. In both focus groups, 15 minutes was spent at the beginning on NGT instructions and ensuring that participants were comfortable in the Mural collaborative workspace. A further 15 minutes were spent in silent generation. Participation in focus groups was reasonably balanced (see Table 4.1). In both focus groups, the length of time occupied by the most vocal participant (8.5 minutes and 14 minutes respectively) was twice that of the least vocal (4 minutes and 7 minutes respectively). The resulting idea generation was relatively balanced. In the first focus group (FG1), Kate generated the most (13) while Mark generated the fewest (9). The second focus group (FG2) was more verbose in their idea generation, writing both more
numerous and more expansive ideas. Rose generated the most (17) while Ron and Ben generated the fewest, with 11 post-its each.

Both focus groups were highly collaborative during the group sharing and there was a spontaneous tendency to seek connections between ideas. This is evident in the spoken explanations offered by participants while transferring each item into the group sharing space. The code associated with this behaviour, *Making links between ideas*, was used 70 times, making it the most frequently used code. The same behaviour is also apparent in the physical clustering of ideas in the space which resulted from participants carefully choosing how to position their ideas when transferring them for the silent generation to the group sharing space. This is reflected in the code *Hesitation about what / where to add*, which was used 29 times.

**Table 4.1**

*Participation in NGT Focus Groups*

<table>
<thead>
<tr>
<th>Participant</th>
<th>Pseudonym</th>
<th>Colour</th>
<th>Gender</th>
<th>Number of ideas</th>
<th>Time speaking</th>
</tr>
</thead>
<tbody>
<tr>
<td>FG11</td>
<td>Mark</td>
<td>Yellow</td>
<td>M</td>
<td>9</td>
<td>4 mins</td>
</tr>
<tr>
<td>FG12</td>
<td>Kate</td>
<td>Purple</td>
<td>F</td>
<td>13</td>
<td>7 mins</td>
</tr>
<tr>
<td>FG13</td>
<td>Maeve</td>
<td>Green</td>
<td>F</td>
<td>12</td>
<td>5.5 mins</td>
</tr>
<tr>
<td>FG14</td>
<td>Sean</td>
<td>Blue</td>
<td>M</td>
<td>10</td>
<td>5.5 mins</td>
</tr>
<tr>
<td>FG15</td>
<td>Sam</td>
<td>Orange</td>
<td>F</td>
<td>10</td>
<td>8.5 mins</td>
</tr>
<tr>
<td>FG21</td>
<td>Rose</td>
<td>Yellow</td>
<td>F</td>
<td>17</td>
<td>7 mins</td>
</tr>
<tr>
<td>FG22</td>
<td>Lee</td>
<td>Purple</td>
<td>F</td>
<td>12</td>
<td>9.5 mins</td>
</tr>
<tr>
<td>FG23</td>
<td>Ian</td>
<td>Green</td>
<td>M</td>
<td>13</td>
<td>7.5 mins</td>
</tr>
<tr>
<td>FG24</td>
<td>Ron</td>
<td>Blue</td>
<td>M</td>
<td>11</td>
<td>7 mins</td>
</tr>
<tr>
<td>FG25</td>
<td>Ben</td>
<td>Orange</td>
<td>M</td>
<td>13</td>
<td>14 mins</td>
</tr>
</tbody>
</table>

Participants, particularly those in FG2, made frequent reference to the conceptual framework, located at the top of the Mural collaborative workspace (see Figure 3.2). The code *Using prompts* tracked when participants made explicit reference to the conceptual framework and was used 26 times.

The detailed explanations given by each of the participants during the round robin stage, combined with the tendency to seek connections and cluster ideas,
resulted in few comments, suggestions, and questions in the serial discussion stage. In addition, some participants had already requested clarification during the round robin stage. As these queries were infrequent and quickly addressed, I did not deem it necessary to interrupt these exchanges, fearing that I might compromise the naturally collaborative nature of participant interactions.

Voting in an NGT is often used to make a collaborative decision or arrive at a group consensus (Bartunek & Murninghan, 1984; Delbecq & Van de Ven, 1971; McMillan et al., 2016). In the case of this study, I considered whether voting would bring any value, and decided that it might provide an insight into which aspects of faculty identities participants considered most important or interesting among the ideas shared. I was also curious to know whether participants would tend to vote for their own ideas. Participants were asked to select the five posts they found most interesting or important and then instructed to rank them from 5 (most important) to 1 (least important). The allocation of points using small voting dots was conducted, like the silent generation of ideas, in blind mode, a Mural feature intended to prevent conformity bias. The same colours were allocated to each participant for idea generation and voting. It is worth noting that participants tended to vote for ideas posted by other participants and Sean was the only participant who used a majority of his voting dots (three out of five) for his own ideas. Mark, Ben, and Ian allocated no voting dots to their own ideas.

4.2.2 Inductive NGT Codes

The inductively generated codes were ranked based on points attributed to ideas in the voting stage of the NGT. The codes are presented in rank order, including points received in each focus group for codes and sub-codes as well as an aggregated total for each code group in Table 4.2.
<table>
<thead>
<tr>
<th>Codes and sub-codes</th>
<th>Points received</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Focus group 1</td>
</tr>
<tr>
<td>Belonging</td>
<td></td>
</tr>
<tr>
<td>Shared language / behaviour</td>
<td>1</td>
</tr>
<tr>
<td>Shared field / discipline</td>
<td>3</td>
</tr>
<tr>
<td>Shared rituals</td>
<td>8</td>
</tr>
<tr>
<td>Shared beliefs / assumptions</td>
<td>–</td>
</tr>
<tr>
<td>Multiplicity</td>
<td>3</td>
</tr>
<tr>
<td>Primacy of research</td>
<td>5</td>
</tr>
<tr>
<td>Importance of expertise</td>
<td>–</td>
</tr>
<tr>
<td>Type of educator</td>
<td>–</td>
</tr>
<tr>
<td>Passion</td>
<td>14</td>
</tr>
<tr>
<td>Openness to change / development</td>
<td>5</td>
</tr>
<tr>
<td>Relationships</td>
<td>3</td>
</tr>
<tr>
<td>Openness to students</td>
<td>3</td>
</tr>
<tr>
<td>Feeling understood</td>
<td>–</td>
</tr>
<tr>
<td>Ethics / responsibility</td>
<td>3</td>
</tr>
<tr>
<td>Autonomy / self-governance</td>
<td>–</td>
</tr>
<tr>
<td>Bureaucracy / managerialism</td>
<td>–</td>
</tr>
<tr>
<td>Accountability</td>
<td>–</td>
</tr>
<tr>
<td>Purpose</td>
<td>2</td>
</tr>
<tr>
<td>Contribution to society</td>
<td>2</td>
</tr>
<tr>
<td>Dedication to students</td>
<td>4</td>
</tr>
<tr>
<td>Status</td>
<td>4</td>
</tr>
<tr>
<td>Pride</td>
<td>–</td>
</tr>
<tr>
<td>Accomplishment</td>
<td>–</td>
</tr>
<tr>
<td>Authenticity</td>
<td>–</td>
</tr>
<tr>
<td>Centrality</td>
<td>–</td>
</tr>
<tr>
<td>Confidence / efficacy</td>
<td>–</td>
</tr>
<tr>
<td>Competence</td>
<td>–</td>
</tr>
<tr>
<td>Motivation</td>
<td>–</td>
</tr>
</tbody>
</table>
4.2.2.1 Presentation of Codes. Each of the codes is presented and discussed below, illustrated with relevant participant quotes.

**Belonging.** Along with its sub-codes, Belonging received a total of 45 points and was considered the most important or interesting aspect of faculty identity by both focus groups. Maeve introduced the idea of belonging in FG1, explaining “I have been thinking a lot lately about the sense of belonging, and what that does to who you are, and how you participate, and who you are as a teacher, but also as a colleague.” Although it was only the second idea of 53 shared, three participants gave this idea five points. Kate returned to the idea later saying, “they either feel like they belong to groups, or they don’t belong in other groups, and that helps them build their identity as faculty.”

**Based on shared language / behaviour.** The sub-code Based on shared language / behaviour is associated with “specific behaviour” and “jargon” and Kate refers to “in-group behaviour and language,” saying jokingly “you can fake it, if you know the secret handshake.” She also introduces ethics as being “like a familiar language.” Sam bundles together gender, accent, physical appearance, and status into what she terms “visible fit” musing that faculty might ask themselves “do I look like a university professor?”

**Based on shared field / discipline.** Participants in both focus groups explained that belonging Based on shared field / discipline involved a “broader network... outside of the institution” with whom faculty might collaborate or from whom they might receive recognition. Ron mentioned that this might open “the opportunity for sharing identities with non-faculty.”

**Based on shared rituals.** The sub-code Based on shared rituals emerged from participants mentioning a range of activities including “networking,” “events,” “conferences, “awards” and “sabbaticals” but also “sitting on the boards of journals” and even “lab work.” Sean noted that some of these, such as the process of earning a PhD, are “interestingly, individual yet shared experiences.” Kate characterised others as “created artificially” and noted that social acceptance and validation via these rituals is a key to belonging: “I was invited to this event, so therefore, I must be part of this
group.” Ian characterised some of these rituals as “perks” while Kate used the term “trial by fire” to refer to the sometimes-challenging aspects of becoming a member of faculty.

**Based on shared beliefs / assumptions.** Beliefs and assumptions were grouped together in the sub-code *Based on shared beliefs / assumptions.* Ron spoke about a “socially shared understanding” based on faculty members’ “own beliefs about themselves” but he cautioned that there are differences between institutions and between different HEI systems which may lead to different understandings of the term ‘faculty’. Maeve spoke about a “solidarity” associated with belonging and Ian evoked the role of sharing complaints about “students’ performance, toughness of ... reviewers, poor Uni [sic] leadership.”

**Multiplicity.** Encompassing the multi-faceted nature of many faculty roles as well as the notion of boundaries, *Multiplicity* garnered 31 points and was particularly popular in FG2 (23 points). In both focus groups, the multiple roles that faculty play were viewed as a potentially troubling aspect of faculty identities: “Wearing the different hats may be tricky at times” (Kate). Sam identified “two really different ... major profiles of teachers” within her institution, characterised by whether and to what extent the faculty member is engaged in research. In discussing ethics, Kate alleged that “there's just a different set of ethics that comes with identifying yourself as a teaching person versus research person.” Several other participants referred to this duality and Ron ventured that the “conflict” between teaching and research “could be at the core of faculty identity.” Maeve drew a link between this duality and questions surrounding the “purpose of the university.”

**Primacy of research.** The discussion around the multiple roles of faculty led to the emergence of the *Primacy of research* as a sub-code with two participants in separate focus groups referring to highly successful researchers as “stars” and another using the term “celebrities.”

**Importance of expertise / being an expert.** The notion of expertise came up regularly in both focus groups. Ron talked about “working with, developing, and expanding knowledge,” Lee brought up the importance of staying
“updated ... in your area of expertise,” and Ian mentioned that some faculty want to teach only in their narrow area of specialist expertise. Most participants made a distinction between discipline expertise and teaching expertise and Kate pointed out the “specific body of knowledge” that informs teaching. The struggle of endeavouring to improve the teaching practice of faculty who are diva-like discipline experts was probed by Sam: “because they’re so expert, they tell people things ... being told that they shouldn’t just be an expert... is very, very challenging,” and Ben spoke about faculty questioning both the value and the validity of the teaching expertise of faculty developers. Finally, Kate mentioned the “counterbalance” of “boring [administrative] work that has to be done.”

**Type of educator.** In addition to the multi-faceted nature of faculty identities, there are also multiple types of faculty involved in teaching. Maeve mentioned teaching experience, but Mark observed that experience does not necessarily make people educators. This idea was revisited by Sam in relation to the different titles that faculty hold and how this might lead to tangible inconsistencies in lived experience, including availability of resources and recognition. Sam explains that this can have “an influence on how they see themselves and how they are seen and potentially appreciated.” Ben also pointed out the influence that a specific field or discipline can exert on teaching practice, giving examples including lab work, archaeological digs, and interactive seminars.

**Passion.** Although passion was only mentioned by Sean and Maeve, all FG1 participants voted for one of the posts coded for *Passion*, one of which related to discipline and the other to teaching. Maeve shared this as her final idea, saying “passion – the most important ... for last.” The code was not used at all for FG2, but motivation was mentioned by several participants (see below).

**Openness to change.** Encompassing curiosity, willingness to learn, and risk taking, *Openness to change* was used to code several converging ideas. Sean talked about “exploring new ways of teaching” and Maeve pointed out that trying new methods implied embracing a “risk of looking stupid or failing.” Rose noted that engagement in professional development involves faculty repositioning themselves
“as a learner,” and Lee placed “curiosity” and “questioning your beliefs” at the heart of this openness.

**Relationships.** There were fascinating comments on Relationships in both focus groups. Maeve introduced the idea in connection with belonging in FG1 and distinguished between relationships with students and with colleagues “how do you participate and who you are as a teacher, but also as a colleague.” Lee asserted that a faculty member “may be more comfortable in one of these roles,” but “you don’t have to like or be liked by everyone ... to establish healthy relationships ... you can’t force every relationship.” Ben highlighted institutional boundaries and “faculty politics,” and Ian mentioned the potency of in-group interactions and “social bonding” in informal settings, while Rose underlined the important exchanges that take place within groups: “I give to the group, and I take from the group.”

**Openness to students.** Lee emphasised the inevitable centrality of relationships with students: “you cannot teach alone.” Maeve made an explicit distinction between openness to change and openness to students and this particular quality of relationships with students reappeared elsewhere, leading to the sub-code Openness to students. Rose posited that faculty ask themselves “what aspects of my identity do I share with my students?” This suggests that there is a conscious curating of faculty identities for different relationships. Sean mentioned the need for an awareness of students’ struggling and Mark saw being a “communicator” as central to self-image and faculty confidence.

**Feeling understood.** Rose and Ben both spoke about the need for empathy, of Feeling understood. Sam pointed, in particular, to misunderstandings relating to roles, expectations and resources.

**Ethics.** In addition to notions of trustworthiness and reliability mentioned by Rose, several ideas relating to responsibility, impartiality, and maintaining rigor converge in the code Ethics. Kate acknowledged that ethics, as a language, has different meanings and applications in teaching and research, and others expanded on this idea. Seeing faculty as a “gatekeeper” whose role it is to “maintain rigor,” Sam placed responsibility at the heart of faculty identities. This “commitment to
quality” was conflated with accountability by Kate and Ben spoke about faculty holding themselves to the highest standards of impartiality.

**Autonomy / self-governance.** Although Autonomy / self-governance relates to academic freedom in terms of teaching content, Mark takes this further, mentioning the extent to which faculty have “ownership over their course and the way that they deliver.” Ben adds that this may include the right to continue teaching badly – which he marries with an arrogance regarding expertise – musing that, in their teaching practice, “there are almost no obligations for teachers.” Ian returns to this point later, quoting a prominent member of faculty as saying, “I’m grateful to [the institution] for allowing me to teach as bad [sic] as I want.” He also highlighted control over budgets as an aspect of autonomy. The notion of autonomy is common to several professions and Ron contrasted faculty with other professions outside higher education in terms of self-governance and representation.

**Bureaucracy / managerialism.** As a sub-code of autonomy, Kate mentioned “boring work that has to be done” and claims that this “cements identity” for faculty. Ben pointed to the influence of relations “between several parts of the institution” on what faculty “can and cannot do.” He explains that faculty identities rely upon an ability to “find ways to cope with decisions that are beyond your control.” However, Lee argues that this is an inevitable aspect of working in a system-based context:

> A faculty member chooses to work in higher education. Thus, [they] must be prepared for the stakeholders, accreditations advisory boards, etc. that are part of it. It's a full package. You can't have all the perks with none of the sacrifices.”

**Accountability.** This sub-code includes who or what faculty are accountable to, but also covers what faculty are accountable for in terms of expectations. While Ian lists some of these expectations as a “nuisance” and Kate characterises administrative tasks as “boring”, Lee questions whether expectations of faculty, particularly in the current context of a global pandemic, are reasonable, and Ian notes that accountability may be driven by feedback from students.
**Purpose.** Maeve saw the “purpose of the university in the sense of educating students, but also producing research” as informing faculty identities. The code *Purpose* was also used for Ron’s idea, that “working with, developing [and] expanding knowledge ... could be at the core of faculty identity,” providing a link between research and teaching roles. Later, Ron returned to his idea that “faculty share [a] common endeavour” situated in the “same social and physical space.”

**Contribution to society.** As a sub-code of purpose, how faculty perceive their *Contribution to society* includes ideas of service and vocation. Ben sees this sense of what they bring to society as coupled with responsibility, and as fuelling a “sense of [their] own importance.” For Sam, research, rather than teaching, is “what they do and contribute to society... where their identity comes from.” For Mark, faculty “see themselves” as “empowering students,” and for Sean, an awareness of the “impact” of their teaching strengthens faculty identities.

**Dedication to students.** A sense of purpose driven by *Dedication to students* includes caring for students, dedication to their achievements, and behavioural aspects of “being on time for classes ... making yourself available” (Maeve) or “how one shows up and what they bring” (Rose).

**Status.** The code for *Status* was used more than any of the other codes in Table 4.2, but it only gathered 4 points in the voting stage of the NGT. For participants in both focus groups, status and power are closely related to institutional politics and access to resources, and can cause considerable frustration for faculty, resulting in contested faculty identities. Maeve likens career tracks to “the railroad that delivers you” to being a professional and she is careful to qualify this as a “political function.” Sam argues that the range of titles carried by those engaged in teaching can be misleading and contentious. Differences in rank associated with title may mean that “you don’t get an office” and have “access to completely different resources.” This may influence how faculty “see themselves and how they are seen and potentially appreciated.” Status is closely linked by several participants to qualifications, recognition of expertise, receiving awards, and an aura of “celebrity” (Kate) or being “perceived as a star” (Ian). Within the
institution, status is linked to a range of exclusive privileges, but the role of recognition outside the confines of the institution was also mentioned.

**Pride.** Treated as a sub-code of status, *Pride* marries status and recognition with reputation as illustrated by Ben carefully choosing to place “institutional reputation” close to “qualifications” in the Mural sharing space. Pride is also associated with arrogance for some participants, with Ian offering an example: “I’m top ... of my field, so don’t bother me.”

**Accomplishment.** The sub-code *Accomplishment* includes the qualifications, titles, awards, and recognition that fuel status, and is used to identify specific examples of accomplishment mentioned. Examples include “grants, publications” (Rose) and “sitting on the boards of journals, organising conferences, being invited as guest speaker to different events” (Ian).

**Authenticity.** Sean introduces the idea of authenticity as “a hard one ... it’s influencing a lot of things” and other participants place “appearance” (Mark) and “self-image” (Maeve) close to it in the Mural sharing space. In another area of the space, Sam shares the idea of “visible fit with the image of a professor,” which raises questions around potential conflict between authenticity, appearance, and expectations.

**Centrality.** Some participants referred to the lives of faculty beyond their professional identities. These are coded using the term *Centrality* as they tend to refer to the importance of the faculty identity among other identities. Although Sam did not specify other identities, her statement, “first and foremost, researcher,” alludes to the centrality of this identity for the faculty members she has in mind. Later, she brings up the “isolation” and the limited “social world” that many faculty inhabit due to the demanding nature of their professional lives. She explains, “they don’t know a lot of people that aren’t like them.” However, Rose suggests that “personal identities may impact ... professional identities” and Ron acknowledges that a range of “external conditions,” such as pressure and challenges outside the workplace exert influence on faculty identities.

**Confidence / efficacy.** For the participants, the confidence of faculty merged with their sense of efficacy. Sam explored the challenge of working with “teachers who are feeling less secure around their identity.” Lee explained that
perhaps too much is expected of faculty. However, she later celebrated the fact that faculty have learned that they can teach in different environments because of the challenges of teaching during a pandemic.

**Competence.** Confidence and efficacy might be seen as the emotional product of Competence. Both focus groups explored similar ideas around competence. Kate (FG1) and Ben (FG2) mentioned the “specific skills” needed to teach in higher education. For Rose (FG2), competence implied a combination of “knowledge and experience” which Kate (FG1) termed a “convergence of pedagogical and content knowledge,” but Mark (FG1) warned that teaching experience does not necessarily make educators. Lee (FG2) worried that faculty are expected to be comfortable teaching in a range of environments, citing the rise in the importance of technological proficiency, and Ian (FG2) pointed out that some faculty would prefer to teach only in a very narrow area of expertise in which they are a “specialist.”

**Motivation.** In FG2, Ron, Rose, Maeve and Lee all mentioned Motivation with Rose qualifying it as something which pushes faculty to do better. For the purposes of this research, motivation might be considered as underpinning commitment, passion, and purpose.

4.3 Dimensional Mapping and Item Generation

A comparative dimensional mapping was conducted using the summary of concepts and contextual factors developed in Chapter 2 (see Figure 2.1 and Appendix 1) and the results of the NGT focus groups (see Table 4.2 and Section 4.2.2.1). Mapping the definitions of concepts and contextual factors to the explanation of NGT focus group codes resulted in fourteen emergent dimensions (see Figure 4.1). Several of the emergent dimensions bear the name assigned to an NGT focus group data code, such as Belonging which integrates closely related concepts from the literature including self-categorization, in-group homogeneity, permeability, stability, relationships with peers, and collegiality.
Others bear the name of a concept, such as Development which relates to the NGT focus group data code for Openness to change. Teacher efficacy, a new emergent
dimension, incorporates the concept of *Expertise in education* from the literature and the codes of *Confidence* and *Competence* from NGT focus group data.

### 4.3.1 Emergent Dimensions and Proposed Items

Each of the emergent dimensions (see Figure 4.1) is presented in turn below and includes a thorough discussion of the role of both the NGT results and the literature-informed summary of concepts and contextual factors in the emergence of the dimension; a working definition for the dimension; and proposed items. The Workplace PERMA Profiler (Kern, 2014) contains items which are relevant to some of the dimensions of the construct and these are also discussed (see Appendix 15 for the Workplace PERMA Profiler).

Items were adapted or developed to ensure that the emergent dimensions were fully represented in the new measure. Face, content, and construct validated items from extant measures of teaching identities were considered for inclusion (Abu-Alruz & Khasawneh, 2013; Beijaard et al., 2000; Canrinus et al., 2011, 2012; Friedman, I. A., & Kass, 2002; Hanna et al., 2020; Moore & Hofman, 1988; Noi et al., 2016; Puhr, 2019a; Simmons, 2009; Starr et al., 2006; Tan et al., 2017; Živković, 2018).

There is general consensus that keeping a measure as short as possible is advisable to avoid respondent fatigue (De Vaus, 2014; DeVellis, 2017; Hinkin, 2005). In order to ensure that a dimension is reliably measured, a minimum of three items per dimension is recommended (Hinkin, 2005). Developing more items than needed and retaining only the best items following content validation is also advised (DeVellis, 2017).

Existing items from other measures were assimilated based on their relevance to the emergent dimensions and their reflection of both the summary of concepts and contextual factors, and the NGT results. They were adjusted where necessary to reflect the higher education context and, in some cases, to integrate comments made by participants in a small-scale study conducted earlier in my doctoral research (Puhr, 2019a).

New items were developed to fill any conceptual gaps that remained. The extent to which new items were required for dimensions including beliefs, ethics,
and expertise implies that extant measures of teacher identity would not capture aspects of higher education faculty identity considered significant by the faculty developer focus group participants.

**4.3.1.1 Belonging.** The results of the NGT focus groups suggest that belonging is expressed in shared language and behaviour; rooted in a shared field or discipline; situated in shared rituals and practice; and underpinned by shared beliefs and assumptions. This resonates with PIT’s collective understandings premise (Levitan & Carr-Chellman, 2018). However, Barbour & Lammers (2015) warn that studies should not use belonging or attachment as a proxy for beliefs. Belonging, they argue, is a simple sense of membership, which Leach et al. (2008) might regard as in-group homogeneity, implying self-categorisation (Scheepers & Ellemers, 2019; Trepte & Loy, 2017).

**Definition of Belonging:** the extent to which one feels part of a faculty community.

- I feel part of a community of faculty (adapted from Starr et al., 2006).
- I feel at home among faculty (adapted from Moore & Hofman, 1988).
- I see myself as a member of higher education faculty (adapted from Noi et al., 2016).
- I have a lot in common with other members of faculty (new item).

**4.3.1.2 Attachment.** The deeply emotional nature of identities is one of the premises of PIT (see Levitan & Carr-Chellman, 2018). Attachment reflects the intensity of one’s connection and relates to solidarity, a sense of in-group unity (Leach et al., 2008); and salience, the emotional prominence of an identity in a particular context (Scheepers & Ellemers, 2019; Trepte & Loy, 2017). It might be measured as level of commitment (Barbour & Lammers, 2015). Although sometimes conflated with belonging in professional identity research (Amott, 2016; Beijaard et al., 2004; Canrinus et al., 2011; D. Holland et al., 1998; Kern, 2014; Noi et al., 2016; Wenger, 1998), in the context of HE, attachment resonates with collegiality (Cohen, 2021; Henkel, 2010; Moore & Hofman, 1988; van Lankveld et al., 2017). Attachment is also closely related to engagement as conceptualised in the PERMA model of flourishing (Butler & Kern, 2016; Seligman, 2011, 2018).
Although the NGT participants didn’t mention attachment, the strong emotional connection implied might be represented by passion, which was important for FG1; and motivation, which featured in FG2.

**Definition of Attachment:** the level of connection and commitment one feels towards one’s profession and work.

- I am committed to my work in higher education (adapted from Abu-Alruz & Khasawneh, 2013).
- I feel a strong connection with my work in higher education (new item).
- I feel deep involvement in the work that I do (adapted from Moore & Hofman, 1988).
- I am passionate about my work (adapted from Abu-Alruz & Khasawneh, 2013).

**4.3.1.3 Beliefs.** Beliefs refer to “established, rule-like propositions about ... legitimacy” (Barbour & Lammers, 2015, p. 7). Although belonging and attachment might relate to an organisation, beliefs extend beyond the organisation: “holding, acting on, sharing, and revising beliefs about the nature of work is at the core of what it is to be a professional” (p. 7). Beliefs are deeply held for professionals (Barnett, 2008; Derrick, 2013; Hoyle & John, 1995; Lunt, 2008; Noi et al., 2016) and their association with legitimacy and credibility resonates both with social identity (Barnett, 2008; Trepte & Loy, 2017) and professionalism (Barnett, 2008; Derrick, 2013; Hoyle & John, 1995; Lunt, 2008; Noi et al., 2016). The role of artefacts and rituals in professional practice draws on the importance of institutional logics, norms, customs, rules, and procedures and is important for both organisational identity and the higher education context (Bourdieu, 1988; Brown, 2017, p. 245; Delanty, 2007; D. Holland et al., 1998; Jenkins, 2014; Levin & Shaker, 2011a; Webb et al., 2002). The subconscious mediation between structure and agency implied here evokes the potency of Bourdieu’s *habitus* (Bourdieu, 1988). Despite their importance in the literature, shared beliefs, assumptions, and values are not present in any measures of teacher identity and new items have been developed here to reflect the NGT results and the literature reviewed.
Definition of Beliefs: one’s deeply held understandings regarding the values, rules and frameworks of one’s profession.

- My beliefs about my profession are rooted in activity and practice (new item).
- My beliefs about my profession are bound by rules and customs (new item).
- My professional values are consistent with my beliefs about my profession (new item).
- I believe in the legitimacy of my profession (new item).

4.3.1.4 Multiplicity and Boundaries. Multiplicity and boundaries emerged in the NGT results as a potential source of struggle for faculty. Although multiplicity is unavoidable in theories of social identity (Goffman, 1990; Levitan & Carr-Chellman, 2018), the permeability and stability of multiple identities determine their strength (Bourdieu, 1977b; Trepte & Loy, 2017). PIT also highlights the central importance of both multiplicity and malleability in identities, as well as their dependence on context (Levitan & Carr-Chellman, 2018). The multi-facetedness of higher education faculty identities is the extent to which they have more than one distinct role (Billot, 2010; Bourdieu, 1988; Brown, 2017; Caza & Creary, 2016; M. Clarke et al., 2013, 2015; Davey, 2013; McCune, 2021; Puhr, 2019c). This, coupled with increasingly porous boundaries in the context of higher education (Cohen, 2021; Gordon & Whitchurch, 2010; K. Lewis, 2014; Locke et al., 2016; Whitchurch, 2008), has resulted in multiplicity playing a potentially decisive role in faculty flourishing.

The types of educators discussed in the NGT focus groups resonates with my earlier doctoral research on conceptualizing multi-faceted identities (Puhr, 2019c) and developing scale items (Puhr, 2019a). The primacy of research in some research-intensive universities, leading to what NGT participants termed “stars” and “celebrities” is also integrated here.

Definition of Multiplicity and Boundaries: the extent to which one has more than one distinct professional role, the boundaries of these roles, and how they interact.

Proposed items for multiplicity, primacy, and boundaries are adapted from Puhr (2019a):
• My work encompasses more than one role (yes/no).
  o If yes: It is challenging to manage more than one role (reverse score).
• Which of the following best reflects your professional journey?
  1. I stopped working in my discipline when I became an educator.
     ▪ I maintain updated knowledge about current trends in my field.
     ▪ Staying connected with the industry/discipline I previously worked in supports my teaching.
     ▪ It is challenging to stay connected with the industry/discipline I previously worked in. (reverse score).
  2. I am actively engaged in my discipline (e.g. via research) while, in parallel, working as an educator.
     ▪ I see myself, first and foremost, as a researcher in my discipline.
     ▪ I see myself, first and foremost, as an educator.
     ▪ My research interests compliment my teaching.
     ▪ It is challenging to balance my research and teaching roles. (reverse score).
  3. I work in my discipline and as an educator simultaneously (e.g. in a laboratory).
     ▪ The applied learning environment facilitates learning.
     ▪ It is challenging to manage two roles simultaneously (reverse score).

4.3.1.5 Expertise in Discipline. NGT participants discussed the importance of expertise and being seen as an expert, along with what faculty are doing with knowledge and Ron mentioned, “working with, developing and expanding knowledge”. This resonates with what Wood et al. (2016) term the “hierarchy of influence through knowledge” (p. 241), and several other studies discussing disciplinary expertise (M. Clarke et al., 2013; Drennan et al., 2017; Gappa, 2010; Hao, 2016). New items have been developed to reflect this convergence between NGT results and the literature reviewed. These items acknowledge the possibly
fluid nature of expertise, a concept underpinned by PIT (Levitan & Carr-Chellman, 2018), as respondents may identify to some extent with one, more than one, or even all of the roles.

**Definition of Expertise in Discipline:** the importance and nature of one’s discipline-specific expertise.

- A good faculty member must be an expert in their field or discipline (adapted from Noi et al., 2016).
- I see myself as a creator, formulating knowledge in my discipline (new item).
- I see myself as a scrutinizer, evaluating knowledge in my discipline (new item).
- I see myself as a teacher, conveying knowledge in my discipline (new item).
- I see myself as an administrator, organising knowledge in my discipline (new item).

**4.3.1.6 Development and Openness.** The extent to which one engages in development activities to improve one’s professional practice is prevalent in both the literature reviewed (see Gappa et al., 2007; Korthagen, 2004; Steinert et al., 2019; van Lankveld et al., 2017) and the NGT results, where it encompasses curiosity; willingness to learn; and risk taking. The need for identities to fluctuate and adapt is a central premise of PIT (see Levitan & Carr-Chellman, 2018) and implies that openness to change is a key factor in strong identities. Several items have been developed or adapted from measures of teacher identity and range from exploring new approaches, to an openness to change.

**Definition of Development and Openness:** the extent to which one is willing to learn, open to change, and engages in activities to improve professional practice.

- It is important to me to continue developing my professional knowledge and skills (adapted from Abu-Alruz & Khasawneh, 2013).
- I demonstrate strong ongoing professional growth (adapted from Abu-Alruz & Khasawneh, 2013).
- I participate fully in professional training and development (adapted from Noi et al., 2016).
• I am not interested in new approaches to my professional practice (new item – reverse score)
• I am curious about different ways of doing my job (new item).
• I enjoy adapting in response to changing circumstances (adapted from Friedman, I. A., & Kass, 2002)

4.3.1.7 Relationships. In both the literature reviewed and the NGT results, relationships are categorized into the quality of relationships with colleagues and peers, which aligns with collegiality (Cohen, 2021; Henkel, 2010; Moore & Hofman, 1988; van Lankveld et al., 2017), and the vocational, service-oriented relationship with students. Relationships thus consists of two sub-dimensions: relationships with colleagues; and relationships with students. Relationships is also one of the pillars of the PERMA model where it is oriented towards relationships with colleagues in the Workplace PERMA Profiler (Kern, 2014), covering feelings of being supported, appreciated, and satisfied by workplace relationships. The items proposed for relationships with colleagues augment the contents of the PERMA profiler (see Appendix 15) and respond to the NGT participants discussion of empathy and the need to feel understood.

Definition of Relationships with Colleagues: the quality of one’s relationships with colleagues; feeling supported and understood.
• I am comfortable interacting with colleagues (adapted from Starr et al., 2006).
• I enjoy working collaboratively with colleagues (adapted from Noi et al., 2016).

Definition of Relationships with Students: one’s ability and willingness to invest in supportive, meaningful relationships with students.
• I am able to establish a trusting and caring relationship with students (adapted from Abu-Alruz & Khasawneh, 2013).
• I enjoy building a rapport with students (adapted from Noi et al., 2016).
• Engaging with students is an important part of my work (new item).
• I am comfortable interacting with students (new item).
4.3.1.8 Ethics and Responsibility. Grounded in a strong and shared professional sense of what is right and wrong, ethics and responsibility are prominent in literature regarding professionalism (Klass, 1961; Lunt, 2008). Although the NGT results suggest that ethics may be subtly different in teaching and research, faculty play a crucial role in maintaining rigor and quality in higher education for NGT participants. The measures considered did not include items covering ethics and new items have been developed.

Definition of Ethics and Responsibility: one’s professional understanding of what is right and wrong and one’s sense of responsibility for quality and ethical standards.

- I feel responsible for monitoring and maintaining quality in my work (new item).
- I recognise that there are ethical dilemmas in my work (new item).
- I feel responsible for maintaining rigorous ethical standards of professional behaviour (new item).

4.3.1.9 Autonomy. One’s capacity to make choices and act independently covers aspects of self-governance, autonomy and agency, and is a defining feature of professionalism (Carr-Saunders & Wilson, 1933; Freidson, 2001; Klass, 1961; Wright, 1951). These principals are associated with academic freedom in the higher education literature reviewed (M. Clarke et al., 2013; Drennan et al., 2017; Gappa, 2010); with power – one’s ability to exert authority, influence and control – in social identity literature (Coupland & Brown, 2012; Lawler, 2014); and with the forces of power and agency in the theoretical framework of figured worlds (D. Holland et al., 1998). The NGT results suggest a nuanced tension for faculty between a workplace without obligations and managerial decisions beyond their control.

Definition of Autonomy: one’s sense of agency, self-determination, and individual freedom of inquiry and practice.

- I am actively involved in important decision-making processes at work (adapted from Friedman, I. A., & Kass, 2002).
- I am given a large amount of freedom in the work I do (Canrinus et al., 2012).
• I have the freedom to adopt the strategies and methods I deem appropriate in my work (new item).
• My work benefits from academic freedom (new item).

4.3.1.10 Purpose. Purpose appears in research focused on individual professional identity (Barnett, 2008; Beijaard, 1995; Canrinus et al., 2011; Freidson, 2001; Kern, 2014), organisational identity (Kern, 2014), and the higher education context (McCune, 2021). Meaning is a pillar of the PERMA model (Seligman, 2011, 2018), where it refers to the sense of purpose in one’s life – a belief that one’s life has value. In addition, making a contribution to society, an idea which also features in Starr et al. (2006); and dedication to students, a dimension for Abu-Alruz & Khasawneh (2013) were considered by NGT participants as instilling faculty identities with meaning.

Definition of Purpose: the sense that one’s professional life has value, meaning, and purpose.
• I make a valuable contribution to society through my work (new item).
• My work gives me a sense of purpose (new item).
• I derive fulfilment from the belief that my work has a positive impact (adapted from Friedman, I. A., & Kass, 2002).

4.3.1.11 Status and Pride. Conflated with titles, politics, access to resources, and recognition in the NGT results, status and pride were discussed in terms of one’s qualifications and accomplishments, but also pride in the reputation of the institution one works for. Indicators of professional status in research include title, rank, and role (Barnett, 2008; Caza & Creary, 2016; Douglas, 2013; Downie, 1990; Freidson, 2001), and several studies suggest that one’s individual reputation may be related to institutional prestige (D. Holland et al., 1998; Locke et al., 2016; Moore & Hofman, 1988). Positive distinctiveness, a sense of the superiority of one’s group (Derrick, 2013; Pellegrino, 1983; Scheepers & Ellemers, 2019); and social comparison, the nurturing of status and in-group favouritism (Freidson, 2001; Klass, 1961; Scheepers & Ellemers, 2019), feed self-categorisation in SIT (Scheepers & Ellemers, 2019; Trepte & Loy, 2017). This resonates strongly with the embodied and context dependent nature of identities in PIT (Levitan & Carr-Chellman, 2018); with
the force of privilege in the theoretical framework of *figured worlds* (D. Holland et al., 1998); and with Bourdieu’s concepts of field and capital (see Webb et al., 2002).

**Definition of Status and Pride:** one’s importance, position, and respect relative to others; one’s standing and reputation.

- I am proud to work as a member of higher education faculty (adapted from Canrinus et al., 2012; Noi et al., 2016).
- The institution I work for is well respected (new item).
- I enjoy high professional status (adapted from Noi et al., 2016).
- The public image of higher education faculty is positive (adapted from Moore & Hofman, 1988)
- I enjoy the recognition I get as a member of faculty (adapted from Starr et al., 2006).

**4.3.1.12 Authenticity.** Authenticity emerged from the NGT results as closely linked with appearance and expectations. The idea of looking and sounding like faculty may be part of legitimacy, which is concerned with perceived validity of group membership criteria in SIT (Trepte & Loy, 2017) and is defined as “aesthetic labour” by Addison (2016, p. 51) in her Bourdieusian conceptualization of the higher education workplace in the twenty-first century.

**Definition of Authenticity of Appearance:** the sense that one’s self-image is visibly coherent with the aesthetic appearance of a member of faculty.

- I look like a member of faculty based on my physical appearance and dress (adapted from Simmons, 2009).

**4.3.1.13 Centrality.** Centrality is a dimension of social identity, where it feeds into multiplicity by addressing the relative importance that one identity may have among an individual’s multiple identities (Leach et al., 2008; Moore & Hofman, 1988). In the NGT results, centrality emerged as reflecting the isolation that some faculty may experience due to the limited social world they inhabit outside of higher education. This resonates with salience, the emotional prominence of an identity in a particular context (Levitan & Carr-Chellman, 2018; Scheepers & Ellemers, 2019; Trepte & Loy, 2017). The Workplace PERMA Profiler (Kern, 2014) has an item addressing loneliness at work, but this is distinct from a
lack of social life beyond work.

**Definition of Centrality:** the importance of one’s professional identity to one’s overall sense of self.

- My professional identity is central to who I am (adapted from Živković, 2018).
- My professional identity dominates my sense of self (new item)
- My sense of self is dependent on my work (new item)
- My life revolves around my work (new item).

**4.3.1.14 Teacher Efficacy.** Competence is represented in the summary of concepts and contextual factors derived from the literature reviewed in Chapter 2 (see Figure 2.1 and Appendix 1) as the strength of one’s expertise in educational practice, and is a core feature of teacher efficacy (Friedman, I. A., & Kass, 2002) and higher education faculty identities (Abu-Alruz & Khasawneh, 2013; Anderson, 2009; Beijaard et al., 2000; Bostock & Baume, 2016; Giusti & Hogg, 1973; Gunersel et al., 2013; Mansbach & Austin, 2018; Tan et al., 2017; van Lankveld et al., 2017). The NGT results concurred, with confidence and efficacy presented as the emotional products of having the specific skills, knowledge, and experience associated with teaching in higher education. The Likert scale end-point labels for these items is Always... Never.

**Definition of Teacher Efficacy:** one’s belief in one’s ability to bring about desired outcomes of student engagement and learning.

- I am able to use appropriate technologies to enhance students’ learning (Noi et al., 2016).
- I am confident in my ability to select appropriate teaching approaches to guide student’s learning (Noi et al., 2016).
- I am able to adapt my methods to support the diverse learning needs of my students (Noi et al., 2016).
- I am confident that I am a highly capable teacher (Friedman, I. A., & Kass, 2002).
4.4 Conclusion

This chapter detailed the thorough integration of literature and focus group data in the framing of dimensions and the development of items for a new measure of faculty professional identity in higher education. Next, the dimensions and items require validation to ensure that they accurately represent the construct of faculty professional identity. In addition, the number of items needs to be reduced to ensure that the measure is as short as possible (see De Vaus, 2014; DeVellis, 2017; Hinkin, 2005); that each dimension is reliably measured with a minimum of three items (see Hinkin, 2005); and that the only the best items are retained (see DeVellis, 2017). The next chapter addresses the first step in the validation process—content validation.
Chapter 5 – Content Validation

5.1 Introduction

The purpose of content validation is to ensure that the items in a new measure adequately reflect the construct they were designed to measure. Five experts rated each item in the new measure of higher education faculty professional identity for representativeness and clarity; assigned each item to a dimension; and provided suggestions for the improvement of each item and the entire measure. The data collected was analysed and used to evaluate and enhance the validity of items, dimensions, and the overall measure.

5.2 Quantitative Data Analysis

IRA scores for representativeness and clarity were calculated for individual items using the ordinal variable data collected. The IRA scores for clarity were used to calculate a score for the measure (IRA/Ave) and those for representativeness were used to calculate I-CVI, M-CVI/Ave, and M-CVI/UA scores. I-FVI scores for the relevance of items to their assigned dimension were calculated using nominal variable data and D-FVI/Ave and M-FVI/Ave scores were calculated for each dimension and the entire measure respectively.

5.2.1 IRA and CVI Scores

There is a general consensus in the literature that an IRA or I-CVI score of above 0.80 is acceptable based on Davis (1992) although Lynn (1986) recommends a perfect score of 1.00 for three to five experts and a minimum score of 0.78 for six to experts. Polit et al. (2007) recommend that Lynn’s requirement be imposed for content validations involving only three or four experts. They further suggest that the M-CVI/UA may lack reliability given that content validity studies use varying numbers of experts, and they recommend, instead, raising the acceptable M-CVI/Ave score to above 0.90. This approach favours high I-CVI scores, while allowing for modest disagreement between experts for a small proportion of items.

Of the 64 items rated for representativeness, only one item scored an I-CVI below 0.80 and 56 items scored 1.00 (see Appendix 16). The resulting M-CVI/Ave score was an excellent 0.97 and the M-CVI/UA was 0.88. IRA scores for clarity were also strong: only two items scored below 0.80 and 61 items scored 1.00. The
IRA/Ave for clarity was 0.98. These item and measure scores for representativeness and clarity suggest that, apart from three items requiring removal or revision, the measure is both representative of the construct and clear.

5.2.2 FVI Scores

For dimensional relevance, McGartland Rubio et al. (2003) recommend a score of 0.80 as an acceptable score for both I-FVI and D-FVI/Ave. Of the 55 items assigned to dimensions by experts, 36 scored an I-FVI above 0.80, 14 scored between 0.40 and 0.60, and the remaining five scored between 0.00 and 0.20 (see Appendix 16). Of the fifteen dimensions, D-FVI/Ave scores of at least 0.80 were achieved by eight; five scored between 0.60 and 0.80; and two scored below 0.60 (see Table 5.1).

Table 5.1
Relevance Scores (D-FVI/Ave) for Dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Relevance Scores (D-FVI/Ave)</th>
<th>Average for all items</th>
<th>Average for three best items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belonging</td>
<td>0.40</td>
<td>0.53</td>
<td></td>
</tr>
<tr>
<td>Attachment</td>
<td>0.55</td>
<td>0.60</td>
<td></td>
</tr>
<tr>
<td>Beliefs</td>
<td>0.68</td>
<td>0.73</td>
<td></td>
</tr>
<tr>
<td>Multiplicity and boundaries</td>
<td>0.80</td>
<td>0.80</td>
<td></td>
</tr>
<tr>
<td>Expertise in discipline</td>
<td>0.60</td>
<td>0.87</td>
<td></td>
</tr>
<tr>
<td>Development and openness</td>
<td>0.87</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Relationships with colleagues</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Relationships with students</td>
<td>0.95</td>
<td>0.93</td>
<td></td>
</tr>
<tr>
<td>Ethics and responsibility</td>
<td>0.93</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Autonomy</td>
<td>0.80</td>
<td>0.67</td>
<td></td>
</tr>
<tr>
<td>Purpose</td>
<td>0.67</td>
<td>0.93</td>
<td></td>
</tr>
<tr>
<td>Status and pride</td>
<td>0.80</td>
<td>0.80</td>
<td></td>
</tr>
<tr>
<td>Authenticity of appearance</td>
<td>0.80</td>
<td>0.80</td>
<td></td>
</tr>
<tr>
<td>Centrality</td>
<td>0.60</td>
<td>0.67</td>
<td></td>
</tr>
<tr>
<td>Teacher efficacy</td>
<td>0.65</td>
<td>0.80</td>
<td></td>
</tr>
</tbody>
</table>

Retaining only the best three items for each dimension results in an improvement in D-FVI/Ave for several dimensions but the following five dimensions require revisions to improve I-FVI and D-FVI/Ave scores: Belonging; Attachment; Beliefs; Autonomy; and Centrality.
Potential dimensional overlap between Attachment and Purpose was evidenced in the assigning of Q7 and Q8 to Purpose rather than Attachment by two and three experts respectively. However, no items from the Purpose dimension were assigned to Attachment. Q3 was assigned to Attachment by three experts, and Q6 was assigned to Belonging by two, revealing a further dimensional overlap between Belonging and Attachment. Although Barbour & Lammers (2015) argue that belonging and attachment are distinct, the overlap between these two dimensions suggests that they should be merged and the most representative items (Q1, Q5, and Q6) retained in a new Belonging and attachment dimension. Solidarity and salience remained in the new dimension, while passion, represented by Q8, was absorbed by the purpose dimension.

It is worth noting that Purpose aligns with the dimensional definition of Meaning in the Workplace PERMA Profiler (Kern, 2014). Although full construct validation is beyond the scope of this thesis, the relationship between items developed for the Purpose dimension and items already validated for relevance to the Meaning dimension in PERMA is tentatively tested using internal reliability scores with instrument testing data in the next chapter.

The Beliefs dimension, with a D-FVI/Ave of 0.73, might be adjusted by revising the wording of Q11. The word ‘values’ at the beginning of the item caused one expert to assign it to Ethics and responsibility and another to Purpose. The wording of the item was revised as follows: ‘My beliefs about my profession are consistent with my values’.

Two items in the Centrality dimension were misassigned to Authenticity of appearance: Q49 by one expert and Q50 by two. This is somewhat surprising given the dimensional definitions for Centrality and Authenticity of appearance. The wording of Q50 was revised to replace ‘work’ with ‘professional identity’. A slight potential overlap between Centrality and Purpose was also suggested by Q49 and Q51 being assigned by one expert each to Purpose.

In dimensions with high D-FVI/Ave scores some individual items misassigned by content validators achieved strong interrater agreement, requiring that they be
either revised or removed. Q41 was assigned by two experts to *Teacher efficacy*. The item was revised to remove the words ‘positive impact’. Q18 was assigned to *Teacher efficacy* by two experts and to *Centrality* by the other three. It is interesting to note that Q16 and Q17 achieved high IFVI scores but Q18 and Q19, also developed to reflect applications of disciplinary expertise confused the experts as they overlapped with other dimensions. These two items were removed. Q55, assigned to *Status* by two experts and *Expertise in discipline* by another two, was removed.

Other items removed due to a low IFVI divided the experts. These include Q35 and Q42, allocated to several different dimensions by the experts, each of which achieved high I-CVI and IRA scores.

### 5.3 Qualitative Data Analysis

Qualitative data can provide valuable guidance, informing revisions to enhance the validity of items and dimensions, and the overall quality of a new measure in content validation (Lynn, 1986; McGartland Rubio et al., 2003). Comments provided by the panel of experts in this study included suggestions for revisions to individual items, hesitations regarding dimensional relevance of items, and remarks regarding the overall value of the measure. The qualitative data was labelled according to whether comments referred to an item (Q1, Q2... Q64) or the entire measure (M), and linked to the associated content validator (CV1, CV2... CV5). The first manual open coding stage in the inductive thematic analysis revealed the following emergent themes:

- **Wording**: suggests revision(s) to the wording of an item.
- **Scope**: suggests revision to narrow the scope of an item.
- **Dimensional relevance**: hesitation in assigning an item to a dimension.
- **Weak item**: item requires substantial revision or removal.
- **Layout**: presentation of item for content validation caused confusion.
- **Compliment**: praise for the measure.

In the second axial coding stage, labelled data was deconstructed, colour coded by theme, and reassembled in a selective coding stage to facilitate the final interpretation (see Appendix 14). Figure 5.1 illustrates the thematic tendencies of
content validators in their comments. CV1 and CV2 were concerned by their hesitations when assigning items to dimensions. Their comments confirm some dimensional overlaps already identified in the interpretation of the quantitative data. Commenting on Q4, CV1 stated: “belonging and attachment are not easy to disentangle.”

Figure 5.1

*Number of Coded Comments per Expert*

Three experts (CV1, CV2, and CV4) suggested minor revisions to the wording of items and many of these suggestions were integrated: the word ‘activity’ was removed from Q9; the word ‘scrutinizer’ in Q17 was replaced by ‘expert’; ‘am’ was replaced by ‘feel’ in Q26 and Q53 to bring a more emotive quality to the items; and ‘dominates’ was replaced by ‘is integral to’ in item 49, to soften the item. Although the change of wording suggested by CV1 for Q23 was not adopted, the scale for this item might be adjusted to an always – never Likert scale to reflect the suggestion. CV4 commented on the possibility of faculty having more than one occupation in relation to Q51. This item was ultimately removed, but the comment was used to make an adjustment to several items (Q26, Q27, Q28) by adding the phrase ‘in higher education’.

Comments questioning the overall contribution or quality of an item, without suggesting specific revisions, were assigned the code of weak item. Some
of these were removed as they also had I-FVI < 0.80 (Q17 and Q49). Others were revised (Q9, Q10, and Q17 – see above). Authenticity of appearance is the only dimension represented by only one item – Q47. This item made CV1 “feel uncomfortable” and CV4 questioned whether “self-presentation” is important for faculty. The item was retained for the final phase of this research, in which its utility will be evaluated.

The scope of some items was considered too broad by CV1, CV4, and CV5. Several of these items also had I-FVI < 0.80 and were removed (Q2, Q4, Q25, and Q51). CV4 suggested, in a comment on Q15, that some faculty may be required to teach outside of their area of expertise. This comment suggests that the item may reveal a tension that contributes to the robustness of identity for some faculty.

The layout of the content validity study caused confusion regarding the filter item (Q14) for some experts, resulting in low IRA and I-FVI scores of 0.50 and 0.60 respectively. CV4 and CV5 both commented on this and CV5 acknowledged that some initial confusion was resolved by the end of the survey.

A standard seven-point Likert scale with labelling of all options (1=Strongly agree, 2= Agree, 3= Somewhat agree, 4= Neither agree nor disagree, 5= Somewhat disagree, 6= Disagree, 7= Strongly disagree) was proposed to the panel of experts. CV2 suggested inverting the intended order of the Likert scale responses to 5 = strongly agree and 1 = strongly disagree. The order of Likert scale options has been the subject of much debate (see Foddy, 1993; Hartley & Betts, 2010; Hinkin, 2005; J. R. Lewis & Erdinç, 2017; McKelvie, 1978) and it is important to acknowledge that the order of scale points may be misread and scale points interpreted inconsistently, but it is impossible to eliminate these risks (see Section 3.3.1.3). The number and order of scale points, as well as the decision to include end-point labels, was taken to align the measure with the fully validated Workplace PERMA profiler (Kern, 2014) in the interest of a coherent respondent experience.

CV2 and CV4 praised the usefulness and relevance of the measure and CV4 commented that some of the items might indicate and require “elevated self-awareness” and suggested a meeting to support faculty with responding to some of the items. These comments are valuable in anticipating the evaluation of utility with faculty developers in the final phase of this research.
5.4 Revising the Measure

Table 5.2 provides an overview of items which have been either revised or removed as a result of the content validity study. In the case of Q20, Q30, and Q45, the items have been removed despite strong scores (I-CVI = 1; IRA = 1; I-FVI = 0.80) in favour of items with a perfect I-FVI in the interests of brevity of the measure (De Vaus, 2014; DeVellis, 2017; Hinkin, 2005). Of the 55 items and nine follow-up items submitted for content validation, 17 items (27%) have been removed and 11 items (17%) have been revised. The revised measure is presented in Table 5.3 and includes revisions to items as detailed above as well as the new Belonging and attachment dimension.
Table 5.2

*Items Removed or Revised as a Result of Content Validation*

<table>
<thead>
<tr>
<th>Item</th>
<th>Revision</th>
<th>Removed</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2</td>
<td>–</td>
<td>✓</td>
<td>I-FVI and comment</td>
</tr>
<tr>
<td>Q3</td>
<td>–</td>
<td>✓</td>
<td>I-FVI and comments</td>
</tr>
<tr>
<td>Q4</td>
<td>–</td>
<td>✓</td>
<td>I-FVI and comments</td>
</tr>
<tr>
<td>Q7</td>
<td>–</td>
<td>✓</td>
<td>I-FVI</td>
</tr>
<tr>
<td>Q8</td>
<td>Changed dimension</td>
<td>–</td>
<td>I-FVI</td>
</tr>
<tr>
<td>Q9</td>
<td>Wording revised</td>
<td>–</td>
<td>Comments</td>
</tr>
<tr>
<td>Q10</td>
<td>Wording revised</td>
<td>–</td>
<td>IRA and comments</td>
</tr>
<tr>
<td>Q11</td>
<td>Wording revised</td>
<td>–</td>
<td>I-FVI</td>
</tr>
<tr>
<td>Q12</td>
<td>–</td>
<td>✓</td>
<td>I-FVI and comments</td>
</tr>
<tr>
<td>Q17</td>
<td>Wording revised</td>
<td>–</td>
<td>Comment</td>
</tr>
<tr>
<td>Q18</td>
<td>–</td>
<td>✓</td>
<td>I-FVI and comment</td>
</tr>
<tr>
<td>Q19</td>
<td>–</td>
<td>✓</td>
<td>I-FVI</td>
</tr>
<tr>
<td>Q20</td>
<td>–</td>
<td>✓</td>
<td>Too many items</td>
</tr>
<tr>
<td>Q23</td>
<td>–</td>
<td>✓</td>
<td>Too many items</td>
</tr>
<tr>
<td>Q25</td>
<td>–</td>
<td>✓</td>
<td>I-FVI and comment</td>
</tr>
<tr>
<td>Q26</td>
<td>Wording revised</td>
<td>–</td>
<td>Comment</td>
</tr>
<tr>
<td>Q27</td>
<td>Wording revised</td>
<td>–</td>
<td>Comment</td>
</tr>
<tr>
<td>Q28</td>
<td>Wording revised</td>
<td>–</td>
<td>Comment</td>
</tr>
<tr>
<td>Q30</td>
<td>–</td>
<td>✓</td>
<td>Too many items</td>
</tr>
<tr>
<td>Q35</td>
<td>–</td>
<td>✓</td>
<td>I-FVI and comment</td>
</tr>
<tr>
<td>Q41</td>
<td>–</td>
<td>✓</td>
<td>I-FVI and comment</td>
</tr>
<tr>
<td>Q42</td>
<td>–</td>
<td>✓</td>
<td>I-FVI and comment</td>
</tr>
<tr>
<td>Q45</td>
<td>–</td>
<td>✓</td>
<td>Too many items</td>
</tr>
<tr>
<td>Q49</td>
<td>Wording revised</td>
<td>–</td>
<td>I-FVI and comments</td>
</tr>
<tr>
<td>Q50</td>
<td>Wording revised</td>
<td>–</td>
<td>I-FVI</td>
</tr>
<tr>
<td>Q51</td>
<td>–</td>
<td>✓</td>
<td>I-CVI and I-FVI</td>
</tr>
<tr>
<td>Q53</td>
<td>Wording revised</td>
<td>–</td>
<td>Comment</td>
</tr>
<tr>
<td>Q55</td>
<td>–</td>
<td>✓</td>
<td>I-FVI</td>
</tr>
<tr>
<td>Dimensions and Indicators/Items</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Belonging and attachment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. I feel part of a community of faculty.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I am committed to my work in higher education.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I feel a strong connection with my work in higher education.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Beliefs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. My beliefs about my profession are rooted in practice.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. My beliefs about my profession are informed by rules and customs.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. My beliefs about my profession are consistent with my professional values.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Multiplicity and boundaries</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. My work encompasses more than one role.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o If yes: It is challenging to manage more than one role. (reverse score)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Which of the following best reflects your professional journey?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8a. I stopped working in my discipline when I became an educator.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o I maintain updated knowledge about current trends in my field.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Staying connected with the industry/discipline I previously worked in supports my teaching.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o It is challenging to stay connected with the industry/discipline I previously worked in. (reverse score)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8b. I am actively engaged in my discipline (e.g. via research) while, in parallel, working as an educator.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o I see myself, first and foremost, as a researcher in my discipline.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o I see myself, first and foremost, as an educator.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o My research interests compliment my teaching.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o It is challenging to balance my research and teaching roles. (reverse score)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8c. I work in my discipline and as an educator simultaneously (e.g. in a laboratory).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o The applied learning environment facilitates learning.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o It is challenging to manage two roles simultaneously. (reverse score)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Expertise in discipline</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. A good faculty member must be an expert in their field or discipline.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. I see myself as a creator, formulating knowledge in my discipline.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. I see myself as an expert, evaluating knowledge in my discipline.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Development and openness</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. I demonstrate strong ongoing professional growth.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. I participate fully in professional training and development.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. I am curious about different ways of doing my job.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Relationships with colleagues</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. I feel comfortable interacting with colleagues.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. I enjoy working collaboratively with colleagues.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Relationships with students
17. I am able to establish a trusting and caring relationship with students.
18. I enjoy building a rapport with students.
19. I am comfortable interacting with students.

Ethics and responsibility
20. I feel responsible for monitoring and maintaining quality in my work.
21. I recognise that there are ethical dilemmas in my work.
22. I feel responsible for maintaining rigorous ethical standards of professional behaviour.

Autonomy
23. I am given a large amount of freedom in the work I do.
24. I have the freedom to adopt the strategies and methods I deem appropriate in my work.
25. My work benefits from academic freedom.

Purpose
26. I make a valuable contribution to society through my work in higher education.
27. My work in higher education gives me a sense of purpose.
28. I am passionate about my work in higher education.

Status and pride
29. The institution I work for is well respected.
30. I enjoy high professional status.
31. I enjoy the recognition I get as a member of faculty.

Authenticity of appearance
32. I look like a member of faculty based on my physical appearance and dress.

Centrality
33. My professional identity is central to who I am.
34. My professional identity is integral to my sense of self.
35. My sense of self is dependent on my professional identity.

Teacher efficacy
36. I am able to use appropriate technologies to enhance students’ learning.
37. I feel confident in my ability to select appropriate teaching approaches to guide student’s learning.
38. I am able to adapt my methods to support the diverse learning needs of my students.

5.5 Conclusion
The content validation process has confirmed that developing more items than required for the final measure, as recommended by DeVellis (2017), allows the removal of weaker items without impacting the comprehensiveness or robustness of the measure. It also revealed that, although most of the items developed in Chapter 4 were representative of faculty professional identity, clear, and relevant
to their dimension, revisions were needed before proceeding to the instrument testing phase of validation with the measure.

In the interests of focusing on the research questions, instrument testing and utility evaluation are prioritised over full construct validation in this study, and these are covered in the next chapter. The revised version of the measure (see Table 5.3) was used to collect instrument testing data from faculty in Swiss HEIs. This data informed the final phase of qualitative data collection, in which the utility of the new measure is evaluated. The scaling and layout of the revised measure in Qualtrics for instrument testing is discussed in detail in the Instrument Design section of Chapter 3 (See Section 3.3.1.3).
Chapter 6 – Utility of the Measure

6.1 Introduction

The previous two chapters addressed RQ2 by developing and content validating a new measure of the professional identity of higher education faculty. The potential of the new measure to provide insights into faculty identities and the extent to which they are flourishing is also the focus of RQ2. In addition, a central aim of this thesis, and the focus of RQ3, involves evaluating the potential utility of the new measure for the purpose of both individual and collective faculty development. This chapter demonstrates the internal reliability of the new measure; explores the relationship between professional identity and flourishing; and analyses the potential utility of the measure for faculty development purposes.

Instrument testing data, collected from faculty in Swiss HEIs, provides a dataset with which to measure internal consistency and examine the relationship between professional identity and flourishing. This is the first step in evaluating the utility of the instrument. The same instrument testing data, presented in follow-up focus groups to the NGT focus group participants, is used to prompt discussions exploring the potential utility of the instrument for different levels of faculty development activity and influence.

6.2 Instrument Testing Results and Analysis

The content validation process (see Chapter 5) confirmed the representativeness and validity of the dimensions of the construct of faculty professional identity in higher education. Content validation also established the relevance of the retained items to the construct dimensions, suggesting internal consistency. Statistical tests on instrument testing data collected allow a further evaluation of the reliability of the new measure as well as enabling an exploration of some of the predicted relationship between professional identity dimensions and PERMA domains of flourishing. This relationship is central in determining the potential utility of the instrument as a tool to inform faculty development initiatives that foster flourishing.
6.2.1 Internal Reliability

Before exploring the relationship between professional identity and flourishing, the internal reliability of the measure of faculty professional identity was evaluated using Cronbach’s alpha, a widely accepted reliability coefficient for measuring internal consistency (Hinkin, 2005; Muzaffar, 2016; Salkind, 2012). Alpha scores were calculated for each of the dimensions using the instrument testing data, to demonstrate internal consistency for the dimensions of the new measure. Alpha reliability values for the 14 dimensions are presented in Table 6.1.

**Table 6.1**

**Alpha Reliability Scores for 14 Dimensions of Higher Education Faculty Professional Identity**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Cronbach’s alpha</th>
<th>Number of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belonging and attachment</td>
<td>.88</td>
<td>3</td>
</tr>
<tr>
<td>Beliefs</td>
<td>.74</td>
<td>3</td>
</tr>
<tr>
<td>Multiplicity and boundaries</td>
<td>N/A</td>
<td>*</td>
</tr>
<tr>
<td>Expertise in discipline</td>
<td>.54</td>
<td>3</td>
</tr>
<tr>
<td>Development and openness</td>
<td>.45</td>
<td>3</td>
</tr>
<tr>
<td>Relationships with colleagues</td>
<td>.64</td>
<td>2</td>
</tr>
<tr>
<td>Relationships with students</td>
<td>.85</td>
<td>3</td>
</tr>
<tr>
<td>Ethics and responsibility</td>
<td>-.11</td>
<td>3</td>
</tr>
<tr>
<td>Autonomy</td>
<td>.86</td>
<td>3</td>
</tr>
<tr>
<td>Purpose</td>
<td>.87</td>
<td>3</td>
</tr>
<tr>
<td>Status and pride</td>
<td>.85</td>
<td>3</td>
</tr>
<tr>
<td>Authenticity of appearance</td>
<td>N/A</td>
<td>1</td>
</tr>
<tr>
<td>Centrality</td>
<td>.78</td>
<td>3</td>
</tr>
<tr>
<td>Teacher efficacy</td>
<td>.85</td>
<td>3</td>
</tr>
</tbody>
</table>

*Note. Authenticity of appearance has only one item, hence no Cronbach’s alpha value.*

* Multiplicity and boundaries has three divergent item subsets depending on the type of multi-faceted identity chosen. The sample size prevented the calculation of alpha values for each subset.
There is considerable debate among researchers regarding an acceptable internal reliability score. George & Mallery (2003) recommend values of $\alpha > .7$ as acceptable. However, Pallant (2020) and Hinton et al. (2014) explain that acceptable values will vary based on the number of items being measured and the number of respondents. They recommend values of $\alpha > .5$ as showing moderate reliability. The table shows that eight dimensions have high reliability of $\alpha > .7$. Two dimensions – *Expertise in Discipline* and *Relationships with colleagues* – have moderate reliability of $\alpha > .5$. However, it is worth noting that *Relationships with colleagues* has only two items relating to collegiality due to the expected strong correlation with the *Relationships* domain of PERMA. The low reliability of *Development and openness* ($\alpha = .45$) suggests that there may a lack of consistency between engagement in development activities and curiosity about different ways of working. Similarly, *Ethics and responsibility*, with a negative alpha value ($\alpha = -.11$) may indicate that a recognition of the existence of ethical dilemmas is not consistent with a sense of responsibility.

It is usual to check the reliability of a fully validated scale as reliability can vary with the sample (Pallant, 2020). Alpha scores for the five PERMA domains are excellent ($\alpha > .9$) for two domains and high ($\alpha > .7$) for the remaining three (see Table 6.2). *Negative emotion* and *Health*, also measured by the Workplace PERMA profiler had high reliability of $\alpha = .72$ and $\alpha = .84$ respectively.

**Table 6.2**

*Alpha Reliability Scores for the Five Domains of PERMA*

<table>
<thead>
<tr>
<th>Domain</th>
<th>Cronbach’s alpha</th>
<th>Number of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive emotions</td>
<td>.94</td>
<td>3</td>
</tr>
<tr>
<td>Engagement</td>
<td>.85</td>
<td>3</td>
</tr>
<tr>
<td>Relationships</td>
<td>.85</td>
<td>3</td>
</tr>
<tr>
<td>Meaning</td>
<td>.92</td>
<td>3</td>
</tr>
<tr>
<td>Accomplishment</td>
<td>.77</td>
<td>3</td>
</tr>
</tbody>
</table>

The relationship between higher education faculty professional identity and flourishing was tested in two ways. Firstly, alpha reliability was calculated for combined items in both measures based on similarities in definitions for the
dimensions and domains selected (see Table 6.3). The alpha values confirm the strong relationships expected between Relationships with colleagues and PERMA Relationships and between Purpose and PERMA Meaning. In addition, PERMA Accomplishment is represented by a combination of Teacher efficacy and Expertise in discipline in higher education faculty professional identity, while PERMA Positive emotions is represented by a combination of Status and pride and Belonging and attachment. These strong internal consistency scores, although not comprehensive, suggest that higher education faculty with strong professional identities will tend to flourish.

Table 6.3

Alpha Reliability Scores for Combined Professional Identity Dimensions and PERMA Domains

<table>
<thead>
<tr>
<th>Faculty Professional Identity Dimension(s)</th>
<th>PERMA Domain</th>
<th>Cronbach’s alpha</th>
<th>Number of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationships with colleagues</td>
<td>Relationships</td>
<td>.87</td>
<td>5</td>
</tr>
<tr>
<td>Purpose</td>
<td>Meaning</td>
<td>.95</td>
<td>6</td>
</tr>
<tr>
<td>Teacher efficacy &amp; Expertise in discipline</td>
<td>Accomplishment</td>
<td>.87</td>
<td>9</td>
</tr>
<tr>
<td>Status and pride &amp; Belonging and attachment</td>
<td>Positive emotions</td>
<td>.93</td>
<td>9</td>
</tr>
</tbody>
</table>

6.2.2 Correlations

The relationship between professional identity and flourishing was further explored using correlational tests. New variables were computed for overall professional identity and PERMA flourishing by taking the average of all items in each measure. A Pearson correlation coefficient was computed to assess the linear relationship between the two new variables. The test demonstrated a statistically significant positive relationship between overall professional identity and PERMA flourishing, \( r(32) = .88, p < .001 \). A scattergram of the relationship showed no evidence of the undue influence of outliers.

Despite the strength of the relationship between professional identity and flourishing, there are several dimensions of professional identity that are not
represented in the PERMA flourishing domains. These include Beliefs, Autonomy, Centrality and Multiplicity. In addition, the PERMA domain of Engagement is not represented in higher education faculty professional identity, having appeared neither in the literature reviewed nor in focus groups with faculty developers. Engagement is central to flourishing as it refers to absorption in what one is doing and can lead to a highly engaged state denoted Flow, in which one is completely absorbed in one’s activity (Seligman, 2011). Thus, the synergies between the two measures, although strong, do not imply that they can be treated as proxies. Using one measure without the other would fail to capture important insights into professional identity and flourishing.

Although not part of the PERMA model, Kern (2014) includes Health in the Workplace PERMA Profiler as an important component of overall wellbeing. A new Health variable was computed using the three items integrated into the PERMA questionnaire by Kern to measure health. A Pearson correlation coefficient was computed to assess the linear relationship between faculty professional identity and health and a statistically significant positive relationship between the variables, \( r(32) = .52, p = .002 \) was demonstrated. Although this suggests that a high score for health is a predictor of strong professional identity, a causal relationship cannot be claimed.

6.3 Follow-up Focus Group Results and Analysis

The unstructured follow-up focus group discussions were shorter than the structured NGT focus groups used in the first phase of this research: FFG1 lasted 59 minutes and FFG2 was a little shorter, at 56 minutes. For the NGT focus groups, balanced participation was a concern, and the level of contribution of participants was captured both in time (minutes speaking) and ideas generated. For the follow-up focus groups, I was more interested in the quality and range of ideas shared rather than ensuring evenly balanced conversations. I was also aware that the unstructured design of the discussions would make achieving an even balance challenging, and although the disposition of participants across the two focus groups was different for logistical reasons, the highly collaborative quality of the
NGT focus groups gave me confidence that individual participants were unlikely to overpower the group.

Graphic representations of the instrument testing data were used as prompts in the follow-up focus group discussions. I was aware that ways in which quantitative data are graphically represented have implications for how the data will be read and interpreted, which in turn might impact the potential utility of the data. As explained in Chapter 3, Kern (2014) recommends bar graphs to display PERMA scores (See Section 3.3.3.3). With five PERMA domains and additional scores for Negative emotions and Health, this results in seven bars. For the new measure of higher education faculty professional identity, with 14 dimensions, I created bar graphs in the interests of aligning with the Kern’s recommendations (see Figure 3.7). However, I also created radar charts (see Figure 3.8), as a potentially more accessible alternative to the bar graph (Cisneros, 2021). For the follow-up focus groups, I selected four instrument testing responses with significantly different professional identity profiles and shared both versions of the data (bar and radar charts) with focus group participants (see Appendix 10). I also included aggregate data for the instrument testing dataset in the graphs in the hope that this would stimulate discussion about the potential utility of aggregate data for both individual benchmarking and collective development purposes.

In terms of the number of discreet ideas shared, FFG1, with 62 ideas was more productive than FFG2, with 47. In FFG1, Lee and Maeve shared 18 ideas each and Ron and Ian shared 14 and 12 respectively. Kate contributed 18 ideas in FFG2, with Ben and Sam sharing ten and nine respectively, and Rose and Mark sharing five ideas each. It is interesting to note that although Mark was also the quietest participant in the NGT focus groups, Rose was one of the most active. For logistical reasons, Rose had to keep her camera turned off in the follow-up focus group, which may explain her lower rate of participation. However, the ideas she shared were particularly rich and thoughtful, as detailed below.

6.3.1 Generating Initial Codes

The inductively generated codes were drafted and refined during three iterative readings of the entire dataset. The most dominant codes and code families
across the dataset focused on how the data might be analysed and compared (Analysis), the various abstract and practical ways in which the measure might be useful (Utility) and how faculty developers might be able to leverage the measure in their work (Role of faculty development). Although all codes were used for both focus group transcripts, there was a lengthy discussion in FFG1 about how to best represent the data graphically (Graphic representation), how these graphs might be interpreted (Interpretation), and the importance of providing clear definitions for each of the dimensions (Dimensional definitions). This was accompanied by a concern, particularly on the part of Lee and Maeve, about the risk of causing distress to individual faculty members (Causing distress). Participants in FFG2 were particularly interested in the various stakeholders who might find the data useful, and this led to concerns about data management and ensuring that faculty have agency in their own development planning (Ethics & Data management). Code families provide additional insights into specific nuances in the data in the form of sub-codes, as Figure 6.1 illustrates. The complete codebook is available in Appendix 17.

Figure 6.1
Example of Follow-up Focus Group Code Family in MAXQDA

6.3.2 Establishing and Mapping Themes

Although the focus group question guide and the overarching research questions can play a role in searching for, reviewing, and defining themes, Braun & Clarke (2012) recommend carefully reviewing codes and coded data to identify topics around which codes cluster or form patterns. Three central themes emerged during the iterative thematic analysis: Utility, Concerns, and Practical Ideas.

The theme of Utility permeates the research questions, follow-up focus group question guide and coding. On examining the data more closely, I noticed that utility related to a range of stakeholders: individual faculty; groups of faculty; and institutional management. I mapped the various ways in which the data might
be useful to these stakeholders by combing through the coded data coded for *Utility, Analysis and Role of Faculty Development*.

As I worked through the codes and coded data, a range of *Concerns* emerged as a second distinct theme. These ranged from issues of data misinterpretation and the ethics of giving access to data in various formats to stakeholders, to concerns over the ability of faculty developers to provide support relating to some dimensions. Limitations of the measure also emerged as a concern.

Finally, and not surprisingly given that the participants are all faculty developers with a tendency towards providing faculty with practical hands-on approaches to teaching, learning, and assessment, *Practical Ideas* emerged as a third important theme and these ideas converged around two main areas: faculty development programming; and operationalisation of the measure.

Figure 6.2 provides an overview of the three themes, illustrating their subthemes and the several areas of interest associated with each. Although the three themes are distinct, they work together and respond to one another. Aspects of the central theme of *Utility* generated some of the potential risks in the *Concerns* theme. Meanwhile the *Practical Ideas* theme included both manifestations of how faculty development programming might make use of the measure on the one hand and solutions for some of the potential concerns and limitations when operationalised on the other. This is reflected in the arrangement of thematic components on the thematic map.
6.3.3 Thematic Analysis

Rather than systematically addressing each of the themes, subthemes, and thematic components of the thematic map, the thematic analysis weaves the three themes together to provide a coherent narrative that draws out the connections between themes as well as integrating pertinent literature.

Participants’ comments, questions, and conversations were insightful, thoughtful, and generous. They were also, by turns, provocative and humorous, betraying a genuine engagement with the topic. To capture these nuanced and valuable contributions, the data are presented below woven into an illustrated analytical narrative in which I have endeavoured to maximize my use of the participants’ voices.

The focus group discussions suggested that the measure of higher education faculty professional identity might be of interest at three organisational levels: the institutional level; the group level; and the individual level. These three levels of inquiry provide the scaffolding for the presentation of the thematic analysis.
6.3.3.1 Institutional Utility. Delanty’s assertion that “the institutional logic of higher education makes it a fertile ground for the production of identities” (2007, p. 132) is reflected in the consensus among focus group participants that the data provided by the measure of faculty professional identity would be of significant interest at institutional level. Participants invoked the insights into organisational culture and well-being that aggregate data might provide. Maeve suggested that the data might offer a nuanced awareness of “what’s valued in my institution?” The “shared dispositions and cognitive structures” of Bourdieu’s *habitus* (Bourdieu, 1988, p. 279) were evoked by Rose when she pointed to the potential benefits of the shared “framework and language” provided by the measure, and Kate surmised that, in addition to educational developers, departments including human resources and communications might be interested in aggregate institutional findings. The prestige of research in higher education is well-documented (see Bourdieu, 1988; Clarke et al., 2013; Macfarlane, 2016; McCune, 2021) and both Kate and Sam saw the measure as having potential to raise the status and profile of teaching in research-intensive institutions: “What are the stories we want to be telling about teaching?” (Sam).

Kate further suggested that the data might reveal compelling similarities and differences between institutions in the Swiss HEI system, where some institutions have strongly intertwined relationships and Sam enthused, “that would be really interesting... in terms of exchanges between faculty developers... ‘So, what are you guys doing in your relationships with students?’ for instance.” This interplay between institutional and larger systemic contexts was an area of interest in Section 1.3.2 and resonates with the SoTL meta and mega levels as conceptualised by Poole & Simmons (2013).

Participants pondered some of the important questions of organisational identity that might be prompted by the data: “Institutionally, is that were we want to be?” (Ian), and “If... these are the things that are vital for flourishing for faculty, ‘How are we doing?’... is a really valuable question” (Kate).

In addition to providing insights and provoking questions, participants discussed the potential impact of the data and the questions raised on strategic decision making. Ian spoke about working “toward a common goal... we, as a
community [are] here, but we want to be there in... whatever number of years.” He
added the measure would help leaders “see the progression.” Kate proposed that
the measure gives institutional leaders “tools to think about how to invest in staff
development... satisfaction and well-being” by precipitating questions like “which
of these [dimensions] are the ones I need to worry about... where do I need to pay
closer attention... are some more strongly correlated than others?” and Ben
reasoned that it would be possible to “rank the various [dimensions based] on how
important they are” for the institution.

Sam argued that institutional data might also help “teaching support units,
in terms of what should your programming look like, when should your
programming fall, who’s coming or potentially not coming?” and Mike suggested
that aggregate data gathered before and after an institution-wide faculty
development intervention might capture the impact of the intervention, an idea
eagerly supported by Ben and Kate. This need for a nuanced and data-driven
approach to faculty development programming resonates with scholarly literature
(see Billot & King, 2017; Gunersel et al., 2013; Locke et al., 2016; Sotto-Santiago et
al., 2019; Way, 2016) although Kate worried that the data might draw attention to
some stakeholder inconsistencies in institutional goal setting: “I’m... just painfully
aware that the things we see on this chart might not be shared goals by the leaders
at our institutions.” Kate did not specify which dimensions she had in mind and a
disadvantage of using focus groups is that the researcher must choose between
interrupting the conversation between participants to further probe a point on the
one hand, and giving priority to the natural flow of conversation on the other. I
generally chose, having provided prompts based on the question guide (see
Appendix 11), to remain as unobtrusive as possible.

In the multiverse of contemporary HEI (Henseke et al., 2021), where third-
space professionals negotiate traditional hierarchies and boundaries (Whitchurch,
2018), participants’ remarks about institutional power dynamics called to mind
both Bourdieu’s symbolic capital (Webb et al., 2002) and the figured worlds of
Holland et al. (1998). Ron cautioned that insights can only be actionable if those
with access to aggregate data have the power to “do something about it.”
However, Lee expressed some misgivings, pointing out that those in positions of power may not “take the time to understand what it all means.” Her caricature of institutional management resonates with several studies decrying the rise of managerialism in higher education (see Bostock & Baume, 2016; Sachs, 2001): “We’ve got a measure, we’ve got numbers, we’ve got visuals... now we do it, and for next year, everybody has a [score of ] 7.2... it’s almost too easy for them” (Lee) and Maeve agreed that “this could be very problematic for many reasons.” In a similar vein, Mark, although enthusiastic about the value of aggregated data for institutional leadership, had privacy and data protection concerns regarding the sharing of individual data, echoing Lawler’s contention that all identities are political (Lawler, 2014).

6.3.3.2 Group Utility. Focus group participants considered several factors in anticipating how the measure might be useful in the context of faculty groupings. This potent tendency, to categorize faculty into groups is a feature of in-group identification in SIT (Scheepers & Ellemers, 2019; Trepte & Loy, 2017). Maeve spoke about the “many cultures within the culture” at her institution, joking, “Everyone always says, ‘We’re different. This discipline’s different’... Yeah, yeah, yeah - you’re all different.” Ian jokingly imagined forming groups of faculty with shared developmental needs as a “sort of Alcoholics Anonymous.” This analogy, although superficially negative, was presented playfully and generated laughter in the group.

Several participants were curious about the potential value of comparing aggregate data for groups, and Mark suggested that this “could be even more useful than just the aggregate of the institution.” He offered grouping examples of “early career” and “later career” faculty while Sam wondered, “is the math aggregate quite different from the environmental engineering aggregate?” Rose imagined implementing a program of “educator exchanges” for a particular dimension by identifying a “cohort that has a higher rating and a cohort that has a lower rating” and putting out a call for volunteers to “share their experience.” This simple yet powerful proposal encapsulates the five approaches (discursive, dramaturgical, symbolic, socio-cognitive and psychodynamic) in organisational identification theorized by Brown (2017).
Taylor (2007) proffers that identities are “taken on through shared practices” (p. 28). The onboarding of new faculty was seen as a particular context which might benefit from the insights of the measure “to help them position themselves in various dimensions” (Ben). For example, the formative power of one’s discipline (see Henkel, 2010) emerged in both focus group discussions. Although not in the same focus group, Ron echoed Marika’s observations regarding the power and influence of discipline when he spoke about embarking on a teaching role as “in a sense, socialising into a discipline... not just theoretically, but also practically, in terms of this specific group of people in this institution.” If we consider these epistemically-bound groups of faculty as similar to a CoP (see Lave & Wenger, 2001), Ron views aggregate group data as a potentially potent enabler in the onboarding process.

Rose proposed that the measure might be used to facilitate workshops in which faculty would find “overlap” and “commonalities,... explore their identities and talk about intersectionality... in a safe space, in a safe way.” This approach responds to the challenges of faculty self-authorship identified by Gunersel et al. (2013) and addresses the needs of historically-marginalized faculty (see Sotto-Santiago et al., 2019). In addition, it fosters belonging by encouraging faculty to “dissect and talk about it with their peers, and also get support from their peers,” while acknowledging the limitations of faculty development support: “there are elements that maybe we, as faculty developers, can’t change... larger cultural things” (Rose).

Several studies suggest putting in place flexible support mechanisms for a range of relationships and networks to counter the destabilising effects of the recent erosion of tradition-bound structures taking place in HEIs (Cohen, 2021; Henkel, 2010; Locke et al., 2016). Pragmatic principles encourage a focus on the process of categorising rather than the resulting categories (Farjoun et al., 2015). By insisting on the tentative nature of categorical systems, attention turns to “questions of evolution, emergence, renewal or dissolution” (p. 1795) of categorical systems. This resonates with Maeve’s interest in team cohesion as she pondered a possible use-case of the measure in her role with program directors “thinking about
coherence in programs and... how cohesive the teams are and what that means for good teaching.”

**6.3.3.3 Individual Utility.** The focus group discussions provided rich data illustrating potential utility for institutional leadership and faculty group contexts. However, the possible utility of the measure for individual members of faculty dominated the discussions and transcended the themes, subthemes, and thematic components of the thematic map (see Figure 6.2). Kate captured this mood by declaring, “I think everything else pales in value in comparison to what it brings... an individual... you are presented with a mirror.” This evokes the underlying psychological processes identified by van Lankveld et al., (2017) as crucial in the forming of faculty teaching identities. Thus, the first potential use of the data at individual level is helping faculty “examine their own identity” (Rose) and providing a starting point for “thinking differently about identity” (Ron). Ian compared this data-informed “I am here and I’m contributing” reflection to “getting soaked into” a “cultural medium” in a practice similar to accumulating cultural capital in a Bourdieusian *habitus* (Bourdieu, 1988) and supported by a core premise of PIT – that self-concept, impulses, and collective understandings all inform identities (see Levitan & Carr-Chellman, 2018).

The importance of self-awareness in tackling the implicit tensions in layered contemporary professional identities (see Caza & Creary, 2016) is particularly acute for higher education faculty (Nevgi & Löfström, 2015; Puhr, 2019c) and this is mentioned by one of the experts in the content validity study (see Section 5.3). Contemplating the potential utility of the new measure of higher education faculty professional identity, Kate declared that “self-awareness... is the most valuable part,” and she discerned what she termed “layers” to this awareness. She imagined an example where a faculty member has a low score for relationships with colleagues and reflects that this is “an area where I’m really struggling, but that might not be my fault. Maybe I’m the only... woman in a team of men.” This resonates with research regarding marginalised faculty by Sotto-Santiago et al., (2019) and with the huge demand in the US for “more programming on diversity, equity and inclusion” by providing “a good entry point to initiate some of the more difficult discussions” (Rose).
Participants acknowledged that individual data might be of interest to faculty developers, but they raised concerns about how, and with whom, individual results should be shared, with Sam noting that it’s “really personal.”. Mark felt that access to individual data should be “up to the individual”, and Kate agreed saying, “it’s really their data” and they should “get to choose... which parts they wanna bring to me.”

The personal nature of the data instigated an important concern – the potential of the results to cause distress – and this was the object of intense discussion in both focus groups. Although participants acknowledged that faculty would “want those results right away” (Lee), and Kate insisted that faculty should “absolutely” see their own results, Maeve worried that the tendency to superficially assume that “a higher score is better” might lead faculty to assume that a low score means “oh dang... I’m not doing very well.” Lee anticipated that some faculty might find their results “quite disconcerting.”

Misinterpretation is a risk at every level of analysis. To counteract the risk of individual faculty jumping to negative conclusions, participants made several practical suggestions: In addition to a key with dimensional definitions, Maeve proposed including examples in an interpretational guide to illustrate that a low score “is not necessarily a bad thing.” This idea was taken up by other participants. However, Maeve cautioned that “people look at the visualisation first... that might be tricky for them.” She suggested that an important role of faculty development would be to assist faculty with the interpretational process: “I would not send [the results] off to faculty without me being attached,” jokingly adding, “small attachment A.” Ian concurred, “It’s like medical data... [you are] accompanied by a medical specialist for a reason... if you’re not trained, then your chances of not interpreting [the data] correctly are so high.” Maeve’s comment chimes with Cisneros' (2021) advice, that “it will be helpful, in a live setting, if you can narrate and animate the building of your [graph] piece by piece.”

Another idea which participants in FFG1 discussed enthusiastically, was the implementation of a three-step-process to accompany faculty. Maeve likened this to a process she currently uses for observations of teaching. In the first step, faculty
would select the dimensions they consider to be the most important or interesting for them in a discussion with a faculty developer: “what are the three or four [dimensions] you want to focus on... or you would like advice on?” (Lee). This would both ensure that faculty understand the different dimensions of professional identity and reduce the risk of faculty being overwhelmed by the breadth of the results. Only after this first accompanied step would faculty complete the survey questionnaire. In the third step, Lee imagined a conversation: “which [dimension] do you think is your strongest?... and then you show it to them” and Maeve added, “always with my explanations... you weren’t doing much of this, but it doesn’t matter because you did a lot of other things.” Ron imagined a more autonomous faculty experience, suggesting a “digital, online... adaptive” reporting tool, where faculty would first have access to a limited number of pre-selected dimensional results and could later choose to return and access other dimensions in an “inquiry into my own data” process. Whether interpretation is accompanied or autonomous, the intimately personal data captured by the measure gave rise to discussions about the potential for a novel approach to professional development for both faculty and faculty developers. The implications of this will be further discussed in the next chapter.

Digitalizing the user experience also came up in FFG2 with Ben suggesting interactive “tool-tips” to make dimensional definitions accessible. Kate expanded later by suggesting that helpful resources could be integrated into this interactive experience: “people who score low here find it helpful to do one of... three suggestions”. This would address faculty questions like “what does this mean?” and “what can I do about it?... so that I can get active on my own as well as potentially use it as a conversation starter.” Other participants responded eagerly: “I think that’s pretty amazing... just dreaming about it” (Ben), and “I really like the idea [of] personalised feedback... you see the gap and you can take action on it yourself... that could be really powerful” (Mark). Although this may seem like a tall order, Amyrotos et al. (2021) argue that technologies are available to provide “individualized, user-centred delivery of information/insights” and they highlight “the need for user-centred/persona-driven data exploration through adaptive data visualisations and personalised support” (p. 175).
In addition to accompanying individual faculty as they engage with and interpret the measure, the role of faculty developers with individual faculty members had several orientations in the focus group discussions. Maeve enthused, “in a sense, it’s more... a tool for me... than a measure for faculty. Thank you... in advance.” Kate anticipated some resistance from faculty who may see the measure as “way too touchy feely... because it’s psychology, not science.” She was careful to qualify this comment as “repeating what I’ve heard people say to me.” However, Ron, in FFG1 came to the opposite conclusion. Like Kate, he thought about his own “stereotypical view of a STEM teacher, say a Physics Professor, and what I like about this is that it gives credibility with the numbers. I think that this is something that they will look for.”

Sam had some reservations about faculty developers feeling “a little bit uncomfortable” and not wanting to “let people down by not being able to accompany and follow up” and Kate agreed that some dimensions “are potentially out of my realm, of my scope of influence as an educational developer.” But she later pointed out that the measure demonstrates that personal and professional development are “intertwined”:

In order to be flourishing you need to have both. You can’t just develop people as instructors... that is often our key mandate [as faculty developers], but the personal development stuff should also be considered somehow. And this gives us at least maybe justification for branching out if we’re not already offering development in this area.

This echoes Centra’s recommendation that faculty development should encompass personal as well as instructional, organisational, and professional growth (Centra, 1989) and Way’s assertion that the underlying ‘being’ of identity merits more attention: “Begin by taking inventory of who you are” (Way, 2016).

Goal setting, already discussed at institutional level, was also mentioned at the individual level. Ian identified the possibility of using the measure longitudinally with individuals as a “professional development tool,” to help achieve a carefully managed “steady progression.” Lee agreed and imagined making three or four dimensions the “focus for the next two or three years” before “worrying about the other ones.” Using the measure as a “diagnostic tool” (Kate), the faculty member
and an educational developer would meet and “come up with a plan together” (Lee), “you’ve got a gap... and you can work on developing and closing the gap” (Mark). Ian imagined a “logic of stepwise improvement,” whereby faculty developers might provide a “sort of proximal development literature that is digestible.” Having previously suggested that some faculty might not need the accompaniment or support of a faculty developer for improvement: “I’m also a big girl. I would probably find my own resources,” Lee eagerly agreed with Ian’s suggestion, adding that “I would want resources tailored to each of the 14 [dimensions].” Providing a curated bank of resources, with materials linked to areas of weakness in professional identity, also arose in FFG2: “people with similar results have found this helpful” (Kate).

Lee acknowledged the positive developmental potential for individuals, but her predictions that goal-setting would go hand in hand with managerial tracking and even managerial repercussions suggested the tensions between agency, power and privilege in the figured worlds conceived by Holland et al. (1998):

What does this mean from me? Am I gonna get in trouble? Do I need to do a thousand extra courses or something... What happens though if... a year later... no change, no improvement, nothing. What happens? Whose fault... is this?

Maeve concurred, “faculty are very scared of being evaluated and what consequences are going to come,” reasoning that it would be “important then to really accompany this tool.”

Participants had mixed reactions to the possibility of comparing individual and aggregate results. Although they conceded that it might exacerbate performance anxiety, Ben appreciated that it could help new faculty to “see what they are compared to [other faculty]” and to “reflect on where they are and where they want to go and help them choose the path.” Ron anticipated that sceptical faculty would be motivated to “do something... with this comparison between the mean, the aggregate level and the individual” and Ben mentioned Nudge Theory (Thaler & Sunstein, 2008), suggesting that seeing aggregate data might prompt the individual to take action.
6.3.3.4 Suggestions for Operationalisation, Limitations and Methodology.

Much of the thematic map has been covered under the three levels of utility. A final thematic area includes the branches of Operationalisation (a subtheme of Practical Ideas) and Limitations (a subtheme of Concerns), with many of the suggestions for operationalisation directly addressing limitational concerns.

Both focus groups spent ten minutes discussing graphic representations of a selection of instrument testing data in detail. I had shared bar graphs and radar charts for four instrument testing respondents (see Section 3.3.3.3 and 6.3). My decision to include bar graphs was based on Kerns’ (2014) recommendation for PERMA data but I also included radar charts as a potentially more compact and appealing graphic visualisation (Cisneros, 2021) for the 14 dimensions of higher education faculty Professional Identity (see Appendix 10). In addition, I included aggregate data in the graphs to stimulate discussion about the potential utility of this data for both individual benchmarking and collective development purposes.

The graphic representations shared used a variety colours to distinguish between respondents (see Appendix 10), but there was a consensus in FFG1 that blue would be the best colour for graphs. Hehman & Xie, (2021) argue that choosing colours has importance both for inclusivity – addressing colour-blindness – and maximising differentiability when data are categorical. While some participants preferred radar charts “it’s very easy for people to see themselves and see where they are and what things need to improve” (Lee), others found the bar graph “easier to read” (Ian) and “more informative” (Kate). Ian acknowledged that, based on variations in personal preferences, “it might be useful to give them both.” Kate noted that the radar chart is “much better for comparison... if I want to look at a person as a whole” while the bar graph is “really easy... especially comparing individual [dimensions]... from one person to the next.” Unwin (2020) advocates “sets of graphics,” arguing that “it is not a matter of drawing a single, ‘optimal’ graphic, if such a thing even existed: it is a matter of choosing a group of graphics that will provide more information” (p. 4).

Ron addressed the layout of data on the graphs: “I would have a strong preference if the spider web representation had... an inherent logic in it.” He explained that his visual expectation was that the radar charts would display...
relationships between dimensions, such as opposites. Without this “logic,” he preferred bar graphs. Casals & Daunis-i-Estadella, (2022) acknowledge that the tendency of a radar chart to suggest a connection between independent axes is a limitation of the method. The natural tendency to seek a logic in the disposition of the dimensions led Lee to recommend using alphabetical ordering to counter any tendency to erroneously assume a significance, such as relationships between dimensions or relative dimensional importance.

The tendency for graphs to have a normative impact was raised in both focus groups. In FFG2, Sam stated that “the radar looks more norming to me... it’s more: this is where you should be... and the bar chart is more: there’s a natural variation between people and different things are gonna be important to different people.” Kate agreed that a radar chart generates the expectation of a “well-rounded individual.” Maeve expressed a preference for lines on a radar chart. Casals & Daunis-i-Estadella (2022) pointed out that filling in the plot area has the effect of drawing the viewers’ attention to the area rather than the values plotted. In FFG1, Ron felt that “a more equal distribution” is more desirable on a radar chart because “it looks better to be a circle” than to be, as Lee put it, “chubby on the left.” However, Ron argued that bar graphs have their own normative inclination, explain that he would “prefer to definitely reach the mid-level” score in all dimensions, because of “all these associations... related to evaluation [and] performance ratings.” These concerns are echoed by Sorto & White (2018), who call for more research into psychologically-informed data visualisation, so that “chart reading ability” (p. 6) is taken into account when deciding on the most appropriate graphing methods. Similarly, graph literacy, which may play a crucial role in how graphs are interpreted, is under-researched (Tsagatoulis, 2020).

The presence of a line graphing aggregate data was contentious. Rob explained that it influenced his “psychological perception, at least on the first... view, very strongly... I immediately intuitively compare.” This might be negated by using a thinner or broken line. He recommended including error bars as indicators of variance. Ian added that error bars would also necessitate the inclusion of sample size and pointed out that the graphing of the aggregate on the bar graph should use dots without a linking line. Sam favoured a softer “broader... beige zone
of confidence intervals to indicate “most people fall in this area... giving more space for people to be individual.”

“What does this mean?” (Ron) was a question repeated by several participants in both focus groups, and discussions around how dimensional scores might be interpreted led to some fascinating comments and suggestions. Sam surmised that the most essential interpretation was:

Just to be really clear on the scale – when people are scoring higher, that means that this is something that they feel that they’re managing well and that isn’t an issue to them, and when they’re scoring lower, that’s something that is more of an issue to them.

Kate imagined faculty asking, “What does this mean and what can I do about it?” and Lee tentatively ventured, “zero to three is a must focus on in the next year, four to seven – change if you can... eight to 10 – leave it alone, it ain’t broke, don’t fix it.”

Interpretational questions extended to the overall score for professional identity: “there is this 5.7... am I 57% good... how does it work?” (Ian). Sam found the overall score to be another norming influence and Ron argued that, at individual level “it doesn’t mean a lot” finding that it masks intriguing dimensional variations. In FFG1, Ian questioned the equal weighting of dimensions in calculating the overall score and this led Maeve to suggest that “one could imagine asking the person who fills it out to grade the importance of the different [dimensions],” an idea that both Ian and Lee eagerly endorsed. Lee alluded to the *third-space* (Whitchurch, 2018) and the multiple roles that faculty sometimes occupy: “some of these [dimensions] might be more important if you wear a managerial hat at times.” Although dimensional weighting was not discussed in FFG2, Kate imagined a conversation in which an individual might say, “I don’t really care about this [dimension]... but this [one]... it’s really valuable to me.” In this context, she worried that a self-reporting methodology may capture individual biases: “I might be reporting that I feel I’m not very effective, but actually the people around me might say I am.” The potential of the instrument to interact with metacognitive awareness and to flag possible flaws or biases in an individual’s metacognitive processes will be further discussed in the next chapter.
Concerns regarding the biases in self-reporting measures and lack of nuance in the data were raised by Kate, but Ron embraced these same limitations, saying, that the results are “just the start of the conversation, because actually the real work would happen based on that, or maybe... motivated by that.” For Rose, this extended to faculty developers: “we have to get more comfortable too... in facilitating these types of discussions.” Kate agreed that a response to a request for a consultation with a faculty developer might include: “Can you do the survey first, so we know what we’re working with?” Sam imagined an even more specific use-case: “if somebody is having a hard time with one particular course, then it might be interesting to answer in... the context of this course.”

Some dimensions generated specific interpretational concerns among focus group participants. My own misgivings regarding Authenticity of appearance were only partially shared by participants. Although Ron did not feel a personal need to conform, he recommended keeping the dimension, explaining that, for some people, “it is really important to follow... this Bourdieu habitus.” Maeve agreed that it is “important, but it means different things for different people.” Ian remarked that attire may indicate one’s “identity for the class [when one is teaching],” which may be very different from “outside of the class.” Ron and Ian concurred that this may be more prevalent in “some disciplines and some institutions” (Ron) where “if you don’t dress up properly... you’re not a faculty” (Ian). Sam connected this with research on diversity, equity, and inclusion (DEI), where only those impacted even notice that there is an issue. Kate agreed that there will be “some people who might not look the part but they’re OK with that” while others “experience negative consequences.” Lee noted that, compared with other dimensions of professional identity, Authenticity of appearance seems “superficial” and could lead to some uncomfortable conversations with faculty, a point with which Maeve wholeheartedly agreed. Despite the enthusiasm of the other participants for the dimension, with Ian declaring “I encourage you to keep it,” my reservations, echoed by Lee and Maeve, are shared by CV1 and CV4 (see Section 5.3) and evidenced in the response of participant D (see Appendix 10). These divided perspectives will be further discussed in the next chapter.
A high score for Centrality might indicate a strong professional identity that is central to one’s sense of self. However, Kate observed that for all other dimensions “it feels natural to say, ‘If it’s high, it’s good,’ but if centrality is too high, I don’t know how healthy that is.” and Ben mused, “I do not expect anyone with a professorship to have a serious hobby outside... work.” Sam asked who would benefit from high centrality: “good for their wellbeing or good for the institution?” Participants felt that this interpretational “anomaly” (Kate), where a low score might not be a problem, could be “quite confusing” (Kate). Lee explained, “Now I’m confused... that’s part of my professional identity which is pulling me down. But you’re telling me not to worry about it. But that means I’m always gonna be down.”

Despite this, none of the participants questioned the value of the dimension. Kate wondered whether adding something about work-life balance might assuage concerns, but she quickly tempered this suggestion, “If they say my work is my life and my hobby and my sleep and my everything... and they’re happy with that. Then, maybe OK.” Thus, participants seemed to agree that, although a high score in centrality may point to an unhealthy work-life balance, centrality may be a dimension of professional identity that is quite independent of flourishing. The interpretation of some participants, that a healthy work-life balance is an indicator of well-being, and that high centrality should trigger concern, may not be true for all faculty and warrants further exploration.

In terms of engaging faculty, Kate wondered, “how do you present something like this” to potentially sceptical faculty, some of the suggestions for digitalising not only the questionnaire response process, but also selective and adaptive reporting with the promise of integrated resources appropriately curated to address the results in each dimension (see 6.3.3.3) might make the measure more appealing. The latter could also alleviate the “insurmountable activation barrier” (Ian) sometimes experienced in professional development contexts.

6.5 Conclusion

This penultimate chapter has investigated the potential utility of the new measure of higher education faculty professional identities for faculty development purposes. The results and analysis of the instrument testing and follow-up focus
group data suggest that there is a strong association between professional identity and flourishing for higher education faculty.

There are potential applications in the development of individuals and groups which go beyond supporting practical how-to-do approaches of faculty development, to encompass the understanding and fostering of individual and collective flourishing. Recommendations for operationalisation of the instrument include providing guidance on the interpretation of scores; flagging the benefits of developmental applications and cautioning against evaluative uses; and a recognition that some dimensions may be deemed more contextually relevant than others. Despite some limitations and concerns, ideas for practical applications respond to needs and issues identified in the literature.

In addition to facilitating innovative approaches to faculty development practice with individuals and groups, there is potential utility for institutional strategic leadership. This raises questions about the sphere of influence of faculty developers and the need for a nuanced interpretation of institutionally aggregated data.

In the next and final chapter, an in-depth discussion covering the construct of professional identity for higher education faculty, the development of an instrument to measure these identities and the extent to which they are flourishing, and the several levels of potential utility of the new instrument will be undertaken to determine how far the three overarching research questions in this thesis (see Section 1.5) have been addressed. The concluding chapter will also consider the limitations of the research as well as its contribution to extant understandings of higher education faculty identities. Plans for dissemination of the research and recommendations for further study will also be covered.
Chapter 7 – Discussion and Conclusion

7.1 Introduction

The final chapter returns to the aims of this thesis and the three research questions formulated in Chapter 1 drawing together the four datasets gathered as well as the diverse literature explored in a discussion intended to ascertain how far the research questions have been addressed. Any limitations of the study are also considered. The contributions of the study to knowledge are evaluated and plans for dissemination are detailed. Finally, recommendations for further research that might address some of the limitations of the study as well as expand on potential contributions to knowledge are explored.

7.2 Discussion

The discussion addresses each of the research questions in turn, returning to the literature and theories underpinning the study as well as the qualitative and quantitative data collected and analysed during the research. The intention is to build on the foundations of the literature reviewed, drawing out arguments and evidence provided by the data, to respond to the research questions.

7.2.1 Conceptualising the Construct

RQ1 asked “What dimensions and influencing factors contribute to the professional identity of higher education faculty?” Earlier in my doctoral journey, I examined the professional identity of a specific group of faculty in my institution (Puhr, 2019c) and took initial tentative steps in the design of a measure (Puhr, 2019a). These small-scale studies demonstrated the complexity and variety of professional identities among higher education faculty. Addressing RQ1, I reviewed a rich and varied literature in Chapter 2 to inform a conceptualisation of the construct of higher education faculty professional identity for this research (see Figure 2.1 and Appendix 1). My pragmatic philosophical position (see Section 1.6) and anthropological leaning (see Section 1.5.1), as well as my earlier doctoral research (Puhr, 2019c, 2019a, 2019b) and research on faculty lived experience conducted in parallel with the completion of this thesis (Germanier & Puhr, 2023; Agogue et al., 2022), were helpful in guiding the breadth of literature consulted.
Qualitative focus group data collected during this thesis confirmed, illustrated, and enhanced theories and concepts in the literature reviewed.

Having established the social and evolving nature of professional identities and the centrality of relationships, contexts, and practice in their shaping (Merry, 2010), SIT provided an established theoretical framework with which to conceptualise the ways in which several factors including power (Coupland & Brown, 2012; Lawler, 2014), multiplicity (Goffman, 1990; Levitan & Carr-Chellman, 2018), self-categorisation (Scheepers & Ellemers, 2019; Trepte & Loy, 2017), and solidarity (Leach et al., 2008) might explain individual and shared attitudes and behaviours. I used the literature to generate a map of key concepts (see Figure 2.1), but I was careful to avoid making value-judgements regarding the relative importance of these concepts. Thus, psychologically oriented factors of social identity, such as self-categorization and centrality, are positioned randomly alongside more sociological factors, including solidarity and in-group homogeneity. The value of SIT was confirmed by focus group participants ranking data coded as relating to Belonging and Multiplicity as the most important aspects of professional identity discussed (see Table 4.2), and the facilitation of in-group identification was seen as a key application of the instrument in follow-up focus groups (see Section 6.3.3.2). This potential application acknowledges the contemporary challenges of blurring boundaries in the higher education context (Cohen, 2021).

The literature on professionalism reiterated the importance of legitimacy (Barnett, 2008; Derrick, 2013; Hoyle & John, 1995; Lunt, 2008; Noi et al., 2016), but several dimensions not mentioned in SIT literature featured prominently in research on professional identities (see Figure 2.1). These included professional relationships, both with peers (Amott, 2016; Beijaard et al., 2004; Canrinus et al., 2011; Holland et al., 1998; Kern, 2014; Noi et al., 2016; Wenger, 1998) and clients (Abu-Alruz & Khasawneh, 2013; Beijaard, 1995; Beijaard et al., 2000; Downie, 1990; Struthers, 2018; Whitty, 2008b; Wright, 1951), and autonomy in one’s professional practice (Carr-Saunders & Wilson, 1933; Freidson, 2001; Klass, 1961; Wright, 1951). These dimensions are shared across the recognised professions and essential to professionalism. I was purposeful in integrating literature specific to the teaching profession, but it is worth noting that the legitimacy of teaching as a profession has
been contested historically (see Flexner, 1915; Hoyle, 1982; Hoyle & John, 1995), generating existential angst in higher education, where faculty teach law, medicine and theology, the three historically accepted professions (Klass, 1961). Recognition of status, a dimension of professionalism, is under threat across the professions (Downie, 1990; Andy Hargreaves, 2000; Pellegrino, 1983), but particularly so in higher education (Seddon et al., 2013; K. Williams, 2008), where contested legitimacy, both historical and contemporary (see Barnett, 2008, 2013) has been exacerbated by shifting boundaries (see Cohen, 2021; Whitchurch et al., 2021). Focus group data confirmed that tradition-bound hierarchies and indicators of status are both influential and problematic for faculty professional identities in Swiss HEIs.

In research investigating organisational identity and the higher education context, several dimensions are shared with professionalism, but with some subtle differences: Relationships with peers carries the nuance of collegiality in higher education (Cohen, 2021; Henkel, 2010; Moore & Hofman, 1988; van Lankveld et al., 2017), bringing the potent tribal influence of disciplinary boundaries (Cohen, 2021; Gordon & Whitchurch, 2010; K. Lewis, 2014; Locke et al., 2016; Whitchurch, 2008); in vocational relationships students replace clients, generating a singular power dynamic (Beijaard et al., 2000; Canrinus et al., 2012; Struthers, 2018; van Lankveld et al., 2017); and the expectation of self-regulation and autonomy have the added weight of the core value of academic freedom as well as the interplay between shared governance and individual autonomy in the higher education context (Bostock & Baume, 2016; M. Clarke et al., 2013; Drennan et al., 2017; Gappa, 2010; F. Holland, 2014; Sachs, 2001). Thus, the formidable influence of context on faculty professional identities (see Delanty, 2007; Levin & Shaker, 2011b) justifies the inclusion of these contextually-infused dimensions in a measure of faculty professional identity. Both focus group and follow-up focus group datasets illustrated the core importance of relationships on the one hand, and individual agency on the other: Many of the ideas for operationalisation focused on fostering a shared understanding of identity (see Section 6.3.3.2) or facilitating a nuanced and actionable self-awareness and agency (see Section 6.3.3.3).
Multi-facetedness, a discreet dimension associated with the higher education context and not found in the literature on professionalism, characterises the complexity of negotiating more than one role. This generates challenges for higher education faculty not faced by other professionals (Billot, 2010; Bourdieu, 1988; Brown, 2017; Caza & Creary, 2016; M. Clarke et al., 2013, 2015; Davey, 2013; McCune, 2021; Puhr, 2019b) and focus group participants expressed a strong awareness of the challenges and inherent contradictions experienced by faculty negotiating multiple roles (see Section 4.2.2.1). In a higher education landscape marked by VUCA, turbulence, and the aftermath of a global pandemic, capturing these dimensions in a measure might help identify their impact on contested or struggling identities.

The concept of flourishing is not addressed in RQ1. However, an aim of this research is to inform the practice of faculty developers and facilitate flourishing. Flourishing was thus included in the conceptual mapping to investigate the relationship between the dimensions of faculty professional identity and flourishing. Defined by Keyes (2002) as a state of mental health and well-being, flourishing has been embraced by the positive psychology movement. The widely-adopted PERMA model (Seligman, 2011, 2018) reiterates the importance of relationships, while meaning resembles purpose, another dimension of professionalism in the higher education context. Accomplishment relates to the dimension of expertise in the higher education context. These conceptual overlaps and similarities suggest that a strong faculty professional identity will also be flourishing. However, positive emotions, a pillar of the PERMA model, does not appear anywhere in the bodies of literature examining social identity, professionalism, or the organisational context of higher education, and engagement, although similar to the social identity dimension of salience, is associated with the state of flow in the PERMA model. As a result, I adopted the PERMA workplace profiler (Kern, 2014) and included it in the instrument designed to test the new measure in the third phase of data collection, discussed below.

Instrument testing data demonstrated a strong relationship between professional identity and flourishing for higher education faculty. Although the focus group discussions focused on professional identity, participants were curious
about the concept of flourishing and how professional identities might flourish. Concerns regarding the possible negative implications of a high score for *Centrality* (see Section 6.3.3.4) demonstrated a nuanced understanding of the tendency of some faculty towards an unhealthy all-consuming working life which might negate flourishing.

**7.2.2 Developing, Validating and Testing the Measure**

RQ2 asked “Can a measure of professional identity for higher education faculty be developed, to provide insights into faculty identities and the extent to which they are flourishing?” The answer to this question is yes, albeit with some limitations.

The development of a measure of any multi-dimensional construct presents challenges (De Vaus, 2002, 2014; DeVellis, 2017). In the case of the professional identity of faculty in higher education, a large body of literature provides a theoretical and conceptual base for measure development (see Figure 2.1 and Appendix 1). However, although much has been written about academic identity, there is a lack of empirical research with which to develop a measure inclusive of faculty not engaged in research (see Section 2.4.1).

In an earlier small-scale study (Puhr, 2019a), I used literature to explore the process of developing and content validating a measure. Although literature is the best starting point to ensure a thorough theoretical understanding of a construct (De Vaus, 2002; DeVellis, 2017), gathering qualitative data via interviews or focus groups is recommended to ensure that the construct has been appropriately conceptualised and to integrate the perspectives and insights of individuals with an everyday understanding of the construct (DeVellis, 2017). For this multi-phase mixed methods QUAL-quant-quant-QUAL research, four datasets were gathered (see Figure 3.1). To answer RQ2, the first qualitative phase of the research endeavoured to augment the literature reviewed with empirical data to enable the development of a measure. Two ensuing quantitative phases validated and tested the measure and a final qualitative phase focused primarily on evaluating the utility of the measure (see Section 7.3).
By choosing to conduct focus groups with faculty developers, insights into faculty identities not found in the literature reviewed were captured and it was also possible to incorporate the potential utility of the measure in its design by considering indicators of particular interest to developers. The innovative use of a carefully designed virtual collaboration space (see Figure 3.2) for a structured NGT approach in focus groups generated balanced contributions and a high level of engagement and interaction from participants. As a result, the voices of participants were treated as essential to the item-generation process (see Chapter 4) grounding the development of the measure firmly in empirical data. During the process of mapping the NGT focus group data to the conceptual and contextual summary of the literature, the importance assigned by research participants to belonging and multiplicity (see Table 4.2) as well as passion, development, relationships, and ethics was considered (see Figure 4.1). The defining of emergent dimensions and the generation of proposed items (see Section 4.3.1) are the product of a thorough interaction between theory and data.

Expert content validation proved an important step in the development of the new measure. Some researchers skip this step, favouring pilot testing followed by construct validation. In this study content validation identified weaknesses in items and dimensions, resulting in several revisions to the measure before testing with faculty. Revisions included the merging of two dimensions, the removal of 17 items, and the revision of the wording of another 11 (see Section 5.4). In addition, the comments of experts raised a concern about the value of Authenticity of appearance as a dimension. As a result, the dimension was discussed in detail in the final qualitative phase of data collection. Finally, echoing participants in my earlier exploratory study (Puhr, 2019a), participants commended the potential utility of the measure with one recommending that successful operationalisation might benefit from a support meeting with faculty. This foreshadowed an idea that generated significant discussion in the final qualitative phase of data collection.

The primary motivation for collecting a sample of instrument testing data from faculty using the revised measure following content validation was to facilitate a data-informed evaluation of utility in a final qualitative phase of data collection. In addition, statistical tests of interrater reliability were conducted using the small
sample of instrument testing data collected \( n = 32 \). Of the 12 dimensions tested, eight demonstrated a high reliability \( \alpha > .7 \). Two dimensions, *Relationships with colleagues and Expertise in discipline*, showed moderate reliability \( \alpha > .5 \). Either a larger sample or more items would be required to fully evaluate the reliability of these dimensions. The low reliability scores of *Development and openness* \( \alpha = .45 \) and *Ethics and responsibility* \( \alpha = -.11 \) suggest a lack of internal consistency, requiring revision. The results illustrate that each step of the validation process is of value in identifying weaknesses and enhancing the quality of a new measure.

### 7.2.2.1 Professional Identity and Flourishing

The decision to omit the concept of flourishing from the first two phases of data collection was taken so that the task of developing a measure of faculty professional identity might be prioritised. Focusing the NGT focus groups and content validation on the construct was possible thanks to the availability of the Workplace PERMA profiler (Kern, 2014) – a fully validated and widely used measure of flourishing.

During the process of developing the professional identity measure, it became increasingly apparent that many of the dimensions of a strong professional identity are similar to the domains of flourishing. Instrument testing data collected from faculty in Swiss HEIs included the new measure of faculty professional identity and the Workplace PERMA profiler. A correlation coefficient demonstrated a statistically significant positive relationship \( r(32) = .88, p < .001 \) between new variables computed for overall professional identity and overall flourishing. Excellent internal reliability scores \( \alpha > .85 \) for four professional identity dimensions combined with similar PERMA domains (see Table 6.3) further confirmed the relationship.

These findings correspond with my expectation based on the literature reviewed (see Section 2.6) and my anticipation that significant overlap might permit the combining of some professional identity dimensions with PERMA domains, thereby reducing the overall number of items in the instrument (see Section 3.3.1.3). However, several dimensions of faculty professional identity, including *Beliefs, Autonomy, and Centrality*, are not captured by PERMA. Conversely, *Engagement*, the PERMA domain associated the state of *Flow*, in which one is...
completely absorbed by one’s activity, is not a dimension of faculty professional identity.

While these results show that nurturing strong professional identities is consistent with fostering flourishing, as predicted based on the literature reviewed (see Section 2.6), dimensions of professional identity including Beliefs, Autonomy, and Centrality are not represented in flourishing, and Engagement, a pillar of the PERMA model, is absent from professional identity. This justifies including both the new measure of professional identity and the workplace PERMA profiler in an instrument intended to provide holistic insights into flourishing identities. However, given the excellent internal consistency scores (see Table 6.3) for some professional identity dimensions combined with PERMA domains, exploring the possibility of merging, for example, the professional identity dimension of Purpose with the PERMA domain of Meaning is a key recommendation for further research.

7.2.2.2 Weaknesses of the Measure. Some dimensions require item revision to improve their reliability before the measure can be fully and reliably operationalised (see Section 6.2.1). In addition, during the development, content validation, and instrument testing processes, two dimensions – Authenticity of appearance and Centrality – manifested problematic characteristics raising questions about their inclusion in the measure.

The divided points of view of follow-up focus group participants regarding Authenticity of appearance (see Section 6.3.3.4) led me to question whether the dimension should be optional in the operationalisation of the new measure. However, a recent study highlights the lack of research in this area and finds that daily clothing conformity is associated with levels and quality of interaction with colleagues in the workplace (Kim et al., 2022). Although the dimension may require more work to temper negative reactions, the role of clothing and appearance in faculty professional identities warrants further study.

Centrality refers to the importance of one’s professional identity to one’s overall sense of self. The dimension emerged causing disquiet in NGT focus groups during the instrument development phase of this research due to concerns that it might reflect the isolation experienced by some members of faculty and observed by faculty developers (see Section 4.3.1.13). This sentiment resurfaced in follow-up
focus groups during the final utility evaluation phase of the research, with the dimension generating unease due to the troubling possibility that a high score might indicate an unhealthy work-life balance inconsistent with flourishing (see Section 6.3.3.4). Research investigating workforce attrition across multiple sectors of the global economy has raised concerns about work-life balance as the global pandemic recedes (De Smet et al., 2021). Rather than questioning the inclusion of Centrality as a dimension in the new measure of faculty professional identity, the domains of Health and Loneliness, included in the Workplace PERMA profiler as important indicators of well-being (Kern, 2014), might provide data to test whether a high score in Centrality is cause for concern.

I deduce that Authenticity of appearance and Centrality are dimensions that may play important roles in the strength of professional identity and flourishing, and I submit that both dimensions warrant further study. However, the sensitivity associated with these dimensions may, in certain contexts, warrant designating them as optional in the operationalisation of the measure. Although beyond the scope of this thesis, further exploration of these dimensions is recommended, and this could be clarified in operationalisation instructions.

7.2.3 Exploring Three Levels of Utility

RQ3 asked, “How might a measure of professional identity be used to inform individual and collective faculty development initiatives and foster flourishing?” The potential utility of a measure was implicit in my quest for an instrument to provide data upon which to base faculty development needs assessments and this was supported by a small-scale study I conducted earlier in my doctoral journey (Puhr, 2019a). Exploring how the measure might prove useful was the second aim of this thesis.

Having collected qualitative data from faculty developers in the development phase of this research to ensure that utility was integral to the design of the measure, my intention in returning to the same participants with a sample of instrument testing data collected from faculty using the revised measure following content validation, was to explore to what extent I had been successful. As third-space professionals (see Whitchurch, 2013, 2018), faculty developers play many
roles in their institutions (Debowsk, 2014; Gibbs, 2013; Mårtensson & Roxå, 2021; McGrath, 2020; Pleschová et al., 2021; Sugrue et al., 2018; Sutherland, 2018; van der Rijst et al., 2022). Participants used this breadth of experience to inform their evaluations of the sample data shared with them in unstructured follow-up focus groups. Their clear and detailed comments elucidated potential utility on three levels, but their insights also revealed a range of concerns, which cannot be overlooked in considering whether and how to operationalise the measure.

As a driver of institutional strategy, the measure might provide aggregate data offering valuable cultural insights and a shared language with which to shape institutional discourse (see Section 6.3.3.1). The same data might inform decision making in areas including communications and the allocation of resources for development. Although many institutions currently conduct employee satisfaction surveys, the data provided by this instrument goes beyond explicit satisfaction to interrogate implicit, underlying factors impacting the collective health and wellbeing of an institution. However, the risk of intentional or unintentional misinterpretation coupled with concerns about managerialism (see Ball, 2008; Bostock & Baume, 2016; Sachs, 2001) and ethical issues of data access were raised, illustrating that utility at the institutional level will interact with a variety of powerful institutional logics (Cohen, 2021; Delanty, 2007; Levin & Shaker, 2011a). Although these risks cannot be eliminated, the data might also shine a light on the same institutional logics if they result in collective problems of agency, power and hierarchical privilege (Holland et al., 1998) associated with the Bourdieusian concepts of *habitus, field and capital* (Webb et al., 2002). I propose that faculty developers, as third-space professionals (see Locke et al., 2016; Whitchurch, 2018), might play an important role as gatekeepers, analysing and interpreting institutionally aggregated data from a third-space position of relative neutrality and making recommendations for development needs to foster flourishing on the one hand, while revealing aspects of institutional culture which give cause for celebration or concern on the other. This is discussed in more detail below.

The shared language provided by the measure has powerful practical implications for contexts in which conversations with and between groups of faculty might shape successful onboarding processes, foster belonging, and
facilitate socialisation activities in workshops. Participants were able to easily imagine leveraging the measure in the context of their well-documented practical expertise, designing and delivering development programmes and workshops (Gillespie & Roberston, 2010; Way, 2016) for institution-wide, group, and individual development purposes (detailed in Sections 6.3.3.1, 6.3.3.2, and 6.3.3.3 respectively). They were also curious about the potential of the measure to offer insights to help understand the differences between groups of faculty with a shared disciplinary identity so that programming might be tailored accordingly. Participants did not anticipate any risks in these group contexts, although the need for psychologically safe spaces and methods was underlined (see section 6.3.3.2). The value of the practices they described is corroborated by a range of studies examining identification processes (see Gunersel et al., 2013; Locke et al., 2016; Palmer, 2015; Sotto-Santiago et al., 2019).

In exploring how the data might be of value to individual faculty members, ambitious and nuanced adaptive approaches emerged. On the simplest level, the data was seen as a “really good conversation starter” (Maeve) in the context of individual consultations between faculty and faculty developers for goal setting or performance evaluation purposes (see Section 6.3.3.3). Research confirms the importance of self-awareness in the professional development of faculty (Amundsen et al., 2005; Centra, 1989; Way, 2016), but conversations about both the potentially transformative impact of the data, and the risks of misinterpretation and distress, led participants to imagine sophisticated, person-centred, multi-phase approaches to the use of the data. Clearly conceived consultation conversations and processes ranged from a skilfully accompanied gradual reveal of the data to a more autonomous digitally supported experience with carefully curated resources. Although the fantasy of an adaptive online platform facilitating a supported interrogation of the data might be unrealistic, some form of technology-enabled user-centred access to the data, advocated by Amyrotos et al. (2021), might help tackle the anticipated reluctance of some faculty who tend to evade personal conversations.

7.2.3.1 A Strategic Institutional Role for Faculty Development. Faculty developers have played an increasing role in the strategic direction of HEIs
(Mårtensson & Roxå, 2021; McGrath, 2020; Sugrue et al., 2018) as predicted by Austin & Sorcinelli (2013). The potential for misinterpretation and misuse of the data provided by the measure, raised by research participants as a concern at both institutional and individual levels of utility and discussed in the previous section, underlines the need for an impartial and knowledgeable role in the analysis of both individual and aggregated data. Faculty developers might therefore play the role of gatekeepers, ensuring that data is collected, accessed and interpreted responsibly at individual, group, and institutional levels. However, some participants felt uneasy about this role, anticipating that aligning faculty development recommendations with the perspectives of institutional management might present challenges. In addition, not all focus group participants currently have the sphere of influence in their institutions to undertake such a strategic role (see Section 6.3.3.1).

Given that my own professional role has become increasingly strategic in recent years, I acknowledge that this trajectory has not been easy and may not be one that all faculty developers would willingly undertake. I submit that inter-institutional networks of faculty developers could provide insights, working models, and support mechanisms to those embarking on strategically influential roles within their institutions.

7.2.3.2 A New Approach to Individual Faculty Development. The potential of the measure to identify possible flaws or biases in an individual’s metacognitive processes, and the orientation of the data away from the typically practice-driven approaches to faculty development and towards the much-overlooked underlying identities of faculty (Barrow & Grant, 2012; Centra, 1989; Gibbs, 2013; Way, 2016), offers an opportunity for faculty developers to broaden the scope of support provided to individual faculty. This paradigm shift represents a key contribution of my thesis to higher education practice and meets development needs identified in several studies (see Amundsen et al., 2005; Amundsen & Wilson, 2012; Centra, 1989; Gibbs, 2013; Knights & Clarke, 2014; Sutherland, 2018; van der Rijst et al., 2022; Way, 2016). However, an adaptive, person-centred approach that delves into the being as well as the doing of higher education faculty might represent a daunting prospect for developers. Participants were excited by the opportunity to leverage the data provided by the instrument to facilitate flourishing. This would
allow developers to shift their focus from fostering compliance with institutional practice. However, they further identified that developing a new approach might reveal an expertise deficiency requiring training for faculty developers (see Section 6.3.3.3). This concurs with recent studies investigating current faculty development activity (see Mårtensson & Roxå, 2021; Pleschová et al., 2021; Steinert et al., 2019).

### 7.2.3.3 Graphic Representation of the Data

Both follow-up focus group discussions intimated the potentially central role that the type of graphic representation used to visualise the data might play in the utility of the new measure. Sample graphs and charts of instrument testing data shared with participants were the object of intense and detailed discussion in both groups (see Section 6.3.3.4). Although I was curious about possible individual preferences for the more traditional bar graph over the increasingly popular radar chart and I was also interested in discussing the inclusion of aggregate data in graphs visualising individual data, the intense interest of participants took me by surprise and my own curiosity was enhanced by that of the participants. Tufte (2001) remains a much-referenced authority on visual representations of quantitative data. The influence of his principles and recommendations, first published in 1992, came across in the discussion focus group participants, where ensuring the accurate representation of data in the simplest form possible was a concern. In addition, participants’ perspectives regarding how the graphs might be read and the potential for misinterpretation is reflected in the more recent work of Berinato (2021). Several studies have pointed to the need for a more psychologically informed approach to data visualisation (Casals & Daunis-i-Estadella, 2022; Hehman & Xie, 2021; Sorto & White, 2018; Tsagatoulis, 2020; Unwin, 2020). The distribution of the instrument to institutions for operationalisation with their faculty would need to include specific advice on graphic representation and interpretation. Although more research is needed on psychologically-informed approaches to data visualisation (Sorto & White, 2018), guidelines might include types of graph(s) or chart(s) recommended, use of colour, arrangement of dimensions, and the inclusion of aggregated data (see Section 6.3.3.4).
7.2.4 Fostering Flourishing

This research has demonstrated a strong relationship between the professional identities of higher education faculty and the extent to which they are flourishing (see section 7.2.2.1). This is a significant finding as it implies that initiatives designed to strengthen professional identities in general, or the specific dimensions which correlate most strongly with the PERMA model in particular, might be assumed to also foster flourishing. The finding provides a strong rationale for investing institutional resources in the development of strong professional identities.

The relationships between specific dimensions of professional identity and domains of flourishing offer more nuanced applications of the instrument. Research participants associated Centrality with an unhealthy work-life balance (see Sections 6.3.3.4 and 7.2.2.2). Comparing the scores for professional identity dimensions with flourishing domain scores for individuals may help understand the complex professional identity dimension of Centrality, especially in cases where an individual with a strong overall professional identity does not have an equally strong overall flourishing score.

The increased public discourse around well-being and resilience (Grant, 2021; Moss, 2019) suggests a need for data-informed approaches to the fostering of flourishing. The development of the new measure of faculty professional identity is timely given that the measure has the potential to be leveraged by faculty developers and institutional leadership in identifying the needs of faculty at three levels of utility, and developing initiatives to meet these needs (see Chapter 6).

7.3 Limitations

Methodological limitations of this research include a lack of full construct validation, implications of small sample size on generalisability, and the benefits and challenges of insider research (see Section 3.5). Further limitations arose during the development, validation, and testing of the measure. The internal reliability of some dimensions (see Section 6.2.1) will necessitate the revision of weak items prior to operationalisation, while the contested qualities of others led to questioning the possibility of making them optional (see Section 7.2.2.2).
The low response rate in the instrument testing phase is a limitation which resulted in not being able to test the internal reliability of the *Multiplicity and boundaries* dimension (see Section 6.2.1). Anticipating a response rate of 15% (Bryman, 2012), NGT focus group participants \( (n = 10) \) were solicited to invite 100 faculty from their institutions to participate in instrument testing and nine agreed. Only 50 responses were received, of which 32 were complete. It may be that the focus group participants failed to contact 100 faculty or that testing an instrument held little appeal for the faculty contacted. The low response rate raises questions about the potential to successfully capture a representative sample with the instrument when operationalised. Follow-up focus group discussions demonstrated the potential utility of the measure, and it is likely that successful operationalisation will depend on the ability of faculty developers and others to generate engagement through a carefully executed communication and implementation plan.

A final limitation relates to the context of the study. The new measure of professional identity for higher education faculty was developed in the Swiss HEI system. Although Switzerland falls within the EHEA, and a range of institutions, large and small, public and private, with a broad range of disciplinary orientations were included in this study, the relevance of the measure to other international contexts has not been tested. This represents both a limitation and an important opportunity for further research.

### 7.4 Contribution of the Study to Knowledge and Practice

As the product of a professional doctorate with an orientation towards practice, this thesis makes several potentially important contributions to both knowledge and practice. As a higher education development practitioner, the lack of a measure of higher education faculty professional identity prompted this research. The new measure represents a significant contribution of this study to the body of research examining academic and faculty identities. My findings demonstrate that although the development of a measure for a complex multi-dimensional institutionally shaped construct is challenging, such a measure can be developed and has practical uses at institutional, group, and individual levels to
inform faculty development initiatives and to understand and foster individual and collective flourishing.

All research involves choices relating to scope and methodology. In choosing to capture the insights of faculty developers in the development of the measure, a nuanced implicit understanding of faculty identities based on intimate interactions and observations came to light. The decision to explore the utility of the measure rather than endeavouring to achieve full construct validation revealed the potential for an innovative, data-informed, adaptive, and person-centred approach to faculty development. Providing a tool to facilitate this approach is an important contribution of this thesis to practice.

Equipping faculty development to play a strategic role at institutional level is another contribution of this study. Although the potential for faculty development to influence strategic decision-making has been studied, this thesis highlights the importance of placing data in unbiased and appropriately skilled hands. With their third-space positioning and their comprehensive insights, faculty developers are uniquely placed to play the role of interpretational gatekeepers.

Conducting this study during a global pandemic necessitated a creative approach to conducting NGT focus groups. The design of a virtual collaboration space using a combination of Mural and Microsoft Teams (see Figure 3.2), and the notable success of the technique in eliciting rich data is another important contribution of this study with potential for practical implementation in other research contexts.

The relationship between higher education faculty professional identity and flourishing is confirmed by the findings of this research with significant overlap between dimensions of faculty identity and domains of flourishing (see Section 7.2.2.1). This suggests that nurturing and developing strong professional identities will generate workplace flourishing and provides a further indication of the importance of professional identity for faculty involved in teaching, research, and administrative activities. In the current global VUCA context of higher education, a measure of the construct of faculty professional identity, and an understanding of the relationship between the construct and flourishing, has the potential to shape strategy as well as informing individual and group support provision.
7.5 Dissemination and Areas for Further Development and Research

This research has many potential audiences, and dissemination will include not only the operationalisation of the measure but opportunities for publication in relevant academic journals and presentation at conferences. In 2021, my fascination with flourishing faculty led me to collaborate on a study exploring the lived experience of faculty negotiating the challenges of remote and HyFlex delivery in 2020 and 2021 using IPA. The study was presented at the AOM conference in August 2022 (Agogue et al., 2022) and will soon be published in an edited book (Germanier & Puhr, 2023). Although not conducted within the scope of the thesis, the study was heavily influenced by my doctoral work and provided more evidence of the need for research investigating the who of faculty identity rather than the how of what faculty do.

The data-informed, adaptive, person-centred approach to faculty development that emerged from the follow-up focus groups is an aspect of this research that I intend to examine further in a practice context. Several research participants have inquired about the operationalisation of the instrument and my hope is that this might have a positive impact in my institution as well as within the SFDN as I fine-tune the measure further and develop instructions for its use. This, in turn, will provide the possibility of probing the relationship between faculty identity and flourishing in more depth and improving some dimensions and domains. In the longer term, if the measure proves successful in practice, full construct validation might lead to testing and adapting the measure for other higher education contexts.

Finally, the techniques developed for virtual NGT focus groups for this study are an innovation in the context of literature on NGT-based research. I intend to present this work at a conference as a workshop or practice example and publish the technique as a research methods paper.
References

https://doi.org/10.1080/13596748.2013.847235


https://doi.org/10.1177/0049124197025003003


https://doi.org/10.1080/19415257.2017.1381638


Amundsen, Cheryl, & Wilson, M. (2012). Are we asking the right questions?: A


https://doi.org/10.7748/nr2002.07.9.4.7.c6194


https://doi.org/10.1191/1478088706qp063oa


https://doi.org/10.1037/13620-004


https://doi.org/10.1017/CBO9781107415324.004

https://doi.org/10.1017/s0266464x02220187

https://doi.org/10.1177/1468794106058877


https://doi.org/10.1080/03075079.2015.1127908


https://doi.org/10.5502/ijw.v6i3.526


https://doi.org/10.1177/17479541221099638


Cunningham (Ed.), *Exploring professionalism* (pp. 10–27). Institute of Education, University of London.


Derrick, J. (2013). ‘Practitioner learning’ not ‘professional learning’: Towards a non-
https://doi.org/10.1080/13596748.2013.819266


https://doi.org/10.1037/13377-000

https://doi.org/10.1080/1743727X.2018.1533939


Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual...


Identity work in the contemporary university: Exploring an uneasy profession.


encyclopedia of philosophy. https://doi.org/10.5860/choice.41sup-0181


https://doi.org/10.1080/03075079612331381417


https://doi.org/10.1057/palgrave.jors.2602065


https://doi.org/10.1002/cc


https://doi.org/10.1017/9781316492765.025

https://doi.org/10.1080/09518398.2010.529842


Puhr, R. (2019d). *Understanding the nature of professionalism in higher education*. 


Appendices

Appendix 1 Summary of Concepts and Contextual Factors

**Social Identity**

**Power**: the extent to which one can exert authority, influence or control (Coupland & Brown, 2012; Lawler, 2014)

**Multiplicity**: the idea that an individual may have several identities (Goffman, 1990; Levitan & Carr-Chellman, 2018)

**Self-categorisation**: the assigning of oneself to a category or type (Scheepers & Ellemers, 2019; Trepte & Loy, 2017)

- **Self-stereotyping**: the forming of a fixed often over-simplified image of oneself (Leach et al., 2008)
- **Positive distinctiveness**: the extent of one’s belief in the superiority of those with which one shares a group (Derrick, 2013; Pellegrino, 1983; Scheepers & Ellemers, 2019)

**Social comparison**: the nurturing of a sense of status and fostering of in-group favouritism (Freidson, 2001; Klass, 1961; Scheepers & Ellemers, 2019)

**Solidarity**: a shared sense of in-group unity (Leach et al., 2008)

**In-group homogeneity**: an awareness of similarities between in-group members (Leach et al., 2008)

**Legitimacy**: the perceived validity of group membership criteria (Barnett, 2008; Trepte & Loy, 2017)

**Salience**: the emotional prominence of an identity in a particular context (Levitan & Carr-Chellman, 2018; Scheepers & Ellemers, 2019; Trepte & Loy, 2017)

**Centrality**: how important or core an identity is (Leach et al., 2008; Moore & Hofman, 1988)

**Permeability**: how easy it is to enter or join a group (Trepte & Loy, 2017)

**Stability**: the likelihood that change will occur in the group (Bourdieu, 1977b; Trepte & Loy, 2017)

**Professional Identity & Professionalism**

**Beliefs & Assumptions**: deeply held, often historically informed, understandings of what it means to be a professional (Etzioni, 1969; Flexner, 1915; Hoyle & John, 1995; Klass, 1961)

**Purpose**: the sense that one’s professional life has meaning (Barnett, 2008; Beijaard, 1995; Canrinus et al., 2011; Freidson, 2001; Kern, 2014)

**Legitimacy & Credibility**: one’s belief in one’s qualifications, expertise and reputation (Barnett, 2008; Derrick, 2013; Hoyle & John, 1995; Lunt, 2008; Noi et al., 2016)

**Recognition & Status**: one’s position and power as represented by title, rank and role (Barnett, 2008; Caza & Creary, 2016; Douglas, 2013; Downie, 1990; Freidson, 2001)

**Self-regulation & Autonomy**: the extent to which a professional exercises autonomy in all aspects of professional practice (Carr-Saunders & Wilson, 1933; Freidson, 2001; Klass, 1961; Wright, 1951)

**Relationships**:

- **Belonging (peers)**: the extent to which one feels part of a professional community (Amott, 2016; Beijaard et al., 2004; Canrinus et al., 2011; D. Holland et al., 1998; Kern, 2014; Noi et al., 2016; Wenger, 1998)

- **Vocation (clients)**: one’s investment in relationships with clients/patients/students (Abu-Alruz & Khasawneh, 2013; Beijaard, 1995; Beijaard et al., 2000; Downie, 1990; Struthers, 2018; Whitty, 2008b; Wright, 1951)

**Ethics**: one’s professional responsibility and accountability founded on a shared understanding of what is right and wrong (Klass, 1961; Lunt, 2008)
**Organisational Identity & Higher Education Context**

**Multi-facetedness:** the extent to which one has more than one distinct role (Billot, 2010; Bourdieu, 1988; Brown, 2017; Caza & Creary, 2016; M. Clarke et al., 2013, 2015; Davey, 2013; McCune, 2021; Puhr, 2019c)

**Boundaries:** the importance of differentiating factors such as discipline, role and rank (Cohen, 2021; Gordon & Whitchurch, 2010; K. Lewis, 2014; Locke et al., 2016; Whitchurch, 2008)

**Attachment:** the level of commitment and connection that one feels (Barbour & Lammers, 2015)

**Expertise in discipline:** the strength of one’s disciplinary expertise as a scrutinizer, creator and custodian (M. Clarke et al., 2013; Drennan et al., 2017; Gappa, 2010; Hao, 2016)

**Primacy of discipline:** the extent to which one’s discipline-specific expertise and/or skills is central to one’s identity (Beijaard, 1995; Beijaard et al., 2000; Bostock & Baume, 2016; Downie, 1990)

**Expertise in education:** the strength of one’s expertise in educational practice (Abu-Alruz & Khasawneh, 2013; Anderson, 2009; Beijaard et al., 2000; Bostock & Baume, 2016; Giusti & Hogg, 1973; Gundersel et al., 2013; Mansbach & Austin, 2018; Tan et al., 2017; van Lankveld et al., 2017)

**Primacy of teaching:** the valence of one’s teaching role and the how central it is to one’s identity (Locke et al., 2016; van Lankveld et al., 2017)

**Relationships:** the importance of reciprocal institutional relationships between administration and faculty (Beijaard et al., 2004; Bourdieu, 1977a, 1988; Gappa, 2010)

**Collegiality (within the institution & the wider higher education context):** the connectedness, consonance and solidarity between faculty (Cohen, 2021; Henkel, 2010; Moore & Hofman, 1988; van Lankveld et al., 2017)

**Contact with students:** the nature and dynamic of the connection formed with one’s students (Beijaard et al., 2000; Canrinus et al., 2012; Struthers, 2018; van Lankveld et al., 2017)

**Governance:** the strategic decision-making processes governing higher education institutions (Bostock & Baume, 2016; Gappa, 2010; Sachs, 2001)

**Academic Freedom:** the concept of individual freedom of inquiry (M. Clarke et al., 2013; Drennan et al., 2017; Gappa, 2010)

**Autonomy / Self-regulation / Agency:** one’s sense of self-determination, one’s capacity to act independently and make free choices (M. Clarke et al., 2013; Drennan et al., 2017; Gappa, 2010; D. Holland et al., 1998; Keyes, 2002; Ryff, 1995)

**Purpose:** what makes work meaningful (Kern, 2014; McCune, 2021; Ryff, 1995; Seligman, 2011)

**Status / privilege:** the standing and reputation of one’s role or position which may be related to the prestige of the institution (D. Holland et al., 1998; Locke et al., 2016; Moore & Hofman, 1988)

**Pride / Self-presentation:** how one presents oneself (Moore & Hofman, 1988)

**Artefacts & Rituals:** the importance of institutional logics, norms, customs, rules and procedures (Bourdieu, 1988; Brown, 2017, p. 245; Delanty, 2007; D. Holland et al., 1998; Jenkins, 2014; Levin & Shaker, 2011a; Webb et al., 2002)

**Development:** the extent to which one engages in activities to improve professional practice (Gappa et al., 2007; Korthagen, 2004; Steinert et al., 2019; van Lankveld et al., 2017)

**Flourishing**
PERMA: the five dimensions of wellbeing (Seligman, 2011) applied to the workplace (Kern, 2014) as follows:

Positive emotions: range from excitement and delight to contentment and joy
Engagement: being absorbed, interested and involved in one’s work. Very high levels result in flow - a state of being completely absorbed by what one is doing.
Positive relationships: feeling connected, supported and valued by others in the organisation.
Meaning: having a sense of purpose in one’s work, that one’s work has value
Accomplishment: feelings of mastery and achievement, of working towards goals, of being able to complete daily tasks and responsibilities
Appendix 2 Invitations to Participate in Research

Invitation to participate in focus groups sent to members of the Swiss Faculty Development Network

Dear [insert name],

Thank you for participating in the SFDN workshop in which I presented my research on faculty professional identities.

I am writing to invite you to take part in the research I am conducting as part of my doctorate in Education at University College London by participating in a structured focus group discussion. Please find attached some information about the project and its purpose.

If you are happy to take part, please complete the consent form and indicate your availability: click here

Yours sincerely,

Ruth Puhr

Invitation to participate in content validity study

Dear [insert name],

I am writing to invite you to take part in a research project.

My doctoral research in Education at University College London explores the professional identity of higher education faculty for which there is currently no reliable measure. As part of my thesis, I am developing an instrument and I need expert input to help me validate potential content.

You are being invited to take part because you are a member of faculty and have experience in research. You will not be asked to 'answer' the questions at this stage, but merely to examine each question carefully and use your experience and expertise to evaluate whether it is a good measure of faculty professional identity.

Please find attached some information about the project and its purpose. The operational definitions used in the study which you may find useful while completing the online questionnaire are also attached. These are also available at the beginning of the online questionnaire as well as a consent form for you to complete if you are happy to take part.

Finally, please note that the software used seems to prefer the Google Chrome browser.

Here is the link:

Many thanks,

Ruth Puhr

Invitation to participate in follow-up focus groups sent to participants in initial focus groups

Dear [insert name],

Thank you for participating in the first phase of my research on faculty professional identities in January. During the three months since the focus group in which you took part, I have developed a
measure and conducted a content validity study with a panel of experts. I am now ready to collect data from faculty in a pilot study using the new measure.

I would like you to invite you to participate in the final phase of the study, a follow-up focus group, to evaluate the utility of the measure. I would also like to solicit your help in recruiting faculty from your institution to take part in the pilot study by completing an online questionnaire.

If you are happy to take part, please complete the consent form and indicate your availability: click here

Many thanks for your ongoing support,

Ruth Puhr

Link to online questionnaire for faculty

Dear [insert name],

Thank you for agreeing to share a link to the online questionnaire with faculty from your institution.

Here is the link for you to share:

The information sheet and consent form (both attached) will be available to read and complete at the beginning of the survey and should tell your faculty what they need to know, but I am happy to answer any questions you may have.

With regards,

Ruth Puhr
**Appendix 3 Information Sheets**

**Professional Identity of Faculty in Higher Education: Developing a Measure.**

October 2021 – December 2022

**Focus Group Information Sheet**

**Information sheet for faculty developers.**
I am conducting a study in order to develop a scale to enhance understandings of the professional identities of faculty in higher education. This project has been given ethical approval by the Institute of Education at University College London. I very much hope that you would like to take part. This information sheet will try to answer any questions you may have about the project, but please do not hesitate to contact me if there is anything else that you would like to know.

**Who will carry out the research?**
I am carrying out this research as an independent researcher.

**Why is this research being undertaken?**
I am interested in enhancing understandings of the professional identities of faculty in higher education with a view to using insights gained to inform faculty development practice.

**Why am I being invited to take part?**
As a faculty developer, you already work with faculty to support them in improving their professional practice. I hope that you will share these insights to help in the development of a scale and in an evaluation of its potential utility.

**What will happen if I choose to take part?**
You will participate in a 90-minute structured focus group with other faculty developers discussing in detail the dimensions of faculty identity and collaboratively developing questions to represent these dimensions. The discussion will be audio-recorded and transcribed. You will be given the opportunity to read the data following transcription and to request that any data that they feel uncomfortable with be removed. This will be followed by a 45-minute unstructured focus group at a later date in which the potential utility of the scale will be explored.

**Will anyone know that I have been involved?**
While the other focus group participants will know that you have been involved, the data will be carefully processed to mask any information which might potentially reveal the identity of participants.

**Do you foresee any problems for me if I take part?**
I do not foresee any problems. You are not required to answer any question that makes you feel uncomfortable. In addition, any information included in answers which might reveal your identity will be masked.
What will happen to the results of this research?
The results and findings will be included in a thesis submitted to the Institute of
Education at University College London as part of my doctoral studies. I plan to
share a brief summary of the findings with participants. The data collected will be
used for the purposes of this doctoral research only. Data will be stored on a secure
drive at UCL and will be deleted following completion of the doctorate in
compliance with GDPR.

Do I have to take part?
Participation is entirely voluntary. You are free to withdraw your consent at any
time. You do not have to give a reason and there are no penalties for withdrawing.

Who do I contact for further information?
If you have any further questions before you decide whether to take part, you can
reach me at ruth.puhr.18@ucl.ac.uk / 079 431 1805.

Data Protection Privacy Notice
The data controller for this project will be University College London (UCL). UCL’s
Data Protection Office provides oversight of UCL activities involving the processing
of personal data, and can be contacted at data-protection@ucl.ac.uk. The lawful
basis that will be used to process your personal data is: ‘Public task’ for personal
data. Your personal data will be stored for as long as it is required for her doctoral
research. If you are concerned about how your personal data is being processed, or
if you would like to contact us about your rights, please contact Ruth’s doctoral
supervisor at UCL, Dr Gwyneth Hughes: gwyneth.hughes@ucl.ac.uk

Further information on how UCL uses participant information can be found here:
https://www.ucl.ac.uk/legal-services/privacy/ucl-general-research-participant-
privacy-notice

If you would like to be involved, please complete the consent form on the next
page.

Thank you very much for taking the time to read this information sheet
Professional Identity of Faculty in Higher Education: Developing a Measure.

October 2021 – December 2022

Content Validation: Questionnaire Information Sheet

Information sheet for content validators.
I am conducting a study in order to develop a measure to enhance understandings of the professional identities of faculty in higher education. This project has been given ethical approval by the Institute of Education at University College London. I very much hope that you would like to take part. This information sheet will try to answer any questions you may have about the project, but please do not hesitate to contact me if there is anything else that you would like to know.

Who will carry out the research?
I am carrying out this research as an independent researcher.

Why is this research being undertaken?
I am interested in enhancing understandings of the professional identities of faculty in higher education with a view to using insights gained to inform faculty development practice.

Why am I being invited to take part?
The new measure requires validation. To do this, content validators with expertise in research design, survey design, the construct of professional identity and the context of higher education are being invited to complete the questionnaire. I am contacting you in the hope that you will agree to take part.

What will happen if I choose to take part?
You will be asked to complete a questionnaire which will include closed questions asking you to rate the representativeness, clarity and dimensional relevance of items. You will also be invited to comment on the validity of each item. The questionnaire will take approximately 25 minutes to complete.

Will anyone know that I have been involved?
Participation in the online survey is confidential and anonymous. In addition, the data will be carefully processed to mask any information which might potentially reveal the identity of participants.

Do you foresee any problems for me if I take part?
I do not foresee any problems. You are not required to answer any question that makes you feel uncomfortable. The questionnaire is entirely anonymous and no personal data with which you might be identified will be collected.

What will happen to the results of this research?
The results and findings will be included in a thesis submitted to the Institute of Education at University College London as part of my doctoral studies. The data collected will be used for the purposes of this doctoral research only.

**Do I have to take part?**
Participation is entirely voluntary. You are free to withdraw your consent at any time until your questionnaire response has been anonymously submitted, after which time it will not be possible to retrieve individual responses. You do not have to give a reason and there are no penalties for withdrawing.

**Who do I contact for further information?**
If you have any further questions before you decide whether to take part, you can reach me at ruth.puhr.18@ucl.ac.uk / 079 431 1805.

**Data Protection Privacy Notice**
The data controller for this project will be University College London (UCL). UCL’s Data Protection Office provides oversight of UCL activities involving the processing of personal data and can be contacted at data-protection@ucl.ac.uk. The lawful basis that will be used to process your personal data is: ‘Public task’ for personal data. Your personal data will be stored for as long as it is required for the research project. If you are concerned about how your personal data is being processed, or if you would like to contact us about your rights, please contact Ruth’s doctoral supervisor at UCL, Dr Gwyneth Hughes: gwyneth.hughes@ucl.ac.uk

Further information on how UCL uses participant information can be found here: https://www.ucl.ac.uk/legal-services/privacy/ucl-general-research-participant-privacy-notice

Thank you very much for taking the time to read this information sheet
Instrument Testing: Questionnaire Information Sheet

Information sheet for faculty.
I am conducting a study in order to develop a measure to enhance understandings of the professional identities of faculty in higher education. This project has been given ethical approval by the Institute of Education at University College London. I very much hope that you would like to take part. This information sheet will try to answer any questions you may have about the project, but please do not hesitate to contact me if there is anything else that you would like to know.

Who will carry out the research?
I am carrying out this research as an independent researcher.

Why is this research being undertaken?
I am interested in enhancing understandings of the professional identities of faculty in higher education with a view to using insights gained to inform faculty development practice.

Why am I being invited to take part?
The new measure requires validation. To do this, faculty currently teaching in higher education are being invited to complete the questionnaire. I am contacting you in the hope that you will agree to take part.

What will happen if I choose to take part?
You will be asked to complete a questionnaire which will include closed questions relating to your professional identity. The questionnaire will take approximately 15 minutes to complete.

Will anyone know that I have been involved?
Participation in the online survey is confidential and anonymous. In addition, the data will be carefully processed to mask any information which might potentially reveal the identity of participants.

Do you foresee any problems for me if I take part?
I do not foresee any problems. You are not required to answer any question that makes you feel uncomfortable. The questionnaire is entirely anonymous and no personal data with which you might be identified will be collected.

What will happen to the results of this research?
The results and findings will be included in a thesis submitted to the Institute of Education at University College London as part of my doctoral studies. The data collected will be used for the purposes of this doctoral research only.
Do I have to take part?
Participation is entirely voluntary. You are free to withdraw your consent at any time until your questionnaire response has been anonymously submitted, after which time it will not be possible to retrieve individual responses. You do not have to give a reason and there are no penalties for withdrawing.

Who do I contact for further information?
If you have any further questions before you decide whether to take part, you can reach me at ruth.puhr.18@ucl.ac.uk / 079 431 1805.

Data Protection Privacy Notice
The data controller for this project will be University College London (UCL). UCL’s Data Protection Office provides oversight of UCL activities involving the processing of personal data and can be contacted at data-protection@ucl.ac.uk. The lawful basis that will be used to process your personal data is: ‘Public task’ for personal data. Your personal data will be stored for as long as it is required for the research project. If you are concerned about how your personal data is being processed, or if you would like to contact us about your rights, please contact Ruth’s doctoral supervisor at UCL, Dr Gwyneth Hughes: gwyneth.hughes@ucl.ac.uk

Further information on how UCL uses participant information can be found here: https://www.ucl.ac.uk/legal-services/privacy/ucl-general-research-participant-privacy-notice

Thank you very much for taking the time to read this information sheet
Appendix 4 Consent Forms

Professional Identity of Faculty in Higher Education: Developing a Measure.

Focus Group Consent Form

If you are happy to participate in a focus group as part of this study, please complete this consent form. If you have any questions or concerns, please contact Ruth Puhr by email at ruth.puhr.18@ucl.ac.uk

I have read and understood the information provided about the research.

I agree to take part in this focus group, consisting of a structured 90-minute discussion followed by an unstructured 45-minute follow-up discussion at a later date.

I understand that the discussion will be audio-recorded and transcribed.

I understand that I will be given the opportunity to read the data following transcription and to request that any data that I feel uncomfortable with be removed.

I understand that participation is voluntary and that I am free to withdraw from the project at any time without giving a reason.

I understand that my data will be stored only for the duration of the doctoral research for which it was collected, after which it will be destroyed.

I understand that I can contact Ruth Puhr if I have any questions or if I want to discuss this project further (079 431 1805 or ruth.puhr.18@ucl.ac.uk).

Name: ____________________________
Signed: ____________________________
Date:____________________________  Contact email:__________________________  Contact telephone:-  

Please keep a copy of this consent form for your records.
Professional Identity of Faculty in Higher Education: Developing a Measure.

Questionnaire Consent Form for Content Validators

If you are happy to participate in this study, please complete this consent form. If you have any questions or concerns, please contact Ruth Puhr by email at ruth.puhr.18@ucl.ac.uk

I have read and understood the information provided about the research.

I agree to take part in this content validity study.

I understand that participation is voluntary and that I am free to withdraw from the project at any time until my questionnaire response has been anonymously submitted, without giving a reason.

I understand that my data will be stored only for the duration of the doctoral research for which it was collected, after which it will be destroyed.

I understand that I can contact Ruth Puhr if I have any questions or if I want to discuss this project further (079 431 1805 or ruth.puhr.18@ucl.ac.uk).
Professional Identity of Faculty in Higher Education: Developing a Measure.

Questionnaire Consent Form for Faculty

If you are happy to participate in this study, please complete this consent form. If you have any questions or concerns, please contact Ruth Puhr by email at ruth.puhr.18@ucl.ac.uk

I have read and understood the information provided about the research.

I agree to take part in this pilot study.

I understand that participation is voluntary and that I am free to withdraw from the project at any time until my questionnaire response has been anonymously submitted, without giving a reason.

I understand that my data will be stored only for the duration of the doctoral research for which it was collected, after which it will be destroyed.

I understand that I can contact Ruth Puhr if I have any questions or if I want to discuss this project further (079 431 1805 or ruth.puhr.18@ucl.ac.uk).
Follow-up Focus Group

Professional Identity of Faculty in Higher Education: Developing a Measure.

* Required

1. If you are happy to participate in the final phase of my research, a focus group to evaluate the utility of a new measure of faculty professional identity, please complete this consent form by ticking all of the boxes below. *

   I agree to take part in this focus group, consisting of a 45-minute follow-up discussion.

   I understand that the discussion will be audio-recorded and transcribed.

   I understand that participation is voluntary and that I am free to withdraw from the project at any time without giving a reason.

   I understand that my data will be stored only for the duration of the doctoral research for which it was collected, after which it will be destroyed.

   I understand that I can contact Ruth Puhr if I have any questions or if I want to discuss this project further (079 431 1805 or ruth puhr 18@ucl ac uk)

2. Full Name: *

   

3. Email address: *

   

4. Phone number: *

   

5. Please indicate which of the following dates you are available (tick all that apply): *

   14:00 - 15:30 on Tuesday, 14 June

   14:00 - 15:30 on Friday, 17 June

   14:00 - 15:30 on Monday, 20 June
6. Are you willing to share a link with faculty in your institution to take part in the pilot study by completing an online questionnaire? *

Yes, I agree to share the link with faculty in my institution (the link will be sent to you shortly)

No, I prefer not to share the link

7. Please type any comments or questions here:
Appendix 5 PDF of Qualtrics Content Validity Study Questionnaire Survey

Information Sheet

Professional Identity of Faculty in Higher Education: Developing a Measure
March 2022

Content Validation: Questionnaire Information Sheet
I am conducting a study in order to develop a measure to enhance understandings of the professional identities of faculty in higher education. This project has been given ethical approval by the Institute of Education at University College London. I very much hope that you would like to take part. This information sheet will try to answer any questions you may have about the project, but please do not hesitate to contact me if there is anything else that you would like to know.

Who will carry out the research?
I am carrying out this research as an independent researcher.

Why is this research being undertaken?
I am interested in enhancing understandings of the professional identities of faculty in higher education with a view to using insights gained to inform faculty development practice.

Why am I being invited to take part?
The new measure requires validation. To do this, content validators with expertise in research design, survey design, the construct of professional identity and the context of higher education are being invited to complete the questionnaire. I am contacting you in the hope that you will agree to take part.

What will happen if I choose to take part?
You will be asked to complete a questionnaire which will include closed questions asking you to rate the representativeness, clarity and dimensional relevance of items. You will also be invited to comment on the validity of each item. The questionnaire will take approximately 25 minutes to complete.

Will anyone know that I have been involved?
Participation in the online survey is confidential and anonymous. In addition, the data will be carefully processed to mask any information which might potentially reveal the identity of participants.

Do you foresee any problems for me if I take part?
I do not foresee any problems. You are not required to answer any question that makes you feel uncomfortable. The questionnaire is entirely anonymous and no personal data
with which you might be identified will be collected. 

What will happen to the results of this research?

The results and findings will be included in a thesis submitted to the Institute of Education at University College London as part of my doctoral studies. The data collected will be used for the purposes of this doctoral research only.

Do I have to take part?

Participation is entirely voluntary. You are free to withdraw your consent at any time until your questionnaire response has been anonymously submitted, after which time it will not be possible to retrieve individual responses. You do not have to give a reason and there are no penalties for withdrawing.

Who do I contact for further information?

If you have any further questions before you decide whether to take part, you can reach me at: ruth.puhr.18@ucl.ac.uk / 079 431 1805.

Data Protection Privacy Notice

The data controller for this project will be University College London (UCL). UCL's Data Protection Office provides oversight of UCL activities involving the processing of personal data and can be contacted at data-protection@ucl.ac.uk. The lawful basis that will be used to process your personal data is: ‘Public task’ for personal data. Your personal data will be stored for as long as it is required for the research project. If you are concerned about how your personal data is being processed, or if you would like to contact us about your rights, please contact Ruth’s doctoral supervisor at UCL, Dr Gwyneth Hughes: gwyneth.hughes@ucl.ac.u

Further information on how UCL uses participant information can be found here: https://www.ucl.ac.uk/legal-services/privacy/ucl-general-research-participant-privacy-notice

If you would like to be involved, please complete the consent form on the next page.

Thank you very much for taking the time to read this information sheet.

Consent

Professional Identity of Faculty in Higher Education: Developing a Measure Questionnaire Consent Form
I have read and understood the information provided about the research.

○ Yes  ○ No

I agree to take part in this content validity study.

○ Yes  ○ No

I understand that participation is voluntary and that I am free to withdraw from the project at any time until my questionnaire response has been anonymously submitted, without giving a reason.

○ Yes  ○ No

I understand that my data will be stored only for the duration of the doctoral research for which it was collected, after which it will be destroyed.

○ Yes  ○ No

I understand that I can contact Ruth Puhr at any time (079 431 1805 or ruth.puhr.18@ucl.ac.uk) if I have any questions or if I want to discuss this project further.

○ Yes  ○ No

**Construct Information**

**Faculty professional identity** is a complex multi-dimensional construct which is founded on an individual's evolving self-concept of who they are in their professional
role. It is formed and maintained through a range of social interactions and shared understandings. It comprises beliefs, knowledge, values, experiences and assumptions.

This operational conceptualisation of faculty professional identity are summarised by the following dimensions:

- **Belonging**: the extent to which one feels part of a faculty community.
- **Attachment**: the level of connection and commitment one feels towards one’s profession and work.
- **Beliefs**: one’s deeply held understandings regarding the values, rules and frameworks of one’s profession.
- **Ethics & Responsibility**: one’s professional understanding of what is right and wrong and one’s sense of responsibility for quality and ethical standards.
- **Autonomy**: one’s sense of agency, self-determination, and individual freedom of inquiry.
- **Purpose**: the sense that one’s professional life has value, meaning and purpose.
- **Status & Pride**: one’s importance, position, and respect relative to others; one’s standing and reputation.
- **Authenticity of appearance**: the sense that one’s self-image is visibly coherent with the aesthetic appearance of a member of faculty.
- **Centrality**: the importance of one’s professional identity to one’s overall sense of self.
- **Multiplicity & Boundaries**: the extent to which one has more than one distinct professional role, the boundaries of these roles, and how they interact.
- **Expertise in discipline**: the importance and nature of one’s discipline-specific expertise.
- **Teacher efficacy**: one’s belief in one’s ability to bring about desired outcomes of student engagement and learning.
- **Development & Openness**: the extent to which one is willing to learn, open to change, and engages in activities to improve professional practice.
- **Relationships with colleagues**: the quality of one’s relationships with colleagues; feeling supported and understood.
- **Relationships with students**: one’s ability and willingness to invest in supportive, meaningful relationships with students.

Please note: You can return to this page at any time during the content validation to check that you are assigning items to dimensions based on the operational
**INSTRUCTIONS**

You are not required to ‘answer’ the questions at this stage, but merely to examine each question carefully and evaluate whether it is a good indicator of faculty professional identity.

- Please rate each of the questions on a scale of 1 to 4, with 1 being the lowest value and 4 being the highest:
  - **Representativeness** - the extent to which each item adequately represents an aspect of the construct of professional identity.
  - **Clarity** - the extent to which the wording of each question is clear.

- Also, please assign each question to a dimension under the **Relevance** heading. If none of the dimensions listed are appropriate, please select ‘None of the above’.

- Space is provided for you to suggest revisions or to make any other comment on each item under the **Comments** heading.

- I intend to use a seven-point Likert scale with labelling of all options (1=Strongly agree, 2= Agree, 3= Somewhat agree, 4= Neither agree nor disagree, 5= Somewhat disagree, 6= Disagree, 7= Strongly disagree) for a full bi-polar range of options. Reverse scoring will be necessary for some items (indicated).

<table>
<thead>
<tr>
<th>Item represents faculty professional identity</th>
<th>Clarity of item</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1 = not at all representative, 2 = major revisions required, 3 = minor revisions required, 4 = representative)</td>
<td>(1 = not at all clear, 2 = major revisions required, 3 = minor revisions required, 4 = clear)</td>
</tr>
<tr>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>Statement</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>--</td>
</tr>
<tr>
<td>My professional values are consistent with my beliefs about my profession</td>
<td></td>
</tr>
<tr>
<td>I am committed to my work in higher education.</td>
<td></td>
</tr>
<tr>
<td>A good faculty member must be an expert in their field or discipline.</td>
<td></td>
</tr>
<tr>
<td>I feel part of a community of faculty.</td>
<td></td>
</tr>
<tr>
<td>It is important to me to continue developing my professional knowledge and skills.</td>
<td></td>
</tr>
<tr>
<td>I have a lot in common with other members of faculty.</td>
<td></td>
</tr>
<tr>
<td>I see myself as a teacher, conveying knowledge in my discipline.</td>
<td></td>
</tr>
<tr>
<td>I am comfortable interacting with students.</td>
<td></td>
</tr>
<tr>
<td>I enjoy high professional status.</td>
<td></td>
</tr>
<tr>
<td>Statement</td>
<td>1</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>---</td>
</tr>
<tr>
<td>I participate fully in professional training and development.</td>
<td></td>
</tr>
<tr>
<td>My beliefs about my profession are bound by rules and customs.</td>
<td></td>
</tr>
<tr>
<td>I see myself as a member of higher education faculty.</td>
<td></td>
</tr>
<tr>
<td>I feel responsible for maintaining rigorous ethical standards of professional behaviour.</td>
<td></td>
</tr>
<tr>
<td>I demonstrate strong ongoing professional growth.</td>
<td></td>
</tr>
<tr>
<td>I am proud to work as a member of higher education faculty.</td>
<td></td>
</tr>
<tr>
<td>I feel at home among faculty.</td>
<td></td>
</tr>
<tr>
<td>I am curious about different ways of doing my job.</td>
<td></td>
</tr>
<tr>
<td>I see myself as a scrutinizer, evaluating knowledge in my discipline.</td>
<td></td>
</tr>
<tr>
<td>Statement</td>
<td>Rating</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>I feel a strong connection with my work in higher education.</td>
<td></td>
</tr>
<tr>
<td>I make a valuable contribution to society through my work.</td>
<td></td>
</tr>
<tr>
<td>I look like a member of faculty based on my physical appearance and dress.</td>
<td></td>
</tr>
<tr>
<td>I enjoy adapting in response to changing circumstances.</td>
<td></td>
</tr>
<tr>
<td>I am comfortable interacting with colleagues.</td>
<td></td>
</tr>
<tr>
<td>I am confident in my ability to select appropriate teaching approaches to guide student's learning.</td>
<td></td>
</tr>
<tr>
<td>I am not interested in new approaches to my professional practice. (reverse score)</td>
<td></td>
</tr>
</tbody>
</table>
I enjoy building a rapport with students.

I see myself as an administrator, organising knowledge in my discipline.

I am able to establish a trusting and caring relationship with students.

I feel responsible for monitoring and maintaining quality in my work.

I am actively involved in important decision-making processes at work.

I feel deep involvement in the work that I do.

I see myself as a creator, formulating knowledge in my discipline.
<p>| I have the freedom to adopt the strategies and methods I deem appropriate in my work. | 0 0 0 0 | 0 0 0 0 | 0 0 0 0 | 0 0 0 0 |
| The institution I work for is well respected. | 0 0 0 0 | 0 0 0 0 | 0 0 0 0 | 0 0 0 0 |
| My professional identity dominates my sense of self. | 0 0 0 0 | 0 0 0 0 | 0 0 0 0 | 0 0 0 0 |
| I recognise that there are ethical dilemmas in my work. | 0 0 0 0 | 0 0 0 0 | 0 0 0 0 | 0 0 0 0 |
| I enjoy working collaboratively with colleagues. | 0 0 0 0 | 0 0 0 0 | 0 0 0 0 | 0 0 0 0 |
| The public image of higher education faculty is positive. | 0 0 0 0 | 0 0 0 0 | 0 0 0 0 | 0 0 0 0 |
| My sense of self is dependent on my work. | 0 0 0 0 | 0 0 0 0 | 0 0 0 0 | 0 0 0 0 |
| My beliefs about my profession are rooted in activity and practice. | 0 0 0 0 | 0 0 0 0 | 0 0 0 0 | 0 0 0 0 |</p>
<table>
<thead>
<tr>
<th>I am passionate about my work.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>My life revolves around my work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Engaging with students is an important part of my work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I am given a large amount of freedom in the work I do.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>My work benefits from academic freedom.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I derive fulfilment from the belief that my work has a positive impact.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I am able to use appropriate technologies to enhance students’ learning.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>My work gives me a sense of purpose.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
My work encompasses more than one role (yes/no).
**IF yes**: It is challenging to manage more than one role (reverse score)

My professional identity is central to who I am.

I enjoy the recognition I get as a member of faculty.

I am able to adapt my methods to support the diverse learning needs of my students.

I am confident that I am a highly capable teacher.

I believe in the legitimacy of higher education faculty
Please note: One of the filter items above (Which of the following best reflects your professional path...) will contain a set of conditions to determine follow-up items, listed below. You are not asked to assign a dimension for these items. Please rate them for relevance and clarity and add any comments of suggested revisions.

<table>
<thead>
<tr>
<th>Item represents faculty professional identity</th>
<th>Clarity of item</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
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<td>(1 = not at all clear, 2 = major revisions required, 3 = minor revisions required, 4 = clear)</td>
<td></td>
</tr>
</tbody>
</table>

**IF I stopped working in my discipline when I became an educator:**
1. I maintain updated knowledge about current trends in my field

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Staying connected with the industry/discipline I previously worked in supports my teaching.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. It is challenging to stay connected with the industry/discipline I previously worked in. (reverse score).</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>IF I am actively engaged in my discipline (e.g. via research) while, in parallel, working as an educator:</strong> 1. I see myself, first and foremost, as a researcher in my discipline.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I see myself, first and foremost, as an educator.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. My research interests compliment my teaching.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. It is challenging to balance my research and teaching roles. (reverse score).</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Finally, please evaluate the **comprehensiveness of the entire measure**.

Comments on aspects such as utility of the instrument, overall design, question types, length, time to complete and any other observations you may have would be appreciated.
Appendix 6 Construct and Dimensions

Faculty professional identity is a complex multi-dimensional construct which is founded on an individual's evolving self-concept of who they are in their professional role. It is formed and maintained through a range of social interactions and shared understandings. It comprises beliefs, knowledge, values, experiences and assumptions.

This operational conceptualisation of faculty professional identity can be summarised by dimensions which are defined as follows:

- **Belonging**: the extent to which one feels part of a faculty community.
- **Attachment**: the level of connection and commitment one feels towards one’s profession and work.
- **Beliefs**: one’s deeply held understandings regarding the values, rules and frameworks of one’s profession.
- **Ethics & Responsibility**: one’s professional understanding of what is right and wrong and one’s sense of responsibility for quality and ethical standards.
- **Autonomy**: one’s sense of agency, self-determination, and individual freedom of inquiry.
- **Purpose**: the sense that one’s professional life has value, meaning and purpose.
- **Status & Pride**: one’s importance, position, and respect relative to others; one’s standing and reputation.
- **Authenticity of appearance**: the sense that one’s self-image is visibly coherent with the aesthetic appearance of a member of faculty.
- **Centrality**: the importance of one’s professional identity to one’s overall sense of self.
- **Multiplicity & Boundaries**: the extent to which one has more than one distinct professional role, the boundaries of these roles, and how they interact.
- **Expertise in discipline**: the importance and nature of one’s discipline-specific expertise.
- **Teacher efficacy**: one’s belief in one’s ability to bring about desired outcomes of student engagement and learning.
- **Development & Openness**: the extent to which one is willing to learn, open to change, and engages in activities to improve professional practice.
- **Relationships with colleagues**: the quality of one’s relationships with colleagues; feeling supported and understood.
- **Relationships with students**: one’s ability and willingness to invest in supportive, meaningful relationships with students.
Appendix 7 Instructions for Content Validators

INSTRUCTIONS

You are not required to ‘answer’ the questions at this stage, but merely to examine each question carefully and evaluate whether it is a good indicator of faculty professional identity.

Please rate each of the questions on a scale of 1 to 4, with 1 being the lowest value and 4 being the highest:

• **Representativeness** - the extent to which each item adequately represents an aspect of the construct of professional identity.

• **Clarity** - the extent to which the wording of each question is clear.

Also, please assign each question to a dimension under the **Relevance** heading. If none of the dimensions listed are appropriate, please select 'None of the above'.

Space is provided for you to suggest revisions or to make any other comment on each item under the **Comments** heading.

I intend to use a seven-point Likert scale with labelling of all options (1=Strongly agree, 2= Agree, 3= Somewhat agree, 4= Neither agree nor disagree, 5= Somewhat disagree, 6= Disagree, 7= Strongly disagree) for a full bi-polar range of options. Reverse scoring will be necessary for some items (indicated).
Information Sheet

Professional Identity of Faculty in Higher Education: Developing a Measure
May 2022

Questionnaire Information Sheet for Faculty

I am conducting a study in order to develop a measure to enhance understandings of the professional identities of faculty in higher education. This project has been given ethical approval by the Institute of Education at University College London. I very much hope that you would like to take part. This information sheet will try to answer any questions you may have about the project, but please do not hesitate to contact me if there is anything else that you would like to know.

Who will carry out the research?
I am carrying out this research as an independent researcher.

Why is this research being undertaken?
I am interested in enhancing understandings of the professional identities of faculty in higher education with a view to using insights gained to inform faculty development practice.

Why am I being invited to take part?
The new measure requires validation. To do this, faculty currently teaching in higher education are being invited to complete the questionnaire. I am contacting you in the hope that you will agree to take part.

What will happen if I choose to take part?
You will be asked to complete a questionnaire which will include a range of closed questions relating to your professional identity. The questionnaire will take approximately 15 minutes to complete.

Will anyone know that I have been involved?
Participation in the online survey is confidential and anonymous. In addition, the data will be carefully processed to mask any information which might potentially reveal the identity of participants.

**Do you foresee any problems for me if I take part?**

I do not foresee any problems. You are not required to answer any question that makes you feel uncomfortable. The questionnaire is entirely anonymous and no personal data with which you might be identified will be collected.

**What will happen to the results of this research?**

The results and findings will be included in a thesis submitted to the Institute of Education at University College London as part of my doctoral studies. The data collected will be used for the purposes of this doctoral research only.

**Do I have to take part?**

Participation is entirely voluntary. You are free to withdraw your consent at any time until your questionnaire response has been anonymously submitted, after which time it will not be possible to retrieve individual responses. You do not have to give a reason and there are no penalties for withdrawing.

**Who do I contact for further information?**

If you have any further questions before you decide whether to take part, you can reach me at: ruth.puhr.18@ucl.ac.uk / 079 431 1805.

**Data Protection Privacy Notice**

The data controller for this project will be University College London (UCL). UCL’s Data Protection Office provides oversight of UCL activities involving the processing of personal data and can be contacted at data-protection@ucl.ac.uk. The lawful basis that will be used to process your personal data is: ‘Public task’ for personal data. Your personal data will be stored for as long as it is required for the research project. If you are concerned about how your personal data is being processed, or if you would like to contact us about your rights, please contact Ruth’s doctoral supervisor at UCL, Dr Gwyneth Hughes:
I have read and understood the information provided about the research.

☐ Yes   ☐ No

I agree to take part in this pilot study.

☐ Yes   ☐ No

I understand that participation is voluntary and that I am free to withdraw from the project at any time until my questionnaire response has been anonymously submitted, without giving a reason.
I understand that my data will be stored only for the duration of the doctoral research for which it was collected, after which it will be destroyed.

I understand that I can contact Ruth Puhr at any time (+41 79 431 1805 or ruth.puhr.18@ucl.ac.uk) if I have any questions, if I want to discuss this project further, or if I want to request for my data to be removed from the project database.

Demographics

What is your age?

- [ ] Yes
- [ ] No

- [ ] Under 30
- [ ] 30 - 39
- [ ] 40 - 49
- [ ] 50 - 59
- [ ] 60 or older
- [ ] Prefer not to respond
What is your gender?

- Male
- Female
- Non-binary / third gender
- Prefer not to respond

What is your ethnicity?

- White
- Asian
- Middle eastern
- Black
- Hispanic or Latino/a
- Two or more ethnic groups
- Other (please specify)
- Prefer not to respond

What is your level of English proficiency?

- Native proficiency
- Full professional proficiency
- Comfortable working proficiency
- Limited working proficiency
- Prefer not to respond

How long have you been a member higher education faculty?
What is your main discipline?

- Arts & Humanities (Philosophy, Languages, Literature, Music...)
- Social Science (Anthropology, Education, Law, Psychology...)
- Natural & Applied Science (Biology, Engineering, Physics, Medicine...)
- Business (Finance, Marketing, Management...)
- Other (please specify)
- Prefer not to respond

Please specify your discipline:

Please specify the higher education institution(s) you currently work for:
## Faculty Professional Identity

The following statements and questions may or may not apply to you.

Consider carefully how the statements and questions apply to you using the full range in the scale.

Please note: The scale ascends from a low of 0 (Never, Strongly disagree, ...) to a high of 10 (Always, Strongly agree, ...).

In general...

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
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<th>7</th>
<th>8</th>
<th>9</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel a strong connection with my work in higher education.</td>
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<tr>
<td>My beliefs about my profession are consistent with my professional values.</td>
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<tr>
<td>I feel comfortable interacting with colleagues.</td>
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<tr>
<td>I have the freedom to adopt the strategies and methods I deem appropriate in my work.</td>
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<tr>
<td>I feel confident in my ability to select appropriate teaching approaches to guide student’s learning.</td>
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</table>
### In general...

<table>
<thead>
<tr>
<th>Statement</th>
<th>Not at all</th>
<th>1</th>
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<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Completely</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am committed to my work in higher education.</td>
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<td>1</td>
<td>2</td>
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<tr>
<td>I am able to establish a trusting and caring relationship with students.</td>
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<td>0</td>
</tr>
<tr>
<td>I feel responsible for monitoring and maintaining quality in my work.</td>
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<td>0</td>
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<tr>
<td>My work in higher education gives me a sense of purpose.</td>
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<tr>
<td>I enjoy high professional status.</td>
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<td>9</td>
<td>0</td>
</tr>
<tr>
<td>My professional identity is central to who I am.</td>
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<tr>
<td>The institution I work for is well respected.</td>
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<td>My beliefs about my profession are informed by rules and customs.</td>
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<td>I recognise that there are ethical dilemmas in my work.</td>
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<td>My work benefits from academic freedom.</td>
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<td>I am able to use appropriate technologies to enhance students’ learning.</td>
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</table>

**In general...**

<table>
<thead>
<tr>
<th>Statement</th>
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<tbody>
<tr>
<td>Not like me at all</td>
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<tr>
<td>Very much like me</td>
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<tr>
<td>I am curious about different ways of doing my job.</td>
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<tr>
<td>I see myself as an expert, evaluating knowledge in my discipline.</td>
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<tr>
<td>I am passionate about my work in higher education.</td>
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</tbody>
</table>
I enjoy the recognition I get as a member of faculty.

I look like a member of faculty based on my physical appearance and dress.

In general...

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>1</th>
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<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel part of a community of faculty.</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<tr>
<td>I enjoy working collaboratively with colleagues.</td>
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<tr>
<td>I am comfortable interacting with students.</td>
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<tr>
<td>I am able to adapt my methods to support the diverse learning needs of my students.</td>
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<tr>
<td>I participate fully in professional training and development.</td>
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</table>

In general...

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
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</tbody>
</table>

---
A good faculty member must be an expert in their field or discipline.

My beliefs about my profession are rooted in practice.

I make a valuable contribution to society through my work in higher education.

My sense of self is dependent on my professional identity.

I am given a large amount of freedom in the work I do.

In general...

<table>
<thead>
<tr>
<th>Not like me at all</th>
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<th>4</th>
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<th>8</th>
<th>9</th>
<th>Very much like me</th>
</tr>
</thead>
</table>

I see myself as a creator, formulating knowledge in my discipline.

I demonstrate strong ongoing professional growth.
<table>
<thead>
<tr>
<th>I enjoy building a rapport with students.</th>
<th>O O O O O O O O O O</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel responsible for maintaining rigorous ethical standards of professional behaviour.</td>
<td>O O O O O O O O O O</td>
</tr>
<tr>
<td>My professional identity is integral to my sense of self.</td>
<td>O O O O O O O O O O</td>
</tr>
</tbody>
</table>

**My work encompasses more than one role...**

- True
- False

**It is challenging to manage more than one role.**

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>

**Which of the following best reflects your professional journey?**

- I stopped working in my discipline when I became an educator.
- I am actively engaged in my discipline (e.g. via research) while, in parallel, working as an educator.
- I work in my discipline and as an educator simultaneously (e.g. in a laboratory).
None of the above

In general...

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<th>Not like me at all</th>
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<tbody>
<tr>
<td>I maintain updated knowledge about</td>
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<td>current trends in my field.</td>
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<td>Staying connected with the</td>
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<td>previously worked in supports my</td>
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<td>teaching.</td>
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<td>it is challenging to stay</td>
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<tr>
<td>I see myself, first and foremost, as</td>
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<td>a researcher in my discipline.</td>
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<td>I see myself, first and foremost, as</td>
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<td>an educator.</td>
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<tr>
<td>My research interests compliment my</td>
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<td>teaching.</td>
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</tbody>
</table>
It is challenging to balance my research and teaching roles.

The applied learning environment facilitates learning.

It is challenging to manage two roles simultaneously.

**PERMA Scale**

**In general...**

<table>
<thead>
<tr>
<th>Never</th>
<th>1</th>
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<th>Always</th>
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</table>

How often do you feel you are making progress towards accomplishing your work-related goals?

At work, how often do you become absorbed in what you are doing?

At work, how often do you feel joyful?

At work, how often do you feel anxious?
How often do you achieve the important work goals you have set for yourself?

<table>
<thead>
<tr>
<th>Terrible</th>
<th>0</th>
<th>1</th>
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<th>9</th>
<th>Excellent</th>
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</tbody>
</table>

*In general...*

In general, how would you say your health is?

<table>
<thead>
<tr>
<th>Terrible</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
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<th>9</th>
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</tbody>
</table>

*In general...*

To what extent is your work purposeful and meaningful?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>0</th>
<th>1</th>
<th>2</th>
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<th>6</th>
<th>7</th>
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</table>

To what extent do you receive help and support from coworkers when you need it?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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In general, to what extent do you feel that what you do at work is valuable and worthwhile?

<table>
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<td><strong>To what extent do you feel excited and interested in your work?</strong></td>
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**In general...**

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**In general...**

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<table>
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<table>
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<table>
<thead>
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### At work, how often do you lose track of time while doing something you enjoy?

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<th>2</th>
<th>3</th>
<th>4</th>
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</thead>
<tbody>
<tr>
<td>Excellent</td>
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</tbody>
</table>

### In general...

Compared to others of your same age and sex, how is your health?

<table>
<thead>
<tr>
<th>Terrible</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<tbody>
<tr>
<td>Excellent</td>
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</table>

### In general...

To what extent do you feel appreciated by your coworkers?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>0</th>
<th>1</th>
<th>2</th>
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<td>Completely</td>
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To what extent do you generally feel that you have a sense of direction in your work?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>0</th>
<th>1</th>
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<td>Completely</td>
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How satisfied are you with your professional relationships?

<table>
<thead>
<tr>
<th>Not at all</th>
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<th>1</th>
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<th>3</th>
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<tbody>
<tr>
<td>Completely</td>
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</table>
At work, to what extent do you feel contented?

In general...

Taking all things together, how happy would you say you are with your work?

○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○

Follow-up contact

If you would like to receive a summary of the research findings, please enter your email address below.

(Your email address will not be used for any other purpose).

○ Yes, I would like to receive a summary of the research findings.
○ No, I do not wish to receive a summary of the research findings.

Please enter your email address:

[Email address field]

Powered by Qualtrics
Appendix 9 Qualtrics Layout for Instrument Testing

Dimensions and dimensional definitions:
Belonging and attachment (BA) – the extent to which one feels part of a faculty community and the level of connection one feels towards one’s profession and work.
Beliefs (B) – one’s deeply held understandings regarding the values, rules and frameworks of one’s profession.
Multiplicity and boundaries (M) – the extent to which one has more than one distinct professional role, the boundaries of these roles, and how they interact.
Expertise in discipline (E) – the importance and nature of one’s discipline-specific expertise.
Development and openness (D) – the extent to which one is willing to learn, open to change, and engages in activities to improve professional practice.
Relationships with colleagues (RC) – the quality of one’s relationships; feeling supported and understood.
Relationships with students (RS) – one’s ability and willingness to invest in supportive, meaningful relationships.
Ethics and responsibility (ER) – one’s professional understanding of what is right and wrong and one’s sense of responsibility for quality and ethical standards.
Autonomy (A) – one’s sense of agency, self-determination, and individual freedom of inquiry.
Purpose (P) – the sense that one’s professional life has value, meaning and purpose.
Status and pride (S) – one’s importance, position, and respect relative to others; one’s standing and reputation.
Authenticity of appearance (AA) – the sense that one’s self-image is visibly coherent with the aesthetic appearance of a member of faculty.
Centrality (C) – the importance of one’s professional identity to one’s overall sense of self.
Teacher efficacy (T) – one’s belief in one’s ability to bring about desired outcomes of student engagement and learning.

Items grouped for Qualtrics layout
Group 1: Never ... Always
BA3. I feel a strong connection with my work in higher education.
B6. My beliefs about my profession are consistent with my professional values.
RC15. I feel comfortable interacting with colleagues.
A24. I have the freedom to adopt the strategies and methods I deem appropriate in my work.
T37. I feel confident in my ability to select appropriate teaching approaches to guide student’s learning.

Group 2: Not at all ... Completely
BA2. I am committed to my work in higher education.
RS17. I am able to establish a trusting and caring relationship with students.
ER20. I feel responsible for monitoring and maintaining quality in my work.
P27. My work in higher education gives me a sense of purpose.
S30. I enjoy high professional status.
C33. My professional identity is central to who I am.

**Group 3: Strongly Disagree ... Strongly Agree**
S29. The institution I work for is well respected.
B5. My beliefs about my profession are informed by rules and customs.
ER21. I recognise that there are ethical dilemmas in my work.
A25. My work benefits from academic freedom.
T36. I am able to use appropriate technologies to enhance students’ learning.

**Group 4: Not at all like me ... Very much like me**
D14. I am curious about different ways of doing my job.
E11. I see myself as an expert, evaluating knowledge in my discipline.
P28. I am passionate about my work in higher education.
S31. I enjoy the recognition I get as a member of faculty.
AA32. I look like a member of faculty based on my physical appearance and dress.

**Group 5: Never ... Always**
BA1. I feel part of a community of faculty.
RC16. I enjoy working collaboratively with colleagues.
RS19. I am comfortable interacting with students.
T38. I am able to adapt my methods to support the diverse learning needs of my students.
D13. I participate fully in professional training and development.

**Group 6: Strongly Disagree ... Strongly Agree**
E9. A good faculty member must be an expert in their field or discipline.
B4. My beliefs about my profession are rooted in practice.
P26. I make a valuable contribution to society through my work in higher education.
C35. My sense of self is dependent on my professional identity.
A23. I am given a large amount of freedom in the work I do.

**Group 7: Not at all like me ... Very much like me**
E10. I see myself as a creator, formulating knowledge in my discipline.
D12. I demonstrate strong ongoing professional growth.
RS18. I enjoy building a rapport with students.
ER22. I feel responsible for maintaining rigorous ethical standards of professional behaviour.
C34. My professional identity is integral to my sense of self.

**Group 8: Various scales**
M7. My work encompasses more than one role.
  • If yes: It is challenging to manage more than one role.
    (Reverse score – Never ... Always)

M8. Which of the following best reflects your professional journey?
(Not at all like me ... Very much like me)

8a. I stopped working in my discipline when I became an educator.
   o I maintain updated knowledge about current trends in my field.
   o Staying connected with the industry/discipline I previously worked in supports my teaching.
   o It is challenging to stay connected with the industry/discipline I previously worked in. (Reverse score)

8b. I am actively engaged in my discipline (e.g., via research) while, in parallel, working as an educator.
   o I see myself, first and foremost, as a researcher in my discipline.
   o I see myself, first and foremost, as an educator.
   o My research interests compliment my teaching.
   o It is challenging to balance my research and teaching roles. (Reverse score)

8c. I work in my discipline and as an educator simultaneously (e.g., in a laboratory).
   o The applied learning environment facilitates learning.
   o It is challenging to manage two roles simultaneously. (Reverse score)
Appendix 10 Instrument Testing Data for Focus Groups

Participant A

Professional Identity & Dimensions

Professional Identity Score 5.7

Participant A

Professional Identity Dimensions

Professional Identity Score 5.7
Participant B

Professional Identity Score 4.1

Participant B

Professional Identity Score 4.1
Participant C

Professional Identity Score 7.5

Professional Identity & Dimensions

Professional Identity Dimensions

Professional Identity Score 7.5
Participant D

Professional Identity Score 7.1

Professional Identity Dimensions
Follow-up focus groups to discuss the utility of the new measure of faculty professional identity

Unlike the first focus group, when we used the nominal group technique to explore your perspectives regarding the professional identities of faculty, these follow-up focus groups will be loosely structured and will last about 45 minutes.

What I have done since our first focus groups:

- I developed a measure using a combination of the focus group data and literature.
- The new measure was content validated by six experts — each item was rated for representativeness and clarity and content validators were asked to assign items to the most relevant dimension. The best three items for each dimension were retained.
- I collected pilot data from faculty in some of your institutions having shared a link with you. My pilot sample is $n = 32$.
- I ran various tests on the data to check the internal reliability of items in dimensions (scatterplots and Cronbach’s alpha), look at various correlations, and try several visual representations of the data.

What we will do today:

- Review data for four participants, considering first impressions. The graphs also benchmark the data for each participant against the aggregate of the pilot data. (10 minutes)
- Discuss how the data might be interpreted by faculty developers. Should a graph be shared with the individual faculty member? Should all dimensions be retained? (10 minutes)
- Consider the value of this data for:
  - How could faculty developers use the data with individual faculty? (Prompt if needed: planning and guiding consultations with faculty and informing individual development plans. Is this like a needs assessment) (10 minutes)
  - How could faculty developers use aggregate data for institutional development? (Prompt if needed: Designing programs for groups / the institution) (10 minutes)
- Closing comments and questions. (5 minutes)
<table>
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<tr>
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<th>Autonomy / self-governance</th>
<th>Using prompts</th>
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<tr>
<td>Kate/Lee</td>
<td>Sam/Ben</td>
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<tr>
<td>..Based on shared rituals</td>
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<tr>
<td>..Using prompts</td>
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</tr>
<tr>
<td>Status</td>
<td>Accomplishment</td>
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</table>

63. Okay, I'm going to fall along the same category here of the all this kind of your career tracks and things like that. It may seem very different, but I don't think it is. And I'll put this one here, which I guess is number 2000. Or something. This idea of sometimes, you know, in a university or in higher education, you don't have a choice. Decisions are imposed upon you. So deciding what you can decide finding ways to cope with decisions that are out of your control. So I think that certain things like the status like the the path or senior lecturer, but you have to wait five years to be there, whatever these rules are. For me, sometimes they're just imposed.

12. Social identity: Sometimes you don't have a choice. Decisions may be imposed upon you. Decide what you can decide and find ways to cope with decisions that are out of your control.

Points: 3 (Autonomy / self-governance)

64. Right. Thank you number 12. Yes, thank you, ma'am.

And for me, I think xxx's proposal of professionals talks to me here and then I'll put the professionals is sitting on the boards of journals, organising conferences, being invited as a guest speaker to events, blah, blah, you know, sort of become part of the, the group of the cohort, the professional, whatever I don't.

13. Professionalism: sitting on the boards of journals, organising conferences, being invited as guest speaker to different events

Autonomy and status are conflated here

Linking to point no. 9
## Appendix 13 NGT Focus Group Code Book in MAXQDA

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Appendix 14 Content Validation Comments and Coding

Emergent Themes:

Wording
Scope
Dimensional relevance
Weak item
Layout in Qualtrics
Compliment

Axial Coding

Coded Comments Rearranged by Theme (labelled by item and content validator)

Wording

Q2 CV4) At home is very subjective
Q3 CV1) Would something like 'feel at ease' work better than 'see' or do you specifically want this verb? I prefer a feely one. Like the next question (Q 34)
Q5 CV4) Commitment can vary so would be good to add the word "currently" or recently found myself committed or in the last x day / weeks found myself committed
Q9 CV2) activity and practice what is the difference?
Q17 CV1) scrutinizer is a bit of an odd word. Scrutineer would be preferable for me - but even then, I don't like this question much.
Q23 CV1) Would people actually agree to this? Would a more nuanced 'I feel challenged by the requirement to..' perhaps elicit more honest responses?
Q26 CV1) or I feel comfortable
Q41 CV4) There should be something clearer about the impact of work on ...
Q49 CV1) is integral to rather than dominates would be preferable for me here
Q53 CV1) Again, I prefer I feel and not I am

Scope

Q2 CV4) could be little more precise
Q4 CV4) Common in terms of? professional / skills / personal / values ...
CV5) a lot? should be more precise...
Q8 CV2) quite general
Q15 CV4) Some universities value versatility so this could also depend on the situation i.e.: at xxx, versatility is good but then versatility could also be limited to a specific mother domain
Q25 CV2) this one seems too general
Q51 CV4) It's too broad and what about people who could have multiple works

Dimensional relevance

Q3 CV2) I hesitated with belonging
Q4 CV1) For me, belonging and attachment are not easy to disentangle
CV2) I hesitated also with belonging
Q12 CV1) Honestly wouldn't know what to do with this ;-) 
CV2) or beliefs?
Q16 CV1) part of the identity but not sure which dimension again
CV2) I hesitate with expertise
Q18 CV2) I was very hesitant on this one (efficacy, centrality, or purpose)
Q35 CV1) I struggled putting a dimension here
Q42 CV2) I also hesitate with belonging
Q45 CV2) I hesitated with authenticity
Q52 CV2) I hesitated with development
M CV2) I think it is important to have the same amound of items for each dimension, but I don't know if it is the case.

**Weak item**

Q9 CV1) I wouldn't know how to answer this question
Q10 CV1) mm, this is a bit of an odd question. My behaviour might be, but my beliefs? I'd struggle answering this one.
CV2) I am not sure I understand this one. does it mean I might have stereotypes which prevent creativity?
Q14 CV1) I don't know which one I would choose here so I think a response is missing for people like me - and it's xxx if you hadn't guessed already
Q17 CV1) I don't like this question much
Q33 CV4) How this would define my ID?
Q47 CV1) But this makes me feel uncomfortable.
CV4) Many faculty could be not focused on self-presentation
Q49 CV4) Requires elevated self-awareness to respond to this

**Filter item** - I see myself, first and foremost, as an educator (comment refers to Q 14)
CV1) Perhaps this could actually be one of the options at first? It would work for me.
Filter item - The applied learning environment facilitates learning
CV2) I did not fully get this one.

**Layout in Qualtrics**

Q14 CV4) Anyway this could be shortened? 
CV5) not clear for me until I went to the next step...
M CV1) I was surprised at how long it was and I disliked the visible thing (Q 47).
M CV2) You mentioned 1 = strongly agree at the beginning, but I would recommend 5 = strongly agree and 1 strongly disagree.
CV5) Last question in the first part not very clear for me before reading the next part...

**Compliment**

M CV1) Otherwise all good.
CV2) I found very useful and relevant. The questions are very clear.
CV4) It's an excellent tool and very helpful. Some questions require deep reflection while others require elevated self-awareness, would it be possible to allow a meeting to help complete some questions.
Appendix 15 Workplace PERMA Profiler

The Workplace PERMA Profiler
Margaret L. Kern, University of Pennsylvania

Measure Overview
In his 2011 book *Flourish*, Dr. Martin Seligman, Distinguished Professor of Psychology at the University of Pennsylvania and founder of the field of positive psychology, defined 5 pillars of wellbeing, PERMA (positive emotion, engagement, relationships, meaning, accomplishment). We originally developed the PERMA-Profiler to measure these five pillars, along with negative emotion and health. This version was later created, which adjusts the questions to the workplace context.

P and N = Positive and Negative emotions
Emotions are an important part of our well-being. Emotions can range from very negative to very positive, and range from high arousal (e.g., excitement, explosive) to low arousal (e.g., calm, relaxed, sad). For Positive emotion, the PERMA-Profiler measures general tendencies toward feeling contentment and joy. For Negative emotion, the Profiler measures tendencies toward feeling, sad, anxious, and angry.

E = Engagement
Engagement refers to being absorbed, interested, and involved in one’s work, and is a key measure for workplaces today. Very high levels of engagement are known as a state called “flow”, in which you are so completely absorbed in an activity that you lose all sense of time.

R = Relationships
Relationships refer to feeling connected, supported, and valued by others in the organization. Having positive relationships with others is an important part of life feeling good and going well. Other people matter!

M = Meaning
Meaning refers to having a sense of purpose in one’s work. Meaning provides a sense that your work matters.

A = Accomplishment
Accomplishment can be objective, marked by honors and awards received, but feelings of mastery and achievement is also important. The Profiler measures subjective feelings of accomplishment and staying on top of daily responsibilities. It involves working toward and reaching goals, and feeling able to complete tasks and daily responsibilities.

H = Health
Although not part of the PERMA model itself, physical health and vitality is another important part of well-being. The Profiler measures a subjective sense of health – feeling good and healthy each day.

Use of the Measure
Two versions of the measure are provided below: the first is for presenting the items one screen at a time, or as a full measure as part of a paper questionnaire; the second groups questions together with the same response scales, to reduce the number of pages needed. The questions should be presented in the order noted. The health and negative emotion questions act as filler questions and provide more information; for
briefness, the 16 PERMA questions (3 per PERMA domain plus a single overall question) could be used, but we recommend using the full measure.

The measure is freely available for noncommercial research and assessment purposes, after registering (please complete the form at https://docs.google.com/forms/d/1eam8chwtjyQDzWG72qum8CjJ2Jlz3Q7r5FE5pje/A/viewform?usp=send_form). In the future, we will have an online portal for taking the measure and receiving results and insights, but at this point, we cannot provide assistance with administering or scoring the measure.

For commercial purposes, please contact the University of Pennsylvania Center for Technology Transfer

**Question Administration**

The questions should be presented either with radial buttons or on a slider scale, with only the end points labeled. Note that this is an 11-point scale, ranging from 0 to 10.

| In general, to what extent do you feel contented? |
|------------------------|--------|
|                      | 0      | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      | 9      | 10     |

**Scoring:**

Scores are calculated as the average of the items comprising each factor:

- Positive Emotion: $P = \text{mean}(P1,P2,P3)$
- Engagement: $E = \text{mean}(E1,E2,E3)$
- Relationships: $R = \text{mean}(R1,R2,R3)$
- Meaning: $M = \text{mean}(M1,M2,M3)$
- Accomplishment: $A = \text{mean}(A1,A2,A3)$
- Overall Well-being: $\text{PERMA} = \text{mean}(P1,P2,P3,E1,E2,E3, R1,R2,R3, M1,M2,M3, A1,A2,A3,\text{happy})$
- Negative Emotion: $N = \text{mean}(N1,N2,N3)$
- Health: $H = \text{mean}(h1,h2,h3)$
- Loneliness: $\text{Lon} (\text{single item})$

**Sample Scoring Presentation**

We are working on the best way to display scores. To date, we have used bar graphs:
<table>
<thead>
<tr>
<th>#</th>
<th>Question</th>
<th>Response Anchors</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>To what extent is your work purposeful and meaningful?</td>
<td>0 = not at all, 10 = completely</td>
<td>M1</td>
</tr>
<tr>
<td>2</td>
<td>How often do you feel you are making progress towards accomplishing your work-related goals?</td>
<td>0 = never, 10 = always</td>
<td>A1</td>
</tr>
<tr>
<td>3</td>
<td>At work, how often do you become absorbed in what you are doing?</td>
<td>0 = never, 10 = always</td>
<td>E1</td>
</tr>
<tr>
<td>4</td>
<td>In general, how would you say your health is?</td>
<td>0 = terrible, 10 = excellent</td>
<td>H1</td>
</tr>
<tr>
<td>5</td>
<td>At work, how often do you feel joyful?</td>
<td>0 = never, 10 = always</td>
<td>P1</td>
</tr>
<tr>
<td>6</td>
<td>To what extent do you receive help and support from coworkers when you need it?</td>
<td>0 = not at all, 10 = completely</td>
<td>R1</td>
</tr>
<tr>
<td>7</td>
<td>At work, how often do you feel anxious</td>
<td>0 = never, 10 = always</td>
<td>N1</td>
</tr>
<tr>
<td>8</td>
<td>How often do you achieve the important work goals you have set for yourself?</td>
<td>0 = never, 10 = always</td>
<td>A2</td>
</tr>
<tr>
<td>9</td>
<td>In general, to what extent do you feel that what you do at work is valuable and worthwhile?</td>
<td>0 = not at all, 10 = completely</td>
<td>M2</td>
</tr>
<tr>
<td>10</td>
<td>At work, how often do you feel positive?</td>
<td>0 = never, 10 = always</td>
<td>P2</td>
</tr>
<tr>
<td>11</td>
<td>To what extent do you feel excited and interested in your work?</td>
<td>0 = not at all, 10 = completely</td>
<td>E2</td>
</tr>
<tr>
<td>12</td>
<td>How lonely do you feel at work?</td>
<td>0 = not at all, 10 = completely</td>
<td>Lon</td>
</tr>
<tr>
<td>13</td>
<td>How satisfied are you with your current physical health?</td>
<td>0 = not at all, 10 = completely</td>
<td>H2</td>
</tr>
<tr>
<td>14</td>
<td>At work, how often do you feel angry?</td>
<td>0 = never, 10 = always</td>
<td>N2</td>
</tr>
<tr>
<td>15</td>
<td>To what extent do you feel appreciated by your coworkers?</td>
<td>0 = not at all, 10 = completely</td>
<td>R2</td>
</tr>
<tr>
<td>16</td>
<td>How often are you able to handle your work-related responsibilities??</td>
<td>0 = never, 10 = always</td>
<td>A3</td>
</tr>
<tr>
<td>17</td>
<td>To what extent do you generally feel that you have a sense of direction in your work?</td>
<td>0 = not at all, 10 = completely</td>
<td>M3</td>
</tr>
<tr>
<td>18</td>
<td>Compared to others of your same age and sex, how is your health?</td>
<td>0 = terrible, 10 = excellent</td>
<td>H3</td>
</tr>
<tr>
<td>19</td>
<td>How satisfied are you with your professional relationships?</td>
<td>0 = not at all, 10 = completely</td>
<td>R3</td>
</tr>
<tr>
<td>20</td>
<td>At work, how often do you feel sad?</td>
<td>0 = never, 10 = always</td>
<td>N3</td>
</tr>
<tr>
<td>21</td>
<td>At work, how often do you lose track of time while doing something you enjoy?</td>
<td>0 = never, 10 = always</td>
<td>E3</td>
</tr>
<tr>
<td>22</td>
<td>At work, to what extent do you feel contented?</td>
<td>0 = not at all, 10 = completely</td>
<td>P3</td>
</tr>
<tr>
<td>23</td>
<td>Taking all things together, how happy would you say you are with your work?</td>
<td>0 = not at all, 10 = completely</td>
<td>hap</td>
</tr>
</tbody>
</table>
### Version 2: grouped version (each group should be a single page – see example below)

<table>
<thead>
<tr>
<th>#</th>
<th>Question</th>
<th>Response Anchors</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pg. 1</td>
<td>How often do you feel you are making progress towards accomplishing your work-related goals?</td>
<td>0 = never, 10 = always</td>
<td>A1</td>
</tr>
<tr>
<td></td>
<td>At work, how often do you become absorbed in what you are doing?</td>
<td></td>
<td>E1</td>
</tr>
<tr>
<td></td>
<td>At work, how often do you feel joyful?</td>
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<td>P1</td>
</tr>
<tr>
<td></td>
<td>At work, how often do you feel anxious</td>
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<td>N1</td>
</tr>
<tr>
<td></td>
<td>How often do you achieve the important work goals you have set for yourself?</td>
<td></td>
<td>A2</td>
</tr>
<tr>
<td>Pg. 2</td>
<td>In general, how would you say your health is?</td>
<td>0 = terrible, 10 = excellent</td>
<td>H1</td>
</tr>
<tr>
<td>Pg. 3</td>
<td>To what extent is your work purposeful and meaningful?</td>
<td>0 = not at all, 10 = completely</td>
<td>M1</td>
</tr>
<tr>
<td></td>
<td>To what extent do you receive help and support from coworkers when you need it?</td>
<td></td>
<td>R1</td>
</tr>
<tr>
<td></td>
<td>In general, to what extent do you feel that what you do at work is valuable and worthwhile?</td>
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<td>M2</td>
</tr>
<tr>
<td></td>
<td>To what extent do you feel excited and interested in your work?</td>
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<td>E2</td>
</tr>
<tr>
<td></td>
<td>How lonely do you feel at work?</td>
<td></td>
<td>Lon</td>
</tr>
<tr>
<td>Pg. 4</td>
<td>How satisfied are you with your current physical health?</td>
<td>0 = not at all, 10 = completely</td>
<td>H2</td>
</tr>
<tr>
<td>Pg. 5</td>
<td>At work, how often do you feel positive?</td>
<td>0 = never, 10 = always</td>
<td>P2</td>
</tr>
<tr>
<td></td>
<td>At work, how often do you feel angry?</td>
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<td>N2</td>
</tr>
<tr>
<td></td>
<td>How often are you able to handle your work-related responsibilities??</td>
<td></td>
<td>A3</td>
</tr>
<tr>
<td></td>
<td>At work, how often do you feel sad?</td>
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<td>N3</td>
</tr>
<tr>
<td></td>
<td>At work, how often do you lose track of time while doing something you enjoy?</td>
<td></td>
<td>E3</td>
</tr>
<tr>
<td>Pg. 6</td>
<td>Compared to others of your same age and sex, how is your health?</td>
<td>0 = terrible, 10 = excellent</td>
<td>H3</td>
</tr>
<tr>
<td>Pg. 7</td>
<td>To what extent do you feel appreciated by your coworkers?</td>
<td>0 = not at all, 10 = completely</td>
<td>R2</td>
</tr>
<tr>
<td></td>
<td>To what extent do you generally feel that you have a sense of direction in your work?</td>
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<td>M3</td>
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<td></td>
<td>How satisfied are you with your professional relationships?</td>
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<td>R3</td>
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<tr>
<td></td>
<td>At work, to what extent do you feel contented?</td>
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<td>P3</td>
</tr>
<tr>
<td>Pg. 8</td>
<td>Taking all things together, how happy would you say you are with your work?</td>
<td>0 = not at all, 10 = completely</td>
<td>hap</td>
</tr>
</tbody>
</table>
Sample question presentation (this is for the general profiler; see above for the actual questions):

**Perma1**

*In general...*

<table>
<thead>
<tr>
<th>Never</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Always to 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>How much of the time do you feel you are making progress towards accomplishing your goals?</td>
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<td>How often do you become absorbed in what you are doing?</td>
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<tr>
<td>How often do you feel joyful?</td>
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<td>How often do you feel anxious?</td>
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<tr>
<td>How often do you achieve the important goals you have set for yourself?</td>
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</tbody>
</table>

**H1**

*In general...*

<table>
<thead>
<tr>
<th>Terrible</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>How would you say your health is?</td>
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</tbody>
</table>

**Perma2**

*In general...*

<table>
<thead>
<tr>
<th>Not at all</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Completely</th>
</tr>
</thead>
<tbody>
<tr>
<td>To what extent do you lead a purposeful and meaningful life?</td>
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<tr>
<td>To what extent do you receive help and support from others when you need it?</td>
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<tr>
<td>To what extent do you feel that what you do in your life is valuable and worthwhile?</td>
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<tr>
<td>To what extent do you feel excited and interested in things?</td>
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<td>How lonely do you feel in your daily life?</td>
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</table>

**H2**

How satisfied are you with your current physical health?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
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</tbody>
</table>
### In general...

<table>
<thead>
<tr>
<th>Never</th>
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<th>2</th>
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<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often do you feel positive?</td>
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<td>How often do you feel angry?</td>
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<tr>
<td>How often are you able to handle your responsibilities?</td>
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<td>How often do you feel sad?</td>
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<td>How often do you lose track of time while doing something you enjoy?</td>
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</tbody>
</table>

### Compared to others of your same age and sex, how is your health?

<table>
<thead>
<tr>
<th>Terrible</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>Excellent</th>
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</tbody>
</table>

### In general...

<table>
<thead>
<tr>
<th>Not at all</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>Completely</th>
</tr>
</thead>
<tbody>
<tr>
<td>To what extent do you feel you have a sense of direction in your life?</td>
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</tr>
<tr>
<td>How satisfied are you with your personal relationships?</td>
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</tr>
<tr>
<td>To what extent do you feel loved?</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To what extent do you feel contented?</td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### In general...

<table>
<thead>
<tr>
<th>Not at all</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>Completely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taking all things together, how happy would you say you are?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For questions, comments, or suggestions, please send an email to perma.flourish@gmail.com; we will try to respond as soon as possible.
### Professional Identity of Faculty in Higher Education

<table>
<thead>
<tr>
<th>Dimensions &amp; Indicators</th>
<th>I-CVI Representativeness</th>
<th>IRA Clarity</th>
<th>I-CVI Dimensional Relevance</th>
<th>D-FVI Dimensional Relevance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belonging</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. I feel part of a community of faculty</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>2. I feel at home among peers</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>3. I see myself as a member of higher education faculty</td>
<td>1.00</td>
<td>1.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>4. I have a list of connections with members of faculty</td>
<td>1.00</td>
<td>1.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Attainment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. I am committed to my work in higher education</td>
<td>1.00</td>
<td>1.00</td>
<td>0.80</td>
<td></td>
</tr>
<tr>
<td>2. I am moving consistently in my work in higher education</td>
<td>1.00</td>
<td>1.00</td>
<td>0.60</td>
<td></td>
</tr>
<tr>
<td>3. I feel deep involvement in the work I do</td>
<td>1.00</td>
<td>1.00</td>
<td>0.40</td>
<td></td>
</tr>
<tr>
<td>4. I am passionate about my work</td>
<td>1.00</td>
<td>1.00</td>
<td>0.40</td>
<td></td>
</tr>
<tr>
<td>Beliefs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. My beliefs about my profession are consistent and adaptive</td>
<td>0.80</td>
<td>1.00</td>
<td>0.80</td>
<td></td>
</tr>
<tr>
<td>6. My beliefs about my profession are shared by rules and customs</td>
<td>0.80</td>
<td>0.80</td>
<td>0.80</td>
<td></td>
</tr>
<tr>
<td>7. My professional values are consistent with my beliefs about my profession</td>
<td>1.00</td>
<td>1.00</td>
<td>0.80</td>
<td></td>
</tr>
<tr>
<td>8. I believe in the legitimacy of my profession</td>
<td>0.80</td>
<td>1.00</td>
<td>0.50</td>
<td></td>
</tr>
<tr>
<td>Multiplicity and Boundaries</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. My work encompasses more than one role</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>10. If yes, it is challenging to manage more than one role (reverse score)</td>
<td>0.50</td>
<td>0.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Which of the following best reflects your professional journey?</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Definitions:**

- **Teacher efficacy**
- **Centrality**
- **Status and pride**
- **Purpose**
- **Autonomy**
- **Ethics and responsibility**
- **Relationships with students**
- **Expertise in discipline**
- **Multiplicity and boundaries**
- **Beliefs**
- **Attachment**

**Content Validation**

- It is challenging to manage two roles simultaneously (reverse score)
- The applied learning environment facilitates learning
- I see myself, first and foremost, as an educator
- I maintain updated knowledge about current trends in my field
- I work in my discipline and as an educator simultaneously (e.g. in a laboratory)
- It is challenging to manage more than one role (reverse score)
- I am actively engaged in my discipline (e.g. via research) while, in parallel, working as an educator
- I am personally involved in the work that I do
- My professional identity dominates my sense of self
- I derive fulfillment from the belief that my work has a positive impact
- My work gives me a sense of purpose
- I make a valuable contribution to society through my work
- My work benefits from academic freedom
- I feel responsible for maintaining rigorous ethical standards of professional behavior
- I am given a large amount of freedom in the work I do
- I have freedom to adopt the strategies and methods I deem appropriate in my work
- I believe that my work has a positive impact
- I am proud to work as a member of higher education faculty
- I am part of the professional education system
- I am recognized as a leader by my peers
- I am recognized as an expert in my specialty
- I am seen as an expert, first and foremost, as an educator
- I feel deep involvement in the work that I do
- I am passionate about my work
- I believe in the legitimacy of my profession
- My beliefs about my profession are consistent and adaptive
- My beliefs about my profession are shared by rules and customs
- My professional values are consistent with my beliefs about my profession
- I believe in the legitimacy of my profession
- My work encompasses more than one role
- If yes, it is challenging to manage more than one role (reverse score)
- Which of the following best reflects your professional journey?

**Results**

<table>
<thead>
<tr>
<th>IRA/Ave</th>
<th>D-FVI/Ave</th>
<th>IRA/Ave</th>
<th>D-FVI/Ave</th>
<th>IRA/Ave</th>
<th>D-FVI/Ave</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.98</td>
<td>1.00</td>
<td>0.97</td>
<td>0.88</td>
<td>0.58</td>
<td>0.73</td>
</tr>
</tbody>
</table>

**Definitions:**

- **IRA =** Sum of I-IRAs (I-IRA1 + I-IRA2 + I-IRAN)/total number of items (55 main items + 9 filter items)
- **D-FVI/Ave** = Sum of I-FVIs (I-FVI1 + I-FVI2 + I-FVIN)/total number of items (55 main items + 9 filter items)
### Appendix 17 Follow-up Focus Group Code Book in MAXQDA

<table>
<thead>
<tr>
<th>Code System</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Utility</strong></td>
<td>47</td>
</tr>
<tr>
<td><strong>Methodology</strong></td>
<td>8</td>
</tr>
<tr>
<td>Ethics &amp; Data management</td>
<td>17</td>
</tr>
<tr>
<td>Ideas for operationalisation</td>
<td>21</td>
</tr>
<tr>
<td><strong>Dimensional definitions</strong></td>
<td>16</td>
</tr>
<tr>
<td>Authenticity of appearance</td>
<td>12</td>
</tr>
<tr>
<td>Graphic visualisation</td>
<td>30</td>
</tr>
<tr>
<td><strong>Interpretation</strong></td>
<td>22</td>
</tr>
<tr>
<td>Overall PI score</td>
<td>7</td>
</tr>
<tr>
<td><strong>Analysis</strong></td>
<td>5</td>
</tr>
<tr>
<td>Comparing between individuals</td>
<td>6</td>
</tr>
<tr>
<td>Comparing individual and aggregate scores</td>
<td>2</td>
</tr>
<tr>
<td>Aggregating - Institutionally</td>
<td>20</td>
</tr>
<tr>
<td>Aggregating - Groups</td>
<td>12</td>
</tr>
<tr>
<td><strong>Causing distress</strong></td>
<td>4</td>
</tr>
<tr>
<td>Performance anxiety</td>
<td>9</td>
</tr>
<tr>
<td>Fear of managerial repercussions</td>
<td>8</td>
</tr>
<tr>
<td><strong>Role of faculty development</strong></td>
<td>33</td>
</tr>
<tr>
<td>Accompanying</td>
<td>5</td>
</tr>
<tr>
<td>Providing support</td>
<td>7</td>
</tr>
<tr>
<td>Goal setting</td>
<td>5</td>
</tr>
<tr>
<td><strong>Participants</strong></td>
<td>109</td>
</tr>
<tr>
<td>gold star</td>
<td>10</td>
</tr>
<tr>
<td>red heart</td>
<td>10</td>
</tr>
</tbody>
</table>