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# ‘Sometimes a science, sometimes an art’: cross-institutional collaboration to create an institutional language of transferable skills

**Kate Daubney**
Independent Scholar

## *Abstract*

This article proposes two models and four principles for creating taxonomies of transferable skills that reflect and enable cross-institutional partnership between academic and professional services colleagues. Such language or taxonomies provide a shared focus for all institutional stakeholders in support of students’ development and future employment outcomes. An anonymised UK university case study demonstrates the models and principles in practice through a cross-institutional collaboration between the Careers Service, other student services teams, and academic departments. Universities, subject/programme teams, academics, careers services, extra-curricular programme teams, and teaching and learning professionals can use the principles and models in this article to create transferable skills taxonomies for their students that can be owned by all university stakeholders, and are relevant to the graduate workplace.

**Keywords:** transferable skills; curriculum; employability; collaboration.

## *Uncertain futures, fluid landscapes*

Universities are increasingly preoccupied with how to prepare graduates to enter the fluid, fast-changing, and uncertain world and employment market (University of Glasgow Learning and Teaching Strategy, 2021; Ossai and Okokoyo, 2022; Organisation for Economic Co-operation and Development, No date). Some have focused on alignment of professional expertise to the specialist requirements of the fourth Industrial Revolution through programme development (for example, University of Edinburgh BSc Artificial Intelligence; University of Glasgow MSc Nanoscience and Nanotechnology; Loughborough

University London MA Design Innovation) while others, including Aalto University in Finland and University of Technology Sydney, propose that developing students’ ability to engage transdisciplinarily with each other more accurately replicates the workplace.

In the UK, the predominantly subject-agnostic graduate recruitment market reflects the perspective that graduates bring something other than discipline-specific specialist knowledge: 81% of graduate recruiters surveyed in 2023 had no preference for the subjects studied by their graduate entrants (Institute of Student Employers, 2023). Furthermore, in a fluid employment landscape, transferable skills have a key role to play in supporting adult lifelong learning. Adults, when compared to children, have a distinct need to learn in order to solve problems or address real life questions (Knowles, Holton III and Swanson, 2014) which requires targeted learning behaviours, as opposed to more sweeping grasps of knowledge (Fleming, 2011), and these are defined by the application of core groups of transferable skills. Enabling students to recognise, articulate, develop, and apply transferable skills while they are at university is, therefore, a practical solution with long term individual and holistic economic benefits that universities should engage with.

Careers Services often lead on the design and delivery of this solution because they are structurally located at the intersection between the university and the world of work. This means that not only are Careers Services offering diverse extra-curricular services in both career planning and employability development that prepare students for the transition from education to work, but they are also key institutional partners in translating labour market intelligence for institutional innovation, and commissioning the delivery of experiential learning in curriculum. However, conversations about employability development through curriculum beyond structured placements can be experienced by some academics as risking curriculum integrity and rigour (Daubney, 2022) and while the Careers Service may be tasked with leading this conversation, they may not be welcomed equally as partners in it. Yet if we are to ensure every student is enabled, we cannot leave employability development to the chance of students having capacity to engage with the Careers Service’s extra-curricular offer. Developing transferable skills through curriculum is the most inclusive (Manoharan, 2020; 2021) and structurally unavoidable (Daubney, 2022) approach.

The identification of which transferable skills are developed through curriculum often happens by one of two approaches. Many institutions create their own institutional framework or shortlist of transferable skills and attributes, which attempt to summarise the intersection of an institutional vision for the student experience with aspirations of what a future-facing graduate should be. These are then integrated into curriculum through quality assurance mechanisms (for example, by (re)writing learning outcomes), integrating specific skills-focused modules, or providing a menu of general and subject-specific teaching and learning activities that academics can integrate (for example, Dublin City University’s Transversal Skills framework). Many academics and subject areas will engage innovatively with this approach, but equally there are risks if elements of the institutional framework are not seen by academics to align with their subject area, or the institutional framework is not meaningful outside the institution. Blackmore and Kandiko recognise the contentiousness of this reductive approach in the disciplinary context (2012), and Rook and Sloan observe that all those with a stake in graduate attribute development view frameworks differently (2021).

The alternative approach to identifying transferable skills is to surface the existing skills innate to each subject (Daubney, 2022), enabling academics to celebrate their subject by using a more diverse and even personally selected range of transferable skills which they then articulate to students through teaching, learning, and assessment. However, the risk here is that the academic language of skills might seem distanced from how employers talk about transferable skills. For example, one global professional services firm (finance, tax, consulting) currently includes ‘Communicate Effectively’ in its core strengths, asking that graduates can ‘communicate passionately and professionally…[are] able to use clear verbal and written communication styles…[and] leave an impact by communicating knowledgeably’ (KPMG, No date). But academics in Psychology, Theatre Studies, and Health Professions, to name just a few, might describe their development of communication skills through curriculum with a more nuanced and varied range of examples. If every subject or even academic creates such a language independently, the institution is awash with a rich but inconsistent language of transferable skills.

How can a taxonomy or language of transferable skills therefore be built that provides more than a superficial and generalised snapshot of the transferable skills that students are developing through their studies and will actually need in work? How can cross-

institutional partnerships to create these taxonomies encompass the academic context, the diversity of other uses (for example, service learning, entrepreneurship) the institution may want to apply its taxonomy to, employer need, and an uncertain future of work?

## *A case study: SmallTown University*

SmallTown University is a UK public multi-faculty university with research presence and high standards of teaching. It has around 15,000 students, predominantly undergraduate, and is keen to enhance the employability of its graduates. Initially, responsibility for student employability development sat with the Careers Service, with some input from an extra-curricular award team elsewhere in Student Services (this directorate includes offices delivering services on accommodation, health, wellbeing, academic processes, and academic support). The ultimate goal of both these teams – eventually endorsed by the university's senior leadership – was to create a core skills framework for all academics and professional services to use. However the Careers Service team was concerned about having a framework that was too detailed and unwieldy for students and academics, and not recognisable to employers either.

Early on in the process, Student Services' leaders of the extra-curricular skills awards completed a comprehensive review of the awards. The awards had significant employer and employment input, reinforcing them as non-academic activity. In parallel, the Careers team was to start engaging and enabling academics in the conversation about transferable skills development, by creating a taxonomy of transferable skills that was sufficiently detailed and subject-sourced to enable a strong sense of bespoke ownership for academics.

Through their review, the Student Services team had created a list of around 80 skills and attributes which had been identified principally by students as the areas of employability development they felt the awards provided. This list was shaped significantly by 'life skills' (for example, financial management, time management) and while the Student Services team were really enthused by the diversity and significance to students of the range of skills, the Careers team were concerned that references to 'life skills' would be seen by academics as irrelevant to curriculum and undermine their conversations with academic

departments. The Student Services team wanted to retain the student voice in any future framework, because they felt it gave the framework authenticity by making the institutional approach relevant to student life in the real world. However, the Careers Service had concerns that while employers would recognise these skills were valuable and important, they would also not see all such skills as pertinent to the workplace. The challenge for these two teams of Professional Services colleagues collaborating at SmallTown University was, therefore, how to incorporate the list of 80 and build towards an institutional concept that was representative of student experience, appropriately academic, and relevant to employers.

I joined the project as a consultant at this stage, and key early discussions focused on enabling both teams to see that creating such a common language was possible, not just for the Student Services and Careers Teams with their differing perspectives, but also to engage academics in authentic discussion about their disciplines. I also proposed that these were not mutually exclusive positions, and to demonstrate this I drew on four principles I had conceptualised, based on my experience of this work in my own previous institution and consulting to other institutions. I would note that while the case study focuses on the role of careers professionals and student services professionals, I believe it represents a scenario that learning development professionals could also find themselves in and I hope it proves insightful in that respect.

## *Core principles of building a taxonomy of transferable skills*

### Principle 1: Recognise the ecosystem

Whatever language emerges, different stakeholders will need to identify with and deploy different levels of skills language complexity for different purposes. Development of transferable skills occurs in three key parts of the university ecosystem, each of which also represents a community of professionals delivering to students.

**Figure 1. A typical university skill development ecosystem.**


Extra-curricular activity within a university usually encompasses skills awards, student societies, volunteering, and ambassador and mentoring schemes, alongside external activities including caring responsibilities, hobbies and interests, part-time work, and internships. Student Services and Student Union colleagues who run these offers can find themselves structurally excluded from institutional discussions about transferable skills, while the practical reality is that many students draw on exactly these experiences to demonstrate their suitability for the workplace. Many new employability initiatives therefore often intentionally draw Student Services and Students Unions into consultation and co-creation (for example, Eastwood and Thapar, 2022; Heard-Lauréote and Smith, 2022; Collins and Dhugga, 2023).

These experiences can overlap in transferable skill development with academic study when students can capture their extra-curricular activities for credit, as in the University of Edinburgh's Student-Led Individually Created Courses. Workplace engagement can be extra-curricular when students take vacation internships, have ongoing part-time work commitments, or volunteer, and in-curriculum and academically credible through credit-bearing internships, capstone projects, or employer-led projects. Institutional frameworks of skills therefore need also to encompass and articulate this skill development ecosystem, which means that the language and framing of those skills needs to be relevant and accessible to academic, workplace, and extra-curricular contexts.

## Principle 2: Acknowledge ownership

Any institutional skills framework must be recognisable to both staff and students if it is to have impact. This is not simply a matter of visibility (see Principle 4 below) but refers more specifically to a sense of identity and ownership, including from the point of view of academic staff. My concept of extracted employability (Daubney, 2022) is designed to enable academics to evolve their understanding of their discipline as being about more than just knowledge expertise. But that has implications for how academics' individual professional identity is embedded in the processes and rites of passage of developing expertise. In practice, most academics refer to themselves in terms of their disciplinary home(s), establishing their identity through the frame of knowledge, amid the challenging context of the 'game of academic prestige' (Adler and Harzing, 2009, p.74). Barnett, Parry and Coate's identification of the shift for academics towards 'doing, rather than knowing, and performance, rather than understanding' (2001, p.436) resonates with the implied prioritisation of skill development over knowledge, as well as reflecting our current academic landscape shaped by contractual instability, an ever-contracting jobs market and the increasing influence of digital delivery. Individually and collectively these different factors are likely to generate a protective response to any threat to academic identity; this is particularly the case if an academic senses reductiveness when their subject is analysed for transferable skills, as can occur when implementing a graduate attributes framework.

There is, however, a parallel narrative where academics can also describe themselves in the language of the skills which particularly define their disciplines. In my own former academic discipline, I could describe myself as an interpreter of motive, a deconstructor of language in search of meaning, a connector of evidence, a detector of patterns and so on. You do not need to know what my disciplinary area was to find that meaningful, nor do you need to come from a similar discipline to see yourself reflected in that description. This does not replace the professional (and arguably the personal) identit(ies) that are constructed around my research presence, and it opens up new opportunities for me to see my academic identity reflected in other different disciplines. This is a parallel narrative about curriculum, not a substitution narrative about identity: I do not stop being a subject specialist when I also define myself through these transferable skills. But if we as academics do not describe ourselves in these terms – as constructors of narratives (Historians or Archaeologists), experimenters (Bioscientists), constructors of cause and effect (Geographers), or modellers of explanations (Physicists) – then how would our

students know that they could do that too? Addressing this matters if we are to enable academics to engage with and embrace the idea that they can own that narrative about themselves and, in doing so, enable students to recognise themselves in that way too.

That ownership must therefore also exist in all three of the areas and communities outlined in Principle 1. In practice, the language of skills is currently far more prevalent in the workplace as seen in job titles and role descriptions; however, if it is also to meet the diverse needs of the workplace both within and beyond curriculum, during the degree and after, then it needs to be at the right level of generalisation or precision. A student who first encounters a skills framework through being captain of their university basketball team must be as able as a student in the knitting club, a volunteer with refugees, a credit-bearing intern or a postgraduate research student to recognise themselves and their actions in this skills language. This is explored more in the case study of SmallTown University below.

In this last respect, we should also reiterate the need for ownership by students. In the SmallTown University case study, they were involved in surfacing some of the original skills and attributes they were developing. Inclusive practice in employability development encourages us to recognise who our students are and meet them where they are in terms of their lived experience (University of London/QAA, 2024). 'Ownership' might therefore include the opportunity for students to be co-creators in terms of which skills are included and how they are articulated to make them recognisable. 'Ownership' also extends to engagement: once a language has been created, how can students be included in the discussion of making that language accessible and engaging to them?

### Principle 3: Consistent and coherent

A by-product of the requirement for ownership is consistency and coherence. While the three areas of the ecosystem are different, students must be able to move between them and recognise themselves consistently and without confusion when it comes to the language of transferable skills used in each. This is not only key to narratives about the longer term value of a university education, but is essential to ensuring that this approach is inclusive. Students must never feel 'I don't recognise myself and my skills in that language'. We must enable the same recognition of transferable skills in all three contexts.

This is key to closing the skills gap for all students: they must be able to recognise that they are already developing the skills through curriculum that employers want them to bring into the workplace.

### Principle 4: Simple and visible

That recognition will also not occur if the framework is too complex or not visible. This is not simply about the number of skills in a framework, but also how they are presented to students and to academics. Universities often brand graduate attributes frameworks in their own colours, but the creation of a whole-of-institution infrastructure which actually enables student engagement is a hugely complex undertaking and needs to give all stakeholders some sense of agency in how they use or engage with the language. Visibility, therefore, reflects the need to meet all stakeholders where they are, and not just where the university wants them to be. The University of Northampton's ChANGE framework, for example, shows ten core skills in an engaging graphic, but underneath them is a sophisticated matrix of learning outcomes for all levels of undergraduate and taught postgraduate study. In practice, this matrix looks relatively easy to apply for academics doing course design, but students might be overwhelmed to encounter the ChANGE framework in that format.

Furthermore, as the integration of more nuanced skills language may happen through quality assurance processes related to degree design and approval, academics may find themselves trapped between the aspiration to use more nuanced language and processes which feel onerous. If a language of skills feels too complicated to use or engage with within those processes, that will not help them achieve their goal. Therefore, what is visible must be accessible in terms of being recognisable and must meet stakeholders where they are. It should also be simple enough to feel meaningful and relevant, but not so simple as to be or appear reductive. This again is the risk for academics, who will be put off by the fear that their subject is at risk of oversimplification at the very stage of learning where depth and nuance is increasing. So this principle might be caveated as 'Simple and visible (with meaningful yet manageable depth)'.

These principles are not exhaustive, but they reflect and address some of the key barriers to engagement and adoption of new conversations about employability and transferable

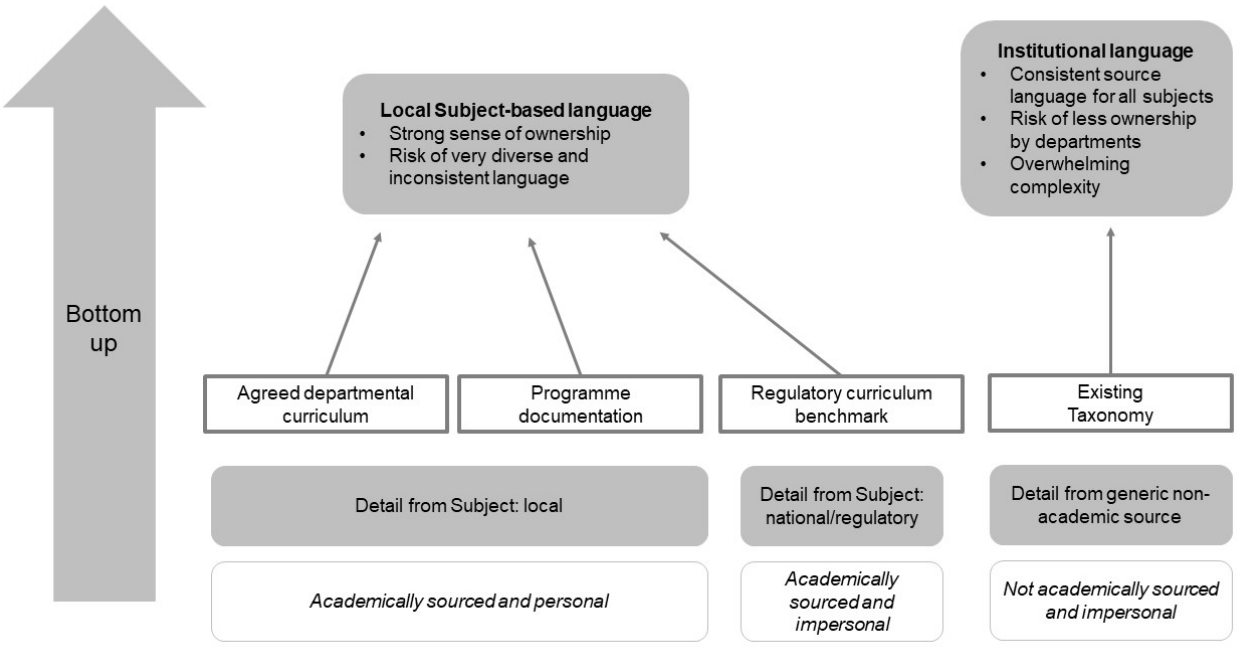
skills in complex higher education professional communities. Therefore, how might institutional collaborators actually try to create that language of transferable skills?

## *Where you end up depends on where you start: models for creating taxonomies of transferable skills*

### Model 1: Building from the bottom up

Were we to begin building a skills framework or taxonomy from the starting point of convincing academics that their subject areas are rich with transferable skills, we would build from the very foundations of subject teaching and learning, in other words from the bottom up (Daubney, 2022). Considering our institutional ecosystem (Principle 1), where is that language of transferable skills coming from? Figure 2 considers the options.

**Figure 2. Building a taxonomy or skills framework from the bottom up © Kate Daubney.**




- Academically sourced and personal: If the language is sourced exclusively from existing institutional curriculum, then it is sourced from academics. It is also personal to them because it reflects the subject as it is taught in the institution. This powerfully enables ownership by the academic community (Principle 2), but

potentially separates this language from stakeholders in other parts of the ecosystem. It also creates considerable risk to coherence and consistency (Principle 3), because every subject is going to come up with something slightly different: for example, Philosophy and Computer Science might have very different ways to talk about 'defining questions'.

- Academically sourced and impersonal: In my University of X case study (Daubney, 2022), I created a subject-led taxonomy by analysing all the UK Quality Assurance Agency Subject Benchmark Statements (Quality Assurance Agency, No date) on curriculum. While these Statements are subject-focused, the resulting taxonomy is effectively a generic source because the skills exist in their own right, without anchor to any particular subject area. Those skills are academically sourced but impersonal. As a careers professional and former academic, my intention was to find a way to articulate the skills so that they comfortably sat across all three areas of the ecosystem. In that case, the language is consistent and coherently adopted (Principle 3), but academics might still see as too generic and detached from the curriculum context, even if it has been derived from analysis of academically credible curriculum documentation. Sourcing is authentic, but ownership is potentially at risk.
- Not academically sourced and impersonal: There are other taxonomies of transferable skills in existence, such as those built by O*NET (an online database of occupational information created by the US government), Lightcast (a labour market analytics platform), SFIA (a global digital skills and competency framework), and soon by the Nuffield Foundation for Education Research (a UK research foundation). The credibility of these sources will be assessed through the lens of the individual and the institution, and while they offer a rich and consistent language of skills, they may be perceived to be too generic and disconnected from universities at a holistic and stakeholder level and, effectively, exist outside the ecosystem altogether.

Overall, we can argue that building from the bottom up very strongly enables Principle 2 of ownership to varying degrees, depending on the source, though that is less likely should the taxonomy come from a generic non-academic source. The sources could be combined, but that would necessitate compromise and rigorous management of different ways of articulating the same skill. However, this approach might be less effective at

enabling the other three Principles. That said, we can learn something important from this about what it means to enable ownership by all stakeholders in the ecosystem.

## Model 2: Expanding from the top down

As noted earlier, universities create graduate attribute frameworks because they look simple and accessible, and give an institution a concise and marketable way to describe their graduates. Were we to review Figure 1 through such a lens, we might imagine that the central overlapping segment of that Venn diagram is occupied by the university's ideal, future-ready graduate. Like any organisational vision statement, this can take the form of a vision of success.

However, while each community of university professionals in the ecosystem of Figure 1 (academics and teaching and learning professionals in the Academic context; Careers Services professionals, Students Union professionals, service learning professionals and others in the Extra-curricular context; academics, Careers Services professionals, employers contributing to curriculum both directly and indirectly, placement officers in the Workplace engagement context) may feel they have an equal stake in the outcome, there is no formula for how each shapes a university's ideal graduate. Such an ideal graduate may be well-rounded by extra-curricular activities, but not every student can engage in such activities because of essential work or caring commitments. Such an ideal graduate may be work-ready but academic colleagues in subjects which are not professionally-aligned may not endorse or value that outcome. Furthermore, students themselves may not recognise such a description of themselves at any stage in their education or graduation. As I describe when testing such a list with students and graduates, the elements of a framework are imbued with perceptions of failure as much as of success: '"What happens if we fail to achieve these? Are we unemployable?"' (Daubney, 2022, p.99).

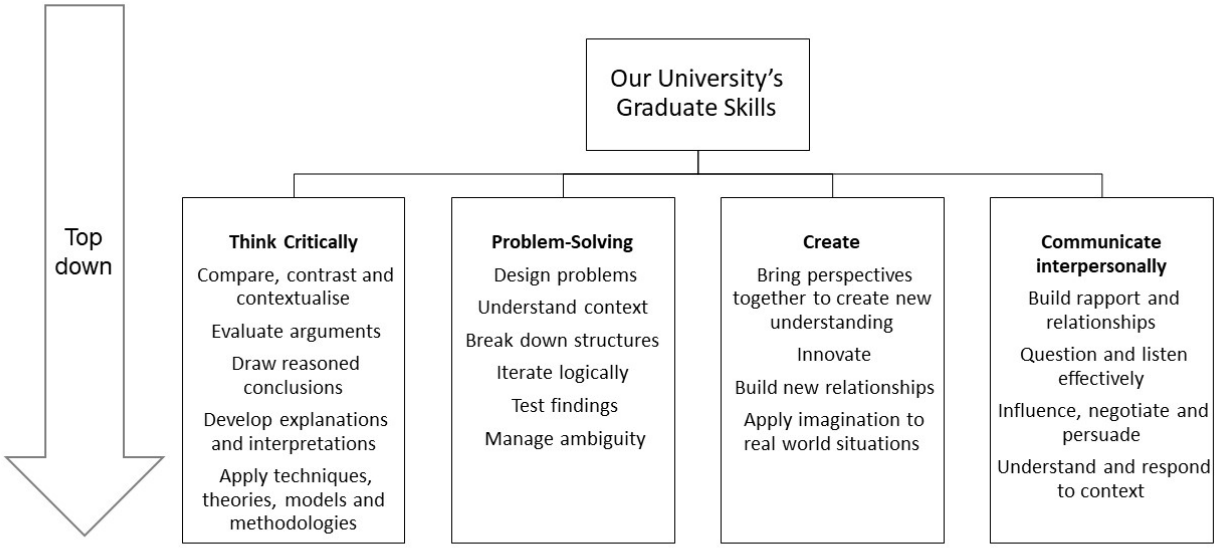
The output of a graduate attributes framework is also deceptively simple, and the process of co-creation, negotiation, arbitration, and disputation can be complex and prolonged. It is in the interest of every stakeholder in the institution that the diverse voices within a university – and those organisations impacted by its graduates – are part of the co-creation. But the more diverse the stakeholder perspectives, the more likely it is that

compromise will occur and that the compromise will resemble generic language which does not alienate anyone, but in which no individual stakeholder can see themselves accurately reflected. That said, effective co-creation can be powerful when it works. Sant's case study of the Creative Attributes Framework (2020) explores how intentional co-creation can work effectively and create a simple but enabling framework for all; however this was made easier by the stakeholders being from disciplinarily-related subjects, with a shared understanding of the journey for students and graduates into aligned career outcomes.

The implications of the taxonomy creation process are significant. If the framework is intended to be accessible to all communities in the ecosystem, is it inevitable that the language of skills becomes more generic in order to be more inclusive of academics and employers, or service learning co-ordinators and students in different subjects? Or is this managed by suggesting, as the University of Northampton did in their Tips for Use of the ChANGE framework, that '[t]here is neither an expectation or a requirement for you to use everything [i.e. all of the 10 skills] listed. Please select from the options available as appropriate for your subject discipline' (2017, p.4). The risk with taking the Northampton approach is that the ability to tailor a choice to a subject starts with removing reference points, not adding them. And that does not enrich the language of skills we want students to graduate with.

But for many universities who have a graduate attributes framework, this is the starting point. And, ideally, every one of the skills listed in such a summative list is made relevant to students through every engagement they have across the ecosystem. Figure 3 provides an example of how to create a richer, more detailed, and meaningful taxonomy that can be connected in this way, made up of four hypothetical framework elements: 'Think critically', 'Problem-solving', 'Create', and 'Communicate interpersonally'. These suggested elements should not be taken as any ideal; they are purely illustrative.

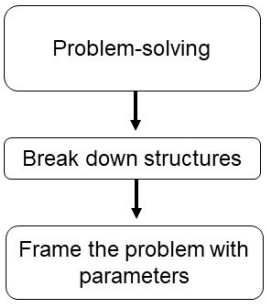
**Figure 3. Example of taxonomy or skills framework expanded from a four element graduate attribute framework © Kate Daubney.**




Firstly, the approach requires being specific about the skills or attributes that fall into each category. From a starting list of elements, a suggested additional 5-8 examples are given beneath each element, on which stakeholders in any of the three areas of the ecosystem can draw. In these 5-8 examples, the language needs to be recognisable in all three areas of the ecosystem. Not all the additional examples might be relevant though: for example, ‘Iterate logically’ might not apply in every volunteering position; ‘Influence, negotiate and persuade’ might not be used in the teaching of some Science subjects. This second layer of 5-8 examples per element could generate a core list of as many as 100 skills and attributes from a framework with more than four elements, offering a rich language that should also be reasonably inclusive of subject areas, workplace contexts and career outcomes, and extra-curricular activities.

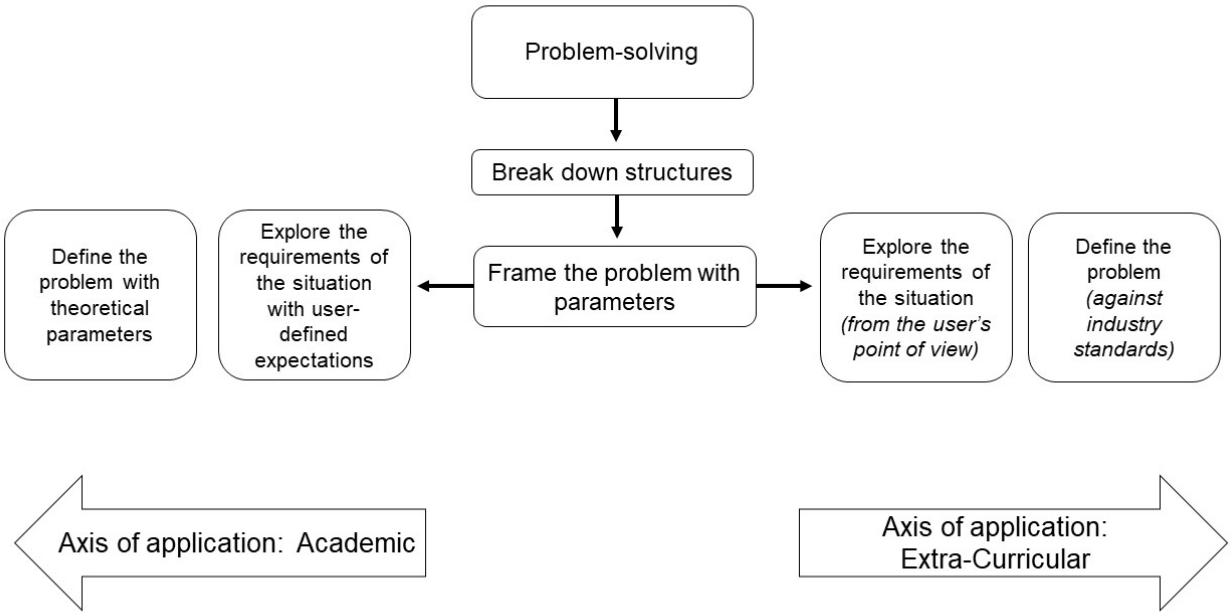
A third level of depth can be added to balance the breadth, particularly to increase the level of subject context and nuance that might be required in academic application. Figure 4 shows an example built out of our hypothetical framework element of ‘Problem-solving’.

**Figure 4. Adding a third level of detail for problem-solving © Kate Daubney.**




This language is beginning to sound quite academic; however, as Figure 5 shows, context becomes really important when a further level of detail is given.

**Figure 5. Academic and Extra-Curricular differences at the same level of skill specificity © Kate Daubney.**

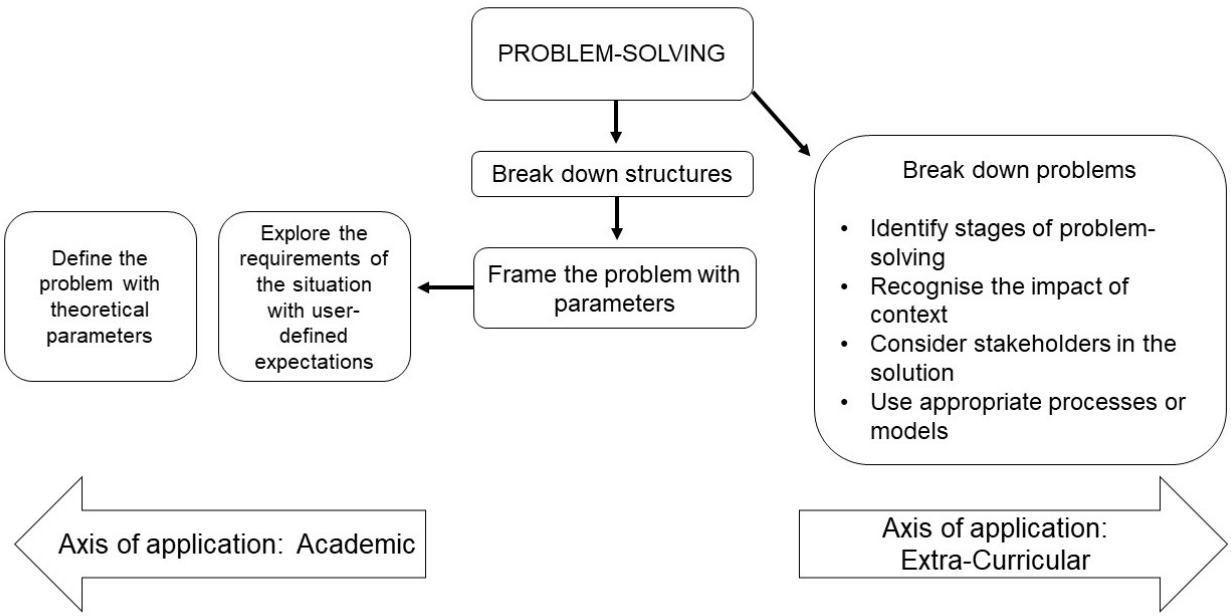



To the left side of the graphic are academic applications of ‘Frame the problem with parameters’, while to the right are extra-curricular versions of those skills which can be contextualised with the additional phrases in brackets. While we might not expect a student working in a part-time supermarket customer service role to think of ‘Framing the

problem with parameters' when a disgruntled customer appears, they would 'Explore the requirements of the situation from the user's (customer's) point of view'.

Furthermore, once the core common language of a taxonomy like this is agreed, different stakeholders in the ecosystem can use that as an anchor to create their own applications and even more bespoke language if need be, without compromising the integrity of the shared core. Bearing in mind that not every subject will use the same level of skill specificity, the level of detail at which agreement is required could vary. My experience of developing a shared language of skills with several universities, including in the case study with SmallTown University, indicates that once the second level is agreed, academics confidently introduce their own language with greater precision or specificity. This can also happen at a faculty or subject cluster level (for example, Creative Arts, Natural Sciences). Figure 6 shows how extra-curricular teams can harness the specificity of a structured language of skills, using perhaps less detailed language while retaining the relevance and recognisability of the language in a more explicitly extra-curricular context.

**Figure 6. Extra-Curricular reframing of a Framework element © Kate Daubney.**




In practice, therefore, we can create a reasonably complex shared taxonomy of transferable skills that enables every stakeholder community and purpose represented in

the ecosystem. The continuing case study narrative outlines how that worked in practice at SmallTown University.

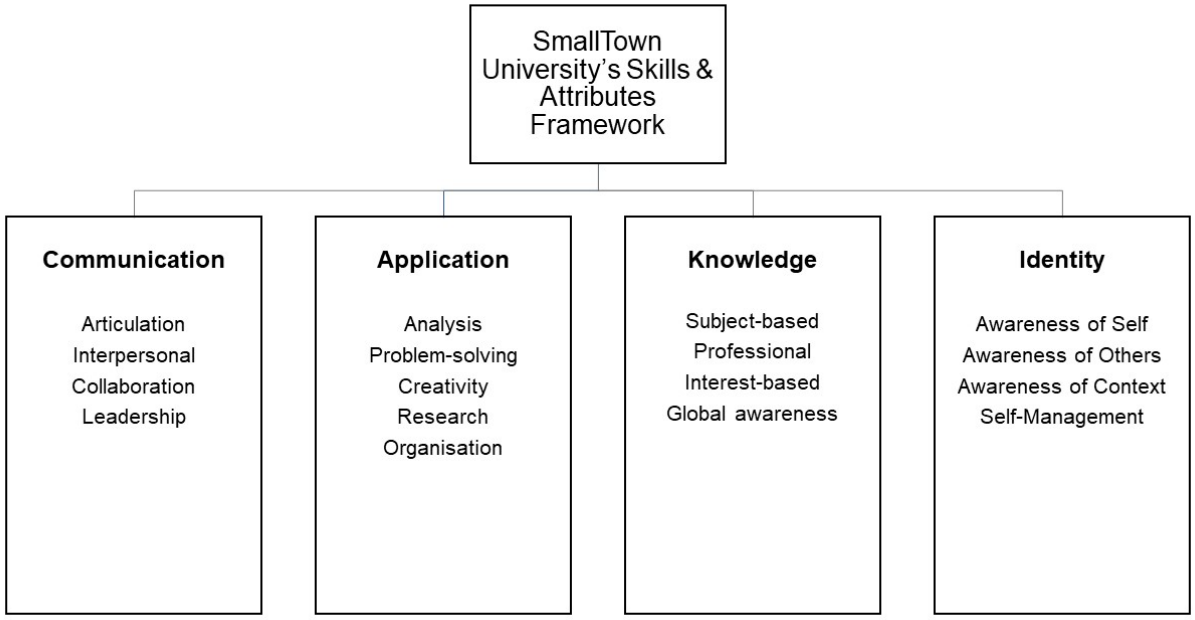
## *SmallTown University: creating an institutional framework*

Revisiting the Figure 1 ecosystem, we can see that the Careers team was effectively representing both the academic and workplace contexts through the employer perspective, while the colleagues reviewing the skills award represented the extra-curricular and workplace contexts, which incorporated students’ experiences of work through the skills award. Arguably, the workplace is over-represented in this model. However, the Careers team’s initial preference was to engage academic partners by having a taxonomy that had been built from the bottom up as in Figure 2, enabling a strong sense of bespoke ownership for academics in shaping their language of skills and offsetting that over-representation. In particular, they wanted to draw the language of skills from each subject, making it academically sourced and personal to each department.

However, they had concerns about whether their own expertise and confidence was sufficient to start those conversations effectively, and how they would be perceived by academic partners, even in academic departments who were already enthusiastic and engaged with conversations about student employability. There was genuine concern that they would not be seen as credible to have this conversation, let alone lead it. However, I suggested that one of the interesting facets of the list of 80 skills and attributes surfaced from the extra-curricular awards review was how detailed some of the language was. It could be seen as equivalent to some of the detail in Figure 5, and that added credibility to both the Careers Service and Student Services extra-curricular team in how they articulated the language of transferable skills. The goal therefore evolved towards how to create a core framework and taxonomy that incorporated the detail and emphasis of the list of 80 which included the student voice, with the potential nuance of academically sourced language, while creating a sustainable and simpler institutional framework.

Figure 7 shows what the final framework and shared language of skills and attributes at SmallTown University looked like (some language has been rephrased to protect the anonymity of the case study).

**Figure 7. SmallTown University’s framework © Kate Daubney.**




To achieve this, firstly the 80 skills and attributes from the extra-curricular review were analysed and clustered collaboratively by Careers and Student Services, with the explicit purpose of creating four broad but clearly defined categories that would be recognisable but not off-putting to anyone within the ecosystem. The categories represent the academic aspect through Knowledge and Application, and the extra-curricular through Identity and Communication. This was an intentional construction which achieved key objectives for both teams. Student Services were able to retain the strong emphasis on life skills (Identity) and lived experience, including work and other extra-curricular activities such as student societies or volunteering (Communication). Careers worked closely with them to discuss the language of the 80 skills, in particular considering how academic partners might respond; this perspective was drawn from conversations Careers colleagues had already had with academics on skills, employability and curriculum. It would also prove prescient of conversations that later took place when the Careers team began to implement the framework in academic partnership. In particular, they focused on how precise and specific language could be that described different skills, and they made some suggestions about how some of the 80 skills might be rephrased or reframed to engage academics more positively.

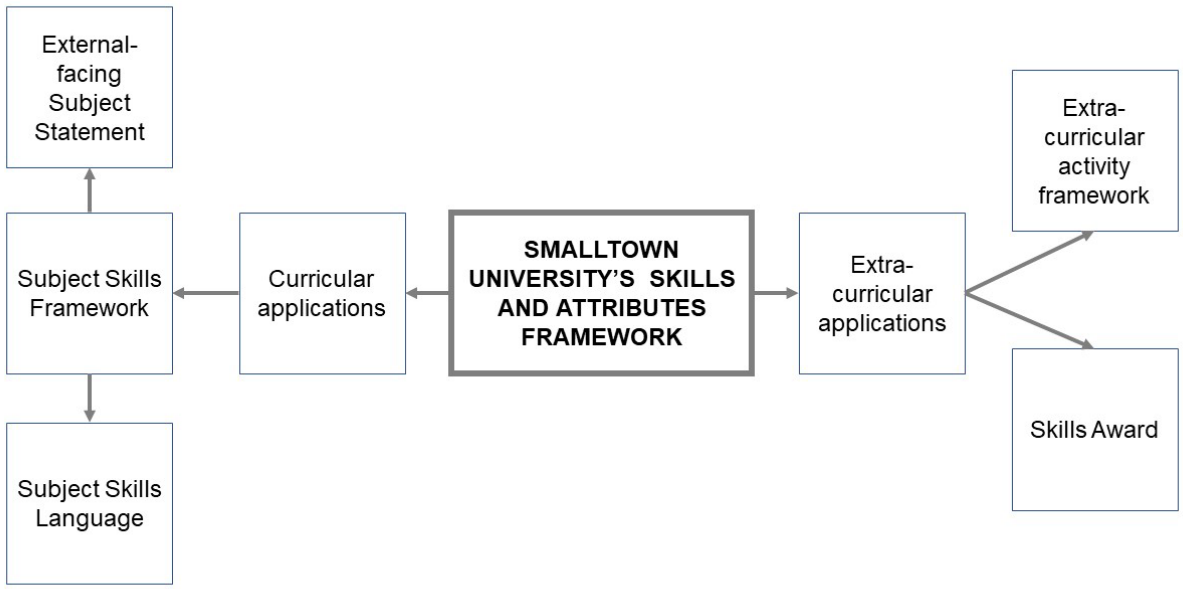
This was essential for the Careers team because both the Communication and Identity categories were also part of the language of skills that academics would be using when the framework was implemented for teaching, learning, and assessment and in any future curriculum review processes. For example, the framework category of Communication skills is a key feature of a number of disciplines, including many where 'employability' might not traditionally be a popular topic for curriculum content or discussion. For example, in the Humanities – where conversations about employability do not always get much traction – it was helpful for the Careers team to be able to explore nuanced ways in which verbal and written skills are applied and developed in different subjects, using language that was academically credible but also meaningful in employment contexts. This might include the construction of narratives in History or building arguments or perspectives in Literatures. Likewise, the category of Identity enables reference to some key skills and attributes that support particular kinds of disciplinary practice and engagement, for example in relation to awareness of self (for subjects such as Psychology) and of context (Sociology, Languages).

The four category structure created a framework that resembled a Model 2 top-down approach, but by also embedding and articulating sub-categories from the outset which was in the spirit of Model 1, detail and nuance were embedded and over-simplification was avoided. In particular, the Careers team felt the categories were strong reference points with which to engage academic partners. This was later confirmed in practice because academics engaged enthusiastically, generating lots of language and deep discussion about their subject areas through the language of skills. In a workshop I facilitated where academics from different subjects gathered to share their first attempts at generating a language of skills for their subject from the framework, it quickly became clear that discussions within subject teams about 'their' skills had generated deep reflection on scholarship and teaching practice. One subject academic identified an important skills-based distinction for students to grasp at an early stage: 'understand that reading for argument is different to reading for facts'. A Science subject academic identified unanticipated communication skills: 'brainstorming with others' and 'knowing when to take a lead in a problem-based discussion'. Another subject academic explored independence in how students use their selected skills, and the complexity of their application at different levels of study. Curriculum and programme documentation were used as reference points to generate specific language within the categories that academic teams could own and

recognise, and the language generated by different subjects was different at the more detailed level, particularly in the Application category where cognitive skills were situated. But the use of the consistent framework that reflects Principle 3 above gave a sense of shared ownership and common ground when academics from different subjects discussed their skills with each other. The simplicity of the four category model reflects Principle 4 and the whole model sits across the ecosystem of Principle 1.

Figure 8 shows how the framework is deployed across the academic and extra-curricular spaces. On the extra-curricular side, the Framework has two applications: a broader activity framework which enables students to calibrate any of their extra-curricular activities against the language of skills and attributes, and the specific university skills award which draws on a subset of the institutional Framework. On the curricular side, the initial stage has been the creation of a subject-specific subset of the Framework for each subject – the Subject Skills Framework – and from there departments can add more detailed skills language where required, but also create a simplified snapshot for external purposes such as marketing the programme to prospective students.

**Figure 8. The institutional deployment of SmallTown University's framework © Kate Daubney.**



## *'Sometimes a science, sometimes an art'*

In his narrative about biologist Carl Linnaeus, writer Bill Bryson suggests that 'Taxonomy is described sometimes as a science and sometimes as an art, but really it's a battleground' (2003, p.319). Indeed, in the highly nuanced contexts of both higher education and work, it is often seen as unrealistic to try to create a coherent and stable bridge of the language of skills between the two. But we must try to do so if we are to enable students to make an effective transition from one to the other. As the case study, Principles and Models above indicate, there is no single perfect way to create such a language of skills, and to move from a language to a taxonomy is a complicated undertaking. Nonetheless, the creation of any language is an innately human endeavour which should aspire to involve as many people as possible in a university who have a stake in the student-to-graduate journey. The differing or even divergent ways in which academic and professional services colleagues might go about shaping that journey cannot be used as an excuse for separation, any more than universities can sustain an isolation from employers who recruit their graduates. Academic precision and voice can be richly enabled, and need not be stifled when clarity for students and appropriateness for work are achieved. From the point of view of learning developers who – like their Careers colleagues – frequently move between or occupy different and overlapping communities and spaces in a university, there is an opportunity to be translators and connectors by seeking patterns and commonalities, and enabling coherence and consistency in the interests of students. Their expertise in learning and skill development can inform these discussions and support the way in which all educators in a university then apply and develop these skills through teaching and learning.

Furthermore, the interests of students – enabling them to be able to identify and articulate the long term value of their degree in many different ways, including the skills and attributes that will support them in work – is a common ground on which all staff communities can meet. The case of SmallTown University, and my other experiences of curating and leading projects to create a shared language of skills and attributes, demonstrates that collaboration is easier when it is based on a shared aspiration for how students should benefit.

When it comes to how a shared language of skills is created, building a taxonomy from a ‘top down’ approach can feel scientific, perhaps driven by process. However, creating the space for academic identity to be included – including from the bottom up – is more of an art if not, literally, a matter of humanity. Between what are often presented as polar opposites – strategy and subject, university and workplace, top down or bottom up, there lie practical ways for colleagues from very different parts of our universities to co-create shared language of skills and attributes that enable students to understand that they graduate as knowledgeable and also as highly skilled entrants to the workplace of the future.

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## *Author details*

Kate Daubney is a former academic with a PhD in film musicology, who has worked in higher education for over 30 years. Since 2002, she has worked in careers and employability education, as a practitioner and later as a senior leader of university careers services. As a freelance consultant, she now advises UK and international universities and other student-to-graduate organisations on education and careers and employability strategies, and the creation of transferable skills taxonomies. She is a Principal Fellow of the Higher Education Academy. Her research includes experiential learning in the Humanities and learning styles in graduate development.

## *Licence*