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Exploring Knowledge and Perceptions of Level Learning Outcomes and Meta-Skills in a Creative Business School Context

Pauline A M Bremner
Robert Gordon University, Scotland
ORCID: https://orcid.org/0000-0002-2465-8398

Elliot Pirie
Robert Gordon University, Scotland
ORCID: https://orcid.org/0000-0001-5849-0119

Madeleine Marcella-Hood
Robert Gordon University, Scotland
ORCID: https://orcid.org/0000-0001-5920-4049

Anne Singleton
Robert Gordon University, Scotland
ORCID: https://orcid.org/0009-0008-7504-4610

Abstract

Much has been written about the necessity for graduates to be aware of their skill set and transferability for the workplace. Degree programs in Scotland have long relied on guidance from the Quality Assurance Agency (QAA) on the taxonomy or wording of level learning outcomes (LLOs), which are the building blocks of degrees. More recently, a meta-skills framework created by Skills Development Scotland (SDS) offers clarity around meta-skills and suggests relevant wording, but these do not always align with academic taxonomies. The current research sought to explore the relationship between LLOs and meta-skills further from an academic and student perspective. A qualitative approach consisting of staff interviews and student focus groups from a range of creative business courses was adopted. A thematic analysis revealed gaps in staff and student understanding of LLOs and meta-skill terminology. The findings support the argument that skills should be linked more obviously to modular learning and recommendations are made as to how these could be communicated effectively to aid understanding around the transferability of university-acquired skills to the workplace.

***Keywords/key phrases*:** employability, skills, transferability, learning outcomes, meta-skills

1. Introduction

The world of work is undergoing rapid change, and there is a new emphasis on lifelong learning, where it is predicted that university graduates and early-career professionals will not enter into a career for life (World Economic Forum (WEF), 2023; Skills Development Scotland (SDS), 2023; Soproni 2023). In order to prepare students for the future, it is argued that educationalists must break down barriers of classical course development and incorporate 'flexitive' pedagogies (Bowman, et al., 2022; Bremner & Air, 2023). National agencies propose meta-skills frameworks (SDS) and government action plans (Hepburn, 2021), which can be used to underpin teaching and ensure that graduates are 'fit for the future' (Advance HE, 2024, np). One such approach that is being implemented in universities is to develop authentic assessments (Ajjawi et al., 2020) and employability frameworks within university curricula (Behle, 2020). However, despite - and perhaps even as a result of - government policy, legislation, benchmarking provisions, academic pedagogies, and external agency recommendations there is a recognised gap in students' knowledge and perceptions of meta-skills (Bremner & Laing, 2019; Goldie et al., 2023). This suggests that graduates do not recognise and may therefore be unable to articulate the skills they have gained on their degree to their future employers. The current research seeks to explore this issue and make recommendations as to how knowledge of meta-skills could be delivered more effectively in university settings.

1.1. University degree development

Curricula development in Scotland has been guided by many things, e.g., the Scottish Credit and Qualifications Framework (SCQF) (equivalent to the National Quality Framework (NQF) in England), Quality Assurance Agency for Higher Education (QAA) benchmarks, and SDS meta-skills; all of which form part of the validation and design process of creative sector degrees in Scotland. LLOs form an important feature in the design of university degrees and the laddering of these across module units of study ensures appropriate progression throughout the various stages of the course. The QAA advises that LLOs are developed in accordance with the 'academic level of study using appropriate descriptors and consistent language. They reflect course and module aims' (QAA, 2023, np). LLO statements contain key verbs and the language of these is directed by educational taxonomies and SCQF requirements to ensure that they are relevant to the stage/level of study (Table 1). These form the basis of module unit descriptors (MUD), which make up the degree.

TABLE 1. SCQF CHARACTERISTICS AND ASSOCIATED TERMINOLOGY

Verbs addressing higher-order cognitive skills are used at level 10:	
SCQF characteristic	**Level 10 Honour's year**
Knowledge & understanding	
Practice: applied knowledge, skills & understanding	Execute, Illustrate, Modify, Operate
General cognitive skills	Argue, Compose, Conceptualise, Critique, Develop, Devise, Examine, Invent, Justify, Modify, Offer, Question, Reconcile, Test
Communication, ICT & numeracy skills	Adjust, Argue, Communicate, Critique
Justify, Reconcile	

Source: (Adapted from Bloom, 1956; Anderson *et al.,* 2016; Stanny, 2016; Newton *et al.,* 2020)

Benchmarking takes the form of subject statements from institutions such as the QAA and Professional, Statutory, and Regulatory Bodies (PRSB) with stipulated requirements for degree accreditation. Although not mandatory, the SDS suggests a meta-skills framework as a recommended toolkit for enhancing skills development in Scotland's young people and supporting employees' lifelong learning (SDS, 2023), which contributes to Scotland's economy and Industry 4.0. Drew (2023, np) argues that "when we apply metacognitive strategies, we become better learners', however, meta-skills are only a guide to be used in context and include: focusing, adapting, integrity, initiative, communicating, collaborating, feeling, leading, curiosity, creativity, sense-making and critical thinking.

Given the emphasis placed on developing these skills in Scotland, it is valuable to explore how these are recognised in university degrees. Despite the obvious crossover between meta-skills and academic taxonomies, there is a gap in knowledge around how these are perceived by academic staff and students and the current research aims to explore this further and make recommendations as to how these two ideas could intersect more effectively, particularly for students who are soon to be transitioning into the workplace. This study aimed to address the research question: *how do staff and honour's year students recognise, understand, and engage with level learning outcomes and meta-skills?*

1.2. Teaching and learning pedagogies

Psychological research underpins the concept of learning with authors such as Dewey (1902), Piaget (1936) and Lewin (1944) highlighting various approaches to learning development and the methods used. Dewey (1902) put the child and the curriculum at the centre and his philosophical approach exposed the significance of experience and social construction in the learning process. Piaget's (1936) seminal work explored the stages of cognitive development from childhood to adulthood and Lewin (1994) studied experiential learning as a cyclical process of reflection. These early models remain relevant and provide a theoretical grounding for the current study.

Literature in this area highlights the value of experiential learning, problem-solving, and reflection (Washburn, 1936; Kolb, 1984; Race, 2019). These themes are arguably particularly relevant in the context of the current research, which explores the perceptions of learning and skills development in a creative business setting, in a university that has strong industry links and places high emphasis on vocational learning and employability. In order to facilitate learning that will prepare students appropriately for the contemporary workplace, teaching methods have been adopted. Rote-style learning processes and closed-book examinations have evolved into more experiential learning approaches with authentic assessment (Vickers et al., 2023), allowing for meta-skills development. Constructivism is defined around 13 items, but conceptually based on the three aspects of realism, cognitive challenge, and evaluative judgement, and features considerably in the early stages of learning and teaching (Piaget, 1936). It has developed to include modelling, coaching, and scaffolding, whether in person or online (Heinrich et al., 2021). Students are placed at the centre with inquiry (Kali et al., 2021) and problem-based learning coming to the fore (Suryanti and Supeni, 2019). Latterly, design thinking theory has become a pedagogic tool in the development of work-based meta-skills and entrepreneurship (Bremner & Air, 2023).

Blessinger (2020) concludes that there has been an explosion of teaching gimmicks and the emergence of mythical educational philosophies. He argues that "knowledge and skills should

be taught explicitly and systematically using a coherent spiral curriculum where knowledge systematically builds upon itself" (Blessinger, 2020 np). Authentic assessments, which embody experiential learning, "have been found to have a positive impact on student learning, autonomy, motivation, self-regulation, and metacognition; abilities highly related to employability" (Villarroel et al., 2018, p.1). However, it is argued that university graduates still have difficulty articulating, translating, and transferring their acquired skill set and knowledge to the world of work (Chan, 2021). This is despite research highlighting that students are benefitting from Bloom's (1956) revised taxonomy (Sudirtha, et al., 2022), suggesting uncertainty around the value of university education in preparing graduates with real-world knowledge and skills. This argument forms the rationale for the current research, which explores students' knowledge, understanding, and engagement with the learning and skills within their degree, where there may be a need for greater clarity and more obvious communication of these.

1.3. Creative industries

The Scottish Government's (2019, np) vision for the creative sector includes "individual creativity, imagination, and curiosity and are where creative motivation provides the basis for living, working or studying". Creative industries education has developed to include subjects such as digital marketing, fashion management, and events alongside longer-standing courses, such as communications and media studies. The creative industries are recognised as one of Scotland's seven growth sectors, contributing approximately £5.5 billion to the economy and providing a significant economic, social, and cultural contribution (Scottish Government, 2019). Around 15,000 businesses operate in the creative industries and 98% of these are SMEs (under 50 employees) or micro-businesses (ibid). This comes with some key challenges for graduates who will go on to work in small, project-based teams or agencies, which are subject to change and may require a more diverse skill set than non-creative roles, which might be less varied.

These aspects make a creative business school setting a suitable context in which to explore the current research issue. The institution of study is a modern university with a long-standing suite of courses to meet the needs of the sector as well as more recent developments in new subject areas. Close collaboration with industry, a shift towards authentic assessment and a strong track record for graduate employment exist within the university and more specifically the creative business school setting. However, the LLOs that continue to inform the structure of the courses make no direct mention of meta-skills. The current study seeks to investigate students' understanding of LLOs and meta-skills in the context of their course and to make recommendations as to how these important elements could be combined more effectively.

2. Methodology

The methodological approach is exploratory and centred around interpretivism as a philosophical position. Interviews with academic staff and focus groups with final-year students were conducted to draw meaning from the lived perspectives and experiences of participants (Creswell and Creswell, 2017). The qualitative analysis was underpinned by Patton's (2002) method, which enabled inductive exploration, where themes are identified from the data.

Six final-year modules were selected from an undergraduate creative business school portfolio. A purposive sampling approach was used to identify these modules (Honigman, 1982). The academic coordinator for each module was interviewed, and a small sample of students took part

in a focus group. The student participants were self-selected via an open email call for participants. This resulted in between two and five participants and two of the six focus groups turned into interviews due to a lack of response from students and where courses had a smaller participant pool due to cohort size (Table 3). Institutional ethical approval was granted, and the participants were anonymised throughout the research findings.

Two sets of questions were created, one for staff and one for students, and interviews/focus groups were structured into two parts: the first focusing on LLOs and the second focusing on meta-skills. Interviews/focus groups were semi-structured, and participants had the freedom to explore their answers in depth, which sometimes led to the emergence of new themes and ideas. Questions were themed in six areas: settling-in; understanding of LLOs; industry 4 and 5.0; awareness of meta-skills; meta-skills in the context of the module/degree; terminology and if/how meta-skills might be built into teaching most effectively. Examples were shown to participants to explore their views on how meta-skills might look in the context of a module unit descriptor. Appendix I outlines the degree context and the LLOs in each module at the time of research.

Interviews/focus groups were conducted electronically using MS Teams after the module had been delivered to aid reflection on behalf of the participants. Two interviewers/moderators were present in each interview/focus group for continuity, notetaking and to eliminate bias (Elias, 1987; Turner & Pirie, 2015). These were recorded and transcribed using the transcription function on MS Teams, which was checked for accuracy and corrected where necessary. Transcripts were analysed thematically and independently by the researchers (Patton, 2002; Braun & Clarke, 2022). Data saturation was reached by the fifth module, but a final one was included to confirm (Fusch & Ness, 2015). The findings and discussion are structured into the following themes: staff and student understanding of LLOs; student engagement with LLOs and MUD documents; staff perceptions of LLOs; and reflections on knowledge versus skills-based learning.

3. Findings and discussion

Participants were selected using a purposive stratified sampling technique (Suri, 2011) where six modules that are delivered to specific courses within a creative business school setting were selected and staff/students from that module were sought. The staff interview profile varied in terms of participants' subject discipline, level of experience and role within the organisation (Table 2). The interviewees were coded from I1-I6.

TABLE 2. STAFF INTERVIEW PARTICIPANTS

Code	Discipline	Teaching experience (HE) years	Role at University
I1	Hospitality	20	Lecturer/ Course Leader Responsible for Module development
I2	Tourism	9	Principal lecturer managing a staff team
I3	Fashion	2	Lecturer with fashion experience
I4	Events	9	Associate Professor and Course Leader
I5	Media	11	Lecturer cross-discipline
I6	Digital Marketing	3	Lecturer with industry experience.

Source: (Authors 2023)

The student focus groups varied in size and participants were split across six focus groups by course of study (Table 3). The focus groups were coded FGP1 – FGP6 for ease of reference.

TABLE 3. STUDENT FOCUS GROUP PARTICIPANTS

Focus Group Number	Discipline	Number of Participants
1	Hospitality	7
2	Tourism	3
3	Fashion	3
4	Events	1
5	Media	2
6	Digital Marketing	5

Source: (Authors 2023)

3.1. Staff and student understanding of LLOs

Despite being from the same institution, staff and students did not always share an understanding of LLOs and the purpose they serve. Staff and student participants were able to provide an explanation, but all were subtly different. This appeared due partly to the terminology. Experienced lecturing staff, tended to associate level learning outcomes (LLOs) with the module unit descriptor (MUD) documents and referred to the two interchangeably. They recognised that LLOs should reflect the content of the module accurately with I2 describing these as "a fundamental driver of the module" and I5 referring to these as an 'academic tool'. I5 reflected on the language of LLOs stating "it has to be academic language, but it still needs to be clear". The findings demonstrate clarity on the honour's level (SCQF10/NQF6) wording, which was aligned with higher cognate terminology that is in keeping with the taxonomies of Bloom (1956), Anderson et al., (2016) Stanny (2016) and Newton et al., (2020).

3.2. Student engagement with LLOs and MUD documents

Despite current and prospective students having access to MUDs via the University's website, staff felt strongly that students were unlikely to engage with these documents. Staff recognised this could be because of information overload amongst students, where "LLOs get lost' amongst other materials" (FGP5). Staff perceived that students are most likely to engage with documents that link directly to a teaching topic and assessment. I3 was critical of the MUD due to its inflexibility, which remained relatively static and unchanged; they felt this led to inaccurate information in areas such as indicative workload (i.e., hours of suggested self-study), which may suggest credibility issues if these were scrutinised closely by the students. I2 reflected: "I think it's either a case where we have to take the module descriptors more seriously. Or accept that it's not the right way to be sharing the key aspects of the module with the students".

The student analysis confirmed that they did not engage with MUD documents, and most students openly expressed that taking part in the focus group was the first time they had engaged with the LLOs. There was consensus between staff and students that the wording of LLOs can be difficult to follow, where for example one participant observed "I certainly wouldn't use that word in everyday life" (FGP3). Students felt the language might be even more challenging in

certain circumstances, e.g., where English was a second language, or where a student had transitioned into a course later via a partnered degree link programme. Another challenge noted is where modules are delivered to multiple cohorts across several courses; with staff noting that it can be difficult to design LLOs for 'bigger modules'. Staff reflected that LLOs are sometimes dictated by the strategic direction of the university at a given time, where there is a risk that the wording might become superficial and LLOs may become less meaningful. In some respects, the staff and student perceptions here add to Blessinger's (2020) argument around educational philosophies where, in the current research context, the message is often lost around the purpose and value of LLOs, particularly to the students themselves.

3.3. Staff perceptions of LLOs

Staff were critical of their own module LLOs when asked to reflect on these in the interview, this was particularly true of staff with more teaching experience who felt perhaps more confident in criticising these. The staff mentioned 'inherited' modules with 'chequered histories', which had been handed over numerous times. They spoke of their difficulty in establishing ownership over these modules, which might also impact on the framing of LLOs. Criticism was often centred on what staff perceived as ambiguous wording, which they felt might be confusing for students, rather than that they felt the LLOs were inaccurate. This may be due to the 'level' element of LLOs, which requires higher-level language at honour's year and the use of particular words like 'critically'. Interviewees' critiques of LLOs varied and at times contrasted, where one staff member felt strongly that LLOs should reflect wider teaching within a module, explaining "I don't like this idea of teaching to assessments. I always think that stuff we cover within modules should go beyond what is assessed". Whereas others linked their LLOs directly to the design of their assessment when discussing these. This raises an interesting point as many pedagogical theories, such as those of Kolb (1984) and Race (2015) who suggest reflection and experience are important, are not represented in the wording of LLOs.

Some interviewees reflected on the timing of LLOs, which are written before a module is ever taught and it was recognised that a level of reflection is needed, especially after the first time a module is delivered. This was supported in discussions with staff who were teaching longer-running modules and who observed that LLOs were often left alone for long periods and not updated and developed. Indeed, none of the staff who were interviewed had made recent changes to the LLO for their module. I1 noted when discussing MUD changes 'I think sometimes you deliver it, you recognise a few issues, then you have assessments, you have holidays, you've missed the boat to make any changes'. This suggests that staff members' ability to evolve LLOs may be prohibited by the bureaucratic process involved and timing of the academic calendar. Staff interviewees recognised that LLOs have a part to play in the wider course structure, but the findings suggest that either a more regular process of evaluating LLOs is needed or that a more relaxed process for adapting/developing these would be beneficial.

Overall, from a staff perspective, the purpose of the LLO was linked to quality assurance, to help guide module content and assessment. As modules may change hands throughout their lifespan, LLOs give a continuous sense of direction and priority. However, this is only true if they are fit for purpose. The findings suggest that there is a need for a periodical review of LLOs rather than at present where the emphasis is on staff to do this proactively. There was also an observed belief amongst some staff participants that LLOs are fixed and cannot be developed, resulting in what was described as LLOs that are so general they are not useful or

reflective of the breadth and depth of the module and therefore the degree. Embedding a meta-skills framework into LLOs in a more obvious way may help to address this as long as those frameworks accurately reflect the teaching and learning of the module. Although these modules were created with employer input, there seems to be an inertia amongst staff, which skews the development of LLOs towards the benchmarking pedagogies rather than considering the authentic and experiential learning and skills being developed in the module. There is a tendency for overreliance on the theoretical approach over pragmatic reflection. This contradicts the use of authentic assessments (Villarroel et al., 2018) and compounds the issue noted by Chan (2021), where the findings suggest that students may have difficulty recognising the value of transferrable outcomes and skills.

The second place where LLOs are presented to students is within assessment documentation. Staff and students agreed and could reflect retrospectively that LLOs for a module were embedded in an assessment. FGP3 noted "I think the way they're written gets us really used to the same type of terminology that is in our assessment briefs'. Students recognised that these informed the assessment but, overall, were more fixated on the assessment criteria than on what knowledge and skills they had actually gained by studying the module. FGP4 noted 'what you're supposed to achieve by the end of the semester, so it's what you're working towards…". This suggests that students, even in their final year of study, tend to focus on short-term goals, e.g. passing an assessment, and, until this goal has been achieved, may be unlikely to engage with information around knowledge and skills more holistically for the future. These findings suggest something of a mismatch between the use of academic taxonomies such as Bloom (1956), which may require updating or further explanation in context to represent more authentic perspectives of the student experience.

3.4. Reflections around knowledge versus skills-based learning

Many pedagogies exist in underpinning skills development but there is a key difference in the benefits of authentic assessment in helping enhance the development of the skills themselves and also students' recognition of these. One participant highlighted "I don't have a huge amount of confidence myself in terms of what skills we should be looking to develop. I think I'm approaching most of this from a knowledge perspective" (I2). Staff were aware that their students gained a range of skills during their module but were not sure how to tackle this in a more proactive way. This extends the debate on academic taxonomies being more directed towards knowledge rather than skills development.

In discussions with staff about the skills within the modules, there was a clear distinction and thematic difference between knowledge-based modules (theory) and skills-based modules (practical). There was a sense, among the staff interviewees, particularly those who either teach across a broader range of subject areas (I5) or who have a strategic overview of various modules across the school (I2) that perhaps it would be more appropriate to build skills into the LLOs for some but not necessarily all modules.

When staff were shown examples of meta-skills and asked to reflect on these in relation to their module, they were able to do this easily. However, there was a tendency to select a high number of skills, but to note that some were only being addressed very briefly in the module, e.g., in relation to an academic model that was being taught in a lecture. Whereas students tended to be more selective in the skills they felt they had achieved in a module. This suggests that, for skills to be recognised by students, there is a need for these to be embedded more deeply into a

module. It also emphasises the value, in this context, of co-curriculum design where student feedback is valuable in helping inform developments in this area (Billet & Martin, 2018).

Table 4 highlights the variances between staff and students, e.g. where one of the more theoretical modules (6) proved harder for students to recognise skills. There was less variance in the more practical modules where, interestingly, most students recognised more skills than staff. Again, this emphasises the need for a collaborative approach to embedding skills into module content, involving staff and students and where academic taxonomies and industry input from organisations like SDS would help ensure authentic and meaningful results.

Contrastingly when examining some of the key LLO verbs for the inclusion of Bloom's (1995) taxonomy (Table 5) the greatest difference was in module No 4. This was a more experienced staff member participant and a Senior Fellow of Advance Higher Education Academy (SFHEA). I4 noted many of the Bloom (1995) verbs in their module, but these were not always recognised by the students.

TABLE 4. META-SKILLS VARIANCE

Module no.	**1**	**2**	**3**	**4**	**5**	**6**
Practical assessment	Yes	No	Yes	No	Yes	No
Focussing					Yes student	Yes staff
Adapting		Yes student			Yes student	Yes staff
Integrity						
Initiative						Yes staff
Creativity				Yes student		Yes staff
Collaborating						Yes staff
Feeling			Yes student			Yes staff
Leading				Yes staff		
Curiosity	Yes student		Yes student			
Sensemaking	Yes student			Yes student	Yes student	Yes staff
Communicating						Yes staff
Critical thinking						

The difference in noting skills is highlighted by the word staff or student indicating who noted the skill while the other did not. Blank spaces indicate the skill was not noted at all. Programme titles: BA (Hons) Digital Marketing; BA (Hons) Events Management; BA (Hons) Fashion Management; BA (Hons) International Hospitality Management, BA (Hons) International Tourism Management; and BA (Hons) Media.

Source: (Authors 2023)

Another key theme was the individuality of students' experience, which might be exacerbated in the more practical, skills-based modules. The attainment of skills could be unique to a small group or individual student, e.g. conflict resolution and problem-solving. If skills were to be incorporated within LLOs more obviously, it would be important for there to be scope to identify students' unique experiences whilst also recognising the more transferable meta-skills that all students might gain. The individuality of experience and the reflective process are important factors, as recognised by other academics in the field (Kolb, 1984; Race, 2019). There was strong agreement that tutorials that facilitated collaboration, e.g. groupwork, enabled the

opportunity for meta-skills development in areas such as teamwork, adaptability, communication, critical thinking, innovation, and curiosity.

In focus groups, students were better able to recognise the skills they had gained within a module when these were built into practical tasks, for example working with clients on real-life projects or debating critical issues relating to their subject area, which supports earlier research by Vickers et al., (2023). For modules with a less obvious practical element, the assessment appeared to be the main memory for students when reflecting on the skills they had gained. This contrasts with the earlier staff interviewee's ideas that not all knowledge should be assessed. However, the focus group findings suggest that students place less value on teaching that is not assessed and may struggle to recall skills relating to this type of learning, e.g., more academic skills such as critical evaluation and research were less well recognised by students.

TABLE 5. BLOOM'S TAXONOMY VERB VARIANCE

Module No.	**1**	**2**	**3**	**4**	**5**	**6**
Practical assessment	Yes	No	Yes	No	Yes	No
Modify			Yes student			
Offer		Yes student				
Operate		Yes student				
Question				Yes staff		Yes staff
Reconcile	Yes staff	Yes student				Yes staff
Test				Yes staff		Yes staff
Devise				Yes staff		
Examine				Yes staff		
Execute		Yes staff				
Illustrate		Yes student		Yes staff	Yes student	
Invent		Yes staff		Yes staff		Yes student
Justify						Yes student
Argue			Yes student			
Communicate				Yes staff		
Compose	Yes staff		Yes student	Yes staff	Yes student	Yes staff
Conceptualise	Yes student				Yes student	
Critique		Yes student				
Develop		Yes student				
Adjust				Yes staff	Yes student	

The difference in noting skills is highlighted by the word staff or student indicating who noted the skill while the other did not. Blank spaces mean neither staff nor students noted the skill at all.

Source: (Authors 2023)

It was evident students could recognise the skills they have gained retrospectively. This emanated from assessment feedback, which they felt was important in helping them develop and recognise the skills they had gained. FGP4 stated: "it's not just about what you did

wrong…but it's more like suggestions like different ways of how you could have approached the subject". Students felt that more obvious signposting of skills would help them to transition through their degree as a whole, e.g. "until now or maybe until a couple of weeks ago, I didn't really realise all the skills that I learned with the module with all the modules throughout university" (FGP4). They felt this would help them to contextualise their learning and practical experiences on their course and to document and remember this for the future, e.g. "we have done so much over the past years, it's impossible to remember all of them" (FGP3).

It was felt that a reflective tool that enables students to document and track their skills would be useful in preparing them for the next stage of their studies and ultimately their careers. FGP4 highlighted: "I don't think it's [always] apparent that you're learning these skills at the time, but certainly now in fourth year you're looking back. I can see that I've developed in most of these areas over the four years". They were better able to reflect on their experience of studying a module objectively and pragmatically after the weight of the assessment had lifted, suggesting this might be a suitable time for them to remind the students of LLOs and meta-skills.

The development of skills is linked most closely to what is learned, whereas knowledge is aligned more closely to what is taught**.** This suggests that knowledge is led by staff, whereas skills are more individual to a student's lived experience of undertaking that module. Staff have a greater degree of direction and control over knowledge-based indicators as opposed to skills-based indicators and outcomes. This is a key point that would need to be considered when building skills into LLOs, where the findings suggest that students would engage better with LLOs if skills were built into these. This reinforces the need for agencies to have a more joined-up approach and rework benchmarks to suit the needs of the work sector with staff and students, feeding into the process of embedding these in the context of specific courses.

Students were able to see the value of meta-skills in relation to their own career paths and recognised the importance of being able to articulate their skills to potential employers, e.g. "I definitely think that putting the skills in the outcomes would be helpful…I think they'd be more likely to then look back at the descriptor to help with CV writing as well" (FGP2). The findings give strong support for a signposting mechanism but highlight the need to communicate these skills in an appropriate, engaging and timely manner. The idea of the student journey and transition throughout the course and into employment featured strongly in the focus group findings, suggesting that students would benefit from a clearer sense of goal/level orientated learning that is more meaningful in addition to the high-level verbs upon, which are not recognised by students.

4. Conclusions and implications for teaching practice

This research examined the recognition, understanding and engagement of LLOs and meta-skills of staff and honour's year students. It has raised questions over the development of LLOs within degrees and their link to skills development. It brings into question student and staff understanding of the academic terminology used in curricula development, and the necessity to make this more meaningful for students and graduates. The findings suggest that students do not engage closely with LLOs for specific modules and staff appeared relatively resigned in their recognition of this. This, alongside other factors, places a lower value on LLOs and perhaps suggests why these are sometimes left for long periods of time without review when other aspects, such as the assessment, are updated more regularly.

Several challenges were noted in relation to academic design and student understanding and engagement with LLOs, much of which centred around the technical language used. Staff seemed to recognise that if the clarity of language was improved, then students might engage more meaningfully with these. This brings into question the usefulness of Bloom's (1956) taxonomy for students, perhaps particularly in a dynamic creative business context. The findings suggest that LLOs should be reviewed periodically to ensure these are fit for purpose but that the current process for doing so places too much proactive individual emphasis on staff to do so and that the regulatory procedures can act as barriers.

The findings suggest that there is no clear recognition amongst staff or students of the drive to align LLOs with contemporary meta-skills. This brings into question the Government's approach to SDS and that of the Scottish Education frameworks, where there is significant emphasis on this. Academic staff recognised the value of aligning LLOs with meta-skills but made the distinction between knowledge and skills-based modules. All staff and students were able to reflect on skills that were taught and learned throughout the modules that were discussed, particularly when these aligned to a real-life experiential aspect of the assessment.

Participants recognised that, although several skills were being developed within these modules and across other parts of the degree, there was no formal process of reflection and documentation of these, which meant these sometimes went unrecognised or forgotten. There was consensus amongst all research participants that students would benefit from a clearer understanding of both the knowledge and the skills they are gaining in their taught modules. These skills need to be conveyed and recorded through a medium they will engage with. The current study suggests that the MUD document (which staff relate most closely to LLOs) is not engaged with by students and so, for students to engage more effectively with LLOs, staff need to separate their thinking around these from the constraints of the MUD.

These findings contribute to the research field of skills, learning and knowledge, extending the work of many others such as Bloom (1956), Race (2019), and Chan (2021) but suggesting a need to revisit educational frameworks and taxonomies to reflect new needs of industry and a mix of knowledge/skills-based learning (Blessinger, 2020). The current research findings suggest that a re-conceptualisation of this sort would be of benefit to educators, employers and students, moving beyond the concept of what might be construed as knowledge-only LLOs to a more inclusive set of module outcomes.

A recommendation could be that meta-skills might usefully be built into the feedback mechanism for modules with a more obvious skills-based element. This is something that could be introduced and evaluated with staff, and students and through a broader review of contemporary meta-skills over a period to establish best practice in this area. A suggestion would be to use the updated acronym **SKILL**, which would stand for '**Skills, Knowledge, Innovation and Lifelong Learning'**. Skills and knowledge relating to each module should be identified and taught using innovative pedagogies to assist in developing a student's lifelong learning. The knowledge and skills should be identified using a co-curriculum design approach (Billet and Martin, 2018), where students can feed in from their past experiences and employers at a more holistic course-specific level to track meta-skills throughout the course but ensure that where these are mentioned at a modular level this is authentic. This process would benefit from regular review, particularly in dynamic contexts, such as the creative sector, which would require a less ad-hoc and more regular system of review, which is less onerous on individual

staff. Embedding meta-skills into the curricula and aligning these to LLOs would deepen students' awareness and understanding of the skills they are gaining and help them document these and articulate them to prospective employers.

5. Limitations and recommendations for future research

This study focused on a single but interdisciplinary academic school within one institution and sampled staff and students based on six modules. This enabled deeper reflection on the part of participants who were able to draw on their experiences more broadly and set this within the context of the specific topic, which helped guide interview and focus group discussions. Further research would be useful in exploring the perception and value of LLOs more broadly, in the context of more theoretical knowledge-based modules and more diverse subject areas. Longitudinal research would also be of value, for example engaging with alumni to explore their perceptions of the transferability of meta-skills gained on their course to the real-life world of work.

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Corresponding Author

The corresponding author for this manuscript is Pauline A M Bremner, MPH who can be contacted by email via p.bremner@rgu.ac.uk

APPENDIX I. LEVEL LEARNING OUTCOMES IN MODULE UNIT DESCRIPTORS

Module Context/No	Level Learning Outcomes On completion of this module, students are expected to be able to:
Hospitality Module No 1	1 Critically appraise the industry development from contract catering through competitive tendering to Facilities Management in the provision of hospitality services. 2 Synthesise the issues of managing aspects of hospitality provision and contracted-out services from the client and provider perspectives. 3 Identify and evaluate the issues/trends relating to the management of hospitality provision nationally and internationally
Events Module No 2	1. Critically examine the emergence of the experience economy and its implication for a relevant subject area 2. Critically discuss lifestyle consumption within a relevant subject area and setting 3. Critically discuss factors influencing consumer behaviour within an experience economy 4. Apply core concepts of experience and lifestyle to a subject specific case study
Fashion Module No 3	1 Appraise the range and scope of sustainability in the contemporary fashion system. 2 Critically assess a relevant aspect of sustainability for an allocated fashion project brief. 3 Evaluate and develop suitable communication methods for an allocated sustainable fashion project. 4 Present a portfolio of work relevant to an allocated sustainable fashion project, to a professional standard.
Tourism Module No 4	1 Critically evaluate current local and global tourism product provision 2 Critically evaluate the leisure tourists' behaviours and experience 3 Critically appraise local and global tourism development strategies
Media Module No 5	1 Evaluate critically the principle managerial challenges and functions in the media value chain and their application to media and content industry segments. 2 Identify structural and cultural barriers to organisational change and innovation activity, and outline strategies to remove or minimise such obstacles. 3 Appraise critically the role of strategy formation and innovation inside the media organisation and the constraints and limits within which it takes place. 4 Evaluate and compare functions and roles within media organisations and across sectoral value systems. 5 Assess critically the impact of new and emergent technologies upon strategy formation and innovation.
Digital Marketing Module No 6	1 Demonstrate a deep understanding of digital marketing project management and strategy, skills, principles and techniques to be applied to a practical context. 2 Expertly apply strategic managerial judgement and identify appropriate digital marketing methods, skills and tools to a digital marketing problem. 3 Critically identify and discuss issues involved in managing teams and projects in the digital marketing industry. 4 Evaluate critically their own practice and that of peer colleagues in a professional and adaptive manner with reference to academic theory and literature.

Source: (Authors 2024)