Embedding Employability Survey

Insights from Student, Graduate, Staff and Employer Voice Profiles

Careers & Employability Centre

The Embedding Employability Survey was conducted by the *Careers & Employability Centre*, *Dundalk Institute of Technology* May to June 2021. Engaging relevant stakeholders, namely; students, graduates, DkIT staff and employers, the survey aimed to uncover attitudes, experiences, insights, and future-oriented thinking about employability for graduates of the institute.

Acknowledgements

We would like to thank all DkIT students, graduates, staff and employers who volunteered their time to participate in our research. We would also like to thank our project team, steering committee and all those who offered insights, voiced experience and shared their expertise.

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Thank You to Our Funders

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FOR THE ENHANCEMENT OF TEACHING
AND LEARNING IN HIGHER EDUCATION

Foreword

Developing a shared vision of the DkIT graduate is an ambitious task and significant responsibility. Over the past 50 years, DkIT has been producing graduates who have gone on to shape and enhance the economic, social and cultural development of communities locally, regionally and globally. To develop this shared vision we needed to capture both the common themes and unique elements that form the DkIT graduate. This called for a thorough exploration and analysis of the views and experiences of all who have a part to play. This ambition, along side DkIT's commitment to "...foster the development of learners as graduates, personally and professionally, who can contribute positively to society" (DkIT Strategic Plan 2020-22), emphasises the strategic importance of this research-led initiative, namely, DkIT Embedding Employability.

Funded by the *National Forum for the Enhancement of Teaching and Learning*, as part of their **Strategic Alignment for Teaching & Learning Enhancement Fund 2019**, and led by the DkIT Careers & Employability Centre, the Embedding Employability initiative has offered staff, students, graduates and employers an opportunity to exchange employability best practice Institute-wide and to voice-together their vision of the DkIT graduate.

The research phase of this initiative comprised a number of methodologies, and central to this research was the design of a wide-scoping survey conducted from May to June 2021. Engaging relevant stake-holders, the survey aimed to uncover attitudes, experiences, insights, and future-oriented thinking about employability for graduates of the institute.

The survey was the second part of our Embedding Employability Projects' programme of research. Participants answered a wide range of questions addressing four key themes: (i) our graduate attributes, (ii) employability factors affecting our graduates' perceived employability, (iii) the utility and effectiveness of *Careers & Employability Services*, and (iv) forward-looking employability plans for DkIT. All completed online by email call-to-action due to the ongoing Covid-19 context. Building on our focus group consultations earlier this year, the survey set about: testing consensus regarding a headline for our graduate attribute framework, highlighting key employability best practices, reaching consensus on Career and Employability Services, and pointing to future directions for employability at DkIT.

This report presents the main findings, draws out key points of guidance to inform an Institute Employability plan. I would like to thank the Embedding Employability Steering Group for their guidance on shaping and promoting this survey and research assistants Dr Michelle Cowley-Cunningham and Dr Jonathan Hodgers for their expertise in designing the survey and compiling the data findings into this valuable report. We hope you enjoy reading the report, and we welcome any comments you may have to embedding.employability@dkit.ie.

Catherine Staunton

Head of Careers & Employability Services

Dundalk Institute of Technology

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This report is related in four main parts. Each part considers the respondents' descriptive statistics, their responses to specific questions per stakeholder, and draws out inferences about where there is agreement, dissent, or ambivalence. Reservations about the reliability or validity of sample size or representativeness, particularly open responding, are emphasised or assuaged where appropriate.

List of Tables

You can find the List of Tables per Theme and Question our **Embedding Employability Webpage** https://www.dkit.ie/EmbeddingEmployability The list can be found here.

INTRODUCTION

The survey centred on a push-to-web methodology of participant recruitment. Respondents were selected from a set of four pre-defined email lists held by IT Services and the Careers & Employability Centre in accordance with informed consent criteria as set out by the GDPR legislation 2018. Those lists were: present students, graduates, present staff, and employers. The employer list was the smallest of the four lists, and our employer sample accordingly had the least number of respondents. We detail some of our concerns about this sample size, having had a representative focus group of employers earlier in the research process.

Method of Recruitment & Survey Design

Our survey was a 4 x 4 x 3: Between (Stakeholder) - Within (Themes) - Between (Item Questions)/ Stakeholder Specific Items Subjects design. We chose the platform Microsoft Forms to run May to June 2021. There were 27-30 item questions depending on stakeholder. A combination of tick-box, ranking, rank ordering, Likert opinion, and open responding items were put to respondents. We piloted drafts with staff and employer volunteers, until our survey was its most concise, response-friendly, and time efficient. Full lists of relevant tables and survey instrument inventories are available from our website www.dkit.ie/EmbeddingEmployability. Dundalk Institute of Technology *Ethics Committee approved our rationale, recruitment method and set of survey instruments.*

The respondents were recruited via email to their inboxes, or via call-to-action links (see here) advertised via the *Institute News* webpage on Dundalk Institute of Technology's website. Students and graduates received an incentive option of winning a voucher for 50 Euro. Running from May to June 2021, the survey collated responses anonymously via *Microsoft Forms* per stakeholder. Analysis and statistical reliability testing for the purpose of this executive summary was conducted in aggregate via Microsoft Excel. Themes and their corresponding questions were separated into five main sections for analysis and reporting:

PART 1— DEMOGRAPHICS

PART 2— GRADUATE ATTRIBUTES

PART 3— EMPLOYABILITY FRAMEWORK

PART 4— CAREERS & EMPLOYABILITY SERVICES

PART 5— FORWARD LOOKING EMPLOYABILITY

PART 1—DEMOGRAPHICS

Demographics and Graduate Attribute data were completed at the close of survey and presented at DkIT Academic Council No.176. All other data included an additional staff member and five graduates completing later than the survey closing date but deemed relevant. A total of 22 further respondents took part, but too far beyond the closing date to be included in the analysis and write-up phase (*only one of these respondents was an employer, of the least representative group, so no exceptions to include further respondents were required). Moreover, not all respondents answered all questions, particularly open response items. Counts, means, ranks and percentages are used per question throughout.

Respondents

At close of analysis a total of 379 respondents were counted: Students (33%), Graduates (30%), Staff (27%) and Employers (10%). A total of 372 respondents had taken part by close of survey. An additional seven more took part after this date.

We included their additional data in PARTs III to V, as PART I and PART II were already presented to Academic Council No.176.

That said, for many questions we resort to the number of responses per specific question, as not all respondents answered all questions.
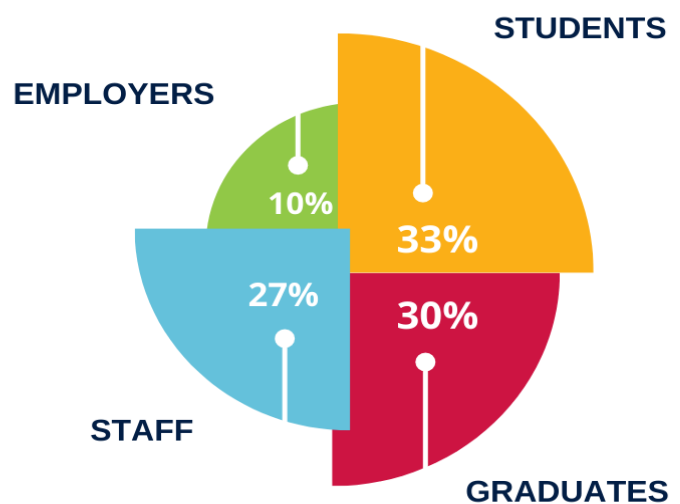

Fig. 1. Stakeholder Distribution for 379 Respondents

Most respondents fell within an age range of 23-35 years (35%) due to additive higher student and graduate response rates for this age category, compared to 36-50 years (25%), 12-22 years (21%), 50+ years (18%), and Prefer-Not-to-Say (PNS) (1%). The majority were Irish Nationals (84%), compared to EU (7%) or non-EU (7%) and PNS (2%).

All subject field categories were represented but less so for Engineering (11%) than Business & Humanities (34%), Health & Sciences (29%), and Informatics & Creative Arts (19%). Only Trades/Other had less (7%). Students <18 years of age are minors and were therefore excluded from the e-list compiled for us by IT Services. Student year groups were represented similarly by first years (29%), second years (20%), third years (31%) and fourth years (20%). Full-time students were the majority of those (84%), with some part-time (8%), postgraduate students (7%) or other (1%). Staff were strongly represented by the academic category (76.5%) compared to professional support (13%), administrative (6%), technical (4%) or Other/PNS (.5%).

PART 1—DEMOGRAPHICS

Whether this will be important for evaluating responses about student services will be discussed later. A concern we do have is that professional and/or support staff voice should be better represented on themes and questions of particular interest to them.

Reservations : Employer Response Rate & Gender Bias

A gender difference of statistical significance is present in this sample, with most respondents being women (62%) rather than men (36%), or Other/PNS (2%). Recall too that employers account for only 10% of the sample, and their industries although varied, are oblique. Most employers chose the 'Other' category, then Manufacturing and Finance with remainder industries only represented in counts of 1's and 2's.

These differences are important, and although may not overall affect the results of the survey in aggregate, they could indicate inequivalences in inferences about employer, engineering, or male share of voice. We are reviewing the possibility of a second survey tranche for employers only in academic year 2021-22, and we have sensibly weighted our earlier representative employer focus group data elsewhere.

In what follows we detail the responses to each theme and its set of corresponding item questions, paying attention to stakeholder differences or similarities, qualifying inferences where necessary with reference to our just outlined respondent constituencies.

PART 2— Graduate Attributes

Graduate Attributes are the core abilities and values a higher education institute community agrees all its graduates should develop. They are the abilities employers deem necessary for today's knowledge workers and graduate success. The premise that graduate attribute frameworks adopt is that students are at university to take part in building a life beyond their degree, and that that life includes attributes facilitative to employability. Graduate attribute frameworks dictate that students will and should engaged citizens as well as employees, community members and lifelong learners. Focusing on graduate attributes through a lens of employability in higher education prepares students to transition into all these roles and more. The central concept that graduate attribute development taps into is the notion that access to higher education provides greater life chances than those who do not. Graduate attribute frameworks are key to fulfilling this promise of employability success to its students by Dundalk Institute of Technology.

This section outlines the results of our survey research with the goal of establishing our own graduate attribute framework. What's key is that our stakeholders, that is our HEI community, reach authentic agreement about the graduate attributes our students possess at graduation. Moreover, that prospective employers have either consensus or complementary perspectives to help us enhance our employability framework development. Further, we have aimed with this survey to bring clarity and a greater evidence-base to bear on the graduate attribute findings of our Focus Group Consultation. That consultation brought together a group of 35+ voices on graduate employability; those identified with grand oversight of the issue (e.g., Employability Champions or Clusters of Interest). Now, we seek to develop these findings with a larger audience, more representative and involved in the day-to-day groundwork of teaching and preparation of our students for graduate success.

Creating a Graduate Attribute Framework— 3 Elements

Constructing a Graduate Attribute Framework requires addressing key thematic priorities. Namely, to agree upon a set of mindset statements and to validate a list of representative capstone attributes and sub-attribute lists. The framework's goal is to authentically reflect the graduate body and how they can constructively meet the world of work.

Creating a Graduate Attribute Framework therefore required an evidence-based research approach attending three main elements:

(i) First, to test if there is agreement about the sorts of qualities that our graduates possess, whether they are deemed DkIT unique, and where we find this agreement to use as an evidence-base to write a set of graduate mindset statements.

(ii) Second, to uncover a consensus for a headline Graduate Attribute Framework; a headline lists the capstone graduate attributes necessary to construct the framework with view to the iconography and marketing apparatus at a later stage. These capstones tend to be the graduate attributes that are mentioned most often as attributes, skills, or competencies and deemed essential or overarching to other graduate attributes. For example, the graduate attributes communication, confidence, or collaboration. Several possibilities, including these were generated from our Focus Group Consultation. We tested them with our survey respondents.

PART 2— Graduate Attributes

(iii) Finally, to measure the importance or lack thereof of specific sub-attributes, namely the graduate attributes that essential, more specific and cluster more generally with specified capstone graduate attributes.

Element (i): Qualities as Mindset Indicators

A list of 20 qualities unearthed from our Focus Group Consultation was presented to respondents. Respondents ticked their Top 3 in accordance with how typical they were of DkIT graduates, and they were presented in the format voiced as by our participants in our focus group. The list included: Positive Attitude, Hard Working, Socially Conscious, Ethically Aware, Transferable Skills, Responsible, Environmentally Aware, Community Focused, Trustworthy, Interculturally Aware, Self-Aware, Fair, Cross Sectorial Skills, Resilient, Life and Wellbeing Aware, Determined, Responsible, Creative, Self-directed Learner, and Independent.

Our results were consistent regardless of stakeholder. **Positive Attitude**, **Transferable Skills**, and **Hard Working** were within the Top 3 for all groups. Following behind were Determined and Self-Directed Learner. A set of mindset statements were developed corresponding to these findings. The possibility: 'Positive Attitude', 'Adaptable' to denote transferability of skills, and 'Resilient' to denote hard working, determined and self-directed mindset in its broadest sense was chosen. This possibility amongst others was floated at Academic Council No.177. It was decided to focus on **Adaptive** to refer to Transferable Skills and **Resilient** to refer to Hard Working.

Element (ii): Agreeing a Graduate Attribute Headline

Our Focus Group Consultation found the graduate attributes 'Communication', 'Collaboration', and 'Confidence' were most representative of DkIT graduates. Respondents were asked as part of this theme of questions to 'help us decide on the fourth graduate attribute to headline our Graduate Attribute Framework'. They were asked to select their preferred headline in terms of how representative it is of DkIT graduates. Four headlines were presented and included the three C's 'Communication, Collaboration and Confidence' with the fourth being either 'Technical', 'Enterprising', 'Practical' or 'Technology-Driven'. Remember, our Focus Group Consultation produced a three-way tie between 'Technical', 'Practical' and 'Enterprising'. Having constructed the composite capstone 'Technology-Driven' to accommodate all three that were tied in terms of programme development and future orientations, we now had to pit them against one another. The results were the following as Table 1 shows:

PART 2— Graduate Attributes

Table 1: Graduate Attribute Framework headline preferences for all stakeholder groups

GROUP	PRACTICAL	ENTERPRISING	TECHNICAL	TECHNOLOGY	TOTAL	OTHER
STUDENT	57	20	33	16	**126**	0
GRADUATE	38	22	15	22	**97**	3
STAFF	54	17	12	13	**96**	4
EMPLOYER	22	4	10	1	**37**	1
TOTAL	171 (48%)	63 (18%)	70 (20%)	52 (14%)	356 (98%)	8 (2%)

The winning headline with all stakeholder groups was 'Communication, Collaboration, Practical, and Confidence'. With 48% of the vote as a first-place preference, it is a minority win, but the remainder (52%) is split between the other three options. That said, the total number of respondents is twice plus that of the other three options. Beyond that comparison, there are those respondents who chose 'Other' separate to the responses to the four mainstream answers. No significant pattern emerged of these, but 'Creative' and 'Emotionally Intelligent' were mentioned more than once. 'Technical' as the fourth capstone attribute won out eventually with the Focus Group Consultation in terms of a total number yet did not feature as prominently as 'Communication', 'Collaboration' or 'Confidence'. We have thus created a working Graduate Attribute Wireframe: *The PCs Graduate Attribute Framework. This framework accommodates the first letters of our capstone graduate attributes in a memorable Headline Title; where P = Practical and Cs = Communication, Collaboration and Confidence.*

The PCs Graduate Attribute Framework: A Framework for DkIT

Working with our headline title '**The PCs Graduate Attribute Framework**', we set about brainstorming some taglines. While not fixed and preparing for a vote by Academic Council No.177 in the autumn, we planned to focus on the capstone 'Practical' in its theoretical or philosophical connotation, that is 'the pragmatic stance'. Possible taglines include: **'Graduates Bringing Practical Solutions to a Complex World**', and with reference to the 3Cs: '**We are Communicators, Collaborators and Confident Changemakers**'. We foresee that this title headline and taglines will be presented and accepted in either its present or an augmented marketing form for rollout during academic year 2021-2022. [The title and taglines were voted for and confirmed by Academic Council No. 177].

PART 2— Graduate Attributes

Element (iii) The Sub-Attributes

Working with our headline title '**The PCs Graduate Attribute Framework**', we set about brainstorming some taglines. While not fixed and preparing for a vote by Academic Council No.177 in the autumn, we plan to focus on the capstone 'Practical' in its theoretical or philosophical connotation, the pragmatic stance. Possible taglines include: **'Graduates Bringing Practical Solutions to a Complex World'**, and with reference to the 3Cs: '**We are Communicators, Collaborators and Confident Changemakers**'. We foresee that this title headline and taglines will be presented and accepted in either its present or an augmented marketing form for rollout during academic year 2021-2022.

Third-level institutions use graduate attribute frameworks to gain competitive advantage by infusing them as ethos into their promotional strategy and marketing apparatus. Irish University websites and prospectuses make clear their competitive efforts to create perceivable dialogue and storyboards speaking of institutional strengths and prestige all the while promising better jobs and lives after graduation. Usually, this ethos is embedded in the Graduate Attributes they expect their graduates to learn and promote to meet the workforce once they leave.

For the most part, graduate attribute frameworks present with capstones (overarching graduate attributes) and clusters of sub-attributes (typical graduate attributes, but those especially relevant to a HEI's graduate body). A set of mindset statements may also accompany a framework or may present separately. Employability statements, regardless of institute or university tier require them.

The Language of Sub-Attributes

This competitive language creates expectations for new students arriving to third-level education about how the institute will serve their student experience as consumers. The language of the graduate attribute framework attends exclusively to human capital overtones with attributes and mindsets calling to prospective employers and students of world-readiness or labour market consciousness. For example, come to our university and engage in 'global citizenship', 'global community', 'diversity', and find a 'flexible career', 'international career', 'research centered', 'cutting edge', 'technology-focused', 'career-ready', 'creative and innovate', 'adapted lifelong learning', 'high profile' 'world-class' are promoted by many institutes. Dundalk Institute of Technology is no different in this regard, but the emphasis on the combination of capstones, sub-attribute clusters, and mindsets will have its own programme and programme development qualification logic. The exercise is one of marketing and advertising as well as pedagogy promise. Yet it does not necessarily preclude authenticity. Our methodology sets out the importance of voicing any such framework for DkIT together. By Focus Group and institute-wide survey response we have created an authentic evidence-based grounding on which our framework may draw on. The research aimed to unearth attributes that matched this competitive language with the authentic DkIT experience, acknowledging the interface between pedagogy and career development.

PART 2— Graduate Attributes

When twinned with innovative pedagogy, graduate attribute initiatives are held to generate outstanding graduates. Indeed, professions accredited programmes will not be approved without them regardless of other demands for curricula structure, content and learning outcomes. Although they may differ somewhat from profession to profession be it Social Care or Engineering, some attributes are universal, for example: Communication Skills, Teamwork Skills, Technical Ability, and Critical Thinking. Within curricula continuous assessment and activities to enhance learning beyond assessment, such as group work (teamwork skills), formal presenting (communication skills), practicals (technical skills), and industry-partnered projects (employability skills) are typical examples of where graduate attribute development may be embedded. Dundalk Institute of Technology's hospitality programme(s), for example, have implemented their own vision of graduate attribute development through a curriculum constructively aligned with skills-development learning outcomes and graduate attribute development. Indeed, we have won a National Forum for the Enhancement of Teaching & Learning in Higher Education's DELTA Award for these programmes. Our efforts to develop an institute-wide set of graduate attributes for all who attend DkIT have begun. The research has started to produce some more interesting insights about the attribute lists held to be most important within each capstone graduate attribute category, and we will share them here.

What Kinds of Communication, Collaboration and Confidence?

Our qualitative-quantitative exploratory design was selected initially (Creswell & Creswell, 2018) to establish a working set of graduate attribute capstones and associated sub-attributes with the qualitative Focus Group component. This focus group study uncovered a set of graduate attributes considered authentic to DkIT, and now we present the results of a follow-up quantitative questionnaire to identify consensus on the sub-attribute lists. When we relate data about these attributes it is important to view them from the perspective of students and graduates making a set of 'We are...' statements, and doer statements are preferable for sub-attributes where possible.

Four item questions corresponding to agreed capstones as per our Focus Group results (A - Communicative, B - Collaborative, C - Confident, and D – Composite/ Quadrant 4) were presented to all stakeholder groups and each individual respondent was asked 'within the following list of graduate attributes, rank the 3 you consider most important'. They were not told what list corresponded to which capstone. Remember, that our headline has now established our Composite or Quadrant 4 as 'Practical'. What's more we embedded graduate attributes deemed important but that had not received typical voice within our focus group data to test if there was a recognisable or implicit association with these sub-attributes and our graduate body. Those tested were: 'Problem Solvers' within the 'Confident' list; 'Leadership' within the 'Collaborative' list; 'Creative' within the 'Communicative' list; and 'Technology-Driven' within our 'Technology-Driven' list. In the fourth instance we sought to validate or invalidate the synthetic graduate attribute 'Technology-Driven' within the DkIT context.

PART 2— Graduate Attributes

Collaboration—We Are Team Players!

Regardless of stakeholder differences, there was relatively consistent responding toward first-to-third choices for aggregate mean percentage lists corresponding to the capstone 'Collaboration', whether presented by first choice preferences or first-to-third preferences. Those first-to-third sub-attributes were 'Team Players' (88.6%), 'Leadership' (50.3%), and 'Collaborators' (51.0%), followed closely by 'Innovative Partners' (46.0%), 'Operationally Savvy' (33.6%), 'Networkers' (19.3%), and 'Socially Enterprising' (11.2%). There were some differences of note between stakeholders for sub-attributes 'Leadership' which staff (35.7%) and employers (37.9%) ranked lower than either students (67.5%) or graduates (60.2%). Perhaps because student and graduation aspiration for themselves is stronger at these life stages or they perceive employers value of leadership more strongly.

#1
TEAM PLAYERS

#2
COLLABORATORS

#3
LEADERS

What's more 'Operationally Savvy' was ranked well by staff (36.7%) and employers (59.4%) rather than by either students (17.9%) or graduates (20.4%); and it is possible that 'Operationally Savvy' is an uncovered labour market differentiator when it comes to hiring DkIT graduates. There is more research required on this aspect, and the employers have a smaller group of respondents in this survey than we hoped, but the result is noteworthy as a unique selling point.

Although the mean percentages are smaller in scale, rankings were treble or above for 'Socially Enterprising' by students (13.9%), graduates (10.7%) and staff (17.3%) versus employers (2.7%).

Employers do not see that attribute as meaningful when they hire DkIT graduates, and circumstances of employment may compete with the flexibility required to take part in socially enterprising endeavour while students. That said, our constituency of employers did not correspond to the socially enterprising sectors, be they charities or entertainment.

PART 2— Graduate Attributes

Communication —Creative and Emotionally Intelligent Communicators

Aside from any stakeholder differences, there was relatively consistent responding toward first-to-third choices for aggregate mean percentage lists corresponding to the capstone 'Communication', whether presented by first choice preferences or first-to-third preferences.

#1
COMMUNICATIVE

#2
CREATIVE

#3
EMOTIONALLY INTELLIGENT

Those first-to-third sub-attributes were 'Communicators' (88.6%), 'Creative' (68.0%), and 'Emotionally Intelligent' (59.2%), followed by 'Digitally Fluent' (46.0%), 'Public Engagers' (33.1%), and 'Self Promoters' (11.5%).

Emotional Intelligence has increasing value according to comparative attribute-led institutes (e.g., GMIT, Ireland), and we were pleasantly surprised to find it ranking. 'Creative' was not an attribute overly mentioned within our previous Focus Group research but was included to test in the survey because we judged it an omission when compared to the graduate attribute literature. It performed well within the array of graduate attributes in this list as indicative of DkIT graduates. Moreover, there is a programme focus at DkIT on creative arts.

'Public Engagers' was ranked almost twice as high by students (43.2%) and graduates (41.2%) than by staff (23.5%) or employers (24.4%). 'Self Promoters' was ranked lower by staff (3.0%) than students (14.6%) graduates (14.8%) or employers (35.5%). Employers valued graduates 'Digitally Fluent' capability (52.3%) than they themselves (34.3% by Graduates; 33.4% by Students), or staff (39.7%). These present clear differences between what students and graduates value or potentially perceive about their role in gaining employability compared to their lecturing staff. Moreover, the context of promotion skills may be valued by students or graduates differently than by staff or employers, but all value having those skills or attributes.

PART 2— Graduate Attributes

Confidence or Professional Confidence?

Aside from any stakeholder differences, there was relatively consistent responding toward first-to-third choices for aggregate mean percentage lists corresponding to the capstone 'Confidence', whether presented by first choice preferences or first-to-third preferences. Those first-to-third sub-attributes were 'Professional Confidence' (49.0%), 'Adaptable & Flexible' (67.9%), and 'Problem Solvers' (53.4%), followed by 'Critical Thinkers' (45.7%), 'Resilient' (34.4%), and 'Lifelong Learner' (25.0%).

#1
ADAPTIVE & FLEXIBLE

#2
PROBLEM SOLVERS

#3
PROFESSIONALLY CONFIDENT

There were some differences of note between stakeholders for sub-attributes 'Professional Confidence' which employers (32.4%) rated lower than students (61.1%) graduates (51.1%) or staff (51.4%), perhaps because they know that 'Professional Confidence' is only beginning to develop upon hire. 'Confidence' alone was ranked almost twice as high by students (31.7%) and graduates (37.5%) than by staff (12.8%) or employers (16.2%).

Students and graduates may recognize the importance of 'Confidence' more widely construed to be in a psychological space to adopt flexible or adaptable modes within the professional context more generally.

Practical— Knowledgeable, Technically Skilled & Work Ready

Regardless of stakeholder differences, there was consistent responding toward first-to-third choices for aggregate mean percentage lists corresponding to the capstone 'Practical', whether presented by first choice preferences or first-to-third preferences. Those first-to-third sub-attributes were 'Knowledgeable' (82.3%), 'Technically Skilled' (71.0%), and 'Work Ready' (65.3%), followed by 'Practice-Led/Practical' (29.5%), 'Technology-Driven' (20.6%), 'Enterprising' (19.8%), and Data Literate (11.6%).

#1
KNOWLEDGEABLE

#2
TECHNICALLY SKILLED

#3
WORK READY

PART 2— Graduate Attributes

There were no significant differences between stakeholders for sub-attributes beyond 'Enterprising' which staff (29.4%) and employers (22.3%) ranked higher than either students (14.8%) or graduates (12.9%), perhaps because the commercial aspects of work have not yet overly occurred to them. Although the mean percentages are smaller in scale, rankings were double for 'Data Literate' by graduates (14.9%), employers (11.2%) and staff (13.7%) versus students (6.6%), denoting the inevitable requirement of data literacy as part of the set of skills for the contemporary workplace. Students will evolve to place that value similarly as the graduates have.

In short, our graduate attribute research, both focus group and survey components demonstrate that our graduates are Practical, Communicative, Collaborative and Confident generally construed. How those specific graduate attributes cluster within those categories are shown in Figure 2 below.

PRACTICAL
- ✓ Technically Skilled
- ✓ Knowledgeable
- ✓ Practical
- ✓ Work Ready
- ✓ Enterprising
- ✓ Data Fluent

COMMUNICATIVE
- ✓ Communicators
- ✓ Public Engagers
- ✓ Creative
- ✓ Digitally Fluent
- ✓ Emotionally Intelligent
- ✓ Self-Promoters

CONFIDENT
- ✓ Professionally Confident
- ✓ Flexible & Adaptive
- ✓ Critical Thinkers
- ✓ Problem Solvers
- ✓ Lifelong Learners
- ✓ Resilient

COLLABORATIVE
- ✓ Team workers
- ✓ Innovative Partners
- ✓ Leaders
- ✓ Networkers
- ✓ Socially Enterprising
- ✓ Operationally Savvy

Fig. 2.: The PCs Framework of Graduate Attributes. P for Practical and 3Cs for Communicative, Collaborative and Confident.

PART 3— Employability Framework

An Employability Framework bespoke to DkIT was developed in tandem with our programme of research. Adapting Marilyn Clarke (2018, p. 1931), our framework views employability via a process of *Perceived Employability.* Employability is defined as the set of achievements, skills, understandings, and personal attributes graduates possess upon completion of a higher education qualification. Perceived Employability is the perception of these same achievements, skills, understandings and personal attributes graduates possess according to their prospective employers, economy, peers and society. The human factors we view our students and graduates possessing at the outset fall into four categories: Human Capital, Social Capital, Career Mindset, and Attributes (including graduate attributes). These factors are apparent or nurtured by the institute's environmental and learning context to create a perception of graduate employability. We differentiate the labour market our graduates encounter as either a Micro or Macro Labour Market, and the interaction of these human factors and labour market contexts give rise to DkIT Graduate Employability, as Figure 3 shows.
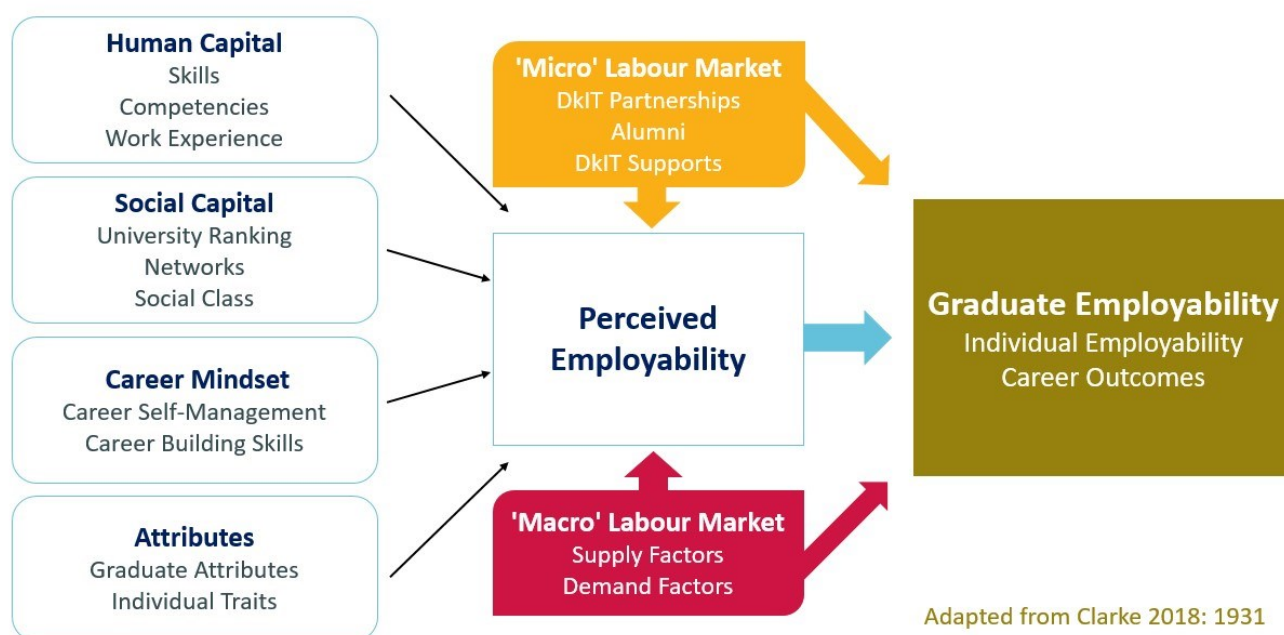

Human Capital
Skills
Competencies
Work Experience

Social Capital
University Ranking
Networks
Social Class

Career Mindset
Career Self-Management
Career Building Skills

Attributes
Graduate Attributes
Individual Traits

'Micro' Labour Market
DkIT Partnerships
Alumni
DkIT Supports

Perceived Employability

'Macro' Labour Market
Supply Factors
Demand Factors

Graduate Employability
Individual Employability
Career Outcomes

Adapted from Clarke 2018: 1931

Fig. 3.: DkTI's Employability Framework

There were some parts of this framework we deemed necessary to test out further. The contextual relevance of the kinds of skills and abilities as well as the speculated importance of the institution's reputation or networks according to key stakeholders were considered.

PART 3— Employability Framework

Personal Circumstances or Network Capital?

Respondents ranked relevant social capital influences in terms of their importance to perceived employability. Of the four influences ranked, all stakeholders aside from employers ranked 'Network of Colleagues/Contacts' as their No. 1; employers ranked it third. For employers, getting the job comes down to more than 'who you know'. Employers ranked 'DkIT's Reputation' as their No.1; students, graduates and staff ranked it second. 'Personal Circumstances' and 'Extracurricular Activities' tied equally for third place for all. According to this result a positive difference to graduates' perceived employability and actual employability is attending DkIT as a third level choice.

This result provides evidence of the gap that can exist between the perceptions of students/graduates versus employers on what they perceive contributes to successful graduate employment. It is useful for DkIT staff to be aware of this so as to inform employability awareness with the student cohort.

What Added Value Does a Qualification Bring? Transferable Skills...

Several items were ranked by respondents in terms of their skills or abilities value to graduate employability. Mean percentage first-to-third rankings revealed 'Transferable Skills' (78.7%), 'Professional Competencies' (60.8%), and 'Work Experience' (43.0%) to be the Top 3. 'Work Experience' is distinct from 'Placement/Internship' (31.3%) which was a close fourth. We couch our reasoning about these rankings carefully because it is possible that this unexpected finding was due to conflation or misinterpretation as we did not define these terms or the context in the question. For instance, it is possible that employers are prompted to think of graduates and other kinds of applicants with work experience. A placement is a key aspect of DkIT's employability commitment and graduates' professional confidence can be positively influenced by placement experience. While placements are of value to graduate employability according to employers (19.5%), real life work experience was more important (44.4%). 'Final Grade' did not receive any ranking points from employers (0%), they valued the 'Level of Degree Award' (e.g., Masters, BSc versus Certificates) (24.4%), or 'Technical Competence' (29.9%) moreso.

Career Management— There's No Place for Luck in Our Aspiration!

Focus on prospective careers is important for any graduate, but some place importance on influences outside of their control. We wished to test what our stakeholders sense making was when it came to placing a value on student and graduate career management activities. We found a remarkable consistency. All stakeholders ranked the four options 'Self Awareness', 'Career Research and Planning', 'Personal Agency' places 1-3, and all placed 'Happenstance/Luck/Right-Place-Right-Time' in last place. DkIT graduates make their own employment luck regardless of stakeholder.

PART 3— Employability Framework

The 'self-awareness' and 'career research and planning' result provides evidence for furthering development and formalisation of career research and planning activities within the curriculum, and throughout the student experience.

Is DkIT Distinguishable from other Comparable HEIs?

There was notable consensus within our survey that DkIT distinguishes itself positively from other comparable HEIs. DkIT's 'Focus on Work Readiness' was ranked its most distinguishing feature. This highlights the positive impact of existing employability initiatives and demonstrates the reputational link between DKIT and employability across all stakeholders.

'Student-Teacher Rapport' and 'Student-Teacher Ratio' came in second and third among the items ranked; a testament to our teaching staff's dedication. These findings bode well for how lecturers might positively receive and implement employability guidance for their curricula. DkIT Partnerships and Industry-Driven programmes came in fourth and fifth respectively, speaking to the employment opportunities and entrepreneurship links within our graduates' reach for having attended DkIT. The area of 'Student-Oriented Supports' was not considered to be a distinguishing feature compared to other HEIs. This result is not surprising as the Student Services are not used equally across the student body. For students who have accessed Student Supports, they may not attribute such supports (counselling, financial, health, careers, sports and societies etc.) in supporting them in achieving successful employment outcomes. Moreover, only 13% of staff were 'Professional and Support', so those who know most did not participate equally in this survey. We suggest a programme of research on Student-Oriented Supports at DkIT may be worthwhile at some point in the future.

PART 4— Careers & Employability Services

Employability Supports at DkIT are one category of Student Supports. We sought to evaluate this service provision in terms of the uptake of these supports. All stakeholders answered this item relative to whether they were a potential service user (i.e., Students, Graduates), or would be supportive of the use of the service for a student or graduate (i.e., Staff, Employers).

'Placement Preparation', '1-1 Careers Appointment', 'Mock Interview', 'Careers Fair', 'Employer Talks' ranked in the Top 5 DkIT Employability Supports. Other supports that were ranked lower included 'Careers Connect' and 'Careers Workshops'. Counts and Mean Counts of actual uptake for Students and Graduates within the survey however, showed that 'Careers Connect', 'Careers Workshops', and 'Careers Emails' were within their Top 5.

The value placed by stakeholders in aggregate for services creating face-to-face linkup between students and employers, with corresponding interview and placement preparation to match is important. Careers supports in general or in the round may require more attention in terms of their improvement, their awareness marketing to students to encourage uptake, or a utility evaluation by the service users only. These findings identify the need for increased promotion of existing DkIT employability supports to students to encourage uptake and provide on–going student evaluation to respond to student and employer needs.

Many services are provided on the DkIT Careers Connect Portal. Our assessment of this service demonstrates that student and graduate and uptake of the facility ranges between 1.1% and 27.3% for ten key functions. Top 5 rankings for use included 'Searching for Job Opportunities', 'Booking 1-1 Appointments', 'Company Research', 'Searching for Events Information', and 'Accessing Career Resources'. That said, one in five of our students had not availed of this service. Without further research, we may not be able to truly tell how useful this service could be. This represents a distinct need for a student awareness campaign for this portal. It should be acknowledged that this campaign may be more impactful if actively supported by academic teams in penultimate and final year cohorts. There was notable consensus within our survey that DkIT distinguishes itself positively from other comparable HEIs. DkIT's 'Focus on Work Readiness' was ranked its most distinguishing feature. This highlights the positive impact of existing employability initiatives and demonstrates the reputational link between DKIT and employability across all stakeholders.

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PART 4— Careers & Employability Services

There were some parts of this framework we deemed necessary to test out further. The contextual relevance of the kinds of skills and abilities as well as the speculated importance of the institution's reputation or networks according to key stakeholders were considered. Employability Supports at DkIT are one category of Student Supports. We sought to evaluate this service provision in terms of the uptake of these supports. All stakeholders answered this item relative to whether they were a potential service user (i.e., Students, Graduates), or would be supportive of the use of the service for a student or graduate (i.e., Staff, Employers).

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Upon an analysis of qualitative response data for how to improve Careers Connect as a service, some mentioned: making students aware of the service from first year, integrating face-to-face functionality, make it relevant by organising via programme focus, or make it more user-friendly. These ideas are important and will be added to the Voiced Emerging Concerns listings we have compiled from our Focus Group Consultation earlier.

PART 5— Forward Looking Employability

To understand more about how employability can best be embedded within the curriculum we will examine the sorts of employability activities that students and graduates already experience, and those staff and employers would recommend to students.

Presenting twelve employability best practice activities to respondents, we examined if students or graduates had first experienced any of them. The activities were selected from our collated best practice uncovered in our Focus Group Consultations with our Employability Champions and our Academic Schools.

All twelve ranged from Mean Counts of 9.5 to 90.0 for students and/or graduates when both were aggregated as a single student grouping. In terms of staff who had embedded those activities in their curricula and employers who though these activities were worthwhile when staff and employers were aggregated as the other group, the Mean Counts ranged from 2.5 to 52.0. Consensus for the Top 5 included 'Work Placement', 'Group Assessment', 'Peer Learning', and 'Formal Presenting'. The groups only diverged for 'Online Profile Exercises' and 'Placement Workshops, where students and graduates valued these exercises, but staff and employers did not. Employers and staff preferred placement preparations to profile exercises. All were viewed as present and even CV-Worthy in our Focus Group Consultation, and we plan to work more with this data to evidence-base our employability best practice guidelines for all those enhancing their employability teaching at DkIT.

Anyone in Favour of an Employability Module?

Aside from Employability Activities, there are complementary ways to bring employability to student consciousness. One strategy is to introduce employability training awards, such as Special Purpose Awards collected over the course of a degree programme, Honorary Awards to affirm an employability status, or even an Employability Module. Our respondents were found to have a unanimous preference for an Employability Module, be they employers (70.3%), staff (64.6%), students (48.7%) or graduates (54.9%) (Mean in favour of Module 59.6%), as Figure 4 shows.

Fig. 4. Stakeholder preference for the introduction of an Employability Module
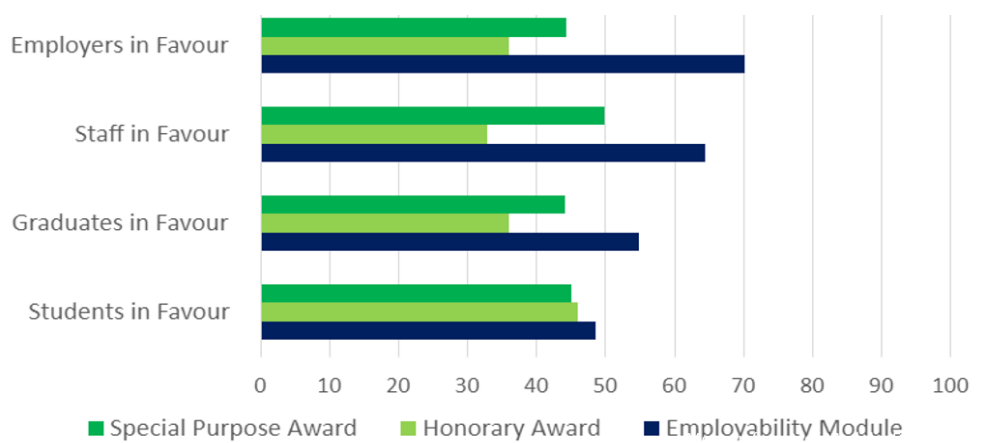
PART 5— Forward Looking Employability

Job-seeking skills mentioned crucial to gaining employment by graduates between qualification completion and employment were varied (93 respondents) including: Interview Skills (23%), CV Application (20%), Skills and Learning (21%), and Resilience (33%). Some (3%) responded 'I don't know'. On integrating these crucial skills to a DkIT student experience (38 respondents), some responded with actionable interventions such as bringing in an 'Employability Module', a 'Graduates at Work Module', a 'Mental Health Module', or more 'Placement and Mandatory Placements'.

When it comes to making graduates entering the jobs market confident however (78 graduates openly responded), they turn on employability building supports in the negative (60%) looking to receive more work placement and CV-building activities, rather than support from the curricula (24%). Some (26%) responded 'I don't know'. While Careers Supports with the help of the curricula at DkIT engender graduates to feel work ready, our graduates do not necessarily feel as confident as they would like. There is room for improvement; and our graduate attribute employability initiatives intend to address this.

Institute-Wide Employability Enhancement Activities: Looking to the Future

Universities tend to have endowment and bursaries well beyond that of the average Institute of Technology or HEI, and many enhancement activities are thus available consistently for their students and graduates. With a Technological University aspiration, Dundalk Institute of Technology would like to look to the future to test the opinion of stakeholders about employability aspirations in line with these next steps.

A list of seventeen such options for prospective employability intervention were presented to garner the attitudes of students, graduates, employers and staff alike. The favoured interventions tended to focus on funding for everyday needs. 'Bursaries for Laptops', 'Scholarships', 'Earn-As-You-Learn' programmes featured amongst the Top 5. 'Industry-Partnered Assessment', 'Career Investigation Assignments', 'Exam Placement Awards Within Year', 'Head Start Programmes' and other imperative job seeking, and employment preparation options featured within the Top 10. The student body makeup appears to be one dependent on signifiers of talent, hard work and financial incentive to succeed. 'Reflective Practice' or 'Cognate Subject Modules' to enhance their learning experience is of less concern. Noteworthy too is the notion that a 'Student-led Recruitment Agency' finished Top 5. Aspiration is high with self-directed impetus, but financial factors remain paramount for DkIT students and graduates.

PART 5— Forward Looking Employability

Boosting Graduate Work Readiness

Free responding was an option for any individual who had ideas of their own to voice to boost graduate work readiness. Of the 128 responses, ten themes emerged, some echoing the findings of our quantitative items in our survey. The themes uncovered were: Placements (e.g., making placement mandatory for all), Equity in Careers Service Provision (e.g., programme-specific services), Employability Module (e.g., specific to job readiness), Promotion of Careers Services to Students (e.g., advertise the service better), Access to Employers and Employees (e.g., make employer talks mandatory), Part-time Jobs (e.g., ringfenced internships), Focus on Job Applications (e.g., self-presentation skills), COVID-19 focus (extra support for Pandemic students), Alumni (e.g., we need a functioning/formal Alumni), and Embedding Employability in the Curriculum (e.g., train business students in CRM).

Mean and rank essential work readiness activities favoured by all stakeholders included: Work Placements (Mean 94.5%, Rank 1), Collaborations with Employers (Mean 81.6%, Rank 2), Alumni Scheme (53.6%, Rank 3), Soft Skills Training (51.3%, Rank 4), and Hard Skills Training (49.0%, Rank 5). DkIT does not have an official Alumni, but all stakeholders deem it highly important to create a dynamic of work readiness for our graduates, and this notion will be considered worthy of future intervention or proposal.

Specific Stakeholders— Graduates

Several questions within this theme allowed for respondents between the stakeholder groups to comment openly. The first of those groups were the Graduates with open responding options affording them a space to voice their views on: 'what activity at DkIT helped you to be work ready the most?'; 'what would have made you more confident entering the jobs market?'; 'what was the most crucial job-seeking skill learned between leaving college gaining employment?'; and 'have you any ideas to on how DkIT might integrate this into your 3rd level experience?'.

Highlights from graduates on work readiness (87 respondents pointed to four main themes: Curriculum & Study (18%), Extra-Curricular (7%), Assessments (18%), and Career Services (51%) and other. Some (6%) responded 'I don't know'. Majorly perceiving Careers Services and Extra-Curricular having a role in work readiness acknowledges the excellent work that Careers & Employability Services do but raises questions about actual or perceived work readiness embedded in curricula. There is clearly a requirement then for a mapping exercise to be completed by lecturers and tutors for programme or modular level. A further requirement to embed employability in the curricula by signposting employability mapping explicitly in class materials and in-classroom dialogue to provoke student aware-ness may also be important. Our general discussion examines the prospect of attribute-led employability embedded in the curriculum as a tool to facilitate these awareness-building strategies.

PART 5— Forward Looking Employability

Specific Stakeholders— Employers and Teaching Staff

Some employers chose to freely answer on the specific reasons they hire DkIT graduates (27 respondents). Broadly speaking they hire for specific Qualities (e.g., Can-do-Attitude, Well Rounded), Graduate Attributes (e.g., Technically Skilled, Good Communication Skills), Programme Quality (e.g., Focus on Practicals), Being Local, and they themselves having a 'Good Relationship with the College' (e.g., Careers Supports Exceeds Others, Knowing the Lecturers). Mostly, employers indicated their engagement with DkIT via the Careers Office, Knowing Individual Lecturers, and Careers Connect.

Employers had some views about improving the relationship between DkIT and employers more generally (27 respondents). There was a focus on four areas broadly speaking: Programme Quality (e.g., Technical Modules Need Updates), Engagement (e.g., More 1-1 Engagements with Students/Not Just Talks to Large Groups, A Central Point of Contact - 'Employers' Liaison Officer'), Relationship with DkIT (e.g., More Direct Engagement with SMEs), and Information (e.g., Information Campaigns on Courses and Programme Content Aimed at Employers).

Staff experienced interaction with employers in three main ways (43 respondents): Work Placements (e.g., Liaising or Sourcing Work Placements), Industry Partnership (e.g., Inviting Guest Speakers or Circulating Job Advertisements), and Professional Duties (e.g., Board Duties or Providing Students with References). All modes of communication were used whether it be by phone, email, careers events, or other face-to-face. That said, teaching staff viewed the most important contribution to graduate employability as their Teaching and Learning, then Work Placement or Engagement with Industry. Students' Initiative, Self-Directed Learning or Extra-Curricular Activities were much less important in their view.

Highlights from staff on their most important teaching methods (38 respondents), were related to Qualities (e.g., instilling self-belief), graduate attribute development (e.g., embed graduate attributes in programmes), industry partnerships (e.g., partnership projects), and embedding employability in the curriculum. Staff had many good ideas here, so we'll list them: Industry-Themed Briefs, Advice in Lectures, Conference Attendance, Professional Accreditations in Tandem with Degree Programmes, Researching Industry, Practicals, CPD Attendance, Diligent Ongoing Support, Career-Focused Assessments, Placements, Employment-Like Assignments, Portfolio Building, Embedding Graduate Attributes in Programmes, Erasmus, Student-led Initiatives or Peer Mentoring etc.

In short, the relationships between DkIT and employers or DkIT teaching staff and employers are evident and have potential to improve, grow or be formalised to support graduates in their employability.

GENERAL DISCUSSION

DkIT has been serving the community and advancing the skills of the workforce in the region since its establishment fifty years ago. Producing graduates who improve and participate in the social, economic, and cultural development of society, and more specifically its region. The aim of our report is to provide the framework for embedding employability in DkIT, by building on existing exemplars of Institute wide Employability Practice and Careers & Employability Centre supports.

Embedding Employability at DkIT: A Graduate Attribute Partnership

This research has brought to light the excellent work we do, from both career supports and teaching perspectives. Moreover, the curriculum and employability support offered by DkIT often go hand in hand together, and a graduate attribute employability programme is one of the ways we can strengthen this impact.

Our Graduate Attribute Framework, calls for students to be:

1. *Active Citizens to maximise their career potential*

2. *Prepared Graduates ready to transfer skills to eligible employment roles and more*

3. *Confident Graduates meeting the world with positivity and a can-do attitude*

4. *Collaborative Graduates with the skills to work with fellow citizens and co-workers*

5. *Creative Communicators with the emotional intelligence required of a diverse society*

Whatever their qualification subject, their mindset will propel them with the positive mental attitude, adaptability and resilience essential for the contemporary workplace and what a technology-driven world of tomorrow may bring.

Work Readiness

Happenstance, whilst a recognised career model, it is not deemed by DkIT stakeholders as a key determinant of career success. DkIT graduates make their own employment luck, be it their mindset, their subject specialisms, hard work or the attributes they develop as students. The context of career supports nurtures this development. There are clear opportunities to further enhance service provision and to create the kinds of interlocking career supports that interact and complement the development of our teaching staff and graduates. Namely, to introduce the DkIT Employability and Graduate Attribute Framework, an Employability Module and an attribute-led employability guidance initiative for staff.

GENERAL DISCUSSION

Graduate Attribute Framework as Marketing Apparatus for DkIT

The winning graduate attribute headline with all stakeholder groups was 'Practical, Communication, Collaboration and Confidence'. With 48% of the vote as a first-place preference, it is a minority win, but the remainder (52%) is split between the other three options. We have thus created a working Graduate Attribute Wireframe: **The PCs Graduate Attribute Framework**. This framework accommodates the first letters of our capstone graduate attributes in a memorable Headline Title; where P = Practical and Cs = Communication, Collaboration and Confidence. Our students and graduates polled this as their favourite headline, and over 200 of them voted. Add to this our four dynamic sub-attribute cluster lists, including particularly DkIT specific graduate attributes like 'Operationally Savvy', 'Emotionally Intelligent', 'Creative', 'Innovative Partners', 'Critical Thinkers', 'Lifelong Learners', 'Team Players', 'Data Literate', 'Knowledgeable', 'Technical', and 'Digitally Fluent', and we are confident to weave a combinatorial storyboard attractive to our marketing function. Our Graduate Attribute Framework, calls for students to be:

A Graduate Attribute Framework of interacting elements (e.g., Barrie, 2009), detailing how they affect an institution's efforts to encourage curriculum renewals to achieve Graduate Attributes is also important to consider. This report has set out the conceptions and consulted appropriate stakeholder. From this point forward, our policy will endeavour to attend to the following:

1. *Implementation:* how DkIT will coordinate and approach the implementation of its graduate attribute policy
2. *Curriculum:* highlight DkIT curriculum structure of modular-to-programme; to have policy in place for upcoming programmatic review
3. *Assessment:* make explicit the embedding of Graduate Attributes in assessment; constructive alignment with Graduate Attributes
4. *Quality Assurance:* how DkIT will monitor and assure the development of Graduate Attributes
5. *Staff Development:* how DkIT will enable and engage staff in efforts to foster Graduate Attributes
6. *Student-centred:* no matter how much effort DkIT will put into implementing a Graduate Attribute Framework; the strategy will not work unless it is perceived by students to have actively engaged them in developing the attribute
7. *Industry Partnered:* ensure industry contribute to inform graduate attribute development and curriculum design

CONCLUSION

Our research demonstrates that this attribute-led approach is an authentic implementation of employability best practice. The skills and abilities, or career management activity students and graduates perceive as possessing upon graduation correspond to the chosen graduate attribute framework, and to the requirements of the labour market they will meet.

Our Graduate Attribute Framework will complement good teaching and learning practice. It will act to reinforce and extend good practice in both programme learning and employability outcomes. Much of that deemed valuable student learning experience is key to the development of transferrable skills which are effective in study, the workplace and life. As a case in point, transferable skills were exact favoured terminology indicative of mindset qualities, as well as the top-ranking skill or ability attained from completing a qualification at DkIT. Our students and graduates therefore know what the labour market will demand, and they know what is of value throughout their programme.

In summary, the world of work has become one of perpetual change, calling for graduates prepared to be flexible, adaptable and resilient. Our graduates will change jobs, roles or even careers several times throughout their lifetime. Our Graduate Attribute Framework will endeavour to provide a support structure and engender the mindsets essential for lifelong employability.

References

AdvanceHE *Embedding Employability in Higher Education. See* [here](#).

AHECS Graduate Market Survey (2020). Retrieved March 10, 2021 from https://www.ahecs.ie/wp-content/uploads/2020/10/AHECS_GMS_2020-Final-Soft-Copy.pdf

Barrie, S. (2007). A conceptual framework for the teaching and learning of generic graduate attributes. *Studies in Higher Education, 32(4), 439-458.*

Barrie, S., Hughes, C., & Smith, C. (2009). *National Graduate Attributes Project (National GAP): Embedding Graduate Attributes in the Curriculum. Australian Learning & Teaching Council. Sydney: Australia. Retrieved March 10, 2021 from* https://ltr.edu.au/resources/GI7-633%20Sydney%20Barrie%20Graduate%20Attributes%20report%202009_0.pdf

Biggs, J., & Tang (2011). *Teaching for Quality Learning at University: What the Student Does, 4th Ed. Open University Press. Maidenhead, UK: McGraw-Hill.*

Bree, R. T. (2018). *Technology-Enhanced Assessment Methods in Science and Health Practical Settings. A Report Commissioned by TEAM.*

Bridgstock, R. (2009). 'The Graduate Attributes We've Overlooked: Enhancing Graduate Employability through Career Management Skills'. Higher Education Research & Development 28(1), 31–44. https://doi.org/10.1080/07294360802444347

Clarke, M. (2018). Rethinking Graduate Employability: The Role of Capital, Individual Attributes and Context. Studies in Higher Education 43(11), 1923–37. Retrieved July 14 2021 https://doi.org/10.1080/03075079.2017.1294152.

Dacre Pool, L. and Sewell, P. (2007) The key to employability: developing a practical model for graduate employability. *Education and Training, 49 (4) 277–89.*

Daniels, J. and Brooker, J. (2014) Student identity development in higher education: implications for graduate attributes and work-readiness. *Educational Research, 56 (1) 65–76.*

Dunne, J. L. (2017). Work placement reflective assessments and employability enhanced through highlighting graduate attributes. *Journal of Teaching and Learning for Graduate Employability, 8(1): 40-59.*

Emon, A., & Timonen, V. (2019). Graduate Attributes: Social Constructions and Lived Experience of University Students in Ireland. *Journal of Education Culture & Society, 2: 133-147.*

Ericsson, K. A., & Pool, R. (2016). *Peak: Secrets from the New Science of Expertise. Boston New York: Houghton Mifflin Harcourt.*

Farrell, A., & McEvoy, E. (2019). *Making a Difference: A Student View of Excellent Teaching. National Forum for the Enhancement of Teaching and Learning in Higher Education. Dublin 2: Ireland.*

References

Hager, P., Holland, S. and Beckett, D. (2002). *Enhancing the Learning and Employability of Graduates: The role of Generic Skills. Business / Higher Education Round Table Position Paper No.9. Melbourne, Australia*

Irish Times (2021). Future-Proofing in a Pandemic-hit Job Market. Retrieved March 09, 2021 from https://www.irishtimes.com/news/education/future-proofing-in-a-pandemic-hit-jobs-market-1.4476415

Krumboltz, J. D. (2009). The Happenstance Learning Theory. *Journal of Career Research 17(2): 135-154.*

O'Farrell, L. (2019). *Understanding and Enabling Student Success in Irish Higher Education. National Forum for the Enhancement of Teaching and Learning in Higher Education. Dublin 2: Ireland.*

Oliver, B. (2013). Graduate Attributes as a Focus for Institution-Wide Curriculum Renewal: Innovations and Challenges. *Higher Education Research and Development, 32(3): 450-463.*

Phillips, P. (2021). A Qualitative Exploration of Postgraduate Students' Understanding of Emotional Intelligence and Its Potential Impact on their Future Career Development. *All Ireland Journal of Teaching and Learning in Higher Education (AISHE-J) 13(2).* Retrieved July 14, 2021 from https://ojs.aishe.org/index.php/aishe-j/article/view/561/929

Robertson, I. (2021). *How Confidence Works: The new science of self-belief, why some people learn it, and others don't. London: UK. Bantam Press: Transworld Publishers Ltd.*

Tomlinson, M. (2017). Introduction: Graduate Employability in Context- Charting a Complex, Contested and Multi-Faceted Policy and Research Field. In M. Tomlinson & L. Holmes (Ed.). *Graduate Employability in Context: Theory, Research and Debate (pp. 1–40). London: Palgrave Macmillan.*

Turner, N.K. (2014) Development of self-belief for employability in higher education: ability, efficacy, and control in context. *Teaching in Higher Education, 19 (6) 592–602.*

Tymon, A. (2013) The student perspective on employability. *Studies in Higher Education, 38 (6) 841– 56.*

University World News (2021). *Adaptability is Set to be the Key Skill for the Future. Retrieved July 14, 2021 from* https://www.universityworldnews.com/post.php?story=20210702110012289

Veld, M., Semeijn, S., & van Vuuren, T. (2015). Enhancing Perceived Employability: An Interactionist Perspective on Responsibilities of Organizations and Employees. *Personnel Review 44(6), 866–82.* Retrieved July 14 2021: https://doi.org/10.1108/PR-05-2014- 0100

Yorke, M., & Knight P. (2006). *Embedding Employability into the Curriculum: Learning and Employability 1. Heslington, York: Higher Education Academy.*

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