

# Essential skills for a global workplace: revisiting the DINAMITE model for post-pandemic higher education.

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## Title

Essential Skills for a Global Workplace: revisiting the DINAMITE model for post-pandemic Higher Education

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## Biography

Izzy's qualifications include an MA(Hons) Social Science and postgraduate certificates in Public Relations, Higher Education Learning and Teaching, and Research Methods. She is currently studying for a PhD in the field of Collaborative Online International Learning (COIL), is an Accredited Member and Fellow of the Chartered Institute of Public Relations, and a Fellow of the Higher Education Academy in the UK.

## Abstract

This paper investigates some of the recent terminology and concepts used to describe the type and nature of transferable skills that are developed and nurtured in students in Higher Education, with a particular focus on the DINAMITE <sup>1</sup> model.

The DINAMITE model was developed by the author in 2021 following research with employers in three different countries. This paper seeks to evaluate the relevance and suitability of this model in 2024 from the perspective of fellow pedagogical researchers at the author's home institution in Scotland.

An online, semi-structured, focus group with eight academics was held in February 2024. A thematic analysis was applied to the data and compared to recent literature on transferable skill development in Higher Education.

The findings suggest there is a lack of clarity and coherence concerning the different terms and concepts that are used to describe transferable skills within the context of Higher Education, however, there is strong awareness and understanding of the fundamental importance of these skills. The DINAMITE model has both strengths and weaknesses as a conceptual tool for understanding the transferable skills that are necessary for a global, digital workplace. Therefore, this paper proposes a revised version of the DINAMITE model based on the recommendations of the participants.

Further research is needed to examine a wider range of academic, student, and employer opinions on the terminology and concepts used to describe transferable skill development within Higher Education. A universally accepted model would enable key stakeholders to devise a more cohesive approach to transferable skill development in preparation for the workplace.

## Keywords

## **Summary Statement**

Essential Skills for a Global Workplace: revisiting the DINAMITE model for post-pandemic Higher Education suggests there is a lack of clarity and coherence concerning the different terms and concepts that are used to describe transferable skills within the context of Higher Education. The strengths and weaknesses of the DINAMITE model for transferable skill development are also examined and a revised version is proposed for potential use by Higher Education professionals.

## **Classification**

Research Article

### **1.0 Introduction**

This paper will present the results of a project, the aim of which was to evaluate the relevance and suitability of the DINAMITE model for transferable skill development within Higher Education. The need for a conceptual model that can assist Higher Education practitioners in developing students' transferable skills has become increasingly important in the post-pandemic, global, digital, era <sup>2</sup>.

### **1.1 Skills Development for a Global Digital Workplace**

Universities have a responsibility to support students to develop the academic, technical, and transferable skills that are necessary for working in a dynamic global workplace, however, it is the development of transferable skills that can be a particular concern for employers who often note a lack of problem-solving, initiative and communication among new employees <sup>3</sup>. This presents an important and urgent challenge for Higher Education if graduates are to compete in and contribute to, the future workplace successfully.

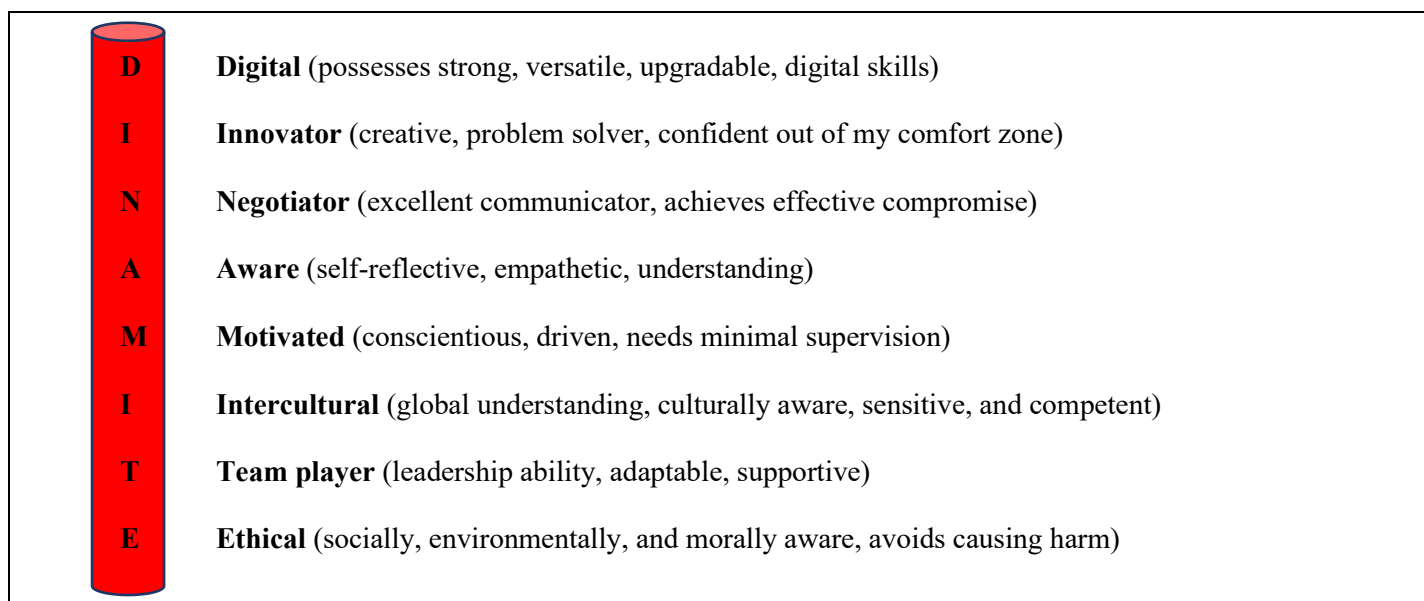
With rapidly accelerating developments in workplace technology, the ability to work synchronously and asynchronously across geographical and time boundaries is growing and evolving at an ever-increasing rate. The post-pandemic context adds additional complexity to the problem with increasing volatility and unpredictability concerning political, economic, social, technological, and environmental issues <sup>4</sup>. The pace of change and uncertainty in the macro geo-political environment and global workplace context demands employees who are adaptable, resilient, and culturally aware <sup>5</sup>.

As the nature of work changes, the skills emphasis can also shift, therefore the need for lifelong learning and a flexible mindset are necessary to compete in the employment market <sup>6</sup>. These challenges can place significant pressure on Higher Education to continuously review and update the methods used to develop the transferable skills that prepare students for the future workplace. It also provides an incentive for universities to develop a more flexible, skills-focused portfolio of courses that will enable graduates to continue learning and developing throughout their careers.

Transferable skills that are commonly cited in academic and industry-based literature include: written, oral and interpersonal communication; teamwork and collaboration; and leadership and responsibility. However, intercultural, and digital skills are especially important in a global workplace where employees are working across geographical borders using an increasing array of digital platforms and tools. Consequently, university teaching and learning strategies must be able to adapt to this dynamic, international working environment and prepare students effectively for

it <sup>7</sup>. In response to this, a new conceptual model for transferable skills development for the global workplace was created (Figure 1).

*Figure 1. DINAMITE – 8 essential attributes for the global, virtual, workplace (Crawford, 2021)*



The DINAMITE model <sup>8</sup> was derived from a thematic analysis of qualitative, interpretative research conducted in 2020 with employers in the UK, Germany, and the USA. Primary data collection involved a series of twelve in-depth, semi-structured, interviews with employers from a range of educational and employment backgrounds. The interview questions examined participant perceptions of transferable skills for employability encompassing digital and intercultural competence; the role of Collaborative Online International Learning (COIL) in transferable skill development; and the type of learning outcomes universities could be aspiring to within the field of virtual exchange and collaboration. The primary data was transcribed and analysed after each set of interviews. Core themes were extracted from the transcripts using Interpretive Phenomenological Analysis <sup>9</sup> to identify superordinate and subordinate themes, followed by closer scrutiny of the self-reflective signs and indicators embedded in the responses. Data coding and analysis were carried out manually by the researcher. Following a thorough examination of the data, eight significant themes were identified including the central theme of this paper: transferable skills and future employability. The participants placed considerable value on graduate transferable skills for a successful career, therefore the findings were used to create the DINAMITE model which seeks to capture the essential attributes that universities should develop in students if they are to successfully address the need for future-ready graduates and employees in a rapidly transforming, globalised, digital employment market. The ‘dynamite’ metaphor implies that when all these attributes are combined, the individual has the potential to make a positive, explosive impact in terms of productivity and performance, within the global, virtual workplace <sup>10</sup>.

## 1.2 Critical Appraisal

The DINAMITE model was created in the aftermath of the global Covid-19 pandemic which saw a revolutionary change in hybrid working, and the technology and skills that it demands, and is representative of this context. However, the model was informed by research with employers rather than academics, who are the primary end-users of the model. Employers were originally approached to obtain a deeper understanding of the type of transferable skills that are considered necessary for successful employment in the global, digital workplace. To obtain an academic perspective,

the author embarked on a new study in 2024 to review the relevance and suitability of the DINAMITE model within the current Higher Education context with experienced pedagogical researchers. The primary goal of the research was to create a refined model for the development of transferable skills, that can be adopted and adapted within universities. This paper aims to present the findings of the study and address the following research questions:

1. How do academics view and interpret the terminology associated with transferable skill development?

The way that terminology is understood and used may affect the clarity and consistency of the approach to developing transferable skills.

2. What type of conceptual models are used by academics for the development of transferable skills in students?

Identifying the models that academics use may help to distil common elements that could be of higher value for transferable skill development.

3. How relevant and useful is the DINAMITE model for transferable skill development from an academic perspective?

Refining the DINAMITE model may help to achieve greater clarity and consistency of approach in the development of transferable skills.

## **2.0 Theory and Concepts**

The terminology that is used to describe transferable skills can be wide-ranging, ill-defined, and applied inconsistently. Common terms in employability literature include soft skills, meta-skills, transversal skills, employability skills, and non-academic skills however for this paper one of the most popular terms ‘transferable skills’ will be used <sup>11</sup>. The term ‘transversal skills’ was used for the original DINAMITE model and associated research <sup>12</sup> however; it has been revised here to ‘transferable skills’ for clarity and consistency.

Within Higher Education, some well-established theories and concepts help practitioners and students to appreciate, recognise, and develop the transferable skills that are necessary for the future workplace <sup>13</sup>. This section will explore how transferable skills are described and categorised in relation to the global workplace, global team development, active learning pedagogy, and professional frameworks.

### **2.1 Global Workplace Characteristics and Transferable Skills**

A primary concept underpinning this research is that contemporary global workplaces have common characteristics that require a particular set of transferable skills. Neeley <sup>14</sup> argues that physical separation and cultural differences can create social distance between geographically dispersed employees which in turn can lead to misunderstandings and mistrust. Neeley’s SPLIT framework <sup>15</sup> identifies five components for mitigating social distance: Structure, Process, Language, Identity and Technology and recognises the importance of social and emotional intelligence for global working and intercultural sensitivity and digital competency as core transferable skills. This point is reinforced by Blay and Froese <sup>16</sup> who note that the nature of global work in the post-pandemic era, is changing. Where employees might previously have physically relocated to perform their duties in or with other countries, virtual work through global virtual teams (GVT) is increasingly the norm, especially for multinational organisations. They classify GVT by dispersion (temporality, diversity, location) and technological context (type and value of technology) and argue that cultural and virtual intelligence are important transferable skills to work successfully in this way.

## **2.2 Global Team Characteristics and Transferable Skills**

Seminal theoretical constructs such as Belbin's<sup>17</sup> analysis of team roles and Tuckman's<sup>18</sup> stages of team formation are used within Higher Education to articulate and develop transferable skills in students including problem-solving, collaboration, planning and delivering results. However, subsequent criticism suggests that role theory oversimplifies team dynamics and limits flexibility in assigning roles<sup>19</sup>. This lack of flexibility is even more problematic within the context of the complex, unpredictable, global workplace. In 2022, Belbin<sup>20</sup> updated this work to reflect the post-COVID-19 context acknowledging that it had forced significant and sudden changes in virtual, cross-cultural teamwork. The need for greater flexibility in forming and disbanding teams is recognised, however, the ability to embrace diversity through an understanding of team roles and behaviour remains relevant. This revision suggests there are nuances to the type of transferable skills that are needed for global virtual working, and the ability to understand behavioural and cultural diversity within teams is a necessary skill for both leaders and their teams. Theoretical models that examine personality types such as The Myers-Briggs Type Indicator<sup>21</sup>, are also used within Higher Education to enable a greater understanding of team behaviour. Using a pre-determined scoring system, this model enables respondents to identify their own and other people's preferences in the way they view and react to the world around them. However, while this may have some merit in addressing the ability to understand behavioural diversity in teams, it has been criticised in recent years for being too rigid for the complex, dynamic, global workplace<sup>22</sup>.

## **2.3 Active Learning and Transferable Skill Development**

To support the development of the transferable skills that students need to operate successfully in a complex, global workplace, active learning environments are encouraged within Higher Education because they can offer an authentic, 'real world' setting for academic, technical, and transferable skill development within a safe environment<sup>23</sup>. Within this learning environment, the ability to reflect in a structured way is a core transferable skill because it allows the individual, team, and employer to obtain a more meaningful appreciation of the reasons for success or failure. Gibbs' Reflective Cycle<sup>24</sup> provides a simple, generic framework to help students learn from their experiences including describing the experience, identifying thoughts and feelings about the experience, evaluating the strengths and weaknesses of the experience, analysing the experience to make sense of it, and drawing conclusions about what worked and what could have been done differently. Kolb's Experiential Learning Cycle<sup>25</sup> embeds the process of reflection within four stages of learning: concrete experience, reflective observation, abstract conceptualisation, and active experimentation. Morris<sup>26</sup> extends this via five themes which add more clarity and insight into the type of transferable skills that may be developed at each stage including, the ability to identify and appreciate contextual nuances, critical thinking, reflective observation, tailored conceptualisation, and pragmatic problem-solving.

## **2.4 Professional Frameworks for Transferable Skill Development**

International and national Governments and industries provide a range of research, guidance, and frameworks that are designed to promote the development of transferable skills for the future workplace. Skills Development Scotland's Strategic Plan 2022-27<sup>27</sup> includes guidance for skills development within the context of Industry 4.0: "As technologies and jobs continue to change throughout people's careers, workers will need to continuously develop adaptive resilience and a diverse skill set, including baseline digital skills, to remain competitive in the labour market." Digital skill development is a key priority for government and industry, and additional funding can be sought by universities that deliver in this area. It could therefore be argued that digital competency should be regarded as a core

transferable skill for students to develop. The OECD Learning Compass 2030 <sup>28</sup> distinguishes between three different types of skills: “cognitive and meta-cognitive skills, which include critical thinking, creative thinking, learning-to-learn and self-regulation; social and emotional skills, which include empathy, self-efficacy, responsibility and collaboration; and practical and physical skills, which include using new information and communication technology devices.” In addition to the digital skills imperative, this also positions social and emotional skills on an equal footing with more traditional cognitive skills, reinforcing their importance for the future workplace and echoing the work of others. The UNESCO Skills Framework <sup>29</sup> is particularly relevant for the contemporary workplace due to its global outlook and emphasis on global sustainability. Transferable skills in this context are described as “the ability to solve problems, communicate ideas and information effectively, be creative, show leadership and conscientiousness, and demonstrate entrepreneurial capabilities.” UNESCO <sup>30</sup> describes these skills as enablers for employees “to adapt to different work environments and so improve their chances of staying in gainful employment.” This will be increasingly important in a rapidly evolving employment landscape. Advance HE <sup>31</sup> highlights interview technique, effective writing, confident presenting, critical analysis, teamwork, and persuasive argumentation as the type of transferable skills that are useful both in the classroom and the workplace; and LinkedIn <sup>32</sup> suggests that creativity, critical thinking, communication, leadership, researching, teamwork, and technical skills are all important for a prospective employee’s resume.

## **2.5 The DINAMITE Model and Transferable Skill Development**

It is possible to identify core transferable skills from the extant literature that may be of particular importance for graduate employability including digital competency, creativity, communication, reflexivity, motivation, intercultural competency, adaptability, and empathy. The DINAMITE model <sup>33</sup> identifies eight essential attributes for the global, virtual, workplace which encompass these core transferable skills. However, despite a degree of consistency with other theoretical models and concepts and reflecting the views of a small sample of employers, there is a need to revisit the model from the perspective of Higher Education practitioners for whom the model is primarily intended, to ensure that it is suitable for adoption and adaptation in that setting.

## **3.0 Methodology**

An interpretivist paradigm which assumes that human experience and understanding of the world is socially constructed, underpinned the research because the way that transferable skills are conceptualised and understood is subjective and open to individual interpretation <sup>34</sup> To be congruent with the research philosophy, an inductive approach was adopted which involves building theory from the findings. Packer <sup>35</sup> argues that a methodology which involves a program of inquiry is more suited to the complex nature of human life. This approach also conforms to the subjective nature of the research and implies that a qualitative methodology which facilitates a more in-depth, fluid, analysis is most appropriate.

### **3.1 Sampling**

According to Lapan <sup>36</sup>, qualitative methodologies should be open to amendment during the investigation because of the complex, socially constructed view of reality. The original research by Crawford <sup>37</sup> involved semi-structured interviews with employers exploring transferable skill development for the workplace. Therefore, to gain a different perspective on the topic, an online focus group was conducted on MS Teams with eight academics involved in pedagogic research at a Scottish university. A purposive sample was appropriate in this case because the participants were required to have a strong knowledge and understanding of transferable skill development theories, models, concepts, and practices within universities. The focus group involved academics from the author’s institution and five of the eight participants were

colleagues from the same academic School as the author. Subject areas included fashion management, event management, information and library studies, marketing and digital marketing, computing, and nursing and midwifery.

The participants included an Associate Dean, two Associate Professors, a Teaching Excellence Fellow, a Principal Lecturer, and three Lecturers who shared a wealth of teaching and research experience. Specialisms included student skills development and graduate employability, experiential learning, live clients, and digital engagement enhancements, transferable skills for different types of students and disciplines, the relationship between placements and study, the relationship between level learning outcomes and meta-skill development, innovation and entrepreneurship skill development and employability, graduate apprenticeships, real-world collaboration, AI and group and individual learning, the significance of personal learning environments and education interculturally, and digital toolkits for learning. Taking part in the study was voluntary and the anonymised data was processed following the General Data Protection Regulation <sup>38</sup>.

### **3.2 Structure**

The participants were invited to offer an academic opinion on the DINAMITE model as a conceptual tool for universities to adopt in support of curricular activities that are designed to enhance employability. These activities could include any approach to teaching and learning which seeks to develop the transferable skills that employers may need now and in the future. During the focus group participants were asked seven questions under the themes of transferable skills and employability; transferable skills-based conceptual models in Higher Education; and the DINAMITE model.

### **3.3 Data Analysis**

The primary data was recorded and transcribed using MS Teams software. Due to the small sample size, data coding and thematic analysis were conducted manually by the researcher with each participant receiving a unique numerical code. Key themes were identified by selecting keywords and quotations, coding, theming, and interpreting them to form preliminary assertions that informed the revised conceptual model <sup>39</sup>.

## **4.0 Findings and Discussion**

Nine significant themes emerged from the data under the broad areas of general confusion and disagreement around the terminology used to describe transferable skills; strong awareness and understanding of different transferable skills development models and concepts with generic traits identified rather than the specific traits of each model; and positive overall appraisal of the DINAMITE model with some insightful suggestions to improve it further. These themes are discussed in more detail below.

### **4.1 Problematic Definitions**

There was some confusion and disagreement among the participants around the terminology used to describe transferable skills suggesting the absence of a coherent, unifying concept that can be applied easily. However, the majority agreed they would use the word ‘transferable’ to describe the type of skills in question. There was consensus that other words are often used interchangeably with transferable skills and those terms lack a clear definition e.g. *“I would say that I'm probably quite bad at using them all interchangeably or slightly different in slightly different contexts.”* (P6) It was also suggested that the boundary between everyday activities is blurred e.g. *“We're online, but we're in person. We are formal, but we're not.”* (P3) and consequently, the definition of transferable skills cannot be confined to one domain e.g. education, work, or everyday life. The importance of understanding how transferable skills



are understood and developed in other cultures was also highlighted as an important consideration for international students: *"Some of these soft transversal skills are not necessarily embedded in other cultures you know and it's things that we're seeing that we're needing to support students with when they come across here."* (P4) This was linked to the perceived difficulty that some students face when trying to articulate their transferable skills to employers: *"It's almost like there's a disconnect between what these skills are, where we gain them, whether that be in employment, education or everyday working or everyday life, and the student's ability to see the value in the wider things that they do in life."* (P4) These sentiments paint a picture of transferable skills terminology that is transient and mercurial and reinforce Dalrymple's <sup>40</sup> assertion that the adoption of one term e.g., 'transferable skills' may be a useful starting point for discussing the topic with further contextualisation if needed.

## 4.2 Negative Associations

The term 'soft skills' was highlighted by participants as particularly problematic because it implies that these skills are inferior to discipline-specific skills and could have negative gender associations e.g., *"I've also had lots of debates with others around soft skills being the sort of wrong word for it because it implies that they're easy or they have implications of femininity."* (P1) There was general agreement that terminology that implies the skill set is less important can harm student perceptions of those skills and their engagement with skill development activity in those areas e.g., *"And actually, our experience probably collectively is that it is difficult to get students to engage with some of these skills. They're not easy."* (P1) This may suggest the terminology that is used to describe transferable skill development could affect the success or failure of associated activities, and ultimately damage graduate employability and career prospects if it results in a lack of engagement. The use of terms with negative associations could also undermine the value of active learning pedagogy <sup>41</sup> where reflection on transferable skill development is key.

## 4.3 Transient Employment

When asked about their views on the relationship between transferable skills and employability, the participants continued to focus on the importance of terminology e.g., *"I think employability has changed quite dramatically and I don't think that's the right term anymore, because if we're talking about developing skills, we have to be able to change and adapt so much more quickly than we ever have done before."* (P5) however, the term 'transferable' was seen to capture the transient nature of employment and was linked to the need for a more holistic approach to skill development e.g., *"the reality is that a lot of our students will be getting a degree in a particular subject, but the likelihood of them remaining for the rest of their career within that specific domain is very unlikely."* (P6) Therefore, it was suggested that the terminology should reflect the future-focused, evolutionary, and social nature of these skills e.g., *"It's like preparing students for life a little bit more...it's like the next step of education is life skills."* (P2) and *"it's about the other skills that you're developing beyond the knowledge that you're developing."* (P6) This reinforces the work of Neeley <sup>42</sup> and Blay and Froese <sup>43</sup> who note that the nature of global work in the post-pandemic era is changing and requires an adaptive mind and skill set.

## 4.4 Pace of Change

The **pace of change** was described as a challenge for academics when it comes to teaching transferable skills e.g., *"The speed of change is faster and faster, as academics it's hard for us to keep up discipline wise in some ways, and by the time our graduates get out there, business is already moving on."* (P1) Echoing Crawford <sup>44</sup>, the Covid-19 workplace was highlighted as an example of rapid, revolutionary change that had an immediate impact on the type of transferable

skills that are necessary to navigate change: *“The fundamentals of being able to work with others and negotiate and show leadership and show emotional intelligence probably are more important because of things like more remote working.”* (P1) The ability to work with people from wider backgrounds and cultural differences was also cited as a critical factor for transferable skill development in the post-pandemic era. These findings reinforce the assertion that the pace of change in the macro and working environment demands employees who are adaptable, resilient, and culturally aware <sup>45</sup>.

#### 4.5 Core versus Adaptable Skills

While the need for adaptability in the way transferable skills are developed was highlighted, the need to retain core skills was also a consideration e.g. *“There's still using those same core skills in a different environment. So, I think that transferability has to have a baseline somewhere around criticality, digital literacy, and good communication, collaboration, all these types of things.”* (P8) This reflects earlier models of transferable skill development that focus on core attributes <sup>46</sup> as well as more recent industry-generated models such as Linked In <sup>47</sup>, implying their continued relevance. This point was embellished by another participant who suggested: *“The people we're training are going into work where they're working remotely...therefore, preparing them for the workplace is just a question of giving them the abject skills of their career and then a few simple transversal skills like time management and agreeing to be managed by someone else.”* (P7) This view appears to contradict the argument for a more holistic approach to transferable skill development from both an academic and industry perspective <sup>48</sup> but perhaps reinforces the need for greater flexibility in the way academics and employers view transferable skill development in an evolving, digital workplace. Overall, the focus group participants agreed that a combination of core and future-focussed transferable skills is necessary for career success but increasingly difficult to teach and acquire: *“In terms of working with others, negotiating, collaborating, showing leadership, knowing when to back off, having that emotional intelligence, that should be part of life skills, but seems to become increasingly difficult, especially for young people.”* (P1)

#### 4.6 Skills for the Future

The discussion around existing models and concepts of transferable skill development immediately raised the recent incorporation of sustainable development goals into the transferable skills mix: *“I guess the obvious one for me because I'm working on it now is the UNESCO <sup>49</sup>. Competencies for education for sustainable development encompass things like critical thinking, self-awareness and normative, anticipatory, or future competencies, and collaborative competencies”* (P1) These competencies mirror much of the extant literature on transferable skill development for the post-pandemic workplace <sup>50</sup> suggesting their continued and wider relevance. The European Competencies Framework <sup>51</sup> was described as strong because *“it brings into consideration the different contexts of the task in development, and it's not focused on only students and what they do in higher education but and what they do in their everyday lives as well.”* (P3). This reinforces the argument that transferable skills are context-specific and cut across all aspects of everyday life <sup>52</sup>. It also underlines the need for industry and sector-specific guidance on transferable skills.

#### 4.7 Signposting Professional Skills

The government agency, Skills Development Scotland <sup>53</sup>, and discipline-specific professional bodies were referred to as credible industry sources that academics can use to signpost desirable transferable skills for the contemporary workplace: *“I've had my colleagues signpost students to others (professional bodies) that are subject-specific to their areas. So, I think there's a wide range of different places that we can take that from.”* (P4) The World Economic Forum,

central and local government, the Nuffield Institute and Deloitte were also cited as helpful, future-focussed sources of data concerning transferable skills (P5). However, while the participants were able to cite several different sources of information about transferable skills and the general nature of the guidance contained within them, they did not refer to any specific traits highlighted by those sources which suggests they may be hard to remember. Therefore, it could be argued that a clear, consistent model for transferable skill development may be useful <sup>54</sup>.

#### 4.8 Academic Models for Personal Reflection

From an academic perspective, Kolb's <sup>55</sup> and Gibb's <sup>56</sup> experiential learning models were used by one participant in a professional development module to help students apply theory to practice in their coursework. (P2) Belbin <sup>57</sup> and Myers Briggs <sup>58</sup> team development models were also used to promote personal reflection: *"One of the things I liked using with students was things like Belbin's <sup>59</sup> team roles, which then linked to specific skills and getting them to think about their default form of action, and ways that they might need to change or moderate when they're in a particular setting, working with others."* (P1) The ability for students to reflect was also cited as an essential transferable skill by P5: *"I'm glad P2 and P1 mentioned those things because I think reflection is a, really, really strong thing. It needs to be in because people need to view a situation or experience then spend some time reflecting and figure out what we can do differently the next time, perhaps to improve it."* This emphasis on reflection reinforces the work of Gibbs; Kolb; and Morris <sup>60</sup> who also position reflection as a core transferable skill for students to acquire.

#### 4.9 Appraisal of the DINAMITE Model

Following the discussion about the terminology, concepts and models used to describe transferable skills, the author revealed the DINAMITE model to the participants on their screens and asked them to take a few minutes to consider its strengths and weaknesses within the context of a global, digital workplace. The model was generally well-received because it provides a memorable visual prompt and captured many of the points from the preceding discussion: *"For me, it absolutely works I have to say because it covers many of the key things that we've discussed so far and many of the things that we know are present in some of the other models."* (P1); *"I love the acronym, I think it's easy to remember, the creation of it makes sense and you can understand it really visually (which is helpful in the classroom)."* (P2); *"This is a very useful broad framework as for me I see a few of these transversal skills that are really important to have in any employee."* (P3); *"Really like the model and who doesn't as an academic lover of models."* (P4); *"It's great and you can remember DINAMITE (2021) quite easily, I think without too much difficulty."* (P5); and *"Like just about everyone has said, I like the model. I think we can all agree on that...I think it's great we need more models that explain things easily."* (P7)

However, there were also suggestions to refine the DINAMITE <sup>61</sup> model to make it more relevant to the current and future Higher Education and employment context, and these have been incorporated into the final version (Figure 2).

##### 1. Horizontal instead of vertical

The vertical nature of the model places Digital at the top and this was viewed positively: *"I quite like that digital is at the top just because we are in such a digital era...it's the thing that's so fast moving and so changeable."* (P1) This reinforces the academic and industry-based literature which positions digital skill acquisition at the centre of transferable skill development <sup>62</sup>, therefore the revised model retains Digital at the start of the acronym. Others believed the vertical nature of the model produced a misleading hierarchy: *"But that (hierarchy of skills) is difficult to kind of know without*

*having something to anchor it to, so it kind of needs to be broad to be able to use it.”* (P7) P1 expanded further on this point later in the discussion saying: *“I don't know if your model is sort of hierarchical in terms of the importance of each word that you've put in the brackets, probably not, but automatically in terms of our sort of psychological understandings and functions, there is primacy.”* This suggests that a horizontal model might position each skill more equitably and has therefore been incorporated into the revised model. P7 pointed out the misspelling of the word DINAMITE and although the ‘concept’ of dynamite is more important for the visual analogy than the correct spelling”, it was regarded as a potential weakness when applied to an academic setting. The acronym has therefore been revised to DYNAMITE.

## 2. Team and individual split

The need to define each skill was highlighted: *“For example, digital, what does it mean?”* (P3); *“Maybe have a bit more description in some of them.”* (P4); and *“The model could clarify if it is a set of essential attributes for the workplace or is this a set of essential attributes for each worker.”* (P7) also suggested splitting the acronym for individuals and teams. These recommendations reflect earlier assertions by the participants that a more nuanced, holistic approach to the definition of transferable skills is necessary and therefore precipitated a split in the revised model between individual and team skills, with a more nuanced description for each one.

## 3. Possessing and valuing leadership skills

The participants suggested that a split might encompass an emphasis on teams ‘possessing’ skills and individuals ‘recognising and valuing’ skills because it may not be appropriate for all individuals in the team to possess them: *“Not everybody will be a leader because if everybody was a leader, this world would never really work.”* (P3) This point was reinforced by P1: *“You know, not everybody can be leaders, otherwise you end up clashing and everybody wants to have their way.”* However, P8 contradicted this: *“I know you've got team player and I see you've got leadership ability, but for me, for my discipline, you know, clear leadership is the crux of everything for us.”* This reinforces the need for discipline-specific guidance concerning transferable skills and team development<sup>63</sup>. P5 suggested that the ability to manage diverse change could be incorporated under leadership, together with a stronger emphasis on collaboration. P1 echoed this point: *“Collaboration to me is a sort of first level of being that team player.”* P3 expanded on this further suggesting that Teamwork is an attribute that everyone, regardless of ability, should be encouraged to develop. Linking to this theme later in the discussion and reinforcing the importance of social and emotional skills<sup>64</sup>, P4 suggested: *“We need to have empathy, for maybe group members that don't sit in that team scenario as effectively as others.”* P5 expanded on this saying *“We've spoken an awful lot over the last few years about resilience. Is that you know, part of being empathetic, part of being understanding?”* As a result of these suggestions and their correspondence with the literature, additional terms have been incorporated into the revised model including ‘valuing’, ‘possessing’, ‘collaboration’, and ‘resilience’.

## 4. Motivation, creativity, and self-reflection

Within the context of the global workplace, motivation was highlighted as important because of the need for people who are *“driven and need minimal supervision and things like that.”* (P2). P8 suggested that ‘accountability’ should also be included under ‘motivation’ because this is essential for professions like nursing and P4 suggested ‘inquisitive’ and ‘having influence’ could also be included. These terms reflect the idea that employees should be willing to work out of their comfort zone<sup>65</sup> and be open to lifelong learning and development<sup>66</sup> and have therefore been reflected in the revised

model. Concerning continuous self-improvement, ‘self-reflection’<sup>67</sup> was identified as a key transferable skill: *“I do like the fact you've got self-reflective because that's something that not all disciplines have, but it's really important to us.”* (P8) This has been incorporated into the individual skills definition in the revised model. Creativity was described as nuanced depending on the individual and the setting: *“I think it can apply to different people in different scenarios that may not otherwise think of themselves as creative.”* (P4) In response, P1 suggested that creative thinking is a better term because people can *“get hung up on creativity as an arty thing rather than the ability to think outside of the box or to think creatively.”* This too has been reflected in the revised model.

The only term that was not addressed directly by the participants was ‘Intercultural’. Indeed the ‘global’ dimension of the model was barely touched upon during the discussion despite a couple of attempts by the author to re-introduce the model’s full title into the conversation. This may suggest this element of the model is acceptable in its current form, inherently important, or conversely, not relevant at all. Further work is needed to investigate this further, not least because the original DINAMITE model<sup>68</sup> was based on research that considered Collaborative Online International Learning (COIL) and the importance of intercultural sensitivity for transferable skill development, and the model is intended for a global workplace. In addition to the revisions outlined above, the author also applied the term ‘transferable skills’ to the model title in recognition of the sentiments expressed by participants and the work of Dalrymple et al<sup>69</sup>. The focus group participants appreciated the opportunity to discuss this topic with other pedagogical researchers: *“I already learned some new things and I'm now hoping that you'll share, once you get the transcript of this, some of these answers with the rest of us, I'd love to be able to look up these different systems.”* This suggests that the research process itself was of value for sharing and developing knowledge and understanding of transferable skills development.

## **5.0 Conclusion and Recommendations**

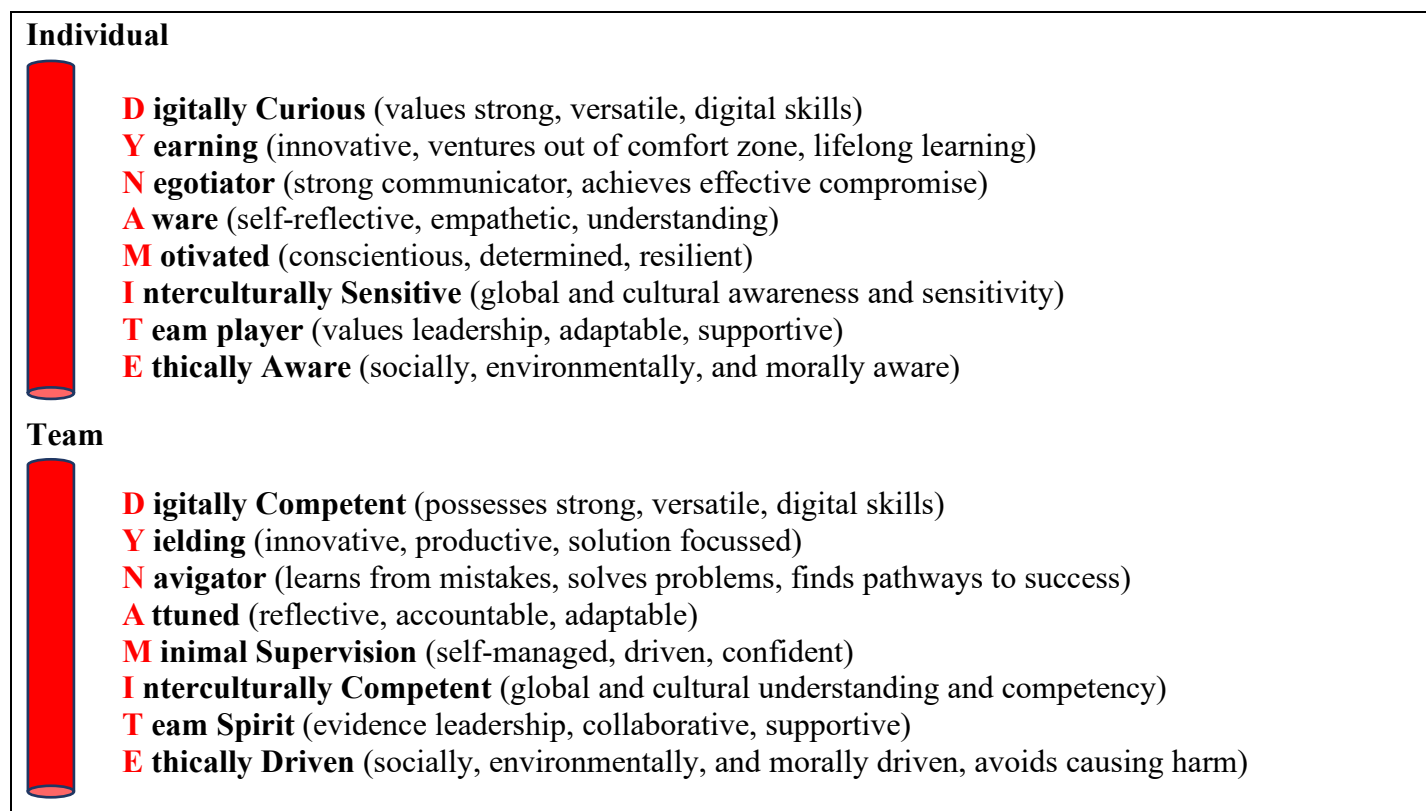
The transferable skills referred to in this paper and represented in the conceptual model can be applied to any context and any professional situation. While the term ‘core skills’ is typically applied to academic or technical skills, the growing level of importance placed on transferable skills by employers and academics suggests they should be given more attention within the curriculum because they are vitally important for every profession.

The purpose of this study was to develop a model for transferable skills development that can be adopted by universities. This was achieved through an analysis of extant academic literature and an interpretation of the terminology associated with transferable skill development from the perspective of eight academics with expertise in the field of pedagogical research. This revealed that the way terminology is understood and used within academia may affect the clarity and consistency of approach to developing transferable skills, as well as the level of student engagement. The research also found that there are a variety of seminal and revised academic and professional models, concepts, and guidance within the field of transferable skill development that are adopted and adapted by academics, however, the absence of a clear, consistent, unifying model creates a degree of confusion and uncertainty in the application of this knowledge within the classroom. Despite this, the research found that it is possible to identify common elements from the literature, of higher value for a dynamic, global, workplace that can help to inform the creation of a revised model for transferable skill development. Following a critical discussion of the DINAMITE model, the research participants agreed that it is a useful, memorable prompt for academics tasked with transferable skill development in students, however, they also identified several refinements to improve the model further (section 4.9). These refinements are intended to make it



more relevant to the current and future workplace and Higher Education context. Figure 2 illustrates the revised model which includes these refinements.

Figure 2: DYNAMITE – Essential Transferable Skills for the Global, Virtual, Workplace (Crawford, 2024)



It is hoped this paper will assist in furthering research and understanding of transferable skills development and employability. The findings may also be used to inform related academic research areas and quality enhancement themes, as well as provide for publications and course development opportunities. A limitation of the study was the focus group only involved academics from the author's institution, therefore it is not possible to generalise the findings to the wider Scottish Higher Education community or further afield. Despite sharing a wealth of pedagogical teaching and research expertise, five of the eight participants were colleagues from the same academic School as the author which may have predisposed them to a more favourable appraisal of the DINAMITE model and a subject-specific perspective. Therefore, further research with academics, employers, and students is needed to produce a stronger analysis of the DINAMITE model for identifying essential transferable skills for the global, digital, workplace. This could include quantitative methods to gain a broader understanding of the terminology and traits across a wider population.

## Figures

Figure 1. DINAMITE – 8 essential attributes for the global, virtual, workplace (Crawford, 2021)

Figure 2: DYNAMITE – Essential Transferable Skills for the Global, Virtual, Workplace (Crawford, 2024)

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## Appendices

Appendix A: Raw Data - Focus Group Transcript (available on request)