



Purposeful pedagogy in action: The Transition Attributes framework

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ABSTRACT

The Transition Attributes (TA) framework is a novel evaluative pedagogic tool which allows mapping of transition activities across four core attributes (skills, knowledge, mindsets, and habits) and twelve sub-attributes which are linked to established higher education sector graduate attributes literature and measures of student success in higher study. This short paper outlines the basis of the TA framework, the rationale for each sub-attributes, and outlines how the TA framework could be applied via an exemplar analysis to illustrate its potential to aid in gap analysis, assurance, and advanced planning around suites of activities intended to support learners' transition in any context.

Keywords: transitions, graduate attributes, curriculum, framework

Introduction

When considering transitions, there are multiple macro, meso and micro lenses to apply (Cifuentes & Santelices, 2022). The first transition points that come to mind are the obvious and important points of large transitions, such as change from further to higher education. Other examples are transitions between basic higher study (levels 4, 5 and 6 in England), transition onwards to advanced higher study (levels 7 and 8 in England), or transition into the workplace (Cage et al. 2021). It is important to remember that smaller transition experiences are constantly happening across a myriad of other points, such as transitions into new study spaces or between educational contexts like studios, workshops, clinical environments, and many others. Additionally, there are inherent transition points into, between and out of group working contexts which are no less valid but can be more subtle akin to threshold concept pedagogy, where transition points could perhaps even be regarded as thresholds themselves (Meyer & Land, 2005).

Given the 2024 higher education (HE) sector re-emphasis on the employment-linked skills agenda, key metrics such as graduate outcomes *via* the Office for Students in England, and career readiness views from industry and employers, there is a need for a purposeful pedagogic longitudinal lens through which to interrogate the plethora of large and small transition-based interventions that take place in and across curricula, frequently associated with positive student outcomes (De Vos & Verbruggen, 2021; Dost & Smith, 2023). What the sector regards as transferable graduate attributes in higher education tends to be largely conserved and cover areas such as professionalism, critical thinking, digital fluency, cultural agility, self-awareness, empathy, etc. (Cheng et al., 2015). We observed a further breakdown into four attributes of habits, skill, knowledge and mindset (Wong et al., 2022) and created a Transition Attributes (TA) framework to map alignment between attributes which contribute to transition success, and transferable graduate attributes, to better articulate the relationships between both as learners move through and then out of their educational experiences (Lipan et al., 2020).

Our Transition Attributes (TA) framework emerged from scholarly attempts to understand transition in the higher education context and concluded there are two critical perspectives for success. The first embraces the psychology of transition success as being both intrinsic and extrinsic and predicated on person-centric qualities (Dweck, 2024). The second establishes the correct outputs of transition success using measurable variables thereby being predicated on process-centric qualities (Aranda et al., 2022). Taking these two perspectives of transition success as the basis of our framework and aligning these with the four core attributes of habits, skill, knowledge and mindset, the balance between person-centric attributes of mindset and habit are complemented by the process-centric attributes of skills and knowledge to build the basis of our framework and to frame the collective of our twelve sub-attributes as shown below in Table1.

Table 1 The Transition Attributes. Four core attributes and their mapped sub-attributes and a brief overview of what constitutes each one.

ATTRIBUTE	SUB-ATTRIBUTE	OVERVIEW
Knowledge	Academic	Talks to iterative knowledge gain (through experience, study, opportunity etc.) over time
	Wellbeing	Talks to healthy behaviours and drivers of those behaviours in the academic and social contexts (Poade & Crawford, 2024)
	Specialisms	Includes disciplinary ways of thinking and practicing (i.e., criticality, inquisitiveness, design thinking etc.)
SKILL	Basic Literacies	Talks to a range of literacies such as digital, cultural, disciplinary, educational etc. (including both cumulative skills gains and targeted skill acquisition)
	Collaboration	Considered in discrete domains of collaboration and includes an evaluative approach to measuring skill development longitudinally (Edgerley & Crawford, 2025)
	Communication	Talks to a range of skill-based measures of communication broadly subdivided as active, verbal and non-verbal in nature.
MINDSET	Strategic Awareness	Talking to strategic thinking is aimed at personal strategic awareness to advance direct personal development goals based on level of attentiveness, alert to opportunity.
	Motivation	Defined as reason(s) to act, including intrinsic, extrinsic (action-based), identified and introjected (non-action-based) motivations driving behaviors.
	Identities	Defined as facets of self-understanding, including internalised, externalised, social, academic, civic identities as well as the interplay between these for the individual.
HABIT	Emotional Intelligence	Encompassing self-awareness, self-regulation, empathy, and reciprocity.
	Social Intelligence	It stems from developing and learning from success and failures in social settings, including managing social capital.
	Agency	Encompassing agency as a locus of control, as well as a determinant in making meaning.

The Transition Attributes framework, shown in Figure 1, offers a visual overview of transition activities (both individually and by the connections, collectively) by qualitatively using a sentiment analysis approach applied across diverse documentation (text, video, etc.), which is coded and then mapped across the twelve



discrete sub-attributes within the four core attributes. This qualitative approach allows for dynamic visual representation of the frequency of sentiment and by extension, allows elucidation of the relationships(s) between sub-attributes, helping build an image to visualise those relationships based on frequency of sentiment. Advanced application of the framework happening in work currently in development involves testing its efficacy to identify gaps and /or exposes weaknesses around inter-relation of discrete transition activities to inform advanced curriculum design decision-making.

Figure 1 Transition Attributes framework

The Transition Attributes (TA) framework could be applied in various ways to allow mapping of activities against which assurance of progression towards graduate outcomes can be interpreted. This is achieved by evaluating each attribute and within them, each of the twelve sub-attributes for any desired transition point (or activity), whether those are points of transition into study, points of transition between levels of study, or transition into employment. The true test of any new framework lies in its potential impact. The TA approach offers scalable insights that can inform student retention trends, employability through learning gains over time, skill acquisition correlation, and curriculum design, both proactively and retrospectively.

Transition Attributes in action: An exemplar application

To illustrate the potential of the framework, we mapped the seven recommendations to improve student transition success that emerged from the Unite ‘Transition to University’ report (2024) to demonstrate where each recommendation sits within the TA attributes and sub-attributes of our framework. The table below summarises that mapping exercise and our rationale for the mapping:

Recommendation from Unite Transition-to-University-Report-May-2024	Transition Attribute Mapping	Rationale for Mapping
Develop better understanding between the sectors and more standardised approaches in higher education	Basic Literacies	Greater standardisation towards sector-wide agreement on best practices - and terminology - in supporting the learner’s transition to university.
Focus first on engagement and belonging	Identities Social Intelligence	The increased challenges that new students now face in terms of social skills and adapting to independent living as students are adjusting to the demands of settling in, making new friends and, in many cases, living independently for the first time.

Work collaboratively to support the social aspects of transition to higher education	Collaboration Social Intelligence	A more collaborative approach could help new students to integrate into the student community
Co-ordinate induction activities across the institution	Agency Strategic Awareness Communication	Students can become overwhelmed by the competing demands, a particular challenge for neurodivergent students and disabled students and extended to the way in which these activities are communicated.
Optimise pathways for students who chose to study close to their place of origin	Agency Strategic Awareness Wellbeing	The UK higher education sector is an outlier, compared to other countries; in expecting most new school-leaver students to move away from their previous place of residence therefore provision of more guidance should be possible to help them navigate their transition.
Consider creative and targeted approaches to mitigate cost-of-living concerns	Strategic Awareness Wellbeing Social Intelligence	Financial issues can represent a significant barrier and can negatively affect students' mental health, both in developing their independent study skills and in acquiring social networks.
Ensure that approach to transitions keeps pace with the diversity of the student body	Identities Collaboration	A culturally competent and inclusive approach is essential to ensure that all groups of students at risk of marginalisation (including international students), can feel a sense of belonging.

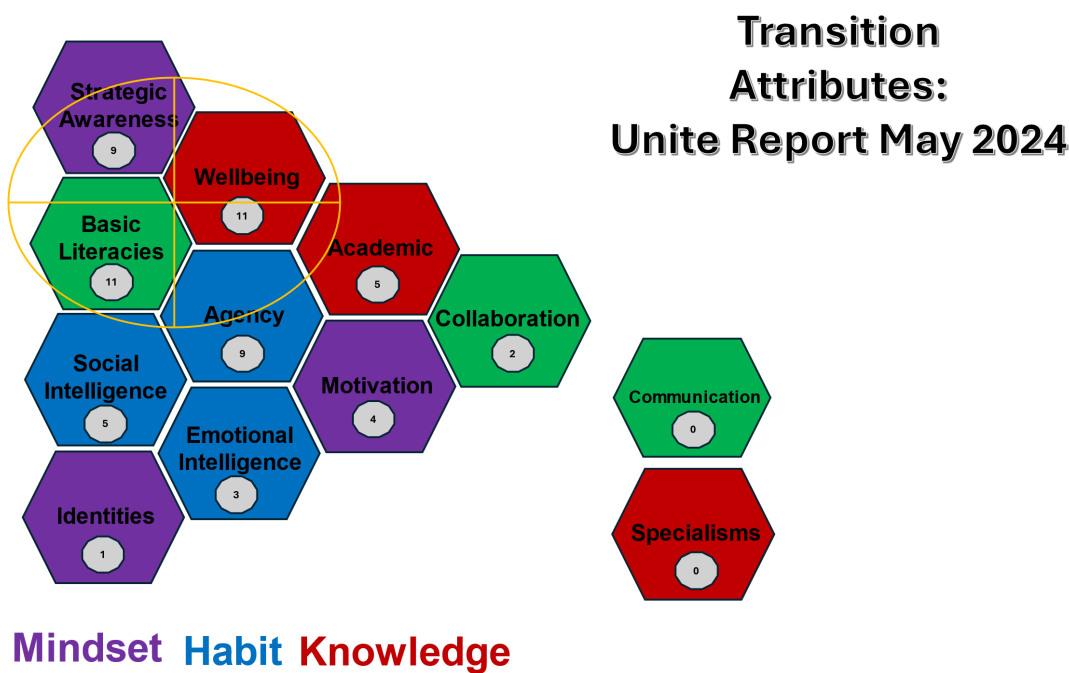


Figure 2 Mapping analysis of UNITE report

Sentiment analysis (Figure 2, grey circles) shows the frequency of sentiment mapped to each TA sub-attribute within the Unite report. Sentiment Analysis was chosen for its ability to extract meaning from various data sources, known to be useful to enhance insights and consistency as an approach; acknowledging the method also requires manual review to interpret nuanced language and that its

accuracy positively correlates with the volume of data. Relevant documentation underwent word frequency counts as a first data pass, followed by evaluation of emergent word combinations (1-, 2- or 3-words) as a second data pass. These were then manually analysed for theme alignment and nuance before being coded to a TA attribute of best fit. Interpretable data points were excluded.

The crosshairs indicate where the greatest sentiment frequency occurred and are added to provide a *distance from the centre* reference point for each sub-attribute and allow visualisation of their links. Our analysis shows that the Unite report has the most frequent sentiments of basic literacies and wellbeing, with close links able to be made between strategic awareness and personal agency sub-attributes. On the relative periphery (in terms of sentiment frequency) are social intelligence, academic and motivation and less prevalent sentiments around identities, emotional intelligence and collaboration. Absent from the TA analysis were sentiments of communication as a skill and specialisms, which is logical given the content and context of the Unite report.

Conclusion

Application of the TA framework allows transition activities to be mapped using sentiment analysis. The output affords visualisation of linkages between sub-attributes in such a way as to easily quantify the linkages in terms of frequency of sentiment as a proxy measure of degree of presence within the documentation articulating the activities. Continuing work on the TA framework investigates its usefulness in gap analysis in suites of activities, and its application to offer assurance as well as its use to aid advanced planning of activities around transitions into, through and out of higher study that contribute to student success.

Biography

Russell Crawford is a professor and Pro-Vice Chancellor Academic Services at Falmouth University with an active pedagogic research interest in gamification for learning. Russ is a Senior Fellow of Advance HE, won the Time Higher 'Most Innovative Teacher of the Year' in 2017. and was awarded his National Teaching Fellowship in 2018.

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