

## Reimagining the Future of Design Education: Nurturing Mindsets and Skillsets in Students

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**Abstract:** This paper reveals the outcomes of an investigation to develop a radical manifesto for the future of creative design and media higher education. The result was the development of a manifesto (Mindsets and Skillsets) that sought to profoundly redefine how creative design and media education could be delivered. At its heart, the manifesto attempts to create the optimum environment for students to thrive in education, careers and through life. Ravensbourne University began a review of its portfolio of courses and academic delivery in May 2016. This provided a unique opportunity to evaluate the existing programme delivery philosophy along with the practices and models of a range of international creative educational contexts, and to review relevant literature and practice. Using a combination of the *Double Diamond* design-thinking approach and a *grounded theory-light* research methodology this study gathered data from international college visits, pedagogic conferences, literature reviews around student learning, delivery modes and learning spaces, and a hosted symposium anchored by an international educational panel and a creative industries professional panel. The five resulting principles emerged from the analysis of the data and materials were identified as: Cultivate / where the whole person thrives; Collaborate / where disciplines evolve; Integrate / where education engages industry; Advocate / where purpose informs practice; and Originate / where creativity harnesses technology. This paper attempts to position the Mindsets and Skillsets Manifesto as a visionary, pragmatic and deliverable new model of creative higher education.

**Keywords:** *interdisciplinarity; transdisciplinarity; pedagogy; thriving; creative higher education*

### 1 Introduction

#### Rationale for Change

Ravensbourne University, based in London UK, began a review of its portfolio of courses and academic delivery in May 2016. This provided a unique opportunity to evaluate the existing college philosophy along with the practices and models of a range of international creative educational contexts, and to review relevant literature and practice.



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The rationale for evolving and realizing a strong and distinct higher education (HE) proposition was not simply cosmetic; Brexit had introduced a previously unforeseen mix of challenges and threats to European HE. The GuildHE Brexit Update 2 (20th January 2017) predicted the following challenges to Higher Education Institutions (HEIs): staff retention, research funding, student recruitment, collaborations, student loans, ability to plan, and xenophobia. The report cited opportunities as: new partnerships, focus on HE for UK growth, favourable exchange rate, International refocus and growing talent.

There were additional factors that were requiring a change culture at this institution and these included; the institution's move towards university status with the application for Teaching Degree Awarding Powers (TDAP), the UK Government's Teaching Excellence Framework (TEF), Tier 4 Visas and the attempt to tighten control of and potentially reduce overseas (Tier 4) student numbers, research funding challenges, the proportions of Further Education (FE) and Higher Education (HE) student numbers at the institution, the role of apprenticeships, school education reform and the decline of arts-based subjects in primary education.

It was also felt that creative design and media education is due a major review; the traditional subject lecture, seminar, tutorial model has barely changed in 40 years. In light of the above, this change project sought to position this institution as a dynamic and agile player in the HE creative education sector within the London context and both nationally and internationally.

### **Scope, Scale and Methodology**

This study utilized a mix of methodological approaches in order to accommodate the wide range of data gathered. In the first instance the researchers employed a *grounded theory-light* methodology to interrogate the range of materials and contexts. These materials included data from international college visits, pedagogic conferences, literature reviews around student learning, delivery modes and learning spaces, and a "Futures in the Making" symposium. The symposium also included presentations by each course at the university and data collected via a course questionnaire, market intelligence data, a range of workshops and the central external inputs anchored by two panels; one comprising of international educators and academics and the other panel of creative industries experts and practitioners.

The study used a combination of systematic and emerging design concepts (LeCompte & Goetz, 1982). Initial analysis of data used various established coding protocols to develop the emerging theory. It used the seminal Strauss and Corbin (1990) model of open, axial and selective coding. Open coding forms initial broad categories from the information gathered; axial coding then focuses on a specific category, connects open-coded groupings, and views them in relation to other categories; and finally, selective coding develops a theory based on the interrelationship between the categories from the axial coding process.

### **Chronology of the Coding Process**

Analysis of the data was initiated with an open coding process. This transpired with a line-by-line reading of all data to acquire a general overview of the process. This noted the central idea, focus and phenomena of each sentence, paragraph or segment of the transcript. This stage also included cross-referencing with field notes taken before, during and after the interviews, along with *initial descriptor* coding notes. Categories were then identified and organized according to collective similarities in meaning and intonation. The organization of the categories stage of the open coding process informed the next level of analysis, properties. Properties emerge from the multiple perspectives of the participants into any one given category or unit of meaning. These categories would then begin to develop into an emerging rough picture of a labelling or categorization of these narrative units emerging from the students' perspectives.

### **Axial Coding, Selective Coding, Explanatory Model**

The second phase saw the axial coding process take the initial open-coded categories organize them into an emerging central phenomenon. This would act as an axis or central category around which the various related factors could revolve and emerge. The final coding level saw a refining of the axial coding process to identify the clearly identifiable themes to emerge from the data that would form the developing theory grounded in the student responses to the intervention. An explanatory model was then developed to support the organization of the developing narrative that would serve the emerging Mindsets and Skillsets Manifesto that resulted from this study.

The researchers also maintained an on-going field note documentation throughout the project that informed any clarification of details or emphasis. Forty pages of field notes (see above) were constructed over the period of the

study, and were organized as either descriptive or reflective field notes. Descriptive field notes recorded the various events and activities during the study such as the emotional intonation or particular emphasis of individuals expressed during discussions or events. Reflective notes recorded the researchers' insights, broad ideas, and emerging themes (Creswell, 2002). The field notes were also analysed for actual or potential errors during the coding process. Dialogue from events and discussions were cross-referenced with field notes to aid analysis and category allocation. Corbin and Strauss (1990) describe the three fundamental elements of a grounded theory approach as concepts, categories, and propositions. This construct provided a useful analytical framework to evolve a cohesive range of outcomes from the study.

The five key meta-themes to emerge from this process can be best summarized as:

- Then need to education the *whole student* – in other words to teach both hard, and so-called soft skills and competencies (EH emotional inelegances).
- To ensure practice-based curricula embraced interdisciplinary approaches
- Where possible, to ensure the curriculum reflect industry practices and cultures
- Nurture and provoke an ambition in students to make work that addresses their curiosity, passion and to address some of the bog challenges on our globe.
- Ensure that the tension between technology and creativity is harnessed productively.

Once the data had been organized and categorized, the research then employed the “Double Diamond” design-thinking methodology as the basis to progress the study into process with a coherent set of outcomes and recommendations. Divided into four distinct phases – *Discover*, *Define*, *Develop* and *Deliver* – the Double Diamond is a simple visual map of the design process. In all creative processes a number of possible ideas are created (*divergent thinking*) before refining and narrowing down to the best idea (*convergent thinking*), and this can be represented by a diamond shape. The Double Diamond indicates that this happens twice – once to identify the problem and once to create the solution. Discovering the best ideas in the creative process is iterative – ideas are developed, tested and refined. In *Discover* designers look at the problem in new ways, discover new things and gather new insights. In *Define* designers try to make sense of the possibilities identified in *Discover*. *Develop* is the part of the process where concepts and potential solutions are created, prototyped, tested and iterated. In *Delivery* the solution is finalized, produced and launched.

Through the Design Double Diamond creative process and the coding procedure, the resulting *Mindsets and Skillsets Manifesto*, with the underlying *Five Principles*, was designed and written forming the basis of the re-launch of the curriculum structure, content and delivery modes.

## 2 Literature Review

The initial data gathering and analysis for this study included a literature review around themes that were deemed pertinent to the context of Ravensbourne: student learning, multidisciplinary approaches to subject pedagogy, and innovative educational delivery models. This led to the evolution of the *Five Principles* of the *Mindsets and Skillsets Manifesto* and has subsequently led to a more focused distillation of these themes around inter and trans-disciplinary approaches to portfolio delivery; student thriving; purposeful design and media practice; technology and creativity. The following is a summary of the literature review that informed the *Mindsets and Skillsets Manifesto*.

### Student Thriving

A key driver in this project was to ensure that student experience was at its heart. Student success can be defined broadly as “satisfaction, persistence, and high levels of learning and personal development” (Kuh et al., 2005, p. 14). However, while such indicators tend to focus on academic performance and graduation rates, a successful university experience must reach beyond such criteria.

The concept of *thriving* as utilized by Schreiner (2010a) is useful in her examination of what it takes to create a holistic university student experience. There are three main types of thriving according to Schreiner (2010a): academic thriving, intrapersonal thriving, and Interpersonal thriving. *Academic thriving* is characterized by engaged learning and academic determination. Students who are thriving academically are psychologically engaged in the learning process, not merely engaged in behaviours. The learning process energizes them. *Intrapersonal thriving* requires the development of healthy attitudes toward the self as well as toward the learning process. Lastly, *interpersonal thriving* includes meaningful connections with other people.

Schreiner's (2010a) validated and reliable 35-item Thriving Quotient has been administered to over 15,000 college students across more than 70 institutions in the USA and Canada. The goal was to measure aspects of college students' psychological functioning that were amenable to change, so that interventions could be designed to enable a higher percentage of students to get the most out of their college experience. The research shows that thriving is a distinct construct comprised of the following: The idea of thriving was conceptualized as optimal functioning in five key domains: (1) Engaged Learning, (2) Academic Determination, (3) Social Connectedness, (4) Diverse Citizenship, and (5) Positive Perspective.

*Engaged Learning* occurs when students are meaningfully processing the material, making connections between what they already know or are interested in and what needs to be learned (Schreiner 2010b). They are focused and attentive to new learning opportunities and actively think about and discuss with others what they are learning. In short, they are energized by the learning process. The second of the key domains, *Academic Determination*, is necessary to academic thriving (Schreiner 2010b). Here it is not just about the motivation to engage in learning, but is also about the behaviours and attitudes that enable students to push through challenging times and persist in reaching their academic goals. *Academic Determination* is characterized by an investment of effort, an ability to manage one's time and the multiple academic and personal demands of the college environment, a motivation to succeed, the intentional pursuit of one's goals, and normalizing the help-seeking process. *Social Connectedness* can be distilled into the following: healthy relationships, nurturing a sense of belonging, encouraging positive interactions with others, cultivating students' voices and contribution, working together toward common goals, and an openness to diversity.

*Diverse Citizenship* consists of encouragement of students to engage in specific activities that will enhance their diverse citizenship, and a structuring of campus events and activities to promote interactional diversity. When the institution sends a strong signal that honouring differences is a key value of the institution, the foundation is set for positive interactional diversity - conversations in and out of class around politics, world events, differing religious views, cultural differences, and divergent world views. It is not simply the interaction with difference that matters; it is also the quality of that interaction. Lastly, *Positive Perspective* consists of equipping students with an optimistic explanatory style, and helping students envision their future success (Schreiner 2010a).

How students explain the setbacks and failures that are an inevitable part of life affects their likelihood of recovering more quickly from such events, as well as an ability to approach future challenges. When students have a positive perspective on life, what psychologists call an *optimistic explanatory style*, rather than an unrealistically positive view of the world, this perspective actually enables a person to come to grips with difficult situations more readily. The coping strategies that distinguish this optimistic explanatory style can be characterized as proactive and problem-focused, rather than reactive and avoidant.

Another strand of the thriving literature refers to so-called strengths-based education (Epstein, Rudolph & Epstein, 2000; Cave, 2003; Anderson, 2005; Austin, 2005; Cantwell, 2005; Gillum, 2005; Pritchard, 2006; Pritchard & Pritchard, 2008). A strengths-based approach to education can be defined as the identification and development of the unique individual strengths and talents of each student. Anderson describes this approach as supporting students as they "apply their strengths and talents in the process of learning, intellectual development, and academic achievement to levels of personal excellence" (2004, p. 1). Strengths-based approaches attempt to help students identify their own unique talents and then use them to develop a strategy for utilizing such gifts in negotiating their academic progression and careers. As Anderson and Schreiner (2004) state, "Research ... has led to a potentially revolutionary discovery: individuals who focus on their weaknesses and remediate them are only able to achieve *average* performance at best; they are able to gain far more –and even to reach levels of excellence– when they expend comparable effort to build on their talents. This discovery is of enormous import to higher education..." (p. 4). A strengths approach encourages students to develop into individuals capable of capitalizing on their gifts and abilities in various contexts. In identifying and cultivating students' strengths, it seeks to encourage self-awareness that also nurtures a confidence to then apply those strengths to their academic studies. Anderson (2004) suggests that, "a strengths-based approach to teaching involves a process of assessing, teaching and designing experiential learning activities to help students identify, develop and apply their strengths and talents in the process of learning, intellectual development, and academic achievements to levels of personal excellence" (p. 1). It could be argued that applying a combination of both the thriving and strengths-based approaches has much to offer in nurturing student academic success.

## **Multidisciplinary, Transdisciplinary, and Interdisciplinary**

As subject disciplines within creative approaches begin to overlap or even blur in their distinctiveness (e.g. digital/analogue, film/digital effects), this study sought to explore pedagogic models that could exploit the potential of intentionally facilitating cross-disciplinary methodologies. For the purposes of this summary, definitions of multidisciplinary, transdisciplinary, and interdisciplinary models will be defined as the following: a multidisciplinary model occurs when disciplinary scholars collaborate while remaining within their respective disciplinary frameworks. In this framework research tackles issues from several disciplines, however the subjects are taught in parallel to each other rather than integrated together (Harris, Lyon & Clarke, 2009). This paper, while acknowledging this method as valid, will primarily focus on transdisciplinary and interdisciplinary models. An interdisciplinary model integrates subject knowledge with working methods from a range of disciplines to create a synthesis of practice. It integrates ideas from different disciplines and sits in the space between existing disciplinary knowledge and original research approaches (Harris, Lyon & Clarke, 2009; Learning Teaching Scotland, 2010).

A transdisciplinary model transcends disciplinary boundaries, and creates new and innovative disciplinary modes through the unity of theory with praxis among multiple disciplinary perspectives. It is characterized by a knowledge production that attempts to span both academic and professional frontiers, using an integrated approach to create bridges between different disciplines (Lawrence & Despres, 2004; Harris, Lyon & Clarke, 2009; Russell, Dolnicar & Ayoub, 2007).

Interdisciplinary and transdisciplinary approaches provide potential educational benefits that can develop into lifelong learning skills that remain essential to a student's future development. The benefit of working within and across disciplines provides a thorough and well-rounded approach to preparing students for creative knowledge production in the creative disciplines. More standardized disciplinary approaches to education are critiqued as unable to provide sufficient breadth to develop and address students' collaborative skills and knowledge. Interdisciplinary methods are recognized as fundamental to addressing this challenge. When students are educated with a single discipline method, or one subject at a time, knowledge is fragmented and a student's understanding of themselves, the world, and their culture becomes restricted. Generally, students are more highly motivated when they are actively interested in pursuing an education which intrigues them and uses content based in life experiences, creating an authentic purpose for learning. The exploratory nature of interdisciplinary methods causes students to look at a wide variety of perspectives from which a topic can be explored, and internalize an open-minded approach - not just toward research but to fellow students with different ideas (Boyer & Bishop, 2004). Transdisciplinary study is also necessary to provide students with the proficiency necessary to manage the plurality and complexity of knowledge (Bracken & Oughton, 2009).

The emphasis on personal growth, or thriving for students, is often forgotten in the quest to grow within a predetermined framework, as Jantsch (1970) predicted nearly five decades ago. But with transdisciplinary and interdisciplinary methods of education, the university produces dynamic, sharp graduates who do not simply function well in society but can often become leaders within it. Arguably, this discipline blurring approach also mirrors the practices and breadth of experience that graduate will encounter in the industries they aspire to work in.

There are three key cautions and critiques however, when undertaking the project of incorporating transdisciplinary and interdisciplinary methods into the educational system. Firstly, there is a balance to be struck between detailed specialization of a subject area versus generalized knowledge of several subject areas (Burchell, 1971). Secondly, it is crucial that curriculum is fully developed and rationalized in order to support a successful programme. Finally, achieving genuine interdisciplinary or transdisciplinary education relies heavily on the collaboration among the educators. When these critiques are addressed, students and teachers alike can advance in critical thinking, communication, creativity, pedagogy, and essential academia with the use these two techniques (Jones, 2010).

## **Purpose-driven Approaches**

Another key driver in this study was the desire to ensure that any new academic framework would nurture and harness so-called purpose-driven approaches to creative education. Arguably, the diversity of communities - both stakeholders and constituencies, has resulted in new relationships within and between higher education institutions and in the external local communities they serve. The ability to devise efficient means of curating these relationships is held to be a prime criterion for higher education institutions to be considered as innovative and responsive (Brennan, 2008). As well as playing an essential role in the process of social reproduction, education is always, simultaneously, a major source of social transformation, providing learners with those critical and reflective forms of consciousness and understanding that will enable them to participate in the creation of an improved and more

desirable form of social life than that which currently exists. Bracher (2006) argues that real learning involves a transformation of the student, and therefore there can be no such thing as a purely neutral or amoral educational transaction. Thus, in higher education pedagogy of widening participation (as is at This institution) would involve processes of the educational development of individuals in a participatory and inclusive university and its external communities in which gaining knowledge and constructing successful learner identities go hand-in-hand (Walker, 2003).

In seeking to embed such purpose-driven creative educational approaches into the curriculum, it seems that a social justice imperative needs to present. Social justice can be defined as encompassing themes of empowerment, integration, and transformation (Walker, 2003). Whether the focus is on the individual student learning in new ways through a service-learning course to become a self-motivated learner or on a university/community collaborative venture involving multiple government agencies and public institutions, the goal should remain to facilitate the empowerment of those in statuses that have been traditionally disempowered. At an institutional level, it is important to transform community-based scholarship and teaching so it becomes a catalyst for larger societal change. Although space here does not permit in depth case studies, both the University of Brighton's Social Engagement Strategy and the University of Pennsylvania's Netter Center for Community Partnerships are often cited as examples of what some universities are currently doing to engage their institution, faculty, and students with the surrounding community.

### **Learning and Technology**

Ravensbourne University has identified itself as a *digital creative village* in recent years, and the role of technology in learning has become central. Learning highly technical skills does not necessarily have to come at the expense of creativity, however. In fact, technology can be creatively driven (Bryant, 2010). There is a reciprocal relationship between creativity and digital technologies; technologies allow for new and creative pedagogical practices, but educators in turn must also develop a creative mindset to teaching and learning. The best uses of educational technology seem to be grounded in an approach that embraces openness for new and intellectual risk-taking. (Mishra, Koehler & Henriksen, 2011). Progressive creative education programmes then, arguably need to combine strong pedagogic content and processes as well as space to allow students to use this content for their individual creative self-expression using technology.

Henriksen, Mishra and Fisser (2016) suggest that progressive academic frameworks need to connect creativity and technology to curriculum development strategies. There needs to be specific modules or programmes which focus explicitly on creativity and technology, as well as a broader application of integrating and embedding these concepts across the curriculum, and featuring creativity and technology in policy at all undergraduate levels. Assessment of creativity, with and without technology, exists within a range of tensions and dilemmas, so it is important to use alternative forms of assessment with dynamic and flexible approaches to support the widest possible student achievement.

Bryant (2010) suggests several strategies to nurture well developed high-tech abilities with high concept applications. High concept here involves the ability to create artistic and emotional beauty, to detect patterns and opportunities, to craft satisfying narrative and to combine seemingly unrelated ideas into a novel invention via technological mediums. The first suggested strategy is the use of open-ended assignments, provoking students to make personal choices about fluid problems. The second is mind-mapping, brainstorming, and storyboarding, to encourage planning before diving into a technically charged environment. The third strategy involves the inclusion of symbolism or metaphor, as it is described as being partially rational and partially creative. The fourth is peer conversations, which help to encourage a collaborative culture that allows creativity to flourish. The fifth and final strategy is teacher-directed critique, which considers the overall meaning of an artifact - the effects used to achieve that meaning, and areas for improvement. If a reciprocal relationship between creativity and technology in learning and teaching is to thrive in education institutions, there needs to be active institutional support and tolerance of experimentation and risk taking by staff and students (Martin, Morris, Rogers, Martin & Kilgallon, 2009).

## **3 The Mindsets and Skillsets Manifesto: The Five Principles**

The culmination of the overarching research, that included the Literature Review, the various visits to national and international conferences and institutions, the Futures in the Making Symposium, the 20 / 20 / 20 Lecture Programme and the market analysis of courses was the creation of *Blueprint for a Manifesto*. Presented as a new academic vision that, through the implementation of *Mindsets and Skillsets Manifesto*, will position the institution with a unique offering; competitive advantage, an enriched and relevant student experience and situate the institution as an innovative world-leading design and media university. This vision was then presented as the *Mindsets and Skillsets*

*Manifesto* at three key forums: the Ravensbourne Staff Conference, Course Leaders' Away Day, and to the Board of Governors, and became the guiding framework for all training, briefing and implementation.

### **Mindsets and Skillsets Manifesto:**

#### ***Principle 01: Cultivate / where the individual thrives***

- Holistic Education: beyond the discipline
- Life Skills: resilience, self-efficacy, multiple intelligences

This principal drew heavily on the *thriving* literature discussed here and indicated a radical motivation to put so-called 'soft skills' personal development on equal footing with skills acquisition and intellectual rigor. Traditionally such emotional intelligence (EQ) nurturing is partitioned off into Student Services or 'specialist workshops' outside of the core curriculum. By positioning this critical developmental range of mindsets at the heart of the manifesto, an intentional signal was being communicated: nurturing the development of the *whole* individual has to be prioritized. The final descriptor developed to articulate this read as:

Extending the norms of skills-acquisition and competency-based approaches *Cultivate* nurtures the creative individual beyond the academy, embracing the holistic notion of educating the whole person. Critical life-skills are investigated and multiple intelligences explored through a model that supports professional and personal development to create and support resilient and inclusive individuals prepared for work in the ever-changing creative industries and for living with wider societal and cultural flux in the 21st century. *Cultivate* intends to embed such modes into the curriculum in order to nurture rounded practitioners who are strong team players and self-reflective Creatives who are fully prepared for the world of work.

#### ***Principle 02: Collaborate / where disciplines evolve***

- Blurring Disciplines: petri dish for new thinking and practice
- Shape-Shifters: new practice demands new practitioners

The *Cultivate* principal sought to reflect on many of the great pockets of innovative practice seen at a number of visited institutions (E.G. Stanford's D School/ University of Southern California's Jimmy Lovine and Andre Young Academy), and on the inter/transdisciplinary literature. This institution's course programmes have historically been designed to nurture a broad skills and attributions base in students. There is, however, a need to reinforce the transferable skills students gain during their study (e.g. communication, critical thinking, time management, problem solving etc). The rapidly shifting nature of the digital creative industries also requires the advanced development of a robust range of cross-disciplinary employability skills such as: teamwork, negotiation, collaboration, self-awareness and being able to reflect on one's own practice, and able to generate one's own workload and self-management.

Working across discipline and course boundaries students can be introduced to each other's working environments, exposing them to alternative curiosities, methods, practices and social concerns. Such an approach fosters new questioning and knowledge that changes traditional learning habits and develops agile high performers. The resulting descriptor developed to articulate this principal read as:

The *Collaborate* model enables students with discipline-specific knowledge to apply their own creative thinking, design and media practices and methodologies and production techniques to inter-disciplinary and trans-disciplinary projects. Inter-disciplinary project models integrate subject knowledge and working methods from a range of disciplines to create synthesis of practice, whilst the trans-disciplinary model creates new and extended disciplinary modes through the unity of intellectual and practice-based frameworks to reach beyond single disciplinary perspectives.

#### ***Principle 03: Integrate / where education engages industry***

- Professional Modes: education mirrors industry
- Depth and Breadth: specialists and generalists

This principal sought to build on the interdisciplinarity of the *Collaborate* principle and integrate its core ambition - to exploit the blurring of the lines between single subject disciplines into the curricula of each Course, Department and School. As far back as 1971 Burchell was highlighting the benefits of such an approach:

The single discipline (or subject-at-a-time approach...) fragments a student's world view and restricts rather than promotes his understanding of himself, his culture, and the world. Justification for transdisciplinary study is based

on the key assumption that, as a result of such study, the learner will be equipped to cope with the plurality and complexity of organized knowledge... The main task of the human intellect is to put things together in comprehensive patterns, not to separate them into separate compartments. This means that the education of college students must be arranged so that each will have the chance to escape from the constriction of specialized knowledge, and can learn to look at the world as a spaceship with identifiable and world-wide characteristics.” (p. 1)

The *Integrate* principle imagines a creative container that becomes such a fluid hub of pedagogic excellence and professional practice. These hubs should also mirror as accurately as possible the professional structures that serve the creative industries. So for example the engine of any advertising agency is its creative department that functions to develop concepts and campaign briefs to diverse content outputs. The roles that serve this endeavour include: art directors, designers, production artists, web designers, creative directors, and specialist creatives in print, broadcast or digital media, photographers and video production. By designing curricula and pedagogic structures that support the cross over and collaboration of these functions (which span many of our courses), This institution can more dynamically engage its students, staff, and employers.

The descriptor developed to articulate this principal read as:

This model integrates academic delivery with industry practice; enabling subject specific, interdisciplinary student teams to replicate modes of working found within relevant professional models; the Production House in Film and TV, the Design Studio in communication and media design, the Fashion House in fashion and textiles, the Advertising Agency in advertising and promotion and the Architecture Practice in architecture and interiors.

Typically, the Integrated Team, with each member assigned a specific role, works to a phased delivery that may include the Discover, Define, Develop and Deliver stages of the Design Double Diamond. *Integrate* challenges traditional constraints in the teaching of the solo practitioner and embraces the notion of disciplinary discovery and practice through team working. The *Integrate* principle imagines a creative container that becomes such a fluid hub of pedagogic excellence and professional practice.

#### ***Principle 04: Advocate / where purpose meets practice***

- Citizen Practitioners: tackling real-world problems
- Self to Selves: from the individual to the collective

The development of the *Advocate* principle sought to harness student creativity and reflect a commitment to purpose driven and sustainable education. As the British Government’s own research on this concluded: “The best way to educate people about sustainable development is to help them discover what the term encompasses, what it means, and how it should affect the ways they live their lives ... By helping people to understand and engage with the concept... they will discover sustainable development for themselves and begin to apply it within their world...” (Higher Education Partnership for Sustainability).

As such *Advocate* intends to nurture a greater commitment by all staff and students to reflect this in its creative outputs. Assessment briefs and industry and social projects should aim to provoke and inspire our cohorts to produce provocative and inventive work portfolios, show-reels and creative collections. Working with external agencies, charities and businesses, this institution will be at the forefront of producing and exhibiting work that is recognized for developing innovative solutions to the problems of sustainable development.

The descriptor developed to articulate this principal read as:

Putting purpose first, *Advocate* recognizes the responsibility for creative education to address the unprecedented environmental, social and economic challenges facing humankind; tomorrow's designers and media practitioners are increasingly aware of their responsibilities as global citizens to engage with complex ethical issues related to climate change, social justice, interdependence, wellbeing and bio-diversity.

*Advocate* puts studio projects and commercial and charitable industry commissions at the centre of the educational experience enabling the student real-world opportunities to improve the communities in which they live and work and in turn begin to transform the wider world. As such *Advocate* intends to nurture a greater commitment by all staff and students to reflect this in its creative outputs.

Assessment briefs and industry and social projects should aim to provoke and inspire our cohorts to produce provocative and inventive work portfolios, show-reels and creative collections. Working with external agencies, charities and businesses, this institution will be at the forefront of producing and exhibiting work that is recognized for developing innovative solutions to the problems of sustainable development.

#### ***Principle 05: Originate / where creativity meets technology***

- Mind-Sets + Skill-Sets: the dynamism of ideas + technology
- Applied Mastery: leveraging theory, practice and innovation

This institution has a historic commitment to the creative use of technology at the core of its DNA. As reflected in the ambition of all *Five Principles* here, the skills necessary for success in the modern world transcend traditional academic, creative and technological boundaries. The *Originate* principle builds on the outstanding reputation the college has for its ability to produce technically strong graduates who can seamlessly move into industry level jobs. *Originate* will more deeply integrate the leveraging of theory, practice and innovation in its students leading to breakthrough visualisations, products, systems, technologies and disruptive creativity.

The ideas-led use of technology, underpinned by a relevant and integrated contextual studies programme will foster highly original and thoughtful course project outcomes. Innovative briefs and reflective practice to create thought-leading solutions by employing leading edge technology to express the necessary business, entrepreneurial and creative expressions, will support students in this aim.

The descriptor developed to articulate this principal read as:

Sitting at the intersection of creativity and technology, *Originate* enables the merging of visionary mind-sets and skill-sets to provide provocative and challenging design and media approaches. *Originate* embraces both integrated and agile design-thinking and design-doing practice and research methodologies to forge dynamic technologically-savvy and creativity-driven responses and solutions to given and self-directed industry-leading projects.

## **4 Conclusion**

This study proposes a new manifesto for the delivery of a more holistic creative education in design and media at Ravensbourne University. Questioning historic paradigms across the sector, mainly unchanged for many decades, this study determines that only radical rethinking of the rationale for design and media education will create a meaningful and purposeful student experience.

Data gathered for this study included a literature review, feedback from national and international institutional visits, an industry and academic panel symposium, and consultations with the university's academic community. The resulting *Mindsets and Skillsets Manifesto* and its *Five Principles* offer a radical new curriculum framework.

The *Mindsets and Skillsets Manifesto* commits to placing student thriving, a key feature, at the centre of the student experience. Thriving, in this case, refers to the broadest notion of student success, from nurturing multiple intelligences and developing resilience to modes of working and studying that will prepare graduates for the rapidly changing industries into which they graduate. *Mindsets and Skillsets* is also designed to inspire student cohorts to reach towards purposeful approaches to their practice and intellectual endeavour.

Critical next steps in the development of the *Mindsets and Skillsets Manifesto* include the crucial the implementation of and the embedding of the manifesto across the institution. It is envisaged that this study will also provoke deeper investigation and research into developing creative curricula that will serve students in supporting their ambitions to shape and influence the industries and cultural sectors they will be employed within. In an uncertain and changing economic and political climate, this must be an essential ambition for the whole sector.

## **References**

- Anderson, E.C. (2005). Strengths-based educating: A concrete way to bring out the best in Students and yourself. *Educational Horizons*, 83(3), 180-189.
- Anderson E.C. & Schreiner L.A. (2004) Strengths-based advising. Gallup Organization. Art.mmu.ac.uk. Retrieved 1 Nov. 2016, from <http://www.art.mmu.ac.uk/>

- Austin, D.B. (2005). The effects of a strengths development intervention upon the self perceptions of students' academic abilities. (Doctoral dissertation, Azusa Pacific University, 2005). *Dissertation Abstracts International*, 66(05A), 1631-1772.
- Australian Policy Online. (2017). *ARC Centre of Excellence for Creative Industries and Innovation*. Retrieved from <http://apo.org.au/taxonomy/term/184> [Accessed 2 Jan. 2017].
- Baldassarre, A. (2007). Quo Vadis Music Iconography? The Repertoire International D'Iconographie: Musicale as a Case Study. *Fontes Artis Musicae*, 54(4), 440-452.
- Barnett, R. (1994). *The Limits of Competence*. Society for Research into Higher Education (SRHE) and Open University Press. Buckingham.
- Beetham, H., McGill, L. & Littlejohn, A. (2009). *Thriving in the 21st century: Learning Literacies for the Digital Age* (LLiDA project). Glasgow: The Caledonian Academy, Glasgow Caledonian University.
- Boyer, S., & Bishop, P. (2004). Young adolescent voices: Students' perceptions of interdisciplinary teaming. *Research in Middle Level Education*, 28(1), 1-19.
- Bracher, M. (2006). Teaching for Social Justice: Reeducating the Emotions Through Literary Study. *JAC*, 26 (3/4), 463-512.
- Bracken, L. & Oughton, E. (2009). Interdisciplinarity within and beyond geography: Introduction to Special Section. *Area*, 41(4), 371-373.
- Brennan, J. (2008). Higher education and social change. *Higher Education*, 56(3), 381-393.
- Bryant, C. (2010). A 21st-Century Art Room: The Remix of Creativity and Technology. *Art Education*, 63(2), 43-48.
- Burchell, H. (1971). On Interdisciplinary Education. *The High School Journal*, 55(22), 78-85.
- Cantwell, L. (2005). A comparative analysis of strengths-based versus traditional teaching methods in a freshman public speaking course: *Impacts on student learning and engagement*. *Dissertation Abstracts International*, 67(02A), 478-700 (UMI No.AAT3207574).
- Cave, S.L. (2003). The effects of strengths education on the academic motivation of first year college students. *Dissertation Abstracts International*, 64(02), 417A (UMI 193 No. 3082036).
- Chinyowa, K. (2017). Developing creative industries 'driven' curricular and implications for South Africa's Higher Education Institutions: A case study of TUT's Faculty of the Arts. Community University Partnership Programme. (2017). About Cupp. [online] Retrieved 10 Jan. 2017, from <https://about.brighton.ac.uk/cupp/about-cupp.html>
- Creswell, J.W. (2002). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Upper Saddle River, NJ: Merrill Prentice Hall.
- Corbin, J., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology*, 13, 3-21.
- Design Academy Eindhoven (2016) [online] Retrieved 1 Nov. 2016, from <https://www.designacademy.nl/Study/Bachelor/DesignDepartments.aspx>
- Design Council (2005). [online] Available at: [https://www.designcouncil.org.uk/sites/default/files/asset/document/ElevenLessons\\_Design\\_Council%20\(2\).pdf](https://www.designcouncil.org.uk/sites/default/files/asset/document/ElevenLessons_Design_Council%20(2).pdf)
- Duncum, P. (2001). Visual culture: Developments, definitions, and directions. *Studies in Art Education*, 42(2), 101-112.
- Epstein, M.H., Rudolph, S.M., & Epstein, A.A. (2000). Using strength based assessment in transition planning. *Teaching Exceptional Children*, 32(6), 50-54.
- Gillum, W.M. (2005). The effects of strengths instruction on under-performing high school students in mathematics. *Dissertation Abstracts International*, 66(01A), 86-238 (UMI No. AAT3185052).
- Gouzouasis, P. (2006). Technology as Arts-Based Education: Does the Desktop Reflect the Arts? *Arts Education Policy Review*, 107(5), 3-9.
- Graham, M. (2009). Ap Studio Art as an Enabling Constraint for Secondary Art Education. *Studies in Art Education*, 50(2), 201-204.
- Harris, F., Lyon, F. & Clarke, S. (2009). Doing interdisciplinarity: Motivation and collaboration in research for sustainable agriculture in the UK. *Area* 41(4), 374-384.
- Henriksen, D., Mishra, P., & Fisser, P. (2016). Infusing Creativity and Technology in 21<sup>st</sup> Century Education: A Systemic View for Change. *Educational Technology & Society*, 19(3), 27-37.
- High Level Group on the Modernisation of Higher Education (2014). Report to the European Commission on New modes of learning and teaching in higher education. *Luxembourg: Publications Office of the European Union*.
- Hyper Island. (2017). The Story. [online] Retrieved 2 Jan. 2017, from <https://www.hyperisland.com/about>
- Hyun, E. (2011) Transdisciplinary higher education curriculum: A complicated cultural artifact. *Research in Higher Education Journal*, 1-19. Retrieved from <https://www.aabri.com/manuscripts/11753.pdf>
- Jantsch, E. (1970). Inter- and Transdisciplinary University: A Systems Approach to Education and Innovation. *Policy Sciences*, 1(4), 403-428.
- Jones, C. (2010). Interdisciplinary Approach - Advantages, Disadvantages, and the Future Benefits of Interdisciplinary Studies. *ESSAI* 7(26).

- Klein, J. (2006). Resource Review: Resources for Interdisciplinary Studies. *Change*, 38(2), 50-56.
- Kuh, G.D., Kinzie, J., Schuh, J.H., and Whitt, E.J. (2005). *Student Success in College: Creating Conditions That Matter*. San Francisco: Jossey-Bass.
- Lawrence, R. & Després, C. (2004). Futures of Transdisciplinarity. *Futures*, 36(4), 397-405.
- LeCompte, M.D. & Goetz, J.P. (1982). Problems of reliability and validity in ethnographic research. *Review of Educational Research*, 52, 31-60.
- Learning Teaching Scotland (2010). *Interdisciplinary Learning*. Manchester School of Art - Manchester Metropolitan University. (2016). [online]
- Martin, P., Morris, R., Rogers, A., Martin, V., & Kilgallon, S. (2009). Encouraging creativity in Higher Education: the experience of the Brighton Creativity Centre. In *Dialogues in Art & Design: Group for learning in Art and Design (GLAD) conference*, 21 Oct 2009.
- McLuhan, M. & McLuhan, E. (1988). *Laws of media: The new science*. Toronto: University of Toronto Press.
- Mishra, P., Koehler, M.J., & Henriksen, D. (2011). The Seven Trans-Disciplinary Habits of Mind: Extending the TPACK Framework Towards 21st Century learning. *Educational Technology*, 51(2) 22-28.
- Marullo, S., & Edwards, B. (2000). From Charity to Justice: The Potential of University - Community Collaboration for Social Change. *American Behavioural Scientist*, 43(5), 895-912.
- Netter Center for Community Partnerships, (2017). Universities - Communities - Schools: Partners for Change. University of Pennsylvania.
- Netter Center for Community Partnerships University of Pennsylvania. (2017). *Our Mission*. Retrieved 10 Jan. 2017, from <https://www.nettercenter.upenn.edu/about-us/our-mission>
- Nicolescu, B. (1999). The Transdisciplinary Evolution of Learning. In *Symposium on Overcoming the Underdevelopment of Learning at the Annual Meeting of the American Educational Research Association, Montreal, Canada*. [http://www.learndev.org/dl/nicolescu\\_f.pdf](http://www.learndev.org/dl/nicolescu_f.pdf)
- Ocadu.ca. (2016). Interdisciplinary Master's in Art, Media and Design (MDes, MFA, MA) - Programs - Graduate Studies - Academics - OCAD U. Retrieved 1 Nov. 2016, from <http://www.ocadu.ca/academics/graduate-studies/interdisciplinary-masters-in-art-media-anddesign.htm>
- Pratt Institute. (2016). [online] Retrieved 1 Nov. 2016, from <https://www.pratt.edu/>
- Pritchard, G.M. (2006). 'Strength-based' education: does strength-based training influence students in developing a positive attitude towards a strengths approach to their learning? In A. Davies (ed.) *Enhancing Curricula: Contributing to the Future, Meeting the Challenges of the 21st Century in the Disciplines of Art, Design and Communication* (pp. 309-322). London: CLTAD, UAL.
- Pritchard, G.M. & Pritchard, T. (2008). All students are talented: exploiting the strengths potential via a new lens for learning and teaching. In N. Houghton (ed.) *Enhancing Curricula: Using Research and Enquiry to Inform Student Learning in the Disciplines* (pp. 198-214). London: CLTAD, UAL.
- Programs and Degrees, CalArts. (2016). Retrieved 1 Nov. 2016, from <https://www.calarts.edu/academics/programs-degrees>
- Russell, A., Dolnicar, S. & Ayoub, M. (2007). Double degrees: double the trouble or twice the return? *Higher Education*, 55(5), 575-591.
- Stanford Interdisciplinary (2016). Retrieved 1 Nov. 2016, from <https://interdisciplinary.stanford.edu/>
- Samuels, R. (2007). Promoting Social Change through Higher Education. *JAC*, 27(1/2), 234-242.
- Schreiner, L. (2014). Different Pathways to Thriving Among Students of Color: An Untapped Opportunity for Success. *About Campus*, 19(5), 10-19.
- Schreiner, L. (2010a). The "thriving quotient": A new vision for student success. *About Campus*, 15(2), 2-10.
- Schreiner, L. (2010b). Thriving in the classroom. *About Campus*, 15(3), 2-10.
- Schreiner, L. (2010c). Thriving in community. *About Campus*, 15(4), 2-11.
- The GuildHE Brexit Update 2 (2017). Retrieved on 20 Jan. 2017, from <https://www.guildhe.ac.uk/brexit/>
- Transdisciplinary Design: Service-Oriented Design, *The New School*. (2016). Retrieved 1 Nov. 2016, from <http://www.newschool.edu/parsons/mfa-transdisciplinary-design/?show=programcurriculum>
- University of Brighton (2009). *University of Brighton social engagement strategy*. Retrieved 10 Jan 2017, from [https://about.brighton.ac.uk/cupp/images/stories/Social\\_engagement\\_strategy\\_final\\_090909\\_2.doc](https://about.brighton.ac.uk/cupp/images/stories/Social_engagement_strategy_final_090909_2.doc)
- USC Jimmy Iovine & Andre Young Academy. (2016). [online] [iovine-young.usc.edu](http://iovine-young.usc.edu). Retrieved 1 Nov. 2016, from <http://iovine-young.usc.edu/>
- Walker, M. (2003). Framing Social Justice in Education: What Does the 'Capabilities' Approach Offer? *British Journal of Educational Studies*. 51(2). 168-187.

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