



Creative Practice, Collaboration And Industry Engagement: The Launch Of The Digital Marketing Subject Discipline and the development of the 'Inverted T Curriculum'

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ABSTRACT

This case study evaluates the 10-year evolution of the Digital Marketing subject discipline within Robert Gordon University (RGU), reflecting on how collaborative and creative practice was embedded throughout the subject area and beyond; the impact of industry collaboration on student engagement and participation; and the circular nature of the interactions between industry and academia ensuring subject matter remained current and industry-relevant. The paper outlines the creation of the 'Inverted T Curriculum' which brings together the principles of T-Shaped professional with the progression of learning described by Bloom's Taxonomy.

In 2014 RGU launched Scotland's first MSc in Digital Marketing, with a pedagogy focused on collaborative and creative professional practice, with experiential learning, live client projects and industry mentorship being embedded at the heart of the curriculum. The course design was based around an *Agency* structure, with students working on a range of live client projects, developing campaign concepts, strategies and creative outputs with the support of both academic and industry mentors. Many of these practices were embedded subsequently across the school and university. This approach has informed the ethos, use of 'Inverted T' curriculum design and pedagogy of not only the subsequent course developments and the approaches of other subject areas within the school, but the growth of the entire Digital Marketing subject discipline. Ten years on and Digital Marketing provision within RGU has developed beyond a single Master's course to an entire subject area encompassing an MSc, an undergraduate suite, a highly successful short course, accreditation agreements with three professional bodies, several research projects and Knowledge Transfer Partnerships (KTPs), and modules at both undergraduate and postgraduate level embedded across the school and wider institution. Throughout these developments, a focus on industry engagement, collaboration, creative practice, and the application of the 'Inverted T Curriculum' has remained the team's guiding ethos.

Keywords: collaborative and creative industry practice, digital marketing education, experiential learning, creative pedagogies, industry mentorship, curriculum design

Introduction

In 2013 a team of academics within Robert Gordon University started to explore the development of postgraduate provision in the emerging field of Digital Marketing, and the Digital eXperience (DX) project was launched. Research into the Skills Gap in Digital Marketing (Royle & Laing, 2014) identified competencies and knowledge areas which were in growing demand by industry and academia. This research, along with one of the author's (Keenan) close connections with industry, steered curriculum design and highlighted the importance of creative and collaborative development of the subject area and a new MSc Digital Marketing. The nascent team focused on collaborating with industry to ensure the relevance and currency of course developments. As such, course design aimed to reflect not just the skills required in industry but also its working practices, with pedagogy and curriculum centred around real-world challenges, authentic assessment and mirroring an Agency environment. The MSc Digital Marketing was validated the following year. The research not only informed the design of the Master's provision, first of its kind in Scotland, but was also reflective of an approach which emphasised creativity and collaboration between Industry and Academia. This approach has informed the ethos, curriculum design and pedagogy of not only the subsequent course developments and the approaches of other subject areas within the school, but the growth of the entire Digital Marketing subject discipline. Ten years on and Digital Marketing provision within RGU has developed beyond a single course to an entire subject area encompassing an MSc, an undergraduate suite, a highly successful Short Course, accreditation agreements with three professional bodies, several research projects and Knowledge Transfer Partnerships (KTPs), and modules at both Undergraduate and Postgraduate level embedded across the school and wider institution. Throughout these developments, the focus on industry engagement and collaboration has remained the team's guiding ethos.

This case study evaluates the 10-year evolution of the Digital Marketing subject discipline within RGU, reflecting on how collaborative and creative practice was embedded throughout the subject area and beyond; the impact of industry collaboration on student engagement and participation; and the circular nature of the interactions between industry and academia ensuring subject matter remained current and industry relevant. As the digital skills gap that prompted the development of this subject area persists, with a shortfall in the competencies of Digital Marketers (Herhausen et al., 2020), a growing digital and technology sector in Scotland where sales and marketing roles are in high demand (ScotlandIS, 2024), where university support for the development of the Scottish technology eco-system has been identified as a priority (Logan, 2020), and where Universities are still adapting curriculum to meet the needs of employers (Kurtzke & Setkute, 2021; Langan et al., 2019), the findings of this case study remain highly relevant for both employers and for educators wishing to bridge this gap.

Case study construction and approach

For this, semi-auto-ethnographic (Adams et al., 2015) single case study (Yin, 2018) the authors took a reflexive (Whitaker & Atkinson, 2023) approach to evaluate their collective range of insights and drew from a wide range of data gathered over the 10-year evolution of the subject area. The authors are aware, given their position as key contributors to the development of the field, that there is the potential for bias. Building on previous works of Elias (1956, 1987), Turner and Pirie (2016) around issues of *involvement* and

detachment the authors sought to ameliorate this by fact-checking and verification with other colleagues at RGU. Consideration over this lengthy period had enabled them to understand the subject comprehensively and helped to ensure both the robustness and the nuances inherent in the findings (Reid, et al. 2024).

Regarding the range of data presented, any quotations included are with the individuals' express permission for research purposes, whilst for the discussion of student data and feedback, several different university metrics were used, including Student Module Evaluation Questionnaires, Course Appraisals, Institutional Led Subject Reviews, and Post Graduation Employment surveys. However, as these data sets were collected for other reasons out with the explicit remit of the study, the authors have chosen not to directly quote or source the information to protect contributors' anonymity and privacy, while still highlighting valuable insights. The work followed RGU's Research Ethics and Governance (RGU, 2024) processes.

Embedding creative and collaborative practice

A creative and collaborative ethos

The course development team initially consisted of three key members, the authors of this project and Dr Jo Royle. They initiated several relationships with industry to support the MSc design and identified that further expertise was required for the delivery of the course. Dr Simone Kurtzke was appointed prior to validation, her expertise bridging academia and industry. She brought experience from working in Digital Marketing at Visit Scotland and continued to grow industry partnership. The RGU Digital Marketing subject team (DX) has continually championed a collaborative industry-focused approach when developing new courses and modules. At the validation for the MSc a clear vision for the creative and collaborative ethos for the subject was outlined. This goal for the MSc reflected the shared goals of those responsible for its development and has since inspired subsequent embedding of creative practice and collaboration with industry throughout the portfolio. The emphasis on curriculum design that mirrors industry practice, practice-based teaching, authentic assessment, and pedagogical approaches that foster mindset in addition to skillset (Royle, 2023) have come to be shared across DX and reflected more broadly within its host school's assessment strategy.

Creative and collaborative pedagogies

When designing MSc Digital Marketing, the subject team was faced with the challenge of designing a programme focused on the skills and knowledge needs of a rapidly evolving industry. In addition, the course was the first of its kind in Scotland with no competitors to benchmark against, or an established curriculum to support course design. With a scarcity of evidence, examples or information on what a Digital Marketing curriculum could or should entail, and, given the rapid pace of change and digital transformation which leads to skills becoming redundant, a trend which is being accelerated further by Artificial Intelligence (AI) today (edX, 2023), the course team developed an approach which focused on creativity and collaboration with industry allowing professionals the opportunity to input to both the design of curriculum and delivery of the course. This resulted in a programme of modules and activities that bridges knowledge from both

academics and industry practitioners. The course design places as much emphasis on developing a creative mindset as it does on technical skills.

The need for collaboration in developing the curriculum is furthered by the fact that Digital Marketing is a field which encompasses a range of roles and specialisms (Digital Marketing Institute, 2024) which are informed by different fields and disciplines including Strategic Management, Digital Media, Data Analytics and Marketing. While many students will go on to pursue a particular specialism, the aim of the course was to create *T-shaped* Digital Marketers (Swan, 2023). The T-shaped professional has been presented as a model to address the growing range of challenges that are multi- and trans-disciplinary in nature (Caputo et al., 2023). The T-shaped model requires individuals to develop an understanding of both a broad range of topics, competencies or themes, often from different disciplines, alongside in-depth knowledge of a particular specialism. The need for T-Shaped professionals is not always supported by traditional course design which is often specialist by nature. Higher Education has often been noted for its ability to create *I-shaped* professionals (Bierema, 2019), i.e. individuals with depth and specialist knowledge. The *I-shaped* professional though, may face challenges in addressing contemporary problems which are often transdisciplinary by nature (Okamura, 2019). Developing a *T-shaped* professional requires a breadth of knowledge that cuts across disciplines and encompasses generalist knowledge across a range of areas. In the context of Digital Marketing, professionals may require broad knowledge across areas including Organic Search, Paid Media, Social Media, UX Design, Video, Automation and Digital PR (the horizontal line of the T) (Swan, 2023). While broad knowledge of all of these is required in Digital Marketing any of these areas offers specialisms where in-depth expertise is required for specific roles (the vertical aspect of the T). Collaborative practice offers a solution to designing a curriculum for T-shaped Marketers, and while the core academic team offer a wide range of expertise that addresses the breadth of knowledge required in industry, it is through collaboration and working with practitioners in specific roles that the team were able to offer students knowledge of specialist roles.

Designing a curriculum that supports students in developing an outlook that is receptive to multiple perspectives, and which applies an interdisciplinary approach requires as much emphasis on developing a creative mindset as it does on the specific technical knowledge and skillset required by industry (Callahan, 2010). The *T-shaped* Digital Marketer requires not only knowledge from different areas but an approach to both learning and practice that balances creativity, technical knowledge and strategic thinking. To develop creative T-shaped Digital Marketers, the course aimed to develop creative thinking and practices through creative activities and creative approaches to teaching. While there may be distinctions between creative teaching and teaching creativity (Sefton-Green et al., 2011), Cremin and Chappell (2019) have observed several recurring themes in creative pedagogies in their systematic review of empirical work on creative pedagogies from 1990 to 2018. Idea generation; openness; autonomy and agency; playfulness; problem solving; risk-taking; co-constructing and collaboration; group work and teacher creativity have been identified as common features of creativity in teaching. These aspects have been embedded throughout the course through live client projects (Vickers et al, 2023), collaborative ideation activities explored through Design Sprints (Ferreira & Canedo, 2020) and autonomous problem-based learning activities through placement and practice-based research projects. Creative practice was encouraged in all modules within the MSc, working on real-world problems with live clients for assessments, a balance of autonomous learning and group work assessed both formatively and summatively, with the final MSc Project providing

further opportunity for industry collaboration and practical output, with many students building on the ideas developed in previous modules and continuing to work with some of the live clients in their final work. Creative outputs varied depending on individual projects but included content creation for social media, video, branding collateral and design, copywriting, UX design and creative strategy development. Many of these outputs were developed for live clients but where this was not possible activities still mirrored 'real-life' application in their design and implementation as much as possible, with the pedagogical focus of DX ensuring appropriate theoretical underpinning and understanding, to produce industry-ready graduates capable of the tasks of the industry. By solving actual issues, problem-solving and creativity were paramount in their outputs, ranging from the creation of campaign strategies and outputs to ecommerce solutions for SME's and websites for marketing freelancers. In so doing students engaged with authentic assessments (Villarroel et al., 2018) and the higher levels of Bloom's taxonomy (1956), by creating, designing and developing rather than merely *understanding* or *analysing*, they put theory into practice by creating collaboratively (Kurni & Saritha, 2021).

Industry collaboration

Collaboration with industry has been a cornerstone of the subject area's approach and development since its inception. The original design of MSc Digital Marketing was based around an Agency structure, with students working on live design sprints for external clients supported by Steve Milne, Group Director of Strategy at Fifth Ring, and Keenan. These sprints allowed students to develop campaign concepts and creative outputs while learning from the Digital Lead in an international agency. In addition to opening the class to an industry perspective, it also allowed students to collaborate, build networks and to learn about the methodologies applied to ideation and project development in industry.

Students also assumed digital marketing roles, with the class mirroring a real-life (Villarroel et al., 2017) Agency setting where students developed projects and campaigns for the Digital Scot, a student-led website that was initially a class project to promote both the course and the students to potential employers, which has grown to be a repository of RGU's Digital Marketing graduates (Digital Scot, 2024). In addition to supervision from academic staff, students were allocated an industry mentor from Digitas who provided support and guidance. Formal mentorship was incorporated into DX's delivery, initially led by Dr Simone Kurtzke, now Deputy Head of Global Online and Programme Leader in Marketing at Edinburgh Napier University. The mentorship programme was ultimately adopted more broadly within the University and became part of the University's Centre for Employability and Community Engagement (CECE), demonstrating some of the wider impact of the teams' innovative approaches:

Working closely with partners was essential for our success. I led the creation of a mentorship programme in the MSc course, pairing students with mentors from a digital agency. Students gained valuable insights and advice from their digital mentors, preparing them for their future careers in the digital field. Meanwhile, some mentors achieved promotions at their jobs due to their active involvement in the program. Additionally, some students secured positions at the agencies after completing their studies.

(Dr Simone Kurtzke, 2024).

A Digital Industry Group was formed in 2014 to formalise industry partnerships and to manage the mentorship agreement within the MSc, subsequently growing to become an advisory group informing a wide number of courses and developments. With representatives from a range of industries and sectors, the Digital Industry Group provided feedback on developments across the school including MSc Digital Marketing and BA(Hons) Digital Marketing, MSc Business Analytics and the short courses on Strategic Digital Marketing and Data Analytics for Business Decision Making. In addition to providing input to course developments, the group also acted as a forum to discuss placement opportunities, guest lectures and class projects. The success and growth of the group led to the group being incorporated into the broader CCB industry group in 2020.

Ongoing collaboration with industry has not only led to graduates with an extensive knowledge of industry needs and a skillset that can address these demands, but also to a staff team with a wide range of industry focused skills and knowledge. This approach has helped to enable the team to respond to industry challenges through research and consultation and allowed for rapid product development to address industry skill gaps. The blend of industry knowledge and academic insight made the team uniquely placed to address industry focused research projects including a Knowledge Transfer Partnership (KTP) with a leading Scottish food manufacturing company, developing a digital marketing strategy and assets to support them on their Digital Transformation journey.

Embedding learnings: new developments

As the subject area developed there have been several factors that have influenced leadership, specifically changes to the structure of the University, a move from Course to Programme leadership and a subsequent return to individual Course Leadership. While these changes provided benefits to the courses by bringing different perspectives and expertise to the leadership of individual courses, with the MSc now onto its fifth course leader and the subsequent undergraduate course its second, the combination of a shared vision and an appointed Digital Development Lead, Keenan, ensured consistency in the development of the subject area. This led to the development of the subject area and a growing team with a diverse range of skills that address this subject area, with subsequent changes to course design reflecting the wider teams' expertise, the MSc has continued to evolve and now allows for greater specialisation, with discrete modules for Social Media Marketing, Search Marketing and Marketing Analytics, with the first two offering additional opportunities for students to engage with the creative process and create relevant artefacts that address industry needs.

In 2017 DX began working towards the launch of Scotland's first specifically focused Digital Marketing undergraduate degree, with its development guided by the original ethos of DX, embedding a pedagogy focused on professional practice and live client projects. The scale of this project enabled DX to collaboratively design a genuinely new provision. DX adopted a creative approach to course design, using a scraping tool developed by Keenan to search over 5000 Digital Marketing job listings, specifically investigating the key skills that employers were looking for in their job adverts. Reflecting upon the team's discussion with industry stakeholders, including members of the Digital Industry Liaison group, accrediting bodies, and analysis of the job listings, the team identified 5 subject knowledge pillars and 3 assessment

approaches that would underpin the development of the course, where each module would need to align to at least one of these categories for it to be of value to the course:

Figure 1: The Digital Marketing 5 Subject Knowledge Pillars

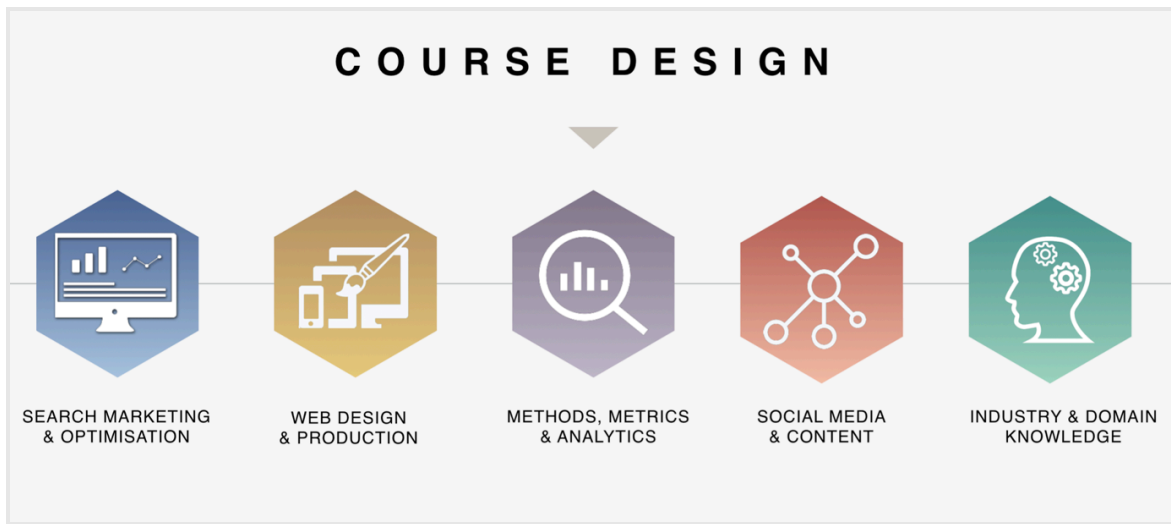
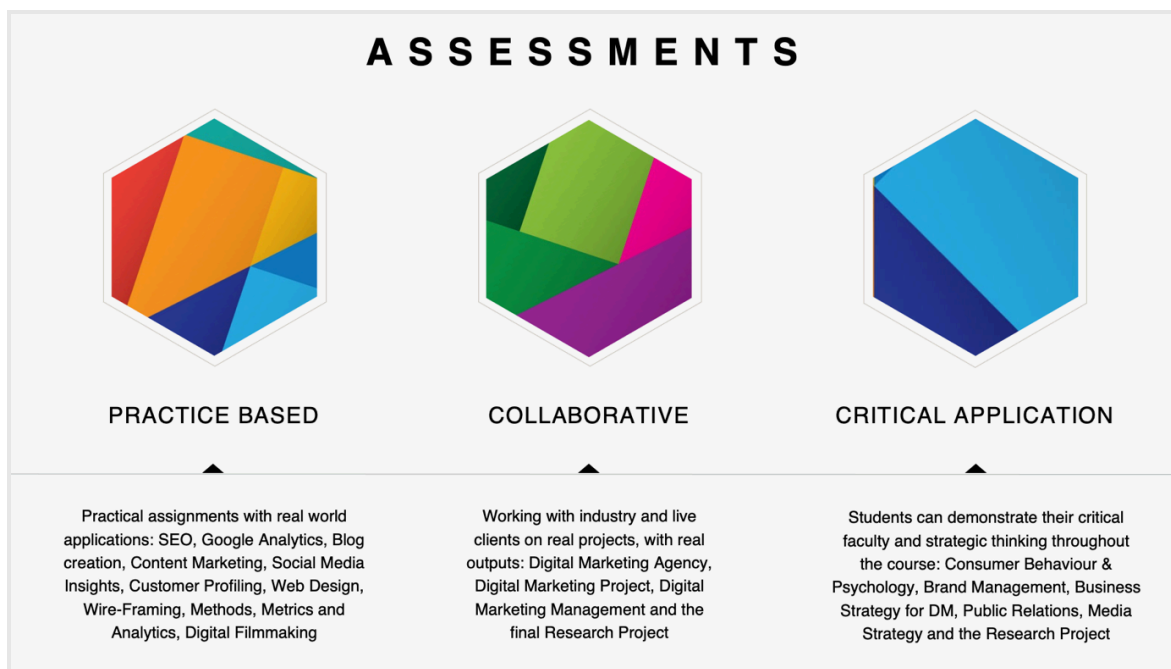


Figure 2: The Digital Marketing Creative and Collaborative Assessment Strategy



BA(Hons) Digital Marketing was validated in 2018 and launched subsequently in 2019. Not only was it the first undergraduate offering within DX's growing portfolio, but it was also the first Digital Marketing undergraduate degree in Scotland. DX took this opportunity to reflect on and formalise best practice,

mirroring the innovative and highly successful approach of MSc Digital Marketing, putting work-related experience at the heart of its design. Close links with industry and live-client projects were embedded throughout the delivery to enhance graduate readiness for employment. This approach enabled graduates to demonstrate an understanding of the theoretical aspects of digital marketing and to apply their knowledge and skills in dynamic industry contexts to enable them to present a portfolio of successfully completed projects to potential employers.

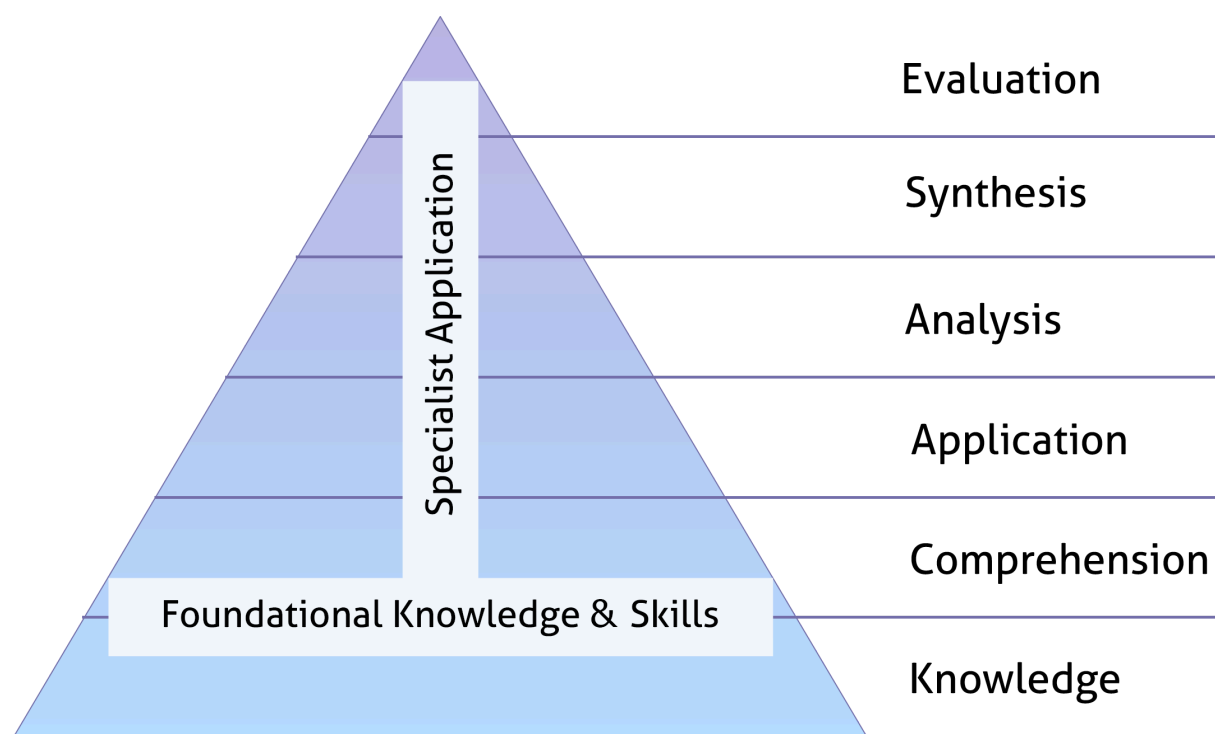
Embedding learnings: pedagogical developments – inverting the 'T'

As the MSc Digital Marketing had evolved through subsequent years of delivery, the team was able to evaluate its strengths and weaknesses and embed its best practices within the new undergraduate course. This led to the formalisation of the original goal, a Digital Marketing Agency environment within the curriculum, embedding realism, complexity, collaboration and authentic assessment within the course design (Villarroel et al., 2017). The BA(Hons) Digital Marketing operates a distinctive Digital Marketing Agency module across the final two years of study, with third year students working for fourth years within the construct of a Digital Marketing Agency on live-client projects. Fourth year students deliver the strategic aspects of the task, whilst leading and managing their degree-level counterparts. The lessons learned from the MSc were fundamental in the development of Scotland's first BA (Hons) Digital Marketing, launched in 2019 with the flagship modules Digital Marketing Agency and Leadership formalising the Agency approach and demonstrating the culmination of this evolution. A detailed evaluation of this approach can be seen in a related article: "The trials and triumphs of running cross-year *experiential modules: Blending theory and practice to advance student professional development and academic practice*" (Vickers et al., 2023). The paper's findings reveal that the realness of the agency setting and authenticity of the assessment (Kolb, 1984), instilled students with confidence in their own capabilities through working with live clients (Ewing & Ewing, 2017). A BA (Hons) 2023 graduate noted that working with live clients prepared them for the role they went on to obtain after graduation (Vickers et al., 2023). With a reflective narrative being a key component in both stages' assessments, students proactively engaged with critical self-evaluation on their own creativity and collaboration (Kolb, 1984), highlighting these underlying principles of a T-shaped Digital Marker to them in an explicit manner. Feedback from both year groups demonstrated that by working with live clients, students developed their confidence, leadership, and teamwork skills. The paper demonstrates the impact that the creative and collaborative ethos pioneered by the DX team has had on the student experience, with the Digital Marketing Agency modules being the culmination of the team's decade long evolution, with the consistent ethos and shared values (i.e. that of delivering industry relevant, authentic education) being exemplified in the modules' delivery and, ultimately, the students' appreciation of this and its influence on their subsequent successes upon graduation. The collaborative industry approach at the heart of DX's delivery has aided and developed the practice of staff: encouraging reflection on their own professional and academic practices has subsequently led them to alter their approach in other modules beyond the subject area, acknowledging an increased appreciation of the benefits of live clients, and embedding reflective summative assessments in other provisions.

The concept of the T-shaped professional (Hansen & von Oetinger, 2001; Caputo, et al., 2023) with a balance of both a broad range of underpinning knowledge with a focused in-depth understanding of, and ability to apply, specialist skills continues to underpin course design across the subject area. This

philosophy, applied within the MSc, was extended to the design of the undergraduate course where the larger number of modules allows for greater application of this approach. The resulting course design combines the principles of T-Shaped professional development with the progression of learning described by Bloom's Taxonomy (1956). This model could be considered as an inverted 'T', where students gain broad knowledge of foundational skills and a diverse range of competencies and knowledge areas in early stages and then engage in opportunities to specialise and apply their learning in a range of professionally aligned assessments and contexts. Having gained broad knowledge of marketing principles, an understanding of an array of digital media platforms and practices, and knowledge of the core technologies and techniques applied in digital media and content production in stages one and two, students are then given the opportunity to apply this knowledge and lean into their particular strengths and specialisms in stages three and four through Digital Campaign Planning, Digital Marketing Agency experience, Placement and their final Research Project. This approach to course design and curricula mapping to Bloom's (1956) Taxonomy can be demonstrated by the authors' 'Inverted T Curriculum Design Model'.

Figure 3: Inverted T Curriculum Design Model



DX's development of the subject discipline has had broader impact and reach across the school and university. One of the key developments of the original MSc Digital Marketing was to offer students the choice of a traditional dissertation or a consultancy project. The consultancy project allowed further interaction with industry as students could work on a real-world project as their final project. This was unique within the University's delivery in similar disciplines at the time. With practice-based projects, students were able to synthesise and apply distinct and specialist skills and knowledge that builds on the broad range of learning developed throughout the degree. Due to the authentic, real-world nature

(Villarroel et al., 2017) of these creative outputs, they were used by students as artefacts for their CV, portfolios, and launch pads for their careers. Following the success of this delivery, this model has been adopted within other areas of delivery: "Embedding a practice-based option within our final research projects has given the students in Media, Journalism and Corporate Communications much greater autonomy and the ability to showcase their talents to prospective employers in a meaningful, industry specific, way." (Dr Fiona Smith, Principal Lecturer, 2024).

The growth of the Digital Marketing discipline and the noted digital skills gap in numerous industries led to DX's development of new modules for other subjects, providing contextualised Digital Marketing knowledge to their areas, "Embedding Digital Marketing Skills into our delivery has been critical for our Fashion Management students, with many of them going on to work in top companies, such as Harrods, Harvey Nichols, Charlotte Tilbury and Farfetch in Digital Marketing roles." (Dr Karen Cross, Associate Dean and Subject Leader in Fashion, 2024). These findings show that the team's approach has had a significant impact on staff and students' professional practice, with students better prepared for industry and staff maintaining currency in their subject knowledge and altering their approach in other delivery to a more interactive and collaborative form of pedagogy, whilst demonstrating the DX leadership in new initiatives outside their own subject discipline.

Measuring the impact of DX's creative and collaborative practices

Stakeholder collaborations and partnership

The collaborative approach fostered by DX has had considerable impact not only on the team and across the institution but more widely in terms of our relationships with external partners, professional bodies and other stakeholders leading to impact on a broader scale. At a local level the relationship with industry partners has brought benefits to students and staff, but also to the industry partners themselves, with numerous live clients benefiting from the students' outputs, with some adopting the practices after the projects have finished: "Some of the data-driven questions raised during our industry mentor meetings with the students, led us to explore new audience segmentation avenues." (Industry Live Client, 2023). These relationships are managed on a formal basis through the CCB Industry Liaison Group, which now encompasses DX's Digital Industry Liaison group. In addition to networking opportunities and the opportunity to shape delivery, partners are also afforded further recognition and benefits. DX's industry partners are offered a certificate and e-logo in recognition of their support for students, they are invited to join the School Industry Advisory Group and given preferential access to our studios and equipment where possible.

The needs of industry, and particularly the skills gap, has been a focus for the team (Keenan & Ibeke, 2020). To address the skills gap and extend the DX approach beyond the full-time cohorts, the team developed several short courses that allow individuals and employers to access flexible online training in several key areas. In relation to Digital Marketing, new developments were facilitated through ongoing collaboration and partnership with the global leaders in Digital Marketing Certification, the Digital Marketing Institute (DMI). The collaboration with DMI allows the team to rapidly develop and deliver new courses that are

professionally accredited and featuring professionally produced and industry relevant content. DX's collaboration with the DMI provided not *just* accreditation but has also allowed the team to respond rapidly to industry needs (Ferrell & Ferrell, 2020) and develop new courses drawing on content provided by the DMI. The benefits that this partnership approach provides are highlighted by the DMI:

Collaboration between industry and academia is paramount for driving innovation and preparing students for the ever-changing landscape of digital marketing. Our partnership with Robert Gordon University exemplifies the power of combining academic rigor and feedback with real-world insights from our subject matter experts, resulting in impactful and industry-relevant educational experiences.

(David Mooney, DMI Head of Partnerships, 2024)

Student feedback and successes

Student feedback and evaluations gathered through National Student Survey (NSS), Student Experience Questionnaires (SEQ), Class Representatives, and Head of Year sessions draw attention to the positive impact of the creative and collaborative design of the curriculum. Students across the provision often report that they can see the future value of their learning experience. As demonstrated in the linked research by Vickers et al. (2023) previous graduates have shared that working with industry partners in an agency setting during their studies was invaluable in securing their graduate role with others noting that authentic learning was critical for their learning, examples in interviews and for future careers; "is definitely going to be helpful, for example, in interviews to showcase work we've done." Further impact of the provision is evidenced by consistently high module achievement, student satisfaction, and final classifications throughout the provision.

Qualitative feedback from annual student review questionnaires also evidences a genuine enthusiasm among students for their studies and appreciation for the teaching team is apparent; not only do students appreciate the support provided by staff, they commend the skills and knowledge developed during their studies. The focus on employability within the curriculum has also been commended by External Examiners, noting that the real-life environment of many of the assessments, the detailed feedback and contemporary topics ensure industry-ready graduates.

The continued success of RGU's Digital Marketing alumni has been a source of immense pride for the team, with successful alumni now holding positions in numerous highly successful agencies and organisations. A group of graduates from the 2017/18 MSc cohort went on to set up their own Digital Marketing Agency, Snap Digital, later partnered with Fortytwo Studio (2022) which ran with great success from 2018-2023. James Galbraith (2024), one of the founders, reflects on his journey:

I came to Scotland, [to RGU] open minded... and ended up doing an MSc in Digital Marketing: it was the best decision I ever made... during my Masters I ended up starting a company with three of my colleagues and friends, we ran that for 5 years with tons of support from RGU. I ended up full-circle, now working here at RGU as the Creative Media Lead.

The combination of these successes goes to demonstrate the impact of the Digital Marketing subject provision at RGU and beyond: In 2015, the team were approached by organisers and asked to contribute two presentations to the "Digital Skills for Graduates" conference hosted by Holyrood Events, Scotland's leading public policy conference provider. Along with a graduate from the MSc and an Industry mentor from DigitasLbi, Jack Keenan presented on "Innovative practices in colleges and universities: a case study of the MSc Digital Marketing", while Dr Simone Kurtzke presented "Partnerships to link education and industry: the DigitasLbi mentorship programme". Keenan and Kurtzke were also panel members for the panel debate at the same event. In addition to leading specific consultation projects to address these points for individual companies, the team have been asked to comment on these points in industry publications such as The Drum (2014) and in the national press:

Our relationship with data is one of the most pressing issues of our age. The first step towards bridging these challenges and allowing businesses to harness the benefits of digital and data is to develop the technical skills in parallel to data literacies and a development of a critical understanding of the impacts of digital technology. These are the core pillars that are developed in many of RGU's courses, bridging both the digital skills gap of today and addressing the need for the ethical, culturally aware, data practitioners of tomorrow.

(Keenan & Ibeke, 2020)

Reflections and lessons learned

Reflecting on the success of DX's approach in the launch and evolution of a subject discipline, whilst there are many lessons learned, there are two key factors for success that whilst derived from the implementation of the Digital Marketing discipline, are in and of themselves subject agnostic. The broader application of these factors is evidenced by the successful development of the Business Analytics subject area that was subsequently launched by many of the same core team, bringing the ethos and approach developed in Digital Marketing to this new field. These factors are:

Industry collaboration and co-creation: Whilst many will collaborate with industry via placements or the occasional live client project, this misses many of the key benefits from a genuine partnership and co-creation of content and curricula. By formalising the industry liaison group as a key component of the subject discipline and embedding industry at the heart of the course design, its development and delivery, the benefits were multifaceted and reached far beyond positive student experience: it opened doors for students future employment, enhanced the relevance of curricula with real world problems being addressed constantly, maintained staffs' currency of expertise and cut down barriers between disciplines, with students engaging with not only the marketing representatives of industry partners, but with multiple different business units, departments and stakeholders.

Multi and interdisciplinarity learning and practices: By its nature the *T-shaped* professional requires significant breadth of knowledge whilst mastering a unique aspect of the respective discipline. To deliver this in an efficient, but critically effective manner would require significant staff resource to have the relevant subject specialisms on hand, which for many schools and institutions may not be possible,

accordingly collaboration with industry, and collaboration with other subjects and disciplines within the institution's own knowledge bases is critical. The students' exposure to this varied expertise, specifically witnessing the collaboration, interaction, synergies and at times differing perspectives from the academics and industry *live* helps to create and support an interdisciplinary mindset and approach (Royle, 2023). By encouraging students to engage in a dialogue with industry, where learning cuts across disciplines and is centred around a co-constructed learning activity, students gain insights that would not be possible through either industry experience or academic activity alone. In the case of interdisciplinary, collaborative learning the subject team have found that the value is greater than the sum of individual experiences.

Within creative disciplines, where subject areas are in the nascent phases of development, or where industries by their nature are in constant states of evolution, educators cannot rely on pre-existing, established curricula. In these circumstances, substantive industry collaboration and embedding creative thinking at the heart of the curricula to ensure students are equipped with an entrepreneurial mindset to prepare them for the shifting landscapes of their evolving industries, should form the key principals of successful course development and delivery. With the increasing prevalence and use of AI in all industries (Rashid & Kausik, 2024), embedding its use and teaching students to use it correctly in modules such as Social Media Marketing, e.g. for content creation, is part of the ongoing challenge of delivering in fast-paced industries. Engaging with this themselves, some of the DX team are piloting the use of AI generated podcasts as part of their 'additional materials' across several modules next academic cycle.

Conclusions

From the launch of an MSc, which put industry engagement, creativity and collaboration at its centre, ten years on, the Digital Marketing subject field has become one of the most significant growth areas within the University. DX's impact on students, stakeholders and individual professional development has fostered a culture and community that gives back to the institution and the broader subject field, with former students developing into staff roles, live-clients, guest speakers, collaborators, and advisors. Growing from a small initial team of three, the subject team now encompasses ten members of staff, has led to over 1000 enrolments in short course, postgraduate and undergraduate study, several funded research projects, KTPs, PhDs and a broad network encompassing staff, industry, students, professional bodies and other universities. DX has influenced the pedagogy, course design and ethos throughout the wider University, with much of this learning being embedded in other areas. Throughout this evolution, the focus on creativity, industry engagement and collaboration has remained the team's guiding ethos. With both authors now in different schools, the learnings and success of Digital Marketing are being embedded in other areas such as the new subject area of Business Analytics, and internationally with the launch of franchise provisions.

Whilst a case study is non-generalisable there are learnings that could be of value to others; firstly, the development of the "Inverted T Curriculum Design Model", which demonstrates how foundational knowledge and skills are aligned to lower levels of Bloom's Taxonomy before developing the specialist aspects of the 'T' as the students' knowledge progresses up the pyramid, has the potential to be applied to course design in various disciplines. Secondly, the success of DX would not have been achieved had it not

been for the collaboration across both the academic team and its wider network of industry contacts and external experts, who facilitated the courses maintaining currency and relevance in an industry which, by definition, is ever evolving and fast paced, by using live-client projects, authentic assessment and project-based outputs.

Biographies

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References

- Adams, T. E., Linn, S., & Ellis, C. (2015). *Autoethnography: Understanding qualitative research*. Oxford University Press.
- Bierema, L. (2019). Enhancing employability through developing T-shaped professionals. *New Directions for Adult and Continuing Education*, 163, 67-81 <https://doi.org/10.1002/ace.20342>
- Bloom, B. S. (1956). *Taxonomy of educational objectives: The cognitive domain*. David McKay.
- Callahan, D. (2010). A memoir of an interdisciplinary career. In R. Frodeman, J.T. Klein, & C. Mitcham (Eds.), *The Oxford handbook of interdisciplinarity* (pp.419-430). Oxford University Press
- Caputo, F., Cillo, V., Fiano, F., Pironti, M., Romano, M. (2023). Building T-shaped professionals for mastering digital transformation. *Journal of Business Research*, 154. <https://doi.org/10.1016/j.jbusres.2022.113309>.
- Cremin, T., & Chappell, K. (2019). Creative pedagogies: a systematic review. *Research Papers in Education*, 36(3), 299-331. <https://doi.org/10.1080/02671522.2019.1677757>
- Digitas. (2024). *We are the networked experience agency*. <https://www.digitas.com/en-us>
- Digital Marketing Institute. (2024). *What Does a Digital Marketer Do?* <https://digitalmarketinginstitute.com/blog/what-does-a-digital-marketer-do>
- EdX. (2023). *Navigating the workplace in the age of AI*. https://business.edx.org/wp-content/uploads/2023/09/edx_Workplace_Intelligence_AI_Report.pdf
- Elias, N. (1956). Problems of involvement and detachment. *The British Journal of Sociology*, 7(3), 226-252. <https://doi.org/10.2307/587994>
- Elias, N. (1987). *Involvement and detachment*. Blackwell Publishing.
- Ewing, D. R., & Ewing, R. L. (2017). Leveraging experiential learning to encourage role transition from “student” to “professional”: Insights from identity theory. *Journal of Marketing Education*, 39(3), 132-144. <https://doi.org/10.1177/0273475317724844>
- Ferreira, V.G.& Canedo, E.D. (2020). Design sprint in classroom: Exploring new active learning tools for project-based learning approach. *Journal of Ambient Intelligence and Humanized Computing* 11, 1191–1212. <https://doi.org/10.1007/s12652-019-01285-3>

- Ferrell, O. C., & Ferrell, L. (2020). Technology challenges and opportunities facing marketing education. *Marketing Education Review*, 30(1), 3–14. <https://doi.org/10.1080/10528008.2020.1718510>
- FortyTwo. (2024). *A new creative partnership*. <https://fortytwo.studio/latest/a-new-creative-partnership>
- Galbraith, J. (2024, January 30). *From study to employment: A Canadian student's experience in Aberdeen, Scotland*. [Video]. YouTube. https://youtu.be/DZAvN_2oYM8
- Hansen, M. T., & von Oetinger, B. (2001). Introducing T-shaped managers. Knowledge management's next generation. *Harvard Business Review*, 79(3), 106–116, 165. <https://europepmc.org/article/med/11246918>
- Herhausen, D., Miočević, D., Morgan, R. E., & Kleijnen, M. H. (2020). The digital marketing capabilities gap. *Industrial Marketing Management*, 90, 276–290. <https://doi.org/10.1016/j.indmarman.2020.07.022>
- Holyrood Events. (2024). *Who we are*. <https://events.holyrood.com/>
- Ironside, L. (2022). *Working as a KTP Associate and studying Digital Marketing at RGU* <https://rgustudentblog.com/2022/08/15/working-as-a-ktp-associate-and-studying-digital-marketing-at-rgu/>
- Keenan, J., & Ibeke, E. (2020). Closing the digital skills gap now essential. *The Scotsman*. <https://www.scotsman.com/business/jack-keenan-and-ebuka-ibeke-closing-the-digital-skills-gap-now-essential-1995544>
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice-Hall.
- Kurni, M., & Saritha, K. (2021). Applying collaborative learning for enhancing the teaching-learning process in online learning through social media. *International Journal of Emerging Technologies in Learning*, 16(16), 251-259. <https://doi.org/10.3991/ijet.v16i16.23207>
- Kurtzke, S., & Setkute, J. (2021). Analytics capability in marketing education: A practice-informed model. *Journal of Marketing Education*, 43(3), 298-316. <https://doi.org/10.1177/02734753211042404>
- Langan, R., Cowley, S., & Nguyen, C. (2019). The state of digital marketing in academia: An examination of marketing curriculum's response to digital disruption. *Journal of Marketing Education*, 41(1), 32-46. <https://doi.org/10.1177/0273475318823849>
- Logan, M. (2020). *Scottish Technology Ecosystem Review*. <https://www.gov.scot/publications/scottish-technology-ecosystem-review/documents/>
- Okamura, K. (2019). Interdisciplinarity revisited: Evidence for research impact and dynamism. *Palgrave Communications* 5, 141. <https://doi.org/10.1057/s41599-019-0352-4>
- Rashid, A. B., & Kausik, A. K. (2024). AI revolutionizing industries worldwide: A comprehensive overview of its diverse applications. *Hybrid Advances*, 7(100277), 100277–100277. <https://doi.org/10.1016/j.hybadv.2024.100277>
- Reid, P.H., Pirie, E., & Ironside, R. (2024). "Telling the story of telling the story": Capturing intangible heritage storytelling on the origins of malt whisky in the Cabrach. *Journal of Documentation*, 80(2), 508-532. <https://doi.org/10.1108/JD-06-2023-0106>
- Robert Gordon University. (2024). *University Research Policies: Research Governance and Ethics*. <https://www.rgu.ac.uk/research/university-research-policies/research-governance-ethics>
- Royle, J., & Laing, A. (2014). The digital marketing skills gap: Developing a Digital Marketer Model for the communication industries. *International Journal of Information Management*, 32(2), 65-73.
- Royle, J. (2023). The re-conceptualisation of entrepreneurial journalism in higher education. In K. Fowler-Watt (Ed.), *Challenges and New Directions in Journalism Education*. Routledge.
- ScotlandIS. (2024). *The Scottish Technology Industry Survey 2024*. <https://www.scotlandis.com/insights/scotlandis-technology-industry-survey/>
- Sefton-Green, J., Thomson, P., Jones, K., & Bresler, L. (Eds.). (2011). *Handbook of creative learning*. Routledge.
- Swan, S. (2023). *Are you a T-shaped Marketer? And which type?* <https://www.smartinsights.com/managing-digital-marketing/personal-career-development/csimon-swan-t-shaped-marketer>
- The Digital Scot. (2024). *Welcome to the Digital Scot*. <https://rgudigital.com>
- The Drum. (2014). *Digital skills gap: Why we are launching MSc Digital Marketing*. <https://www.thedrum.com/knowledge-bank/2014/06/13/digital-skills-gap-why-we-are-launching-msc-digital-marketing>
- The Times. (2024). *UK University Rankings 2024*. <https://www.thetimes.co.uk/uk-university-rankings>
- Turner, D., & Pirie, E. (2016). Problems of involvement and detachment: A critical approach to researching live event experiences. In: I. R. Lamond & L. Platt (Eds.), *Critical event studies: Approaches to research* (pp. 17-35). Palgrave MacMillan. https://doi.org/10.1057/978-1-137-52386-0_2

- Vickers, B., Pirie, E., & Reid, C. (2023). The trials and triumphs of running cross-year experiential modules: Blending theory and practice to advance student professional development and academic practice. *Journal of Perspectives in Applied Academic Practice*, 11(3). <https://doi.org/10.56433/jpaap.v11i3.590>
- Villarroel, V., Bloxham, S., Bruna, D., Bruna, C., & Herrera-Seda, C. (2017). Authentic assessment: creating a blueprint for course design. *Assessment & Evaluation in Higher Education*, 43(5), 840–854. <https://doi.org/10.1080/02602938.2017.1412396>
- Whitaker, E.M., & Atkinson, P. (2023). *Ethnographic Explorations: Surrender and Resistance*. Taylor & Francis.
- Yin, R. K. (2018). *Case study research: design and methods* (6th ed). Sage Publications.