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**TEACHING MARKETING TO NON-MARKETING MAJORS:
TOOLS TO ENHANCE THEIR ENGAGEMENT AND ACADEMIC
PERFORMANCE**

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TEACHING MARKETING TO NON-MARKETING MAJORS: TOOLS TO ENHANCE THEIR ENGAGEMENT AND ACADEMIC PERFORMANCE

Abstract

Purpose - While there has been a significant amount of work involving marketing education, it is unclear how faculty members can increase the engagement and achievement of non-subject specialists. Accordingly, **guided by Bloom’s Taxonomy**, this current study examines the ways that academics can teach marketing to non-marketing undergraduate majors, with a focus on enhancing their engagement and academic performance.

Design/methodology/approach - Survey responses (and related archival information) were collected from 181 non-marketing majors in the United Kingdom (studying marketing modules as part of their undergraduate degrees). Such data passed a series of key robustness checks. **The** hypothesized and control paths were tested via covariance-based structural equation modelling. **In addition**, 20 semi-structured interviews were used to explore the underlying issues behind the statistical results.

Findings - Two variables were **positive** drivers of engaging non-marketing students, namely, discussion-oriented interactions and relating marketing to non-marketing subjects. However, integrating theory with practice produced a negative, but non-significant relationship **with engaging non-marketing students**. In turn, engaging non-marketing students yielded a positive and significant association with academic performance. The follow-up interviews suggested that to best-engage non-marketing majors, educators should consider hosting guest speakers (e.g., owner-managers) to demonstrate how their university-level studies are applicable to “real-world” subject contexts, like sports management and engineering when they graduate.

Originality/value - This current article strengthens the extant literature by identifying some **actionable** tools that can be employed to enhance the engagement and academic performance of non-subject specialists. This is important, since faculty members are under increased pressure to become effective teachers and facilitate student satisfaction (alongside their other duties, **including** research and administration). Hence, this paper assists such individuals to cope with the rapidly-changing landscape of the higher education sector. **In fact, Bloom’s Taxonomy was a relevant pedagogical theory for unpacking how educators can teach marketing to non-marketing majors.**

Keywords - Marketing education, non-marketing majors, student engagement, academic performance, **Bloom’s Taxonomy**.

Paper type - Research paper.

Introduction

Marketing has become a popular major for students in higher education (Barkas *et al.*, 2021). Alongside curriculum design and evaluation methods, academics have highlighted a range of innovative teaching and learning strategies (like case studies, blended learning, simulations, and other interactive approaches) that can enhance the engagement and academic performance of marketing students (Smart *et al.*, 1999; Millican, 2014). **That said**, the extant literature has often been approached from the assumption that marketing is taught to subject specialists **(like undergraduate marketing majors)**, rather

than non-marketing students (non-marketers or non-marketing majors) (Waller, 1993; Strong and Beetles, 2017). Sometimes, non-marketing students must pass certain marketing classes to complete their degree programmes, either as a separate class, or alongside marketing majors in the same class (Barr and McNeilly, 2001; Crick, 2018). Nevertheless, an understanding of the tools that educators can utilize when teaching marketing to non-marketing undergraduate students remains largely under-researched. This is important, given that student satisfaction and achievement are typically widely-cited metrics. However, faculty members face potential challenges if they are placed outside of their “comfort zones” by teaching student audiences that have to be there to complete their non-marketing degree, instead of being there out of pure interest and/or are majoring in that discipline.

Grounded in Bloom’s Taxonomy, the objective of this current study is to examine the tools that educators can use to enhance the engagement and academic performance of non-marketing undergraduate students taking marketing courses. By addressing this objective, five contributions are made:

1. Actionable recommendations are offered regarding how marketing can be taught differently to non-marketers, vis-à-vis, subject specialists (extending Barr and McNeilly, 2001; Crick, 2018).
2. The relationship between student engagement and academic performance is considered, while appreciating it is important to differentiate between actual versus perceived learning outcomes (following Lee, 2014; Bacon, 2016).
3. Key tools to help academics design and adapt courses that are suited to the needs and abilities of non-specialist student audiences are explored (see Taylor *et al.*, 2011; Carrie *et al.*, 2017).
4. Considerations are offered regarding how faculty members can enhance their teaching activities within the ever-evolving higher education sector where the ‘student experience’ features widely (in line with Serow, 2000; Strong and Beetles, 2017).
5. Bloom’s Taxonomy is utilized in a novel capacity to show how educators can boost the engagement and academic performance of non-subject specialists (building upon Bloom, 1956; Nkhoma *et al.*, 2017).

To achieve the research objective (and make the above five contributions), this article is divided as follows. First, after outlining the marketing context and justifying the underpinning theory, the facets of the conceptual model are considered. Second, the mixed methods research design is described. Third, the empirical findings are presented. Fourth, these findings are discussed, with some practical implications for educators. Fifth, the study ends with several limitations and avenues for future research.

Literature review

The marketing subject

A debate surrounds whether marketing should be studied as a science or as an art¹. Brown (1996) suggested that marketing is an art because it is comprised of a set of subjective behaviors associated with how practitioners engage in market-oriented activities. Alternatively, marketing can be viewed as a science, whereby, owner-managers can quantify the effectiveness of their strategies and utilize metrics to evaluate their performance (Cadogan *et al.*, 2012). In this current study, marketing is positioned as a social science, in which it encapsulates a set of subjective principles about customer value creation, but uses measurable concepts (following Zinkhan and Hirschheim, 1992).

Background to teaching marketing to non-marketers

Limited research exists on teaching non-marketing undergraduate students taking marketing courses. For example, Barr and McNeilly (2001) offered certain insights into how faculty members can teach marketing to these audiences by making modules “practitioner-friendly”. These authors concentrated on

¹ Marketing is a broad academic field (Smart *et al.*, 1999; Strong and Beetles, 2017). That is, there are different sub-domains, such as strategic marketing, consumer psychology (and consumer behavior), international marketing, market research, and brand management (Kotler and Keller, 2010; Jobber and Ellis-Chadwick, 2016). Further, there are more specialized sub-areas, such as how marketing intersects with entrepreneurship, namely, the marketing/entrepreneurship interface (Crick *et al.*, 2020). In this current article, the marketing subject is investigated in overall terms – not least of which because it was of interest to uncover how this domain can be taught to non-marketing majors at an introductory level. Hence, the subsequent conceptualizations (as well as the measures and empirical assertions) are intended to be applicable to several sub-domains of the marketing field, alongside other related business subjects.

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3 mature students, which unlike undergraduate cohorts (as per this current article), might possess **some**
4 marketing knowledge, **owing to** their industry experience (Tho, 2017). As an undergraduate illustration,
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6 Crick (2018) utilized personal reflective notes about how marketing can be best-taught to non-marketing
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8 students. Based on **qualitative** data from New Zealand and the United Kingdom, Crick (2018) argued that
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10 integrating theory with practice, discussion-oriented interactions, and relating marketing to non-marketing
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12 subjects have positive impacts on the engagement of non-marketing students. Unfortunately, Crick's
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14 (2018) study was based mainly on observational **sources**. Yet, it signified that it is not uncommon for non-
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16 marketing students to take marketing courses to complete their degree programmes (Carrie *et al.*, 2017).
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19 This current article builds upon Crick's (2018) investigation to explore these under-researched issues.
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23 24 *Theoretical background*

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26 Bloom's Taxonomy is a pedagogical theory that demonstrates how students' knowledge of a given
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28 subject area is achieved through a series of steps (Bloom, 1956). In other words, this lens highlights that
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30 students do not simply "learn" a topic (as this is an all-embracing term), but instead, can develop several
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32 "higher-order skills" that surround different degrees of comprehension (Agarwal, 2019). There have been
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34 a range of revisions made to Bloom's Taxonomy. A commonly-used version is that there are six steps,
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36 namely, "remembering", "understanding", "applying", "analyzing", "evaluating", and "creating" (Anderson
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38 *et al.*, 2001). These six steps help educators to set measurable learning outcomes that can test students'
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40 knowledge across different levels of higher education. For example, a first-year undergraduate student
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42 might be expected to show "remembering" traits in their course material, whereas, a postgraduate
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44 researcher may be required to achieve more advanced skills, including "analyzing" and "evaluating" these
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46 matters (Furst, 1981; Nkhoma *et al.*, 2017). Bloom's Taxonomy denotes that students achieve the more
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48 basic forms of knowledge before they work towards reaching the more advanced "higher-order skills"
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50 (Appendix 1). This pedagogical theory is used to guide the subsequent conceptual model (Figure 1).
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57 [Insert Figure 1 about here]
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Integrating theory with practice and engaging non-marketing students

Consistent with Bloom's Taxonomy, educators should demonstrate how theories apply (or apply differently) in practice (Furst, 1981). In doing so, academics can help their students to develop an in-depth grasp of their course material, not least of which when achieving more advanced skills, like "evaluating" and "creating" activities (Anderson *et al.*, 2001). Nevertheless, if classes are delivered in a way that focuses excessively on theory, students are unlikely to be engaged (Smart *et al.*, 1999). When teaching marketing to non-marketers, enhanced engagement might be achieved through using published research from such students' core subject backgrounds (e.g., engineering and sports) to highlight the theoretical and practical relevance of the marketing domain (Crick, 2018). In these situations, it is advantageous to share findings from relevant and "easy to read" journal articles that correspond to students' backgrounds (Lubbe, 2015). This way, students can become familiar with certain applications of marketing notions, with empirical evidence about how they apply (or apply differently) in practical scenarios (Serow, 2000). Thus, it is expected that:

H1. Integrating theory with practice has a positive relationship with engaging non-marketing students.

Discussion-oriented interactions and engaging non-marketing students

Student engagement is aligned to considerations within Bloom's Taxonomy (Agarwal, 2019). Indeed, this pedagogical theory is designed to strengthen students' knowledge, but has applications pertaining to ensuring that these individuals are engaged with their course material, such as through interactions with those that are teaching them and their classmates (Nkhoma *et al.*, 2017). If academics simply deliver module content to their students, such cohorts might question the value that they are receiving (Lau *et al.*, 2019). If educators offer discussion-oriented interactions with their students, they can develop a rapport with members of their classes, strengthen students' socialization abilities, and improve their cohorts' critical thinking skills (Balan and Metcalfe, 2012). In-class discussions can build upon students'

theoretical knowledge and solidify relevant practical applications (Nicol and Boyle, 2003; Taylor *et al.*, 2011). While in-class discussions might be easier to hold with smaller groups of students (like tutorials), group exercises in lectures have been found to increase student engagement through clarifying the link between marketing and their backgrounds (Carrie *et al.*, 2017). Accordingly, it follows that:

H2. Discussion-oriented interactions have a positive relationship with engaging non-marketing students.

Relating marketing to non-marketing subjects and engaging non-marketing students

A further consideration central to Bloom's Taxonomy (see Bloom, 1956) is that students are best-engaged if they can acknowledge how concepts are applicable to certain arenas; in this current study, including how to deal with issues that are perhaps outside of their "comfort zones". This notion is similar but different to H1 that is 'theory based'. Here, student engagement is proposed to be driven by academics explaining how they can relate a given subject to other fields, which is particularly relevant when achieving more advanced "higher-order skills" (Bloom, 1984). In this scenario, non-marketing students might be provided with illustrations of how marketing applies to their respective subject specialisms (via examples like case studies rather than theory-driven research papers), across various industries and countries (Crick, 2018). The latter issue is especially pertinent with multi-cultural audiences. For instance, when teaching marketing concepts to arts and design students, educators could highlight how artists, fashion designers, and museum curators (among others) in different country contexts depend on adding value to customers in particular ways (Lamont and Friedman, 1997). Therefore, it stands to reason that:

H3. Relating marketing to non-marketing subjects has a positive relationship with engaging non-marketing students.

Engaging non-marketing students and academic performance

Another central issue under Bloom's Taxonomy is that as students develop competencies in certain "higher-order skills", they are more likely to succeed within their courses/modules (Anderson *et al.*, 2001).

Regarding academic performance, differences may exist between perceived and actual learning (Bacon, 2016). As described below, this current study focuses on actual results rather than students' perceived learning to minimize subjectivity. If non-marketers are **engaged** by appreciating the value of marketing (for future employment, becoming entrepreneurs, or postgraduate education), they could invest more time and effort into preparing for their assessments and apply "appropriate" knowledge towards their exams and coursework (Geddes, 2009). Indeed, Lee (2014) found that in the United States, engagement is a predictor of academic performance, **whereby**, perseverance, effort, and a sense of belonging are likely to drive students to perform better in their assessments. **Consequently, it is anticipated that:**

H4. Engaging non-marketing students has a positive relationship with their academic performance.

Control paths

Under Bloom's Taxonomy, there are various drivers of academic performance (Furst, 1981; Halawi *et al.*, 2009). Hence, the outcome variable was controlled for student age, class time, and years of marketing education **as additional factors that might explain its variance**. In terms of student age, as individuals become older, they could obtain more knowledge of theoretical and practical issues that improves their academic performance (Richardson, 1995). Turning to class time, if students devote time in their courses, **they are more likely to** receive information that boosts their academic performance (Kember *et al.*, 1995). Concerning years of marketing education, if students have undertaken marketing classes in the past (e.g., at school), they could be advantaged over students with no knowledge of the subject (Crick, 2018). The chosen research design follows in the subsequent section.

Research design

Research setting

Non-marketing undergraduate students were sampled from two compulsory Semester 2 marketing modules taught at a British university (delivered before the COVID-19 pandemic). Although the name of

this higher education institution **remains anonymous**, the university is research-led, with high-performing subject areas being business and economics, sports science, and mechanical engineering. The university is well-renowned in the United Kingdom and abroad. First, “The Marketing Mix” was taught to 219 second-year undergraduate students taking engineering subjects. These students had completed “The Principles of Marketing” in Semester 1. Second, “The Marketing Mix for Sport and Leisure” was taught to 140 second-year undergraduate students taking sports-related subjects. These students had completed “The Principles of Marketing for Sport and Leisure” in Semester 1. An electronic survey (via Qualtrics), archival data, and follow-up interviews were used to investigate the **key** informants’ experiences during their Semester 1 marketing courses. The university did not permit students to take both modules (in Semesters 1 and/or 2), meaning that double-sampling did not take place. The courses were broadly like-for-like, as the students covered identical topics during each week and were assessed in the same way. In both modules, the students were prescribed the **same textbooks** (Kotler and Keller, 2010; Jobber and Ellis-Chadwick, 2016). Extra **“easily readable” papers** were allocated to the students in both modules **that related to their respective core subjects** (e.g. Crick and Crick, 2016; Crick *et al.*, 2020) **and/or how marketing features in firms’ business models** (e.g., Crick and Crick, 2015; Crick *et al.*, 2018).

Core data collection

After the electronic survey had been designed, it was pre-tested with a sample of academics ($n = 15$) and a group of domestic and international students ($n = 15$), in which they were asked to comment on whether it was clear and covered the correct issues, revealing no concerns (Reynolds and Diamantopoulos, 1998). Next, 181 observations were collected from the population of 359 individuals (a reasonable 50.42% response rate). **The** respondents were encouraged (but not pressured) to participate in the study, and were assured of **confidentiality** when using certain archival proxies (**as described later**). Non-response bias was assessed through conducting *t*-tests for the latent variables, showing non-significant differences across the first and second 50% of responses (Armstrong and Overton, 1977).

Operationalizations

The following adapted scales were used². First, integrating theory with practice was measured on a seven-point Likert scale, with five items, ranging from: 1 = very strongly disagree to 7 = very strongly agree (Apodaca and Grad, 2005). Second, discussion-oriented interactions were operationalized on a seven-point Likert scale, with four items, ranging from: 1 = very strongly disagree to 7 = very strongly agree (Jaaskela *et al.*, 2017). Third, relating marketing to non-marketing subjects was captured on a seven-point Likert scale, with six items, ranging from: 1 = very strongly disagree to 7 = very strongly agree (Waller, 1993; Pappu, 2004). Fourth, engaging non-marketing students was measured on a seven-point interval scale, with five items, ranging from: 1 = not at all to 7 = to an extreme extent (Ahlfeldt *et al.*, 2005). Fifth, academic performance was measured by using the students' final result in the module taken in Semester 1 (via their digital records), using a sliding ratio scale, ranging from: 0 to 100% (Geddes, 2009). Sixth, class time was measured using a seven-point Likert scale, with three items, ranging from: 1 = very strongly disagree to 7 = very strongly agree (a new measure). Seventh, student age was measured using individuals' ages at the time of the survey (sourced from their digital records) (Cassidy, 2012). Eighth, years of marketing education was captured by using a sliding ratio scale (Joensuu-Salo *et al.*, 2020). Ninth, the survey concluded with an informant quality tool. This was captured on a seven-point Likert scale, with three items, ranging from: 1 = very strongly disagree to 7 = very strongly agree (Crick and Crick, 2019). The single-indicators were transformed by natural logarithms to reduce their variances.

Core data analysis

After treating the small number of missing values through expectation maximization, the quantitative data were analyzed through the following steps. First, using SPSS 23, the characteristics of the final sample

² The variables were coded as - integrating theory with practice (ITP), discussion-oriented interactions (DOI), relating marketing to non-marketing subjects (RMOS), engaging non-marketing students (ENGA), academic performance (PERF), student age (AGE), class time (TIME), years of marketing education (YEARS), and informant quality (INF). The condensed informant quality scale was coded as MARKER (as justified later).

were examined (Table 1). By focusing on the means and standard deviations (SDs), a reasonable distribution of undergraduate students (all non-marketing majors) took part in this study, in terms of their ages (mean = 20.52 years; SD = 1.79 years), years of marketing education (mean = 1.99 years; SD = 3.13 years), and academic performance (mean = 61.15%; SD = 14.68%).

[Insert Table 1 about here]

Second, as shown in Table 2, via SPSS 23, an exploratory factor analysis was conducted, with a principal components analysis extraction and a varimax rotation (Churchill Jr., 1979). The Kaiser-Meyer-Olkin (KMO) test of sampling adequacy took place (0.90), alongside Bartlett's test of sphericity ($\chi^2 = 3,072.73$; $df = 136$; Sig. = 0.00), and recording the total variance explained (88.41%). While certain items were deleted (to avoid cross-factor loadings), there was not a negative impact on scales (Crick, 2021). Specifically, the indicators loaded onto six components, which was the anticipated number of factors. Plus, at this stage of the scale purification process, a minimum of two items were retained for each of the multi-item operationalisations (see Crick and Crick, 2019). Thus, the item elimination was not a concern.

[Insert Table 2 about here]

Third, using LISREL 9.30, the measurement model was assessed (Crick and Crick, 2021). As highlighted in Table 3, the model fit indices were within the minimum thresholds ($\chi^2 = 188.60$; $df = 103$; $\chi^2/df = 1.83$; Sig. = 0.00; RMSEA = 0.07; CFI = 0.99; IFI = 0.99; NNFI = 0.96; GFI = 0.90; SRMR = 0.03).

[Insert Table 3 about here]

Fourth, through LISREL 9.30, the model-testing stage involved covariance-based structural equation modelling, focusing on the standardized paths, *t*-values, model fit indices, and squared multiple correlations (R^2) (Cadogan *et al.*, 2012). Covariance-based structural equation modelling was chosen because the conceptual model was relatively complex, in terms of having a "chain-like" format surrounding the drivers of engaging non-marketing students and the link with academic performance (guided by Shook *et al.*, 2004; Cadogan *et al.*, 2009). Indeed, this approach was deemed to be a robust

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model-testing approach, vis-à-vis, simpler data analysis techniques, such as hierarchical regression (Crick, 2020), or potentially limited methods, like correlation-based structural equation modelling (Sraha *et al.*, 2020). That is, covariance-based structural equation modelling allows researchers to evaluate the quality of their measurement items and (at the same time) test path analyses (Cadogan *et al.*, 2005).

Reliability and validity

Reliability was assessed via the internal consistencies (hereafter, the alpha (α) values) of the multi-item constructs after the scale purification stage (all exceeding 0.70) (Churchill Jr., 1979). Face validity was checked through pre-testing the survey (using mostly established measures) with a sample of “appropriate” academics and students (Reynolds and Diamantopoulos, 1998), together with utilizing an informant quality tool. The final multi-item scales yielded high composite reliabilities (CRs) that were greater than 0.60 and average variance extracted values (AVEs) that were in excess of 0.50 (all acceptable). This showed evidence of convergent validity (Cadogan *et al.*, 2012). Regarding discriminant validity, through LISREL 9.30, the correlations between the constructs (the phi matrix) were squared and compared against the AVEs. As the highest squared phi matrix correlation (0.69) was below the lowest AVE (0.81), discriminant validity was present (Fornell and Larcker, 1981). The final scale reliabilities are presented in Table 4.

[Insert Table 4 about here]

Common method variance

To consider common method variance, the survey was made short and engaging for the participants (Podsakoff *et al.*, 2003). Plus, different data sources were used (survey and archival information). The use of primary and secondary information prevented the research team from becoming reliant on one source of data (Chang *et al.*, 2010). Next, using SPSS 23, the marker variable technique was employed as follows. First, a construct that was conceptually-unrelated to any other variable within the conceptual model (the informant quality tool) was selected. Second, a bivariate correlation matrix was “run”, with the

core constructs. Third, a partial correlation matrix was created, containing the same variables, but controlling for the informant quality tool (the marker variable). Fourth, the differences between the bivariate and partial correlation matrices were averaged ($r = 0.02$). This highlighted that the results were not biased by a common method factor (Lindell and Whitney, 2001). Also, the informant quality tool had a relatively large SD (0.90), allowing it to be employed as the marker variable.

Follow-up interviews

Semi-structured interviews were undertaken with 20 domestic and international non-marketing majors that had participated in the quantitative stage. As the research team monitored which students had completed the survey (yielding archival data), a purposive sample was selected of prospective interviewees. No pressure took place to participate in the interviews. The follow-up interviews were used to explore the underlying issues behind the quantitative results (Sraha *et al.*, 2020). The interview transcripts were manually-coded for four pre-determined themes (one for each research hypothesis). Then, the constant comparison technique was employed. This involved analyzing the qualitative data on a continual basis to understand key similarities and differences between the interviewees (Crick and Crick, 2021). The qualitative data in this study draws on illustrative quotes for transparency purposes. The statistical results follow in the next section.

Statistical results

The bivariate correlations between the latent variables were examined, showing the underlying relationships under investigation (Table 5). During the model-testing stage, mixed support existed for the research hypotheses and control paths (Table 6). Integrating theory with practice had a negative and non-significant relationship with engaging non-marketing students ($\gamma = -0.15$; $t = -0.84$), challenging H1. Discussion-oriented interactions ($\gamma = 0.36$; $t = 2.50$) and relating marketing to non-marketing subjects ($\gamma = 0.31$; $t = 2.71$) were positively and significantly linked to engaging non-marketing students (supporting H2 and H3). Engaging non-marketing students had a positive and significant association with academic

performance ($\beta = 0.26$; $t = 3.31$), supporting H4. Regarding the control paths, class time had a positive and significant relationship with academic performance ($\gamma = 0.29$; $t = 3.75$), whereas, student age ($\gamma = 0.04$; $t = 0.51$) and years of marketing education ($\gamma = -0.01$; $t = -0.17$) had non-significant links. The statistical data were well-suited to the structural model ($\chi^2 = 241.54$; $df = 100$; $\chi^2/df = 2.42$; Sig. = 0.00; RMSEA = 0.08; CFI = 0.95; IFI = 0.95; NNFI = 0.94; GFI = 0.87; SRMR = 0.07). The squared multiple correlations (R^2) for the engaging non-marketing students (0.23) and academic performance (0.22) constructs were relatively high. The qualitative findings are presented as follows.

[Insert Tables 5 and 6 about here]

Qualitative findings

A range of non-marketing majors from both modules (sports and engineering undergraduate students) participated in the 20 follow-up interviews (Table 7).

[Insert Table 7 about here]

Regarding theme 1, integrating theory with practice was found to have a negative and non-significant relationship with engaging non-marketing students. Hence, it was of interest to explore in greater depth why such a result occurred. Specifically, 19 out of the 20 interviewees indicated that mixing theory and practice needs to be undertaken differently when teaching marketing to non-marketers. They highlighted that it was important to integrate theory with practice, but the key issue was tailoring the content delivery to their subject backgrounds (here, engineering and sports). Furthermore, it was advised that academics could enhance these student audiences' engagement through utilizing the experience of industry experts (like guest speakers) to explain how marketing theories and concepts apply (and apply differently) to the sector contexts where students aspire to work after they complete their degree programmes. Some illustrative quotes were:

[...] If we could find out cutting-edge information from sports business owners, that would add value to what we're learning about in the lectures (Interviewee 2).

[...] I would have been a lot more engaged if we could have heard some success or even failure stories from entrepreneurs, case studies, information from executives, and some recent figures about how “real-life” engineering firms have used marketing to their advantage (Interviewee 16).

Concerning theme 2, discussion-oriented interactions were positively and significantly related to engaging non-marketing students. Indeed, 18 out of the 20 interviewees highlighted that it was highly-effective for there to be in-class discussions about how certain marketing-focused theoretical issues apply (or can be adapted in certain situations) to “actual” organizations related to their majors. By splitting the class into smaller groups (3-4 people), the cohort appeared to be content with their opportunities to discuss applied topics, clarify more challenging issues, and share their thoughts with other students. Some supporting examples were:

[...] In this module, the in-class discussions and group exercises allowed us [the cohort] to stop for a few minutes, digest what we have just learned, and apply the theories and concepts towards our own subjects (Interviewee 7).

[...] I found that the mini exercises were great at keeping me alert and allowed me to better-understand how marketing applies towards sports clubs, franchises, and governing bodies (Interviewee 12).

Turning to theme 3, relating marketing to non-marketing subjects was positively and significantly related to engaging non-marketing students. Here, 19 out of the 20 interviewees suggested it was important to emphasize that marketing is a diversified domain (i.e., has various sub-topics). The students were appreciative of being provided with practical illustrations (especially pertaining to their subject area) of how various facets of the marketing subject are implemented differently in certain industries over others.

A couple of examples were:

[...] By being given loads of examples about sports marketing, it has helped me to think about how sporting organizations might promote their goods and services (Interviewee 3).

[...] One of the reasons that I've been so engaged in this class is the practical awareness that I now have about how marketing needs to be implemented by all organizations... It's all well and good to have a good product or service, but if it's not promoted properly, I probably won't succeed (Interviewee 18).

As for theme 4, engaging non-marketing students had a positive and significant connection with academic performance. All 20 interviewees suggested that their engagement was a positive driver of their academic

performance. This was attributed to them being motivated to invest the necessary amount of time and effort into preparing for their assessments and applying their knowledge “appropriately”. Some illustrative quotes were:

[...] I took some interesting issues away from all classes and applied them towards my exam revision... My final mark was higher than I expected, so think my engagement made a massive difference (Interviewee 4).

[...] I was really engaged and interested in every lecture... My exam performance was much better than I thought it would be, largely because I was so engaged (Interviewee 19).

In short, the qualitative evidence highlighted the reasons behind the statistical results. These findings are discussed in the following section, together with some practical implications that are targeted towards educators in the higher education sector.

Discussion and practical implications

Grounded in Bloom's Taxonomy, the objective of this current study was to examine the tools that educators can use to enhance the engagement and academic performance of non-marketing students taking marketing courses. After undertaking a mixed methods approach, the following discussion points contribute to the extant literature. First, somewhat surprisingly, integrating theory with practice was found to have a negative and non-significant relationship with engaging non-marketing students (to some extent challenging Smart *et al.*, 1999; Serow, 2000). The follow-up interviews indicated that effectively integrating theory with practice is a potentially difficult task to achieve and needs to be undertaken in different respects when teaching non-marketing majors. Applications of theory should be tailored to students' respective contextual interests (e.g., engineering and sports), rather than providing generic illustrations. By offering non-marketers opportunities for sector specialist guest lectures, they can receive first-hand knowledge about the importance of marketing theories and concepts to the industries that they are likely to work in after they graduate. Instead of focusing on case studies and research-led approaches (as per Lubbe, 2015), it would be beneficial for educators to also utilize “appropriate” guest speakers to

highlight how they implement **theoretical concepts associated with** marketing in their industry-specific roles.

Second, as expected, discussion-oriented interactions yielded a positive and significant connection with engaging non-marketing students. By developing a rapport with non-marketing specialists, educators can boost their students' socialization skills, encourage them to think critically, and tease out more in-depth answers related to their interests than if such discussions were not offered (Nicol and Boyle, 2003; Carrie *et al.*, 2017). From the qualitative evidence, examples were provided regarding how educators can offer discussion-oriented interactions that engage these audiences. Assuming time permits, these included instructing students to participate in small group exercises within their lectures to apply certain theories and concepts towards their subject backgrounds (**e.g., engineering and sports**). Discussion-oriented interactions were a good opportunity for non-marketers to increase their understanding of certain issues from peers and digest facets of this unfamiliar subject area. If these discussion-oriented interactions were not offered, it is inferred that the students would have been less engaged, as they might struggle to keep up with the course content. Academics should consider adapting their curriculums to facilitate these discussion-oriented interactions.

Third, **as anticipated**, relating marketing to non-marketing subjects was found to have a positive and significant link with engaging non-marketing students. **It is again noted that this issue is similar but different to the theory-driven notion of H1.** Although not surprising, if academics can relate marketing to students from non-marketing subject specialisms, they can more easily appreciate how such theories and concepts link with their subject backgrounds. This is an important issue, given that marketing is an organization-wide behavior (**see Kotler and Keller, 2010; Cadogan *et al.*, 2012**). Indeed, students can acknowledge the value of the subject for when they enter full-time employment or become entrepreneurs (Lamont and Friedman, 1997). The follow-up interviews highlighted that non-marketing majors require frequent **practical** illustrations of how businesses in their subject area have succeeded (or failed) in their marketing activities. While subject specialists might be able to easily connect marketing concepts to

practical illustrations, non-marketers are likely to require a lot more examples that surround their subject backgrounds. This should be a consideration when developing and implementing curriculums that are suited to the needs and abilities of non-marketers (extending Barr and McNeilly, 2001; Crick, 2018).

Fourth, not surprisingly, engaging non-marketing students had a positive and significant link with academic performance. If engagement takes place with non-marketing students, they are likely to be more motivated to prepare for their assessments, participate with course content, read the necessary material, and understand the core topics (Geddes, 2009; Lee, 2014). The qualitative evidence supplemented these assertions. Fifth, turning to the control paths, class time was found to have a positive and significant relationship with academic performance. This result supports the view that as students experience more time in their learning environments, they can obtain valuable information to help them to improve their academic performance (Kember *et al.*, 1995). For the other control variables, student age and years of marketing education had non-significant links with academic performance – signifying their lack of importance in this capacity (to some extent contrasting Richardson, 1995; Crick, 2018).

These issues did not arise during the follow-up interviews, implying that they were relatively minor factors in this capacity. Sixth, collectively, these teaching and learning tools are anticipated to assist educators to meet the student-oriented learning environment that is becoming increasingly common in the higher education sector (Serow, 2000; Strong and Beetles, 2017).

Seventh, this current paper has strengthened the wider marketing education literature by utilizing Bloom's Taxonomy as a theoretical lens to explore how marketing can be taught to non-subject specialists. The reason being is that this pedagogical lens evaluates how students do not simply "learn" their course material (a decidedly abstract notion), but instead, can demonstrate their learning via a series of "higher-order skills" (Bloom, 1984; Anderson *et al.*, 2001; Halawi *et al.*, 2009). Bloom's Taxonomy was particularly relevant because it allowed the researchers to conceptualize, operationalize, and test how educators can best-teach marketing to non-marketers – by focusing on how such approaches might lead to increased

student engagement and academic performance (building upon Bloom, 1956; Hurst, 1981; Nkhoma *et al.*, 2017). Some limitations and avenues for future research follow in the next section.

Limitations and avenues for future research

While this current investigation has strengthened the broader marketing education literature, there are certain limitations that facilitate future research directions:

1. The survey and archival data (alongside the follow-up interviews) originated from undergraduate students in the United Kingdom. If scholars build upon this article, they are advised to collect data from a mixture of undergraduate and postgraduate students. This will allow them to better understand whether there are any differences between non-subject specialist students across these levels of higher education.
2. Future research should also address whether the same results apply to non-marketing students in other countries (via cross-national institutional comparisons). In this capacity, it would be helpful to commence with countries exhibiting similar cultures and/or economies (e.g., the United Kingdom and the United States). This will help researchers to avoid comparing “apples with oranges”. Then, cross-national comparisons could be made between countries that have varying differences.
3. Academics might choose to replicate this study using an experimental methodology. For instance, research could be undertaken regarding how marketing majors respond to such teaching and learning strategies compared to non-marketing majors.
4. The conceptual model was somewhat basic because it contained a series of research hypotheses and control paths that were all linear in nature. This was a purposeful aspect of the study. Yet, there could be ways to unpack the conceptual model in future research. As an illustration, this could involve examining key moderators and/or mediators that might influence such relationships (for instance, to determine whether there are factors impacting the association

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between integrating theory with practice and engaging non-marketing students). Equally, the research team could have controlled for more factors (e.g., whether students are home or international, their genders, degree programmes, and so on).

In closing, these limitations do not pose serious concerns, but rather, provide ample scope to extend this study's contribution in future education and training research.

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Figure 1. Conceptual model

Table 1. Characteristics of the two modules

Characteristics	Module 1	Module 2
Total number of students in the modules	219	140
Number of academics in the module team	2	2
Undergraduate degree-level	Second-year	Second-year
Undergraduate degree status	Full-time	Full-time
Number of textbooks	2	2
Degree credits	10	10
Proportion of non-marketing students	100%	100%
Proportion of international students	32%	40%
Primary background of the cohort	Engineering	Sports
Core teaching and learning method	Lectures	Lectures
Online lecture recordings	Yes	Yes
Number of teaching hours per week	2	2
Number of teaching weeks	11	11
Number of student assessments	1	1
Type of assessments	Exam (two hours)	Exam (two hours)
Note: Module 1 was the “Principles of Marketing” and Module 2 was the “Principles of Marketing for Sport and Leisure”. Although the data were collected from the non-marketing students during Semester 2 (while they completed the respective “The Marketing Mix” and “The Marketing Mix for Sport and Leisure” courses), their experiences from their Semester 1 modules were used in the model-testing stage. This information was generated from the students’ digital records, as well as the online learning platform used for the two modules.		

Table 2. Exploratory factor analysis model

Items	Factors					
	1.	2.	3.	4.	5.	6.
ITP_1	0.65	0.43	0.32	-0.01	0.39	-0.02
ITP_2	0.65	0.44	0.36	0.12	0.35	0.10
ITP_4	0.66	0.40	0.39	0.17	0.32	0.03
DOI_2	0.24	0.82	0.25	0.12	0.26	0.01
DOI_3	0.24	0.83	0.12	0.22	0.24	0.05
DOI_4	0.15	0.84	0.30	0.10	0.28	-0.01
RMOS_3	0.19	0.26	0.87	0.11	0.22	-0.02
RMOS_4	-0.22	0.17	0.87	0.18	0.29	0.06
RMOS_5	0.18	0.24	0.84	0.15	0.33	0.07
ENG_A_1	0.08	0.10	0.18	0.90	0.07	0.20
ENG_A_2	0.04	0.24	0.14	0.86	0.10	0.25
TIME_1	0.21	0.24	0.33	0.18	0.82	0.02
TIME_2	0.23	0.37	0.38	0.08	0.75	0.03
TIME_3	0.25	0.40	0.30	-0.02	0.76	0.01
INF_1	0.08	-0.10	0.02	0.39	-0.10	0.80
INF_2	0.11	0.05	-0.07	0.19	0.04	0.88
INF_3	-0.12	0.05	0.13	-0.02	0.07	0.88
Note: The bold text represents the extracted measurement items.						

Table 3. Measurement model

Items	Standardized factor loadings (λ_x)		Standardized error variances ($\theta\delta$)	
	λ_x	t	$\theta\delta$	t
ITP_1	0.88	18.84	0.23	7.67
ITP_2	0.93	Fixed	0.14	5.97
ITP_4	0.90	20.38	0.18	7.04
DOI_2	0.92	17.44	0.16	6.03
DOI_3	0.87	Fixed	0.25	7.58
DOI_4	0.91	17.30	0.17	6.20
RMOS_3	0.92	26.19	0.15	7.80
RMOS_4	0.97	Fixed	0.06	4.56
RMOS_5	0.96	31.62	0.09	5.92
ENGA_1	0.90	15.06	0.19	4.52
ENGA_2	0.90	Fixed	0.19	4.43
TIME_1	0.89	20.68	0.21	7.65
TIME_2	0.95	Fixed	0.09	4.56
TIME_3	0.90	21.40	0.20	7.41
PERF	1.00	Fixed	0.00	Fixed
AGE	1.00	Fixed	0.00	Fixed
YEARS	1.00	Fixed	0.00	Fixed
MARKER	1.00	Fixed	0.00	Fixed

Note: The critical t -value was 1.65 (5%, one-sided).

Table 4. Purified multi-item scales

Scales	Alpha (α)	Items (n)	CR	AVE
Integrating theory with practice	0.93	3	0.93	0.82
Discussion-oriented interactions	0.93	3	0.93	0.81
Relating marketing to non-marketing subjects	0.96	3	0.96	0.90
Engaging non-marketing students	0.90	2	0.96	0.82
Class time	0.94	3	0.93	0.83

Note: The scale reliabilities for the single-indicators cannot be calculated. Yet, as the multi-item operationalizations exceeded the minimum benchmarks, the scale reliabilities were assumed to be acceptable. The informant quality scale was condensed into a single-item measure, as it was only used as a robustness check (Crick, 2021).

Table 5. Bivariate correlations

Latent variables	Mean	SD	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. ITP	4.84	1.34	1.00								
2. DOI	4.77	1.30	0.77**	1.00							
3. RMOS	4.52	1.47	0.71**	0.57**	1.00						
4. ENGA	3.03	1.47	0.28**	0.38**	0.37**	1.00					
5. PERF	4.30	0.55	0.43**	0.40**	0.39**	0.35**	1.00				
6. AGE	3.02	0.08	0.27**	0.27**	0.25**	0.49**	0.24**	1.00			
7. TIME	4.81	1.28	0.81**	0.70**	0.70**	0.30**	0.37**	0.29**	1.00		
8. YEARS	0.55	0.96	0.24**	0.24**	0.29**	0.57**	0.22**	0.64**	0.23**	1.00	
9. MARKER	5.74	0.90	-0.03	0.04	0.09	0.32**	-0.15*	0.11†	-0.02	0.30**	1.00
Note: † $p < 0.10$; * $p < 0.05$; ** $p < 0.01$ (one-tailed tests). The informant quality scale was not used in the model-testing stage, but rather, served as an instrument for the robustness checks.											

Table 6. Structural model

	Paths	<i>t</i>
Research hypotheses		
H1. Integrating theory with practice has a positive relationship with engaging non-marketing students	-0.15	-0.84
H2. Discussion-oriented interactions have a positive relationship with engaging non-marketing students	0.36	2.50
H3. Relating marketing to non-marketing subjects has a positive relationship with engaging non-marketing students	0.31	2.71
H4. Engaging non-marketing students has a positive relationship with their academic performance	0.26	3.31
Control paths		
Student age	0.04	0.51
Class time	0.29	3.75
Years of marketing education	-0.01	-0.17
Note: The critical <i>t</i> -value was 1.65 (5%, one-sided, since the paths were directional).		

Table 7. Characteristics of the interviewees

Interviewees	Ages	Genders	Years of marketing education	Statuses	Subject specialisms
1	20 years, 6 months	Male	2 years, 2 months	Domestic	Civil engineering
2	21 years, 2 months	Male	1 year, 10 months	Overseas	Sports science
3	19 years, 10 months	Female	1 year, 5 months	Domestic	Sports science
4	20 years, 5 months	Male	2 years, 6 months	Domestic	Sports technology
5	20 years, 3 months	Female	2 years, 2 months	Overseas	Civil engineering
6	20 years, 11 months	Female	1 year, 11 months	Overseas	Sports management
7	21 years, 3 months	Female	1 year, 3 months	Overseas	Sports technology
8	19 years, 11 months	Male	1 year, 9 months	Domestic	Civil engineering
9	20 years, 9 months	Male	1 year, 5 months	Overseas	Civil engineering
10	20 years, 8 months	Female	2 years, 7 months	Overseas	Mechanical engineering
11	21 years, 4 months	Female	2 years, 3 months	Overseas	Mechanical engineering
12	21 years, 6 months	Female	2 years, 4 months	Domestic	Sports science
13	20 years, 10 months	Male	2 years, 6 months	Domestic	Mechanical engineering
14	20 years, 5 months	Female	1 year, 10 months	Overseas	Civil engineering
15	19 years, 4 months	Female	1 year, 11 months	Overseas	Sports management
16	20 years, 10 months	Male	3 years, 2 months	Domestic	Civil engineering
17	20 years, 11 months	Male	2 years, 10 months	Domestic	Mechanical engineering
18	21 years, 2 months	Male	1 year, 7 months	Overseas	Sports technology
19	20 years, 6 months	Female	1 year, 2 months	Overseas	Sports technology
20	20 years, 9 months	Female	2 years, 6 months	Overseas	Sports management

Note: The students' ages, genders, statuses, and subject specialisms were accessed from the interviewees' digital records. The interviewees' years of marketing education was recorded during the primary (qualitative) data collection stage. The students' final marks and country of origin were not disclosed for ethics reasons.

Appendix 1. Adapted version of Bloom’s Taxonomy