

**Hacking the marketing education system: Using Macromarketing and the Circular**

**Economy to make a better world**

Editor's Corner

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## **Hacking the marketing education system: Using Macromarketing and the Circular Economy to make a better world**

We need to “hack the system” to infuse environmental and social issues into marketing education. This requires reconfiguration and restructuring of marketing education, as expectations of key stakeholders—students, businesses, NGOs, governments, communities, and the environment—have changed to demand social impact and systemic thinking. However, pressing collective-wellbeing issues, which treat each person as a whole within their context, are still underrepresented in the curricula. Climate change, pandemics, racism, discrimination, social justice, poverty, mental health, and capitalism, along with political tension and division, are the top issues among young adults today (Annie E. Casey Foundation, 2021; Jenkins & Galvin, 2020). Such change implores educators and marketers to engage in macro-level thinking in the traditionally taught managerialist (micro) subject of marketing. The large-scale action required for curriculum change is only possible with equally substantial changes in mindset. Through a Macromarketing lens, marketing educators can hack the system and create real change. They can do this by overhauling the marketing micromanagement rhetoric that currently dominates the curricula of business schools.

Macromarketing is the study of marketing systems. Specifically, Macromarketing considers the functioning of marketing systems and how these marketing systems interact with society (Hunt, 1981). By focusing on this interaction, Macromarketing scholars have investigated a range of outcomes, such as (a) the effects of externalities (costs or benefits of economic activities experienced by “unrelated” third parties), (b) economic development, (c) poverty alleviation, (d) globalization, (e) sustainability (including consumption), (f) quality of life, (g) distributive justice, (h) consumer vulnerability, (i) natural and human-induced disasters, and (j) marketing ethics and responsibility (DeQuero-Navarro et al., 2020). The

“purpose of Macromarketing is to save the world” (Fisk, 2001, p. 121); that is, to envision a sustainable, ethical, peaceful, and equitable world. Thus, key to Macromarketing is sustainability—in its broadest and most holistic definition (Mittelstaedt et al., 2014). It is with this in mind that we introduce this special issue on *Hacking the System: Sustainability and Macromarketing in Marketing Education*.

The aim of this special issue is to add to available resources with scholarship on envisioning, proposing, and providing evidence for “hacking” marketing education for the benefit of society, students, business, and educators. To introduce this special issue, we begin by exploring the status quo of marketing education and efforts toward reshaping it through Systems Thinking and Sustainable Education approaches. We argue for a circular economy framework with accountability as an embedded guiding principle. Last, we provide pedagogical suggestions based on *transformative learning* (advanced in Sustainable Education; Sterling, 2011) to *unteach* the Dominant Social Paradigm (DSP) elements of marketing.

### **Reshaping Marketing’s Paradigm**

#### **Dominant Social Paradigm and Re-examining the Status Quo**

Critical to understanding—and hence improving—marketing education is recognizing its establishment in the DSP. The DSP is defined as the established undercurrent of beliefs, institutions, habits, stories, and norms, which provide the social lenses “that organize the way people perceive and interpret the functioning of the world around them” (Milbrath, 1984, p. 116). The DSP shapes our ideology of success, happiness, consumption, the role of business, and marketing’s goals (Kilbourne et al., 1997). The established DSP, which dominates global marketing education, is based on the “enlightened liberalism” of Western industrial nations and focuses on continuous economic growth, limited government, profit maximization,

individualism, self-interest, technological advancement to solve environmental problems, and happiness through material accumulation (Kilbourne et al., 2001).

The DSP maintains its status quo dominance through reproduced and reinforced actions, terms, success stories, and textbooks and an education system infused with social and structural expectations. This gives the DSP a veneer of fact and pre-determinism. Within the marketing context, the DSP shines brightly through the very foundations of the marketing management course and its textbooks (Kilbourne et al., 1997; Wilkie & Moore, 2006). An introductory marketing course focuses on the marketing environment (with PESTLE—Political, Economic, Social, Technological, Legal, Environmental—factors), segmentation, targeting, and positioning, and the marketing mix’s 4Ps (promotion, place, product, price). All which have a linear focus (take-make-waste model) focused on the immediate needs of individual consumers, prioritizing their needs and wants over others—human and non-human (Kilbourne et al., 1997; Wilhelm, 2008).

The 4Ps and marketing mix, for example, were introduced in the early 1960s and became quickly established in textbooks across the world (Goi, 2009). Referred to as the 4Ps makes the marketing mix remarkably catchy; it is simple to represent visually and provides an easy structure for discussing marketing principles (Yudelson, 1999). Various perspectives in marketing, such as service and technology industries, have drawn attention to the shortcomings of the 4Ps, including its strong consumer goods focus, absence of international considerations, and lack of empathetic approach to marketing systems (Goi, 2009). For decades, marketing scholars, instructors, and practitioners have questioned the need to update, decouple, or disrupt the DSP and use of the 4Ps (Goi, 2009; Kennedy et al., 2020; Peterson, this issue). In the desire to improve on the 4Ps, the marketing mix has been extended in various ways, such as the addition of a fifth, sixth, and seventh “P” (people, process, and

physical evidence/environment) or reworking to the 4Cs (consumer value, cost, convenience, and communication).

The silo domains of the 4Ps oversimplify the marketing processes and instruct students to view marketing action as piecemeal, rather than through a holistic Systems Thinking approach. Critical examination of the DSP reveals a fundamental issue—the 4Ps is a categorization that isolates, rather than integrates, the domains of the marketing mix. Indeed, Wilhelm (2008) points to the need to re-examine the validity of the DSP as “unsustainable myths.” Fundamentally, the 4Ps and its various incarnations fail to illustrate the *connective tissue* important to the holistic, sustainable, and beneficial functions of marketing.

### **Importance of Systems Thinking and Sustainable Education**

Marketing must operate with an understanding of its involvement and impact on the social and environmental systems. This is at the root of the Macromarketing perspective. Appreciating systems and the different ways of looking at the world can free us from the limitations we, as marketing educators and practitioners, put on ourselves. Systems are sets of interconnected entities; thus, businesses are just one entity within the larger social, cultural, and environmental systems (Bansal & Song, 2017; Kramer & De Smit, 2012). These entities are interlinked, and if change is instigated within one, shock waves will affect the others. Such feedback loops are an essential part of interactions in and among systems and provide the ability to understand and bring about change. Self-regulation of actors and entities is achieved through feedback loops (Anderson & Johnson, 1997). Thus, systems analysis researches these feedback loops as interactions that constantly evolve or maintain a system, their behaviors and goals (Kennedy, 2017; Meadows, 1997; Skyttner, 2005). It is important to look at the wider picture—not only those systems that directly influence the marketplace (i.e., competitor, supplier, and policy entities), but also systems that affect human and ecological wellbeing.

Systems Thinking focuses on identifying and understanding the dynamics found in and among these entities. It is a holistic type of thinking that attempts to view all entities, their drivers, facilitators, enablers, and deterrents (along with their power dynamics and narratives; Kennedy et al., 2020; Layton, 2015), as a map or structural diagram to convey them as a system. This enables identification of appropriate social action fields to leverage change (Kennedy, 2016; Layton, 2015). Mapping may include control mechanisms as well as regulatory forces, along with goals and resources (Layton, 2015; Skyttner, 2005), but looks for dynamic and interdependent factors to drive change (Anderson & Johnson, 1997; Domegan et al., 2017). Examples of a Systems Thinking approach in the economic system are the Circular Economy (Corvellec et al., 2020) and indigenous understandings of the social-natural system (Rout & Reid, 2020; Taylor, 2016). An understanding of the feedback loops that inhibit organizations from introducing such models as the Circular Economy can provide leverage points for change. Within the current DSP, the interactions and consequences of system dynamics are rarely considered. Systems Thinking requires a perspective that sees the “forest *for* the trees” while acknowledging the trees in the forest. Finding understanding from these various vantage points can be challenging for educators and students alike.

Sustainability education scholars have provided reflections on how to integrate systems approaches and sustainability principles into the classroom, which can shed light on how marketing educators can do the same (Kemper, Ballantine, & Hall, 2019; Kemper et al., 2020). Sustainability education’s key components are attitude, skills (such as communication and critical analysis), and knowledge (such as ecological limits and boundaries, and environmental management systems and practices; Hesselbarth & Schaltegger, 2014; Stubbs, 2013; Thomas, 2004). UNESCO (2004) believes sustainability education should “emphasize experiential, inquiry-based, problem-solving, interdisciplinary systems approaches and critical thinking” (p. 22). Similarly, Tilbury and Cooke (2005) promulgated the *capacity building*

skills of critical thinking, reflection, innovation, and problem-solving, while transdisciplinary, transformative, anticipatory, experiential, participatory, collaborative, and social learning have been suggested by Wals (2009, 2011). Similar reflections have been observed in business studies (Kearins & Springett, 2003).

Sterling (2004, 2011) discussed the three levels of learning in sustainability education. The first two work within the current paradigm (DSP), while the third level proposes creating a new paradigm. Thus, the first level, also known as single loop learning or Education *about* Sustainability, results in “doing things better” and is a passive knowledge transfer. This implies a “bolt-on” approach to learning while maintaining the DSP (Sterling, 2004). Second-order learning is about “doing better things,” termed Education *for* Sustainability, which integrates (and questions) sustainability more comprehensively, including its various definitions, objectives, and values (Sterling, 2011). For example, Watson et al. (this issue) highlight the value of engaging with contrasting and complementary perspectives in marketing to understand system complexity and appreciate both the macro and the micro lenses. However, while remaining within the DSP, it recognizes that it has limits (Sterling, 2004). Third-order learning—Sustainable Education—is transformative by “seeing things differently.” It not only recognizes the different values and limits of the DSP, but transforms it (Sterling, 2004) and is thus said to be transformational learning (Sterling, 2011). The logic of this is that the first two levels do not change the paradigm because they work at learning within the DSP. Instead, this third level initiates critical reflection on the DSP and paradigm change to transform it (Sterling, 2004). Therefore, a number of scholars have advocated a Systems Thinking approach to sustainability education to aid in this goal (Porter & Córdoba, 2009; Remington-Doucette et al., 2013; Sterling, 2004; Tarrant & Thiele, 2016; Wiek et al., 2011).

Table 1 displays a summary of the key differences among the DSP, Sustainable Education, and Systems Thinking, and the common overlap between the latter two. As the table demonstrates, there is a significant departure in the systems approach and Sustainable Education from the DSP. However, the principles of Sustainable Education and Systems Thinking provide a compatible and coordinated approach for envisioning and implementing a transformative agenda in marketing education (outlined in the next section). Systems Thinking and Sustainable Education require a focus on self-awareness, empathy, examination of the status quo, and empowerment for change/disruption, which are not present in the DSP.

<Insert Table 1 about here>

To date in marketing education, some scholars have incorporated sustainability and Macromarketing perspectives into courses, mostly with “first-order” learning. The focus has largely been on “greening” the 4Ps as a nod toward sustainability (Borin & Metcalf, 2010; Wilhelm, 2008). Macromarketing education has attempted to move toward “second-order” learning with the vision of “third-order”—learning transformation. Current materials include a Macromarketing reading list (Shapiro, 2006), the launch of a textbook (Peterson, 2013), and perspectives on an experiential learning project (Radford et al., 2015), along with course development guides (Radford & Hunt, 2008a, 2008b; Shapiro, 2008; Shapiro et al., 2021). For example, Shapiro et al. (2021) examined methods, such as the creation of social marketing plans, controversy-based approaches to debates, group model building, and causal loop diagrams, to guide student awareness of Macromarketing and the UN’s Sustainable Development Goals. They also created Pedagogy Place, an online repository for Macromarketing teaching materials (<http://pedagogy.macromarketing.org/>). Watson et al. (this issue) highlight the use of an “expanded voice” perspective, which includes alternative but complementary micromarketing and macromarketing class sessions, readings, and materials.



However, beyond Macromarketing, overall within the marketing discipline a weak and non-transformative approach to sustainability and social issues is entrenched in the curricula of both marketing and business schools. Current teaching and materials are based on the free market economic growth imperative (Kemper, Ballantine, & Hall, 2019; Landrum & Ohsowski, 2017; Springett, 2010). Brocato et al. (this issue) provide a systematic analysis of sustainability-related marketing syllabi from AACSB-accredited business schools worldwide, finding most courses are taken in students' final years (300 or 400 level) and are limited toward corporate social responsibility, strategy, stakeholder management, sustainability metrics, and marketing communication. However, growing works on sustainability education in business studies are heavily geared toward students engaging in critical reflective thinking about the relationships between economy, ecology, and society (e.g., Kearins & Springett, 2003; Kurucz et al., 2014; Marshall et al., 2010; Springett, 2005, 2010; Springett & Kearins, 2001; Stubbs & Cocklin, 2008), with Stubbs (2013), Porter and Córdoba (2009), and Bradbury (2003) specifically advocating a Systems Thinking approach.

### **Operationalizing “Hacking the System”**

We propose that hacking the status quo through Sustainable Education and Systems Thinking can provide a Macromarketing lens to marketing education. In this final section, we (a) introduce the Circular Economy as a Systems Thinking framework with the principle of accountability as a guiding basis for Systems Thinking and action and (b) provide pedagogical practices to implement these elements into marketing education to achieve transformative learning (see Figure 1). Overall, the aim of Sustainable Education and Systems Thinking is to guide students to rethink how marketing interacts and affects its natural and social environment as such thinking will result (hopefully) in a transformative learning experience, as often this may include un-teaching marketing foundations related to the DSP.

<Insert Figure 1 about here>

## **The Circular Economy as a Framework**

A framework utilizing the Circular Economy can provide a starting point to understand the consumption and production system and its feedback loops. The Circular Economy provides an alternative (and potentially transformative approach) to the take-make-dispose (linear) model by extending product lifespans and keeping materials flowing in the economic system (Korhonen et al., 2018). Materials can keep flowing through the biological (compost, feedstock) and technical (maintain, reuse, refurbish, remanufacture, recycle) cycles. The Circular Economy forces us to think of the production and consumption of goods in relation to the natural and social systems. Perhaps surprisingly, there is limited business education incorporating a Circular Economy perspective (i.e., Kopnina, 2019). Rather, this broader perspective has been used in other applied fields of study, namely, curricula aimed at design and engineering students (Kirchherr & Piscicelli, 2019). The 10 strategies of the Circular Economy provide a new way to produce, promote, distribute, and price products and services (see Table 2). Introducing this as a mainstay in marketing courses would allow for transformations in student thinking around marketing supply chains and the environment. Specifically, the Circular Economy principles and strategies highlight the Sustainable Education skills and knowledge needed for such a transformation.

The Circular Economy not only provides a Systems Thinking approach to production and consumption, it also provides a framework for economic and market change with positive implications and “hidden” implications where students will need to reflect on the shortcomings of the circular perspective—a key aspect of Sustainable Education is critical thinking and reflexivity. Such shortcomings are related to the DSP, with continuous consumption and economic growth still embedded in most approaches, and a lack of social and cultural sustainability (Korhonen et al., 2018). In short, it is potentially transformative. The Ellen MacArthur Foundation provides many resources for tertiary educators

(<https://www.ellenmacarthurfoundation.org/>) and offers an introduction to Systems Thinking, providing a firm foundation for students to understand marketing's role and place in society.

<Insert Table 2 about here>

### **Accountability as a Guiding Principle**

In furthering the cause and disrupting the status quo, we propose hacking the 4Ps and other marketing mix incarnations by instilling a core of *accountability* for people and the planet, which is inherent to Systems Thinking. For understanding of where externalities of the marketing system lie and learning how to make a positive contribution to the societal and ecological systems, Systems Thinking needs to be applied to the marketing concept and marketing education (Peterson, this issue). This combination of Systems Thinking and accountability has the ability to facilitate transformative learning. Accountability, as a form of responsibility, has both individual and collective meaning and positions the marketing mix as action and consequence oriented. Importantly, accountability needs to be framed through a systems approach—with responsibility toward society, the environment, customers, profit sharers, and self. Most importantly, it does not see externalities as negative effects of the marketing system that are “out there.” Accountability places responsibility for externalities firmly on those who produce them (Shearer, 2002).

Such externalities relate to environmental and social *costs* during not only the production process (e.g., water pollution), but also consumption (e.g., health-related costs of obesity) and disposal (e.g., plastic pollution in seas). If we consider the business as part of the societal and ecological systems, negative effects are not experienced by an “unrelated” party. This contrasts with the DSP negative cost framing, which “removes” the costs from the business's domain and places them on society (Dahlman, 1979). Thus, in our view, accountability for externalities is then not a moral stance; it is good business and leads to societal wellbeing. Accountability eliminates the excuse of marketers, educators, business

entities, and organizational decision-makers from being imprudent or isolated from social, ecological, and equitable long-term consequences. It also provides an opportunity for students to transform their thinking away from these excuses.

### **Transformational Learning as the Outcome**

When “hacking” mainstream marketing courses, Macromarketing educators should focus on achieving transformative learning. As discussed by Sterling (2004, 2011), Sustainable Education (third-order learning) is about a transformation in a learner’s perspective. Transformative learning is the process of change within the learner’s frame of reference (e.g., associations, concepts, values, feelings, and conditioned responses; Mezirow, 1991, 1997). These frames of reference provide assumptions through which learners understand experiences and shape expectations, perceptions, and feelings. Such frames of reference may refer to marketing management concepts embedded in the DSP (Kilbourne et al., 1997), such as customer responsabilization (Schwarzkopf, 2011) and homo-economicus (self-interested, rational consumer; Gintis, 2000), as displayed in Table 1. Students must understand their own worldviews (Peterson, this issue) before they can begin to understand the frames of reference used in business and marketing (e.g., DSP). Individual preconceptions, such as the assumptions tied to previous (micro) marketing courses (i.e., customer responsabilization), are hard to change as individuals are often resistant to ideas that fail to fit our preconceived notions and paradigms (Mezirow, 1997). Students must engage in critical thinking to make their own conclusions rather than Macromarketing education being another form of indoctrination; in other words, students must make up their own mind (Peterson, this issue). Education can have a transformational impact on students, with research demonstrating community sustainability projects affecting views on poverty (Seider, Gillmor, & Rabinowicz, 2011), Macromarketing courses changing DSP beliefs (Kilbourne &

Carlson, 2008), and courses changing sustainability beliefs (e.g., Nousheen et al., 2020; Tang, 2018).

To foster transformative learning, we recommend utilizing tactics that expand the learner's experience beyond the scripted classroom model. These include interdisciplinary teaching, design thinking, community-service projects, experiential learning, reflective assignments, and case studies. Table 3 summarizes the tactics for learning for a Systems-Macromarketing approach to any marketing curriculum with a Circular Economy base.

Interdisciplinary knowledge is needed to teach Macromarketing as it connects to many different concepts, which have strong disciplinary ties, connecting to ecological economics, sociology, psychology, and social movements, for example. To facilitate learning, students must experience, reflect, and incorporate their learnings (Kolb, 1984). Thus, as discussed by Peterson (this issue) and implemented by Samuel et al. (this issue) and Manna et al. (this issue), educators need to engage students in real-world assignments, consultancy projects, field trips, and simulations, which preferably are linked to (tangible) community projects and outcomes (Kemper, Ballantine, & Hall, 2019). Samuel et al. (this issue) demonstrate how a field trip to the world's "greenest" football club allows students to witness and explore a Macromarketing system, advance their ability to critically evaluate meso- and micro-level practices in the context of sustainability, and critically evaluate the responses of diverse "others." Such hands-on experiences, as well as reflecting on their own worldviews and the DSP, can encourage critical thinking and reflective practices in student learning. In this way, educators may utilize design thinking to empathize and provide a holistic and integrative approach to solving wicked problems. Manna et al. (this issue) reflect on a cross-course experiential learning initiative that drew on design thinking to encourage students to develop an appreciation for macro-level sustainability issues. They demonstrate the value of design thinking when faced with real community projects and the value of cross-course fertilization.

Educators can also harness business case studies that highlight the various roles marketers and businesses can play in solving socio-ecological problems.

<Insert Table 3 about here>

### **Concluding Remarks**

As a current “add-on,” sustainability and Macromarketing issues in business are viewed as secondary (or tertiary) goals to maintaining company profits and managerial status quo. They are commonly considered superfluous work in strategy implementation and only encouraged when touting the company bottom line or a win–win scenario (Springett, 2010). Consequently, climate change, inequality, and other socio-ecological issues are considered uncontrollable, abstract, and something to adapt to (and profit from) rather than address through substantive behavioral change in business supply chains and consumption practices (Linnenluecke et al., 2013). This warped view necessitates businesses—and marketing education—to look outside themselves and enhance their responsibility. Neglecting a big picture view, and failing to integrate societal issues into marketing education, will cause the discipline to become increasingly irrelevant (Bradshaw & Tadajewski, 2011; Holbrook, 2005). Given that sustainability issues arise from the interaction of social systems with the natural environment, Sustainable Education and Systems Thinking is a particularly relevant approach to both solving sustainability issues and broadening the thinking of future marketers. We provide a pathway toward “hacking” the marketing education system for transformative learning. We hope this inspires more educators and scholarly works to engage with transformational change to “hack the system.”

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**Table 1. Comparison of Systems Thinking, Sustainable Education and the DSP**

	<b>DSP</b>	<b>Systems<sup>1</sup></b>	<b>Sustainable Education</b>
Principles and assumptions	<ul style="list-style-type: none"> <li>– Endless limit to growth</li> <li>– Consumerism</li> <li>– Customer responsabilization</li> </ul>	<ul style="list-style-type: none"> <li>– Densely connected networks of agents, self-organization, and emergence</li> <li>– Ongoing learning and bottom-up evolution</li> <li>– Meaning is subjective, socially constructed, and not self-evident</li> <li>– Systems and boundaries in conflict require further critical inquiry</li> </ul>	<ul style="list-style-type: none"> <li>– Recognize values of stakeholders</li> <li>– Recognize limits to the DSP</li> <li>– ‘Seeing’ our worldview rather than ‘with it’</li> </ul>
Concepts and theories	<ul style="list-style-type: none"> <li>– Hyperconsumption</li> <li>– Profit maximization</li> <li>– Homo-economicus</li> <li>– Neoclassical economics</li> <li>– Laissez-faire politics</li> <li>– Reductionism</li> <li>– Positivism</li> <li>– Objectivism</li> </ul>	<ul style="list-style-type: none"> <li>– Feedback loops, across/multiple scales (local to global)</li> <li>– Coupled domains (society, environment, economy, technology, etc.)</li> <li>– Social system (values, preferences, needs, perceptions, politics, laws, institutions, etc)</li> <li>– Complexity theory</li> <li>– Non-linear systems</li> <li>– Complex adaptive systems</li> <li>– Soft systems theory</li> <li>– Critical Systems Thinking</li> <li>– Symbolic interactionism</li> </ul>	<ul style="list-style-type: none"> <li>– Third-order learning</li> <li>– Holism</li> <li>– Systemisation</li> <li>– Critical subjectivity</li> <li>– Reflexivity</li> </ul>
Sustainability	<ul style="list-style-type: none"> <li>– Sustainable development as economic growth is</li> </ul>	<ul style="list-style-type: none"> <li>– Raise awareness through self-reflection and</li> </ul>	<ul style="list-style-type: none"> <li>– Paradigm shift/transformation</li> </ul>

<sup>1</sup> Adapted from (Porter & Córdoba, 2009), we have combined Interpretive and Complex Adaptive Systems.

	<p>seen as part of the solution</p> <ul style="list-style-type: none"> <li>– More information and changing values will result in consumers demand and thus, business responds</li> <li>– Improved technology, increased efficiency</li> <li>– Instrumental value of nature</li> </ul>	<p>appreciation of natural and other systems</p> <ul style="list-style-type: none"> <li>– Collaborative stakeholder decision-making and coordinated action</li> <li>– Learning networks create sustainable value in new or existing products and processes</li> <li>– Productive innovations from the bottom up</li> </ul>	<ul style="list-style-type: none"> <li>– Ecological limits (i.e., limits to growth)</li> <li>– Inherent worth of nature</li> </ul>
Education	<ul style="list-style-type: none"> <li>– Transmissive</li> <li>– Practical</li> <li>– Work ready professionals</li> </ul>	<ul style="list-style-type: none"> <li>– Self-understanding</li> <li>– Understand stakeholders and their worldview</li> <li>– Collaboratively made decisions, build consensus</li> <li>– Identify sites of leverage, empower learning, and design incentives</li> </ul>	<ul style="list-style-type: none"> <li>– Understand stakeholders and their worldview</li> <li>– Creative</li> <li>– Reflexive</li> <li>– Participative</li> <li>– Active learning</li> <li>– Emancipatory</li> </ul>

Sources: Hopwood et al., 2005; Kemper, Hall, et al., 2019; Kilbourne et al., 1997; Porter & Córdoba, 2009; Sterling, 2004; Stubbs & Cocklin, 2008

**Table 2. Circular economy strategies**

Refuse	Make product redundant by abandoning its function or offer same function with a radically new product
Rethink	Make product use more intensive (i.e., share, lease)
Reduce	Increase efficiency in product manufacturing or use by consuming few natural resources and materials
Reuse	Reuse by another consumer of discarded product which is still in good condition and fulfils its original purpose
Repair	Repair and maintain defective products so its original function can be maintained
Refurbish	Restore an old product and bring it up to date
Remanufacture	Use parts of a discarded product in a new product with the same function
Repurpose	Use discarded product or its part in a new product with a different function
Recycle	Process materials to obtain the same or lower quality
Recover	Incineration of material with energy recovery

Source: adapted from Potting et al. (2017)

**Table 3. Approaches to learning**

<b>Teaching Approach</b>	<b>Summary</b>	<b>Circular Economy examples</b>
Interdisciplinary teaching	All Macromarketing issues are marketing <i>and</i> social issues. Thus, we need knowledge and perspectives from different disciplines, especially as sustainability issues require such integration (Jones et al., 2010; Kurland et al., 2010). Interdisciplinary teaching requires disciplines working collaboratively to go ‘beyond’ one’s own boundary to understand an issue (Jones et al., 2010) and marketing would benefit from such a perspective (Wilhelm, 2008).	The Circular Economy is based on various disciplines and concepts, such as ecological economics, industrial ecology, cradle-to-cradle, the sharing economy and biomimicry (Korhonen et al., 2018). Marketing students must also understand the concepts of full cost accounting, social entrepreneurship, social justice, and social marketing (Wilhelm, 2008).
Critical thinking	Critical thinking is implemented to question key business assumptions such as the homo-economicus, profit maximization and laissez-faire economics (Painter-Morland 2015; Varey 2011; Springett 2005). In this way, business scholars have suggested engaging a questioning attitude (e.g. Marshall et al., 2010) and examining worldviews (Stubbs & Cocklin, 2008) to challenge the DSP in marketing education. Watson et al. (this issue) demonstrate the effectiveness of engaging with contrasting micro- and macro- marketing materials	Reflect on both the benefits and the shortcomings of the circular perspective (i.e., practicality, continuous consumption, economic growth, lack of social and cultural sustainability) (Korhonen et al., 2018).
Design Thinking	Design Thinking is well placed to handle Macromarketing (Manna et al., this issue) and wicked problems (Buchanan, 1992; Melles et al., 2015). Design Thinking deals with these complex problems through focus on empathy, collaborative	Design Thinking is crucial to designing products and services for the circular economy (Andrews, 2015; Hannon et al., 2016). A toolkit is available online via the Ellen MacArthur Foundation, <a href="https://www.ellenmacarthurfoundation.org/resources/learn/circular-">https://www.ellenmacarthurfoundation.org/resources/learn/circular-</a>

	analysis and evaluation, and feedback to human-centric solution. However, Design Thinking as a term is discussed as a “process of reflective practice to an act of creating meaning, to a way of problem solving” (Melles et al., 2015, p. 194). Nevertheless, in principle, Design Thinking focuses a significant amount of time to the problem finding phase which may include observations or customer journey mapping (Beckman & Barry, 2007).	<a href="https://www.circulardesignguide.com/">design-toolkit</a> and there is Circular Design Guide available at <a href="https://www.circulardesignguide.com/">https://www.circulardesignguide.com/</a>
Community-service projects	Community-service projects involve students engaging with community initiatives which results in hands-on learning (Brower, 2011). Offers an opportunity for experiential learning.	Social enterprises can be contacted to participate in activities such as life cycle mapping. Working with alternative business models such as b-Corps, social enterprises and NGOs.
Experiential learning	Experiential learning theory suggests a four-stage learning process which begins with a concrete experience causing the learner to make observations and reflections, drawing logical conclusions, the learner then may add this to their theoretical constructs and use these to guide decisions and actions in new experiences (Kolb, 1984). Samuel et al. (this issue) includes a field trip to the ‘World’s Greenest Football Club’, Forest Green Rovers. They found that students experiencing such a ‘ultra-novel’ organization is able to motivate learning and inspire critical debate, facilitating sustainability learning. Reflection and critical thinking are important for experiential learning (Peltier et al., 2005).	Can be implemented through community service projects, simulations, product life cycle mapping activities, guest lectures from industry pioneers and in class group activities (i.e., systems mapping). Peterson (this issue) discusses the use of the Conscious Capitalism simulation.
Reflective assignment	Through personal, contemplative assignments students are able to engage in self-reflectivity, assessing our own ideas and	Students can write reflective assignments about their community-service projects or their reflections

	<p>beliefs and questioning what we take for granted (Kitchenham, 2008; Mezirow, 1997). Reflective assignments may be given to students to assess the impact of the course on their own thinking, attitudes and learnings. Linked to experiential learning – without reflection and discussion the 4 stages of learning is not complete (Kolb, 1984).</p>	<p>of the Circular Economy and its limitations.</p>
<p>Case studies</p>	<p>At a bare minimum, no matter the course a marketing educator is in charge of, case studies can be used strategically to ‘hack’ the system. Case studies focusing on social enterprises, non-governmental organizations, charities, businesses with purpose (B-Corps for example) or companies tackling issues of climate change, social justice or other social issues can all be used to highlight goals and outcomes beyond profit maximization. Moreover, case studies containing diverse central figures (e.g. other than Westernized, white men) can help diverse students project into these important decision making roles.</p>	<p>Utilising various business case studies which utilise product-service systems (i.e., clothing rental), eco-efficiency (i.e., electric vehicles), by-products (i.e., upcycled food), recourse loops (i.e., bottle collections), biomimicry (i.e., Interface carpets) and cradle-to-cradle design (i.e., furniture).</p>

**Figure 1. How to 'hack' the system**

