

McGregor, S.L.T. (2009). Reorienting consumer education using social learning theory: Sustainable development via an authentic consumer pedagogy. *International Journal of Consumer Studies*, 33(2), 258-266. Posted with permission from Wiley Blackwell.

Abstract

The paper illustrates the growing interest in understanding consumer behaviour through a Social Learning Theory (SLT) lens, and explains the recently launched United Nations Decade for Education for Sustainable Development (ESD). Then, the discussion turns to an overview of a recently developed ESD/SLT integrated theoretical framework, which is then applied to consumer education via an authentic pedagogy. The paper highlights the rich potential of authentic intellectual work in the form of observational learning by augmenting education for sustainable development within an authentic consumer education curricula.



Introduction

Many consumer behaviours do not result from merely rational choices. Complex consumer behavioral patterns often are imitated and learned from others. This imitation involves complex internal learning processes that may not be visible to consumer educators (Martiskainen, 2007). Social Learning Theory (SLT) has evolved as a theoretical framework that focuses on this dimension of consumer behaviour (McGregor, 2007). The *social* in social learning theory refers to the context within which learning occurs. Bandura (1977) explained that people not only learn from their own personal, lived experiences. They also learn from watching what others do, and what happens to these people when they do it. In essence, people can learn behaviours, emotional reactions and attitudes from watching other people. This assumption also applies to consumer behaviour. If consumers emulate or copy a behaviour, they are said to have learned. SLT concerns itself with the ways people learn to respond to their environment, and with the *patterns of responses* they learn and apply in their lives (Martiskainen, 2007).

From an SLT perspective, the intent of consumer education is to get people to change their consumer behaviour through learning by watching (not necessarily just by doing). SLT posits that people will consume knowing they are not going to receive an external reward or validation for their behaviour; rather, they consume in certain ways (e.g., sustainable, justice-focused ways) because they know their internal thoughts, values, attitudes and beliefs also merit an internal reward (Bandura, 1977). From this stance of internal moral reinforcement, consumers can become empowered citizens who are more likely to engage in sustainable consumption. To that end, the objective of this paper is to bring SLT into the repertoire of consumer educators who are concerned with education for sustainable development (ESD). After (a) illustrating the growing interest in understanding consumer behaviour through an SLT lens, and (b) explaining the recently launched United Nations Decade for Education for Sustainable Development, the paper (c) shares an overview of a recently developed ESD/SLT integrated theoretical framework (McGregor, 2007), which is then (d) applied to consumer education via (e) an authentic pedagogy.

SLT and Consumer Behaviour

SLT, to be explained in more detail shortly, is gaining credence as a framework for understanding how consumer behaviour is learned through people's own experiences as well as watching others' behaviour, and people's responses to that behaviour. Janssen and Jager (1999) asserted that SLT provides a valuable perspective on processes of imitation (and attendant concepts) that may guide consumer behaviour. Lee, Conroy and Hii (2003) affirmed that SLT is a credible theoretical framework for explaining how people learn consumer skills and related behaviour. Glanz and Rimer (2005) maintained that consumption behaviour can be understood using SLT and, what is more important, this behaviour can be changed using interventions informed by SLT. They explained that curricula activities tied to *changing people's behaviour* are derived from individual-level behaviour change theories. Curricula initiatives intended to change the learning contexts and *environments* draw on community-level theories. SLT has both intents at its core: (a) a focus on the two-way relationship and resultant exchanges between individuals *and* their environments, and (b) how these exchanges and relationships change their behaviour. SLT assumes that the environment shapes, maintains and constrains people's behaviour and that people are not passive in the process, that they create and change their environments *by* their behaviour.

Glanz and Rimer (2005) and Martiskainen (2007) identified SLT as one of the key, most robust, social-psychological theories in use today in pro-environmental and health behaviour research, appreciating that environmental behaviour is part of education for sustainable development. Not surprisingly, because consumer behaviour has a strong social component, the complex theory of social learning also includes many concepts that are useful in consumer education (McGregor, 2007).

United Nations Decade for ESD

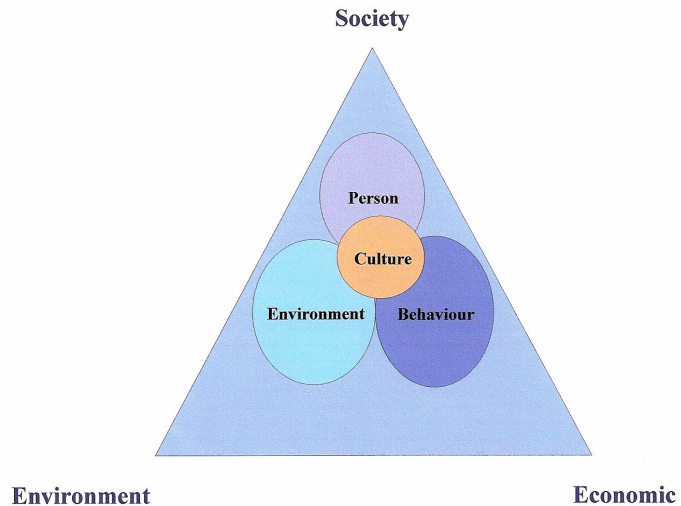
The overall assumption of SLT is that people exist in a two-way relationship with their environments. The key challenge for consumer educators is to identify the personal *and* environmental factors relevant to the behavior of interest (in this case, sustainable consumption), and the *cognitive* processes driving this reciprocal interaction and exchange (Martiskainen, 2007). This idea is emerging in the wider context of the recent United Nations' initiative for ESD. The UN asserted that "education is an indispensable element for achieving sustainable development" (2005, p.2). In December 2002, the UN General Assembly adopted resolution 57/254 and, in effect, put in place the United Nations Decade of Education for Sustainable Development (DESD), 2005-2014 (UNESCO, 2005a). UNESCO is the lead agency for the Decade. In September 2005, UNESCO (2005b) approved an *International Implementation Scheme* for the Decade. One of 15 perspectives informing the Decade is that there are *many spaces for learning*, identified in Section 3.4.

This paper proposes that consumer education can become such a learning site, especially if it is informed by an integration of the principles and pillars of ESD and the tenets and theoretical constructs of SLT (McGregor, 2007). From this integrated theoretical perspective, consumer education can become a powerful platform for challenging new behaviours and practices to secure the future, the aim of education for sustainable development. The next section details a new theoretical framework for designing consumer education for sustainable development through an SLT lens, originally developed by McGregor. She stopped short of describing what this reorientation would actually look like in a classroom - what pedagogical, curricular, content and assessment changes would have to happen. This paper continues her conversation.

ESD/SLT Theoretical Interface

Figure 1 illustrates McGregor's (2007) integrated ESD/SLT theoretical interface. Using this conceptualization, consumer educators can incorporate the United Nation's emerging concern for the interface between social institutions, the economy, and the natural environment (three pillars of ESD). Specifically, consumer educators can pay closer attention to framing consumption within: (a) the limits of economic growth and the potential of viable alternatives; (b) an expectation for full, informed participation in social institutions; and, (c) a longstanding commitment to the entrenchment of environmental concerns in social institutions and economic policy. Furthermore, pulling a cultural dimension or pillar of sustainable development into the equation (Clugston, 2004) means consumer educators can create learning situations that enable citizens to appreciate and respect diversity, shared power, interconnectedness, interrelatedness, and varying value systems and perspectives.

Figure 1 Four pillars of the Education for Sustainable Development (ESD) interfacing with three facets of Social Learning Theory (SLT)



As well, McGregor's model assumes that people can learn sustainable behaviour in the consumer marketplace by watching and emulating others (social learning), and appreciating the interface between people, their behaviours and their environments. Assuming that readers will read McGregor's work, this paper does not repeat it in much detail, focusing instead of the nuances of an authentic consumer education pedagogy informed by the ESD/SLT interface model.

Three Dimensions of Social Learning Theory

Social Learning Theory assumes that each of people, their behaviour and their environment operate in a three-way relationship during learning, mutually influencing each other, determining human behaviour (Bandura, 1977). This theory comprises three main constructs. First, *personal factors and cognitive competencies* include: biological factors, knowledge, expectations, self-perceptions, goals, and attitudes. Second, people's *behaviour* equates to: skills (intellectual and psychomotor), self-efficacy, self-regulation, learned preferences, and practice. Third, the *environment* within which people are acting comprises: social norms, access to community, and people's influence on others (their ability to change their own environment).

The 12 main concepts comprising the theory of social learning are set out in the Appendix, divided into two sections: (a) six learners' *traits* that have to be respected and (b) six learning *processes*. For the sake of brevity, they will not be repeated in the text. The learner traits include: self-esteem, capacity for certain behaviours, expectations, locus of control, the capacity for self-regulation, sense of self-efficacy, and self-reflective capabilities. Learning processes involve: foresightful behaviours, reinforcements, reciprocal determinism, observational learning,

vicarious mental capabilities, and learners' emotional coping responses. McGregor (2007) sets out these 12 concepts in great detail.

Four Pillars of Education for Sustainable Development

ESD assumes that the three pillars of social, economic and environment give shape and content to sustainable learning (UNESCO, 2005b). The *society pillar* refers to the role social institutions play in change and development, with a focus on full, informed participation in these institutions leading to sustainable development. It encompasses human rights, peace and human security, gender equality, cultural diversity, health, and governance. The *economic pillar* touches on people's sensitivity to the limits and potential of economic growth (especially consumption), and its impact on the other two pillars. This pillar includes poverty reduction, corporate responsibility and accountability, and the market economy. The *environmental pillar* involves people's awareness of the fragility and finiteness of the physical environment, leading to a commitment to favour environmental concerns in social institutions, and economic policy. This pillar involves resources, climate change, rural development, sustainable urbanization and disaster prevention and mitigation.

Although implicit in UNESCO's (2005b) social pillar, Clugston (2004) added *culture* as an explicit fourth pillar to ESD to reflect the role of values, diversity, knowledge, languages and worldviews associated with sustainability education. Bringing the *cultural pillar* into the equation opens the door for an appreciation of the impact of a person's actions on *the other*. It gives consumer educators a lens to help learners gain a sense of the connectedness between themselves and others, which is why sustainability matters in the first place. UNESCO (2005b) did not identify *technology* as a pillar of ESD, positioning it instead as a tool(s) for change, cautioning that it has to be used responsibly in order to avoid undermining advances gained via the other pillars.

ESD/SLT Interface Applied to Consumer Education

McGregor (2007) suggested that, from this new, integrated, theoretical perspective, consumer education can potentially lead to empowered, responsible global citizens in their consumer role. People feel empowered if they sense inclusiveness, have a voice, are given a chance to participate, are held accountable, have information, and are given opportunities to build capacity and skill sets conducive to social action and change (Pande, 2004; McGregor, 2005b). To ensure that this transformation to an empowered consumer-citizen takes place, education for sustainable development (ESD) calls for a reorientation of educational approaches – curriculum and content, pedagogy and examinations (UNESCO, 2005b). This reorientation can take place within consumer education.

Following the dictates of the Decade for ESD (McKeown, 2002, UNESCO, 2005a), consumer education can be *reoriented* with a focus on relevant pedagogical approaches to ensure sustained consumer empowerment to shape sustainable development (see also McGregor, 2005b). McKeown explains that education, which has been reoriented to address sustainability, embraces a knowledge base that integrates environment, economy and society. It also addresses “learning skills, perspectives and values that guide and motivate people to seek sustainable livelihoods, participate in a democratic society, and live in a sustainable manner. EDS also involves studying local and, when appropriate, global issues” (p.16).

To facilitate this curriculum reorientation process, the Appendix shares 12 key SLT concepts with attendant definitions, as well as at least four to five respective consumer education applications for each concept. These definitions were drawn from Bandura (1977, 1986, 1989a,b, 1993), Rotter (1954, 1990) and Wals and Heymann (2004). The Appendix was designed to be

both a standalone document and an instrument to inform this paper's discussion of an authentic consumer education pedagogy. With SLT, a powerful mind shift has to happen within educators if they want to help learners respect sustainability by getting them to watch others in order to learn. Educators have to become cognizant of particular *learner traits* accommodated by SLT: self-esteem, capacity for certain behaviours, expectations, locus of control, the capacity for self-regulation, sense of self-efficacy, and self-reflective capabilities. As well, the pedagogy employed by consumer educators will have to accommodate and plan for specific *learning processes*: foresightful behaviours, reinforcements, reciprocal determinism, observational learning, vicarious mental capabilities, and learners' emotional coping responses.

Evidence of ESD in SLT Reoriented Consumer Education

The following section illustrates the ability of the SLT reoriented consumer education curricula, set out in the Appendix, to reflect the roles, values and key curricular characteristics of ESD.

Roles of ESD. The learning strategies informed by SLT, set out in the Appendix, deeply respect the key roles of education for sustainable development articulated by UNESCO (2005b) in its *International Implementation Scheme*. Consumer education conceived and delivered through this integrated perspective would:

- inspire the belief that people have the power and the responsibility to effect positive change on a global scale;
- increase people's capacities to transform their visions of society into reality, because consumer education through this lens would become a primary agent of transformative learning toward sustainability;
- foster the values, behaviours and lifestyles required for a sustainable future;
- put in place a process of learning about how to make decisions that consider the long-term future of the equity, economy and ecology of all communities; and,
- build capacities for futures-oriented thinking.

ESD values. Consumer education framed through the ESD/SLT interface could inculcate the underlying values of ESD, namely, respect for: dignity; human rights; a commitment to social and economic justice for all; generational equity and intergenerational responsibility; cultural diversity; protection and restoration of Earth's ecosystems; and a commitment to local and global culture of tolerance, nonviolence and peace (UNESCO, 2005b).

Key ESD curricular characteristics. A careful examination of the strategies suggested for application in consumer education curricula (see the Appendix) confirms that teaching sustainability through a consumer lens, informed through the interface of ESD/SLT, respects the key characteristics of an ESD curriculum, again articulated by UNESCO in its *International Implementation Scheme* (2005b). Such a curriculum would be:

- interdisciplinary and holistic;
- integrative, wherein learning for sustainability is embedded in the whole curriculum, rather than presented as a separate subject;
- values driven, wherein society's assumed norms are made explicit so they can be critically examined, debated, dialogued, tested and applied;
- focused on critical thinking and problem solving, leading to confidence in addressing the dilemmas (even multi-lemmas identified by McGregor, 2006b) and challenges of sustainable development through a consumer lens;
- based on multi-methods and many ways of knowing (word, art, theatre, dance, role playing) using many pedagogies that model these learning processes;

- grounded in collaboration and cooperative pedagogies to ensure that educators and learners work together to acquire knowledge and play an influential role in shaping the world;
- based on participatory learning and action research, whereby learners participate in decisions about how and what they learn; and,
- locally relevant in the context of a global perspective that sees everything connected (holistic).

Applying an Authentic Pedagogy at the ESD/SLT Interface

A rich integration of the five key curriculum elements of knowledge, practical skills, perspectives, values and issues, to reorient consumer education, necessitates careful attention to a pedagogy that enables learners to adopt and adapt practices and behaviours that foster sustainable development, individually and collectively (UNESCO, 2005b). This paper recommends an *authentic pedagogy* as a very appropriate approach for developing curricula at the interface between ESD/SLT, thereby ensuring that consumer educators concerned with sustainable development are able to teach people using the ideas in the Appendix (see also McGregor, 2007); that is, help them learn sustainability by watching others.

A learning situation is authentic if students engage in higher order thinking, develop a deep understanding of the subject matter, participate in classroom discourse to build shared understandings, and can relate their new knowledge to public issues and personal experience. An authentic pedagogy nurtures independent students, prepares them to live with risk and uncertainty, entails engaging in learning beyond the classroom walls, and strives to help students make connections to the real world, their world (Newmann, Secada & Wehlage, 1995). Newmann et al.'s work included 20 teaching strategies, which they collapsed into four dimensions of authentic pedagogy: (a) intellectual rigour (quality of intellectual work), (b) connectedness (knowledge integration), (c) recognition of differences and diversity, and (d) a supportive environment in the classroom (see Table 1 and Queensland Department of Education, 2001).

Table 1 - Twenty Teaching Strategies Across Four Dimensions of Authentic Pedagogy (extrapolated from Newmann, Secada and Wehlage (1995), used with permission from McGregor, 2006a)

Intellectual Rigour (Quality)	Relevance (Connectedness)
<ul style="list-style-type: none"> • <i>higher order thinking</i> - transforming ideas, information and meanings associated with things with critical analysis and reasoned judgements • <i>deep knowledge</i> - establish complex connections to central concepts • <i>deep understanding</i> of complex relationships and drawing conclusions • <i>substantive conversation</i> via dialogue, sustained exchanges, synthesis and critical reasoning • <i>knowledge as problematic</i> - critically question, second-guess and examine textbooks and ideas from the discipline • <i>metalinguage</i> - discourse analysis to reveal power relationships in written text (framing issues) 	<ul style="list-style-type: none"> • <i>connectedness to the world</i> - issues in curriculum resemble the real-life contexts of students and their families • <i>problem-based curriculum</i> - solve real-life issues by sustained attention to them beyond the classroom • <i>knowledge integration</i> - purposely connect two or more subject areas, paradigms and fields of study together • <i>background knowledge</i> - link learning to students' backgrounds, lived experiences and world views

Socially Supportive Learning Environment	Recognition of Differences/Diversity
<ul style="list-style-type: none"> • <i>student directed</i> - use collaborative approaches via student-centered groups and teams; give students some say in the pace, direction and outcomes • <i>social support</i> - mutual respect, non-violent approach to conflict, positive, peaceful environment • <i>academic engagement</i> - keep students engaged, involved and on-task during class work so they do not disrupt others • <i>self-regulation</i> - students know they are capable of managing themselves and the learning environment (democratic classroom) • <i>explicitly state criteria and expectations</i> against which student performance is judged 	<ul style="list-style-type: none"> • <i>cultural knowledge</i> - purposely value knowledge from all cultures and bring this into play in the learning environment • <i>inclusivity</i> - view classroom as a heterogeneous, diverse group, and plan learning experiences accordingly • <i>narrative style of teaching</i> instead of just informing students (expository) • <i>group identity and community</i> - build a sense of community and identity by challenging the assumptions about <i>others</i> (deal with sensitive and controversial issues) • <i>active citizenship</i> - foster democratic behaviour in the learning environment

Of these 20 teaching strategies, six were related to intellectual inquiry, four to connectedness, and five each to a supportive classroom learning culture and environment and recognition of differences. These are discussed in greater detail in McGregor (2006a), and in an Australian curriculum document called *Productive Pedagogies* (Queensland Department of Education, 2001). Those embracing authentic productive pedagogies want to *produce* a student who is a *citizen* able to employ higher order thinking and intellectual rigour and who feels connected to the wider community, and world. This connection happens because the educator creates a supportive classroom that respects diversity and inclusiveness. These basic tenets of authentic pedagogy resonate strongly with the values, roles and curriculum characteristics of ESD, set out earlier. In the following text, the 20 strategies set out in Table 1 are selectively applied to profile the nuances of a reoriented consumer education curriculum at the ESD/SLT interface.

Intellectual Rigour

Authentic pedagogy assumes that the intent of consumer education is for students to learn how to manipulate information and ideas from many sources so as to unveil oppressive power relationships in the global market (McGregor, 2006a; Queensland Department of Education, 2001; Reynolds, 2002). SLT assumes this learning can happen by watching others. Inherent in an authentic pedagogical approach is critical reflection, a learning strategy that helps people: (a) find their inner power and voice, and (b) develop the potential to change the world for the better. They can do so by challenging the status quo from a social justice, sustainability, and moral imperative stance. ESD is all about this family of values. As well, the SLT concept of self-regulatory capacity gives consumer educators an anchor to help people learn how to impose sanctions or rewards on themselves, rather than depend solely on external reinforcement. In effect, consumers would enter into a contract with themselves about moral, sustainable consumption, and then monitor their compliance with their inner contract, via self-regulation.

Through social learning (observation), people can learn they have a responsibility to help other consumer-citizens to find their voice, too. Once this voice is found, people are transformed, and unable, even unwilling, to consume the same way. Those transformed then evolve toward a moral consciousness in the marketplace, and exhibit a sense of morality, which can emanate from within (McGregor, 2006b, 2008a). Therefore, consumer educators employing the ESD/SLT interface should place paramount concern on the related SLT concepts of: self-esteem, self-efficacy and self-reflection. Inner control, self-confidence and reflection are the cornerstones of SLT, and are especially germane to moral development.

Moral standards regulate peoples' behaviour, and SLT holds that moral thinking and behaviour is influenced by observation and modeling (Bandura, 1989a; Glanz & Rimer, 2005; Ormrod, 1999). From a moral stance, sustainable consumer behaviour embraces *the other*, and SLT holds that doing so happens via modelling others' respectful behaviour in the marketplace. Authentic pedagogy also embraces diversity, and a respect for differences. Other-oriented consumer activities, necessary for ESD, are mediated through moral agency, which becomes a powerful influence on sustainability when coupled with social agency (McGregor, 2006b, 2008a). Remember, the *social* in social learning theory refers to the context within which learning occurs, and the assumption is that people can learn by observing others in social settings. Consumption is a social activity. Consumer educators employing authentic pedagogy at the ESD/SLT interface would privilege the social in their curriculum, while respecting the reciprocal relationship it has with culture, the economy and the environment. They can turn to these four pillars of ESD as they give shape and content to social learning for sustainable, moral consumption.

An authentic pedagogy also is about getting learners to do *learning work*, rather than busy work (McGregor, 2006b; Queensland Department of Education, 2001; Reynolds, 2002). Students would do this learning work by watching others so students can enhance their behavioral capacity, understood to be knowledge of the specific sustainable-consumption related behaviour to be learned and repeated, and the possession of skills to perform this behaviour. Connected to this idea is the inherent premise, of an authentic pedagogy, that learners should engage in big ideas and complex understandings. Such deep learning by watching within consumer education for sustainable development must be scaffolded with a respect for the SLT concept of emotional coping responses. People have to be able to deal with emotional arousal, nervousness, loss of familiar world views or anxiety if they are benefit from a deep, thoughtful curriculum predicated on social learning principles. Educators would scaffold this deep learning with well constructed debriefing sessions (McGregor, 2008b).

Connectedness

As well, an authentic pedagogy includes connectedness (or relevance), which involves helping learners make connections between different aspects of school learning and their past experiences, and the world beyond the classroom. These links can happen via vicarious capabilities, which enable students to transcend the boundaries of their local environment while respecting reciprocal determinism. The latter SLT concept represents learnings that accommodate the three-way, ongoing interaction among people, their environment and their behaviour. An authentic pedagogy holds that what people learn in this relationship should have value beyond the classroom (McGregor, 2006a; Queensland Department of Education, 2001; Reynolds, 2003). SLT assumes this out-of-classroom learning can legitimately come from: modeling others' behaviour, respecting behavioral capacity and, again, accommodating reciprocal determinism.

Socially Supportive Classroom

Authentic pedagogy embraces a socially supportive classroom environment, one where learners are able to influence observational learning activities, and how these activities are implemented (democratic pedagogy to reinforce reciprocal determinism). It involves a high degree of self-regulation by learners (McGregor, 2006a; Queensland Department of Education, 2001). Self-regulation techniques provide an effective method for improving people's consumer behaviour so it respects sustainability. As noted previously, self-regulation refers to people's internal ability to control their thoughts, feelings, motivations and actions; in this case, as these

inner processes and external actions relate to sustainable and transformative consumption.

More than making a warm, happy place to be, an authentic pedagogy also is about creating a learning culture that has high expectations of learners, and respects the expectations of learners (an SLT concept). Expectations are the values consumers place on a given outcome or incentive, in this case, sustainability. Consumer educators should arrange their curriculum so students can watch others while exploring their own expectations, relative to sustainable consumption. Done properly, and through an ESD/SLT interface, consumer education for sustainability further encourages students to take risks in their observational learning. Risk taking during social learning involves locus of control (which shapes the extent of self-initiated change) and reinforcement, understood to be the likelihood that a person will perform an observed behaviour again.

Recognizing Differences

Finally, recognition of differences is part of an authentic pedagogy. This learning process encompasses inclusivity of non-dominant groups, and positively developing and recognizing differences and group identities (McGregor, 2005a,b; 2006a,b; Queensland Department of Education, 2001). Through a respect for foresightful behaviour, consumer educators focused on social learning can help people learn to anticipate the consequences of their consumer behaviour on non-dominant others (e.g., offshore labourers) and the earth, and choose less threatening consumption alternatives. Students gain insights into these consequences through observational learning, wherein they watch someone else consume in a certain way, and then observe what happens to that person and the earth (outcome or consequences). After observing the results of a particular consumption behaviour, the student enters the information into his or her memory for recall to guide his or her behaviour in the future. This whole process is enhanced by the degree to which people feel they have control over their lives. This perceived degree of control can affect whether change in their consumer behaviour is self-initiated or influenced by others, and is understood via values clarification, critical thinking and other learning strategies that respect students' locus of control.

Discussion and Conclusions

Social learning theory has numerous implications for classroom use (Ormrod, 1999), including consumer education for sustainable development (McGregor, 2007). If consumer educators are aware of the critical linkages between consumer education and sustainability, reorienting consumer education can occur. "Perceiving a need brings about a corresponding change in educational systems" (McKeown, 2002, p.27). With this new awareness, consumer educators, concerned for sustainable development, will become open to the relevance of different pedagogical approaches, especially an authentic pedagogy. Although each of the four individual dimensions of an authentic pedagogy has been around for decades, what is new are (a) the synthesis and integration of these ideas into a *Productive Pedagogy* for the 21st century (articulated by Queensland Department of Education in 2001), and (b) the application of these ideas to reorient consumer education for sustainable development using the ESD/SLT theoretical interface.

This innovative theoretical and pedagogical approach helps prepare people to be *citizens* instead of just workers and consumers, and does so through a social learning theory lens - they learn by watching. The observational learning expected of students when the curriculum is designed using SLT is more assured if students' experiences are authentic. Intellectual rigour leads to mental strength. Respecting connectedness leads to knowledge integration. A supportive learning environment respects students as legitimate partners in their own learning, especially if

they are expected to learn by watching. Finally, recognition of differences leads to the creation of positive human relationships, a sense of community, and a connection to others. Also, educators must appreciate that students will not always immediately show the learned behaviour, known as the acquisition-performance gap. While learning is the acquisition of the new behaviour, imitation is the performance of the learned behaviour (Crane, 2008). Ormrod (1999) confirmed that four requirements have to be met in order for a learned behaviour to be performed: (a) attention to the person modelling the behaviour, (b) retention and remembering what has been observed, (c) reproduction of the behaviour (ability and skills to produce the pattern of behaviour), and (d) motivation or good reasons to want to adopt the behaviour.

Imagine the potential for education for sustainable development if we retool consumer education so students are motivated to perform sustainable consumer behaviour. What better place for people to learn how to change their patterns of consumer behaviour, learned by watching, than consumer education predicated on the principles of authentic pedagogy, applied through the ESD/SLT interface. Inferred from Crane's (2008) notions of observational learning, *telling* people to engage in sustainable development activities when consuming will make little difference. But, *showing* people such behaviour *will* make a difference. SLT holds that people can observe and learn the actions of others to develop patterns of consumer behaviour they wish to emulate and perform. The ESD/SLT interface posits that sustainable development can be the product of the performance of observational learning of norms, values and behaviours associated with responsible consumer activities. Authentic intellectual work in the form of observational learning is a viable tool for reorienting consumer education for sustainable development, per the dictates of the UN Decade for ESD.

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Appendix
 Application of Social Learning Theory Concepts in a
 Consumer Education Curriculum Reoriented for Sustainable Development

Social Learning Theory Concept	Definition	Consumer Education Application
Six Learners' Traits		
Locus of control	The degree to which people feel they have control over their lives. This perceived degree of control affects whether change is self-initiated or influenced by others	teach value clarification and values reasoning transformative learning principles critical thinking active learning strategies democratic classroom practice affirmations (I can do it, I am worth it).
Self regulatory (control) capacity	An internal ability to control one's thoughts, feelings, motivations and actions (depends on self-efficacy, feedback, time left to attain a set goal, and moral agency). People learn to impose sanctions or rewards on themselves, rather than depend solely on external reinforcement. In effect, they enter into a contract with themselves and then monitor their compliance with the terms of this contract	provide opportunities for self reflection (journaling), goal setting, problem solving and self-rewards employ transformative learning strategies draw from citizenship or character education use active learning strategies help students analyze their personal standards

<p>Self-efficacy (and self esteem)</p>	<p>People’s perception of their ability to: perform a behaviour, to cope, to visualize achieving a goal, to influence a situation. The higher the self-efficacy, the more likely people are to not give up, and to work harder to learn the behaviour. Also, self-efficacy affects what people will try to achieve. It is self-confidence in their ability to successfully perform a specific type of action</p>	<p>provide clear instructions</p> <p>provide for skill development (including physiomotor skills as well as reasoning abilities and refusal skills)</p> <p>model, or provide credible models of, the desired behaviour, so they can watch it</p> <p>point out their strengths and assets. Celebrate victories.</p> <p>use persuasion and encouragement</p> <p>approach and plan behaviour change so it happens in small steps</p> <p>confidence building exercise</p>
<p>Self-reflective capability</p>	<p>People’s ability to analyze their experiences, think about their thought processes and alter their thinking, ultimately altering their behaviour (greatly influenced by self-efficacy)</p>	<p>critical thinking</p> <p>reflective journaling</p> <p>study circles and reading circles</p> <p>dialogues (instead of just debates)</p> <p>collaborative learning</p>
<p>Behavioral capacity</p>	<p>To perform a behaviour, people must know what the behaviour is and also possess the knowledge and skills to perform the given behaviour</p>	<p>provide opportunities to master relevant skills</p> <p>provide information for where to get additional skill training</p> <p>practice different thought processes (critical thinking, value reasoning, value clarification, problem solving)</p> <p>respect different learning styles and multiple intelligences</p>
<p>Expectations</p>	<p>What people anticipate will happen when they behave in a certain way. It is the value that people place on a given outcome or incentive</p>	<p>incorporate information about likely results of action in any advice given to learners</p> <p>media literacy</p> <p>discourse analysis techniques</p> <p>critical thinking</p> <p>transformative learning principles</p> <p>concept and mind mapping</p>

Six Learning Processes

<p>Vicarious capabilities</p>	<p>Mental processes and media that enable people to attain new knowledge by exploring situations and activities that would normally be out of reach due to time constraints, resources or mobility - their ability to transcend the boundaries of their local environment</p>	<p>use many different media</p> <p>case study approach</p> <p>future scenario approach</p> <p>thematic and issues approach</p> <p>creative thinking skills</p>
<p>Observational learning</p>	<p>Vicariously acquiring a behaviour by “watching” someone else do it and by watching what happens to the person when that person does do it (outcome). After watching, the person enters the information into his or her memory for recall to guide his or her behaviour in the future</p>	<p><i>See ideas for Expectations as well as:</i></p> <p>employ a variety of media and use guest speakers, pen pals, chat rooms</p> <p>include mainstream and alternative media sources</p> <p>include examples of model behaviour from Majority world and Indigenous peoples</p> <p>bring others’ experiences to the students’ attention</p> <p>identify role models to emulate</p> <p>use variety of contextual learning strategies (service learning)</p> <p>employ the inquiry based approach</p> <p>use the problem-solving and problem posing approach</p> <p>story telling, narratives, dramas, role playing</p> <p>action research</p>
<p>Reciprocal determinism</p>	<p>A three way, ongoing interaction among people, their environment and their behaviour. This mutual relationship determines how each of the three factors will evolve, together</p>	<p>involve relevant others</p> <p>work to change learning environment so it is more collaborative, inclusive, democratic</p> <p>teach social change (participatory action) skills</p> <p>teach from a holistic paradigm</p> <p>constructivist approach (bring real world problems into the classroom)</p>

<p>Reinforcements</p>	<p>Responses from self and others that increase or decrease the likelihood that a person will preform a particular behaviour again, in a given situation</p>	<p>encourage students to turn to self-initiated rewards and incentives (rather than external reinforcement)</p> <p>provide incentives and praise</p> <p>encourage students to reward themselves internally (self-affirmation)</p> <p>collaborative and cooperative teaching strategies</p> <p>design class questions so students receive positive reinforcement</p> <p>authentic assessment</p> <p>active listening skills</p>
<p>Foresightful behaviour</p>	<p>Representing future events through forming mental images, pictures, and symbols and then taking action based on this forethought. Foresight helps people anticipate consequences, and choose less threatening alternatives</p>	<p>teach using metaphors</p> <p>asset mapping strategy</p> <p>Delphi method</p> <p>thematic approach</p> <p>employ global education perspectives</p> <p>character (citizenship) education</p> <p>teach controversial and sensitive issues</p>
<p>Emotional coping responses (anger, fear, grief, sadness, guilt)</p>	<p>Strategies or tactics people use to deal with emotions and their reactions to things. People have to be able to deal with emotional arousal, nervousness or anxiety if they are to exhibit higher self-efficacy</p>	<p>stress and anger management</p> <p>debriefing sessions after teaching controversial issues</p> <p>change management skills</p> <p>teach the steps of grieving process (loss of something familiar)</p> <p>transformative learning principles</p> <p>self-esteem inventories</p> <p>reflective journaling</p> <p>make counselling available</p> <p>teach empathy and inclusiveness</p> <p>include health, activity and fitness lessons</p>