Discourse and Communication for Sustainable Education,
vol. 7, no. 1, pp. 37–48, 2016

“I’m Just Going to Buy That!”: Confronting Consumerism in Teacher Education

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Abstract

As educators at a faculty of education, the authors found that teacher candidates (TCs) invariably purchased new materials whenever they had an assignment requiring some form of construction activity. They were concerned about this learned, consumer behavior; lessons of moderation in using the Earth’s resources are important elements of sustainability education. Humans are consumers in both a natural and an anthropological sense, but are capable of sustainable consumerism. Therefore, the authors wanted to promote moderation/sustainable consumerism through an educational intervention in their teacher-education classes. Inspired by Selby’s (2011) third proposition for education for sustainable contraction, they revised an existing art/science integration project where constructions would be created from recycled and/or natural materials. The TCs’ constructions, process work, and Reflection papers provided insight into their creative thinking, and learning, regarding sustainable consumerism.

Keywords: art education, consumerism, environmental education, science education, sustainability

The authors are both educators at a faculty of education in Ontario, Canada: one teaches art methods and the other science methods. Both authors care deeply about the health and well-being of the Earth and its inhabitants and have come to recognize that, in their work, the two are interconnected. The authors believe the important lessons internalized by their teacher candidates (TCs) are those in which they understand how profoundly they can affect their own futures, the futures of their students, and the environments they will inhabit.

Until recently, when the authors assigned projects requiring some kind of construction activity, they found that their TCs invariably responded with “I’m just going to buy that!” when referring to project materials. They purchased new materials in order to create their works and did not seem concerned about being avid consumers of school, art, and other supplies. The authors, however, were concerned about this learned, consumer behavior for their future classroom practice. Both of them come from education backgrounds in which supplies and petty cash were scarce, so they learned to ‘make do’, creatively, with materials that were already available. When the authors needed

supplies for themselves and for their learners, they looked to what they had in their surroundings to use for classroom activities; they did not spend money on new items, for single-purpose uses, that would end up in the trash. By necessity their approach was, “I’m just going to *make* that!”.

Lessons of moderation in using the Earth’s resources are important elements of sustainability education at the elementary, secondary, and postsecondary levels. In a society besotted with consuming, the authors believe that it is important for teachers to learn to reuse, repurpose, recycle, and/or use materials found in nature rather than purchase new ones. They were inspired by Selby’s (2011) nine propositions regarding education for sustainable contraction (see Table one), particularly proposition three: “offer alternative conceptions of the ‘good life’, combat consumerism, and help learners explore and experience alternatives to a growth economy” (p. 7). In an educational climate that seems to venerate purchasing the shiny and new as part of the “good life”, they wanted to provide their TCs with the opportunity to re-imagine their assignments without new materials.

To that end, they revised their existing art/science integration project (Steele & Ashworth, 2013) in which TCs explore how Science and Technology impact Society and Environments (STSE) through visual arts, to include the use of recycled and/or natural materials for the construction segment. Each TC group was also required to write a short reflection on their project, including comments on the design and technical considerations of these materials for their constructions.

Table 1

Selby’s (2011) Propositions for an Education for Sustainable Contraction (ESC)

ESC: Proposition 1

A concerted effort is needed in the light of looming runaway climate change to confront denial by moving learner assumptions, understandings and responses towards disequilibrium (fomenting dissipative structures).

ESC: Proposition 2

Given the likely impending severity of global heating, Education for Sustainable Contraction needs to address despair, pain, grief and loss.

ESC: Proposition 3

Given the ‘powerful wave of neo-liberalism rolling over the planet’ (Jickling & Wals, 2008, p. 2), destructive of ecosphere and ethnosphere, climate change education needs to offer alternative conceptions of the ‘good life’, combat consumerism, and help learners explore and experience alternatives to a growth economy.

ESC: Proposition 4

The view of human<>nature relationship needs to shift from the doministic, the instrumental and the exploitative to one of embeddedness and intrinsic valuing; from a shallow ecological to a deep ecological paradigm.

ESC: Proposition 5

The embrace of intimacy with nature calls for the cultivation of the poetic.

ESC: Proposition 6

‘Educations’ that have been marginalized within education for sustainable development are of pivotal importance.

ESC Proposition 7

With global heating under way, sustainability education and emergency education need to fold together.

Sequel to Table 1 see on the next page

Sequel to Table 1

ESC: Proposition 8

Cozy assumptions about the relationship between education for sustainability and education for citizenship need unpacking and formal and informal learning programs need to offer alternative and localized conceptions of 'good citizenship' (or 'good denizenship').

ESC: Proposition 9

Everyone has to understand and come to terms with the fact that we are threatening our own existence. To confront this requires a Copernican revolution in our view of the world and in the aims, structures, processes of education and, perhaps, in the loci of learning.

The following article explores their journey to not only understand consumerism within and among TCs, but also how they took steps to mitigate it. It begins with an overview of consumerism in their professional context, followed by a description of the integration project they created, and revised, to promote sustainable consumerism within and among their TCs. Later, based on findings from their revised assignment, they provide recommendations for creating environmentally sustainable classrooms.

Consumerism in Teacher Education

Over the years, in their individual and integrated coursework, the authors assigned projects requiring art constructions. Most TCs created these constructions, individually or collectively, from a variety of new materials (e.g., construction paper, coloured cardboard, foam spheres, pipe cleaners, pom poms, googly eyes, feathers). Although some of these materials were available at their university, within their storage cupboards, they noticed TCs with shopping bags full of newly-purchased items to use for building their constructions. When asked where they purchased these items, TCs identified small-format discount stores that offer a variety of inexpensive items, including potential classroom supplies. According to Kohan (2015), these stores are most popular with low-income and budget-wise consumers.

Within their city (population 54,000), there are seven such small-format discount stores. In its online advertisement, one of these stores focuses on how it helps meet the needs of teachers: "... we strive to keep our shelves stocked every day with extreme values on... office & school supplies, toys & crafts, teaching supplies... You can also shop online... for larger quantities of the same items you find in our stores" (Dollar Tree Canada, online source, 2015). Their TCs shop in these local stores for consumable supplies, often for single-use assignment purposes. According to Kibert, Monroe, Peterson, Plate, and Thiele (2012), one of the inherent problems of increased consumer purchasing, from any store, is the concurrent rise in waste production. Glasser (2004) argued that there is hypocrisy among learners and educators when they know consumerism hurts the environment but purchase one-time-use materials anyway. While the authors understand that TCs have limited budgets with which to prepare what are perceived as high quality assignments, they are concerned about constant use of discount stores for school purchases, along with the amount of waste inherent in those purchases.

For Jagodzinski (2007) "commodity fetishism" (p. 347) among educators is based on the lure of the cheap. The authors suggest this "fetishism" for inexpensive classroom supplies is learned consumer behavior and, when they see it at the teacher-education level, they suspect it will continue into future classroom practice. One of them conducted a study of local elementary teachers' practices in art education (Ashworth, 2012) and

found that they spent between \$75 and \$1200 of their own money, annually, on classroom supplies purchased from discount stores. Although the participants had access to school budgets and supplies, and chose to buy discount items for classroom use, they were concerned that this behavior could model unsustainability not only for their learners but also TCs in practice-teaching placements with them.

McGregor's (2003) statement, "people are convinced that to consume is the surest route to personal happiness, social status, and national success" (p. 3), provided for the authors a perspective for helping their TCs understand, and perhaps change, their consumerist behavior. Similarly, Stearns (2006) suggested "many people formulate their goals in life partly through acquiring goods... and take some of their identity from a procession of new items that they buy and exhibit" (p. vii). Although the authors are not sure if buying supplies from discount stores provides "personal happiness" or "identity" for their TCs, they do know that they value high marks on all assignments. Perhaps, they prefer using new materials as a way to make their projects more appealing in an assessment context, potentially providing a competitive edge for securing teaching jobs.

Wals and Jickling (2002) suggested "shifts in educational orientation" (p. 229) must happen within education for sustainability, and Blandy and Fenn (2012) stated that sustainability should be taught collaboratively and cross-curricularly in order to "promote systemic thinking...[and develop] a shared local/global sense of responsibility, and an ethic of doing no harm" (p. 280). Raus and Falkenberg (2014) advocated for teacher educators to become aware of each TC's "ecological self-mission...identity and beliefs" (p. 112) to help learners develop deep, personal understandings of sustainability. Inwood and Jagger (2014), along with Stewart (2010), provided practical ideas for fostering discussions about social issues related to consumerism and sustainability in teacher education in order to transform classroom practices. UNESCO (2005) included not only wasteful consumption as a topic for learners at all levels to explore and consider for better understanding, but also provided recommendations regarding sustainable practices for TCs specifically. These included integrated assignments, curriculum analysis, collaborative teaching and learning, with local and global foci on sustainability. As a guide for educators to promote and practice sustainability in their classrooms, Selby (2011, pp. 6–11) created a list of propositions for education for sustainable contraction to assist learners in understanding the vast implications of climate change on people and the environment (see Table one). For the authors, Selby's (2011) third proposition, "climate change education needs to offer alternative conceptions of the 'good life', combat consumerism, and help learners explore and experience alternatives to a growth economy" (p. 7), fit best with the sustainable consumerism focus of their art/science integration assignment. It became the conceptual framework for the revisions they made to improve that project.

An Educational Intervention

A few years ago, the authors created an art/science integration assignment where TCs formed groups and chose a science topic. After they explored their topic through a STSE lens, each group created an art construction to show their understandings of their selected topic, and then wrote a Reflection paper. Although the assignment was a good way to promote interdisciplinary learning among TCs, the authors were shocked that many groups chose to purchase new materials for their constructions rather than making

use of the recycled materials that were readily available in both the art and science classrooms. Given the choice, many TCs seemed to prefer creating constructions with new/man-made materials rather than recycled or natural ones, and did not seem concerned to spend their personal money to do so. Further, even though they were encouraged to keep their constructions for use as classroom samples, many decided to discard them immediately after assessment. The authors realized the opportunity for intervention.

For them, the heart of their assignment is its simplicity, and a way to promote sustainability in teaching practice. They help prepare nearly 300 TCs annually for elementary and secondary classrooms throughout their province and beyond, so modelling sustainable practices in teacher education can have a broad impact. Their TCs' consumerist behaviour, and Selby's (2011) third proposition, prompted them to ask the following questions: "How do we draw attention to consumerism among our TCs?", "How do we remind TCs that recycling and repurposing was once mainstream teaching practice?", "How do we model and nurture sustainable decisions and environmental awareness in our practice?", and "How do we raise the level of creativity/problem solving/design through sustainable classroom practices?"

The authors believe that their intervention should "offer alternative conceptions of the 'good life', combat consumerism, and help learners explore alternatives to a growth economy" (Selby, 2011, p. 7). Moreover, Kelly and Leggo (2008) recommended interdisciplinarity and suggested opportunities for design, critical thinking, problem solving, collaboration, reflection, and revision as ways to nurture creative processes within assignments/projects.

Methodology and Research Participants

With these concepts in mind, the authors revised the requirements for an existing art/science project: a) the use of recycled and/or natural materials in constructions, b) the inclusion of process work (e.g., sketches, notes, lists, resource URLs) with the finished construction, and c) reflective commentaries addressing the use of *not new* materials, along with design considerations, in group Reflection papers. The first requirement was included to address the consumerist tendencies of our TCs; the second was to see documentation of the creative process; the third helped them to understand what the TCs learned from the project for immediate and future considerations.

Key to the project was the support of faculty administration in their request for concurrent timetabling of art and science education classes for the purpose of the integrated assignment/research project. The research involved 134 TC participants in the Junior/Intermediate division (TCs preparing to teach learners of ages 9–13); they self-selected into 35 groups of two to five persons per group. Prior to the assignment, TCs were introduced to basic visual art skills, as well as design elements and principles. In their science education class, the TCs gained familiarity with science curriculum content, skills and ideas such that they were able to work with the concepts of STSE in a particular curricular unit of science study. The TCs then had approximately one month to complete the science/art integration assignments.

When the authors introduced their revised integration assignment, they discussed the assessment rubric with the TCs, highlighting the expectations to use recycled and/or natural materials where possible. As well, the authors reminded them to keep all process work to submit with the finished construction. The authors then showed them bins of

various recycled items within their classrooms, and encouraged the use of local resources (natural and recycled) for building constructions. The authors are fortunate to teach at a university surrounded by large areas of mixed forest and they encouraged TCs to collect natural items (from the ground, not cut from trees) for assignments. The Reflection papers were assigned to be 2–3 pages in length with suggested guiding questions: a) How well are specific curricular expectations met (or not) through the integration? and b) What are some of the classroom considerations for an art/science integration? The authors deliberately decided not to assign a question addressing environmental sustainability as a way to determine if TCs would recognize this, and other dimensions, of the assignment.

Based on their intention to collect open-ended qualitative data in the form of Reflection papers, they decided to use a constructivist grounded theory approach (Charmaz, 2006; Creswell, 2013) to organize and code their analysis. Charmaz (2006) described the coding process as reflexive, such that the topics that emerged for the authors revealed the perspectives/beliefs of both the TCs as well as the researchers.

Initially, the authors worked separately to determine key ideas in the data; then they worked together, through ongoing discussions, to further refine those ideas, as informed by the initial guiding questions, and taking into account emerging ideas. It became apparent that the TCs not only had views on the assigned topics (integration of curriculum expectations and classroom considerations) but also offered views on a number of other issues based on their work. The following sections describe and discuss the TCs' ideas as expressed in their Reflection writing, and their constructions.

Alternative Conceptions

The authors' exploration of Selby's (2011) theorizing to provide "alternative conceptions to the 'good life'" (p. 7) involved assessing how TCs handled the requirement of using recycled and/or natural materials, as opposed to store-bought ones, to build their constructions. They analyzed how they incorporated and/or transformed the materials in their constructions, and read their reflections (e.g., integration in general, merging art and science specifically, the creative process using recycled and/or natural materials). Within their Reflection papers, many TC groups revealed how pleased and proud they were of their artistry and inventiveness. The creativity of the finished constructions seemed inspired by access to only recycled and/or natural materials, perhaps because the TCs had to think of innovative ways to use them.

One sculptural construction was a working microscope, created to illustrate, and develop an understanding of, the science topic of reflection and refraction (see Figure one). The TCs transformed a detergent bottle into the body of a microscope, made lenses from various lengths of plastic spools, and placed layers of old acetate sheets inside these spools to provide magnification. The STSE information about light was gathered by the TCs, and then displayed on acetate 'slides' which could be viewed when the microscope was angled towards a light source.

Figure 1. Microscope and slides made from recycled items

Figure 2. Bird created with recycled and natural items

Figure 3. Food chain nesting doll construction

An example of a construction built using both recycled and natural items was a bird sculpture, its stomach open and full of garbage items, to help illustrate the effects of pollution on wildlife (see Figure two). The structure was built using recycled chicken wire, bent to give the bird a wistful appearance. Its base was an old shelf and the sculpture was covered, and filled, with materials found in the classroom (e.g., shredded paper, plastic bottles, metal cans, food wrappers). The wings were pine boughs found on the ground near the university. STSE information was placed in the 'stomach' to be easily accessible to viewers.

Another construction, created to display TCs' understanding of a food chain, was a series of nested dolls made with recycled materials (see Figure three). The chain begins with a small cheese container covered with used, streaked modelling clay to represent the sun. The concept continues with a medium-size margarine tub, decorated with shredded faded construction paper to resemble grass. The 'grass' feeds the 'deer', created from a large plastic container to which twigs and hemp were glued. Continuing the sequence is a representation of a bear, made of an old shoebox covered with torn paper 'fur', styro-foam 'eyes', and a painted plastic cup 'nose'. The food chain ends with 'Alex': a human form created from a paper storage box and faded paper. The sun, therefore, feeds the grass, which feeds the deer, which feeds the bear, then eaten by 'Alex'.

On completion of their food-chain construction, this group wrote:

Having students use recyclable materials in an assignment integrates the global issues of being environmentally friendly which makes the assignment resources cheaper for the classroom. Therefore, the teacher or parents do not have to go out and spend money on making this project. As a group, we spent no money on this project. All items were ones we had in our homes or ones that were available in the art classroom. (TC group, personal communication, 2013)

When planning their constructions, most groups drew sketches of their ideas, then found recycled and/or natural materials in order to match their chosen design. One group, however, let the recycled items determine how they would build their construction:

The recycled items dictated the animals we chose to represent in our life systems totem pole... the bear was created after finding an empty coffee creamer container, the deer was made from a recycled body wash bottle, and the wolf emerged from a water bottle. All were mounted on a discarded fence post. (TC group, personal communication, 2013)

Like the aforementioned bird, this totem pole contained natural items: real antlers and feathers.

Within other group Reflection papers, the authors found comments alluding to alternative conceptions of the “good life” (Selby, 2011, p. 7) of consumerism, particularly how the assignment encouraged creative problem solving. One group, for example, provided a positive statement about the challenge of construction:

Even though the use of recycled materials was challenging, it was a good challenge. It was interesting being creative and attempting to get our model to look realistic using these materials. (TC group, personal communication, 2013)

Other group reflections echoed the challenge to make their constructions “look realistic”, even though that was not a requirement of the assignment.

During all assignments, the authors encourage TCs to ‘think like teachers’; that is, consider what they are learning in their education program and how it may impact learners in their future classrooms. This concept was apparent in the following group reflection:

We believe that this project would allow students to display their science learning in an application that involves higher order thinking, creativity, and ingenuity... when we had to think of recycled items to use to show how pulleys work, we had to think outside of the box. This is where student creativity has the opportunity to be truly fostered. (TC group, personal communication, 2015)

From these reflections, and the constructions described above, the authors found the requirement to use recycled and/or natural materials prompted much creativity, as well as thoughtful considerations for future classroom applications.

Confronting Consumerism

Regarding Selby’s (2011) proposal to “combat consumerism” (p. 7), the authors found that a few TC groups included comments in their Reflection papers about the reduction of waste. Two examples focused on the value of extending the life of objects: “The use of recycled materials helped us to appreciate the environment and the potential of bringing a second life to items that may have otherwise been thrown out,” and, “It made sense to use recycled materials to conserve resources. This we will discuss in detail in our classrooms to bring home the idea of sustainability and limiting waste of precious resources” (TC groups, personal communication, 2013). Both group reflections revealed some growth in understanding sustainable consumerism, especially through the use of *not new* materials in the classroom.

Along with sharing the benefits of conservation, many TC groups discussed cost savings, for learners and their families, associated with using recycled and/or natural materials. One group, for example, provided a plan to practice sustainable consumerism in the future: “We would encourage students to try to use as many classroom resources, and recycled items, as possible to avoid them spending their own money and/or their parents’ money” (TC group, personal communication, 2014). Another TC group, focused on the realization that some of their future students may not have the financial means to provide new materials for classroom activities: “It is important to note that students may not be able to purchase their own craft items... requiring that students complete a

project using recycled items is a cost-effective option" (TC group, personal communication, 2014).

Within their Reflection papers, most TC groups remarked how the assignment changed their thinking about store-bought items and projected how it would influence their future classroom practice. They also suggested ideas for collecting and using recycled and/or natural materials. The requirement to use these materials, instead of purchasing new ones, prompted many TC groups to consider how this assignment promoted both environmental and economic sustainability.

Alternatives to a Growth Economy

Within the TCs' Reflection papers, comments arose that echoed Selby's (2011) proposition for alternatives to a growth economy; that is, ideas for how to recycle, reuse, repurpose, and use natural materials, instead of store-bought ones. TC groups made several recommendations for collection and storage of these materials; for example:

A teacher or student may wish to bring in natural materials from the outside world such as soil, water, sticks, moss, grass, rocks, or seeds but plan where to store them where they are out of the way and not posing a hazard to students. (TC group, personal communication, 2014).

Similarly, another TC group considered the collection process, but added the idea of visiting natural and industrial locations to aid in the understanding of the availability of *not new* materials for school projects:

We could go on a field trip to a recycling plant to collect old electronics, or on a nature hike to gather natural resources. These trips could serve as great educational tools through allowing students to see how they benefit society... Students would become educated on these man-made and natural systems, which will foster deeper meaning and inspire creative ideas for their assignments. (TC group, personal communication, 2014)

The Reflection papers were filled with insightful recommendations for encouraging and maintaining sustainable classrooms. Along with them, the authors offer suggestions, based on their revised assignment findings, to help teachers shift from consumer to sustainable practices.

First, the authors suggest creating a list of potential reusable and/or natural materials which learners may bring from home to use for project construction purposes. Second, teachers should ensure that classrooms are well-equipped with recycling bins and boxes of reusable items. These may be bulky and messy, but should nonetheless be considered desirable supplies for any project (e.g., models, games, posters, costumes). Third, although it is tempting to purchase new learning materials and visual aids, teachers should keep learner-made examples, and/or use recycled/natural materials to create samples for instructional purposes. This practice will save personal and school funds and, more importantly, model sustainable practices for learners, colleagues, and the community.

Although each group worked hard to include as many recycled and/or natural materials as possible when creating their constructions, they realized some new materials were needed to build them: "While most of our resources could be readily found and were recyclable, we still needed to use materials like paint, paintbrushes, and hot glue"

(TC group, personal communication, 2015). Another group raised important questions as to what would happen to the materials after their own students did similar projects:

One of the main considerations in terms of student learning is making sure they are adopting the practice of recycling and sustainability when creating the project. If students are taking apart any electronics what are they doing with the leftover pieces? Are they being thoroughly recycled? Are students picking up dead branches or are they pulling them off trees? Also, students should use as little materials as possible, which would require much more planning rather than just cutting and pasting, which would lead to excess waste. (TC group, personal communication, 2015)

Although most TCs seemed comfortable using recycled and/or natural materials, there were a few who were reticent. Notably, these were recent graduates from various Fine Arts programs, whose undergraduate experiences included, mainly, the use of new, pristine materials (TC group, personal communication, 2014).

The authors' practice, before and after the assignment revisions, has been to encourage TCs to keep their constructions for future classroom use: one person in each group takes the construction home and other group members photograph it to use as a resource. Unclaimed constructions are either stored by the authors as samples/ideas for future TCs or broken down into useable materials for the next round of assignments. Regardless, very little is discarded and almost everything is reused.

What began in their science and visual arts education classrooms soon attracted attention among their university colleagues? A few asked about the details of the art/science assignment and then began to require recycled materials in assignments for their courses; for example, a social studies professor assigned an integration project to her TCs where they created classroom samples using recycled items as construction materials. Similarly, another colleague instructed her art education students to create bulletin boards using recycled and/or natural materials. The TC recommendations, the authors' own findings from the revised assignment, and evidence of influence within their faculty, are heartening to them and suggest strong possibilities for sustainable practices in classrooms at all levels.

Conclusion

The requirement of using recycled and/or natural materials for the construction segment seemed to encourage TCs to disregard their favored small-format discount store purchases and, instead, use recycled and/or natural items to build their constructions. By doing so, they saved money, practiced sustainability, and learned to think more creatively when designing and building their constructions. The Reflection papers provided insights into TCs' re-thinking of construction materials and ways to include environmental considerations into their classroom practice. Through this analysis, the authors found not only answers to their questions but also some understanding of the project's impact beyond their art and science education classrooms.

Although the reflections indicated changes in TCs' perceptions of consumerism through this assignment, the authors do not know if their TCs' learned, consumerist behavior truly changed. To date, nearly 1500 TCs have experienced the revised integration assignment so the authors are hopeful its sustainable consumerism message has influenced

classroom practices. The authors have some anecdotal evidence shared by TCs after they returned from their practice-teaching placements, particularly regarding the use of recycled and/or natural materials in their lessons. In order to determine the extent of their revised project’s influence, they intend to contact former TCs, who are now practicing teachers, regarding the impact of the assignment on their current practice.

Although the authors found much inspiration in the literature about sustainable consumerism to inform the revisions to their art/science integration assignment, they felt that Selby’s (2011) third proposition was the most influential for their goal: to encourage TCs to “[understand] alternative conceptions of the ‘good life’, combat consumerism, and explore and experience alternatives to a growth economy” (p. 7). The authors’ approach to teaching sustainable consumerism is through an integration of science and visual arts with environmental education; however, moderation and sustainable practices can be addressed in all subject areas.

The concepts of recycling and using natural materials are not new in education circles but they have been eclipsed by enthusiasm for the shiny and new; classrooms can be sites of unabashed consumerism of everything from paper to digital technologies. The authors hope that the sustainable practices TCs’ learn through their work with the authors will carry over into their own future classrooms. Teacher education, therefore, needs to address the unnecessary squander of resources and one way to do so is to provide TCs with learning experiences that are viable and to creative alternatives. The authors believe that their revised art/science integration project is a good start in that direction.

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