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## THE EDUCATIONAL COST OF SCHOOLHOUSE COMMERCIALISM

*Alex Molnar and Faith Boninger*  
University of Colorado Boulder

*Joseph Fogarty*  
Corballa National School, County Sligo, Ireland

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**National Education Policy Center**

School of Education, University of Colorado Boulder  
Boulder, CO 80309-0249  
Telephone: 303-735-5290  
Fax: 303-492-7090

Email: [NEPC@colorado.edu](mailto:NEPC@colorado.edu)  
<http://nepc.colorado.edu>

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Publishing Director: **Alex Molnar**

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# THE EDUCATIONAL COST OF SCHOOLHOUSE COMMERCIALISM

THE FOURTEENTH ANNUAL REPORT  
ON SCHOOLHOUSE COMMERCIALIZING TRENDS: 2010-2011

*Alex Molnar and Faith Boninger, University of Colorado Boulder*  
*Joseph Fogarty, Corbally National School, County Sligo, Ireland*

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## Executive Summary

Over the past several decades, schools have faced increasing pressure to “partner” with businesses, both to be seen as responsive to the business community and out of the hope that partnerships would help make up budget shortfalls as states reduced public funding for education.

Often, school-business partnerships are little more than marketing arrangements with little if any educational benefit and the potential to harm to children in a variety of ways. The 2010-2011 Annual Report on Schoolhouse Commercializing Trends considers how commercializing activities in schools harm children educationally.

It is relatively easy to understand how corporate commercializing activities harm children educationally by undermining curricular messages (as when candy and soft drink ads contradict nutrition lessons) or by displacing educational activities (as when students spend time focused on a corporate contest rather than the curriculum). A less obvious, though perhaps more serious, educational harm associated with school commercialism is the threat it poses to critical thinking.

Researchers generally agree that thinking critically requires abilities, such as problem-solving, decision-making, inductive and deductive inference-making, divergent thinking, evaluative thinking, and reasoning. According to the research literature, critical thinking is best cultivated in a school environment that encourages students to ask questions, to think about their thought processes, and thus to develop habits of mind that enable them to transfer the critical thinking skills they learn in class to other, unrelated, situations.

It is not in the interest of corporate sponsors to promote critical thinking. Far from it: their interest is in selling their products or services or “telling their story.” Encouraging children to learn to identify and critically evaluate a sponsor’s point of view and biases, to consider alternative points of view or products and services, or to generate and consider solutions to problems other than the ones sponsors offer would, from a corporate point of

view, be self-defeating. For this reason, sponsored messages will necessarily avoid touching on anything that might lead to thinking inconsistent with the intended message.

Although commercializing activities channel student thinking into a corporate-friendly track, the impact on critical thinking of doing so is rarely considered. In part this is because some commercializing activities, such as sponsored educational materials, may, on the surface, appear to have educational benefit. They may, for example, claim to address national standards for basic skills, or to encourage analytic thinking about contemporary issues such as energy policy. Moreover, since marketing is often framed as a “partnership” with schools, even when teachers might want to engage students in thinking critically about the message being marketed, doing so would mean “biting the hand that feeds” the school. Thus, to understand the educational harms of school marketing, it is necessary to understand both how commercial activities cause some things to happen in schools and classrooms and how they prevent or discourage other things from happening.

# THE EDUCATIONAL COST OF SCHOOLHOUSE COMMERCIALISM

## THE FOURTEENTH ANNUAL REPORT ON SCHOOLHOUSE COMMERCIALIZING TRENDS: 2010-2011

### Executive Summary

*Now that School™ is run by the corporations, it's pretty brag, because it teaches us how the world can be used, like mainly how to use our feeds. Also, it's good because that way we know that the big corps are made up of real human beings, and not just jerks out for money, because taking care of children, they care about America's future. It's an investment in tomorrow. When no one was going to pay for the public schools anymore and they were all like filled with guns and drugs and English teachers who were really pimps and stuff, some of the big media congloms got together and gave all this money and bought the schools so that all of them could have computers and pizza for lunch and stuff, which they gave for free, and now we do stuff in classes about how to work technology and how to find bargains and what's the best way to get a job and how to decorate our bedroom.*

(from *Feed*, a novel by M.T. Anderson)<sup>1</sup>

*The 85,000 students enrolled in MPS are a big market, and I believe that corporations that cater to the youth market, such as Sony, Adidas, and Apple, would be willing to pay for naming rights to schools, especially if that included the rights to assign team colors, names and logos. For example, if McDonald's outbid Wendy's, Arby's, and Domino's for the naming rights to a high school, the school's teams might be known as the Golden Archers, with uniforms designed accordingly. Imagine a big game between Nike High and Reebok High—now, that would be a rivalry!*

(from *New Money for MPS*, a blog post by Gerald S. Glazer, candidate for School Director for the Second District, Milwaukee, WI, March 8, 2011)<sup>2</sup>

### Introduction

Although Titus, the teenage protagonist in the young adult novel *Feed*, is blissfully unaware of how corporations' involvement in his schooling affects his attitudes, values, and education, readers can discern those influences even in the short paragraph presented

above. *Feed* is fiction, but not too far from reality as schools and districts look to corporate sources to try to make up for reductions in state education budgets.<sup>3</sup>

If corporate commercializing activities in schools caused no real harm, it might reasonably be argued that these sorts of activities are a benign way for schools to pick up a few extra dollars and to demonstrate their engagement with the business community. However, we believe that there are serious harms to children associated with corporate commercializing activities in schools. We have hypothesized four different but related types of harms associated with corporate commercializing activities: psychological, educational, health, and cost. To illustrate these harms, we examine examples of corporate engagement with schools where we live, in North America and in Ireland.<sup>4</sup>

It is important to note that whereas any single piece of advertising may seem trivial, all advertising contributes to a global message reflecting the values, stories, and morality that promote a consumer culture. As a result, advertising affects how children think about their families, relationships, environment, society, friendships, and selves.<sup>5</sup> While no one particular advertisement or advertising campaign has this effect on its own, the underlying message of consumerism as the highest good is “sold” by every advertising campaign, regardless of its relative success promoting an explicit product.<sup>6</sup>

Last year’s report detailed our analysis of the variety of *psychological* harms associated with corporate involvement in schools. We noted that children exposed to advertising are subject to a variety of psychological ills: displacement of values and activities other than those consistent with materialism, heightened insecurity about themselves and their place

*Whereas any single piece of advertising may seem trivial, all advertising contributes to a global message reflecting the values, stories, and morality that promote a consumer culture.*

in the social world, and distorted gender socialization. For adolescents especially, advertising exploits psychological vulnerabilities—in particular, their reduced ability to control impulsive behaviors and to resist immediate gratification—and increases their susceptibility to peer influence and image advertising.<sup>7</sup> Advertising not only persuades children to buy more, but it also promotes the idea that they can derive identity, fulfillment, self-expression, and confidence through what they buy.<sup>8</sup> The endless advertising for grooming products is only one example: adolescents prompted to believe not that the awkwardness they experience is normal for children their age, but rather that it is a personal flaw, one that can be corrected by using Clearasil, Axe, Old Spice, or any number of other products. Advertising first creates or amplifies adolescents’ insecurities and then, literally, sells them a “solution” in the form of a product that cannot solve the problem it created. Again: in addition to promoting a particular product, every advertisement reinforces the assumption that consumption leads to happiness and satisfaction, the central tenet of consumer culture. This invisible message is especially effective because it is so seldom questioned.<sup>9</sup>

The corporate domination of public space—including schools—now seems obvious and natural to those who grew up in recent years. However, the corporate capture of virtually all public space is neither natural nor necessary.<sup>10</sup> Schools are one of the only places still available where children can exist outside of the pervasive consumer culture. Schools can be places where children explore possibilities for their lives, their values, and their selves other than those marketers define for them.

### Focus of the 2011 Report: Educational Harms

This year's report considers three types of *educational* harm associated with marketing in schools. Two types are straightforward: Some of the lessons learned from corporate advertising explicitly contradict certain things that children learn in classes. The most obvious and prevalent example is that vending machines in schools encourage children to buy and eat food products that their nutrition and science teachers try hard to teach them to avoid. Second, in an already crowded school day, commercializing activities necessarily displace other educational activities. When ASA Entertainment's action sports tour shows up at the local high school, for example, classes are suspended so that students can attend a mandatory assembly. When Microsoft sponsored the tour in 2008 and 2009, students played new Xbox games, strolled past banner advertisements for other sponsors, and listened to athletes' anti-smoking speeches that were the pretext for the program.<sup>11</sup>

Along with providing basic skills instruction and content knowledge, we look to schools to teach our children how to think—scientifically, creatively and critically. This is no easy task. Researchers and theorists have spent quite a bit of energy explicating various skills that contribute to effective thinking and developing approaches to nurturing it in children. Critical thinking, in particular, requires skills and habits of mind inhospitable to the success of commercial enterprises in schools, skills that might lead students to question and possibly reject consumerist messages as they identify and evaluate sponsors' points of view and biases, consider alternative points of view, and generate and consider alternative solutions. Our analysis leads us to the conclusion that when there is commercial activity in schools, critical thinking—and the habits of mind associated with it—are less likely to be encouraged. Paradoxically, to understand how marketing may undermine critical thinking in schools we have to consider, as Sherlock Holmes did in the story "Silver Blaze," the "dog that didn't bark." That is, the threat to critical thinking posed by marketing will become visible when we move beyond what does happen in schools to what *may not* happen in schools as a result of corporate involvement.

Educators' efforts to nurture critical thinking are under threat in modern schools, and not just as a result of corporate involvement. In the United States, school reform emphasizes a testing regime that rewards students, teachers, and administrators for the memorization of facts that translates, in the short term, into high test performance.<sup>12</sup> In this kind of educational environment, teachers have little motivation, support, or time to employ approaches that encourage higher-level thinking among their students.<sup>13</sup> These negative features of the general educational *zeitgeist* are compounded by the involvement of corporations in schools: the same types of low-level thinking that are encouraged by the

testing regime also benefit and are encouraged by corporate “partners” with schools. Even corporate materials that may appear refreshingly “creative” or “critical” can never reflect anything that may threaten the corporation’s bottom line.

## **Methodology**

To examine the role of commercialism in school as broadly as possible, we identified websites associated with advertising and marketing, health care and nutrition, government policy, education, and academic research (see Appendix A). Over the course of the year, we search these sites on a regular basis for documents, articles, and other publications relevant to school commercialism; this year, we looked particularly for its effect on education. Relevant material from these sources was, in turn, used to develop further lines of investigation.

## **Critical Thinking**

### **What Is Critical Thinking?**

In order to understand how marketing undermines critical thinking in schools it is first necessary to understand what critical thinking is and how pedagogy and the school environment can encourage its development.<sup>14</sup>

The term “critical thinking” is used most narrowly to refer to “analytical thinking,” generally considered to be thinking that dissects, critiques, evaluates, and judges.<sup>15</sup> Used more broadly, however, it includes any of the characteristics of so-called “higher order thinking.” Lower order thinking is thinking associated with remembering, comprehending and applying knowledge.<sup>16</sup> Higher order thinking “comprises the mental processes, strategies, and representations people use to solve problems, make decisions, and learn new concepts.”<sup>17</sup> Analyses of the elements involved in critical thinking may vary based on discipline and theoretical perspective, but they are consistent in several aspects.<sup>18</sup> Psychologist Robert Sternberg’s review of various philosophical, psychological, and educational approaches led him to posit that the differences between these analyses rest primarily with how broadly or narrowly they view the construct of critical thinking, not what they see as its core.<sup>19</sup>

While the names given to the various skills associated with higher order or critical thinking vary according to the academic tradition of the theorist, the skills themselves are more or less the same.<sup>20</sup> For example, in 1985, Gubbins reviewed a large number of taxonomies of critical thinking and developed a comprehensive matrix of the skills involved. This matrix defines six subareas of critical thinking and details the specific skills involved in each of them: problem solving, decision-making, inductive and deductive inference-making, divergent thinking, evaluative thinking, and philosophy and reasoning (see Appendix B for the full matrix).<sup>21</sup> A more colloquial way of describing this is that: critical thinkers can take different points of view; they can identify, understand, and evaluate the assumptions,



point of view, and logic behind a given position or proposed solution to a problem; and, they can generate and evaluate alternative solutions.

Critical thinking is thus complex, requiring judgment, analysis, synthesis, and sensitivity to contextual factors.<sup>22</sup> Although the characteristics of critical thinking may be primarily analytical, they overlap with the characteristics associated with “creative thinking,” which has been defined as “thought that results in an idea that is novel and useful.”<sup>23</sup> The “divergent thinking skills” that Gubbins defines, for instance, have to do with generating multiple, varied, unique, and detailed ideas.<sup>24</sup> Other authors have argued that creative and critical thinking processes are “recursive, parallel, coincidental, and idiosyncratic to the situation and the person.”<sup>25</sup> Effective problem solving often requires both, as the individual generates, evaluates, and refines ideas. The practice of critical thinking tends to encourage appreciation for the complexity of a given issue, tolerance for ambiguity, and appreciation of the variety of perspectives from which one can approach an issue.<sup>26</sup>

### **How Students Can Be Encouraged To Think Critically**

Programs designed to promote critical thinking have been successful, clearly indicating that it is possible to nurture both critical thinking ability and the disposition, or habit of mind, to use it.<sup>27</sup> Teachers can, for example, encourage the motivation, verbal ability, and specific skills required for critical thinking, and also introduce content knowledge that might be required to think critically in a specific subject area.<sup>28</sup> In a 1997 *American Psychologist* article on intelligence, Perkins and Grotzer suggest that if intelligence is defined as intelligent behavior over time, it will be influenced to some extent by biology (that is, innate ability), but also by experience and “informed reflective management of thinking.”<sup>29</sup> Efforts to teach critical thinking influence the latter two of these factors: they can provide students with experience thinking about various situations and also with what Perkins and Grotzer call “cognitive reorganization.” Having reviewed a variety of interventions to teach higher-level thinking, these authors conclude that successful interventions make students’ thought processes explicit, leading students to “reorganize” their thinking. In such instruction, students learn such things as thinking strategies and concepts, as well as how to pay attention to their own thinking and how to avoid common weaknesses, like logical errors or faulty use of heuristics.<sup>30</sup> In other words, students learn not only how to structure problems but also how to monitor and correct their own thinking processes as they engage with them.

### ***The Importance of Asking Questions***

In the “real world,” problems may be complex and not amenable to black-and-white reasoning. Critical information may be missing. For example, available information may be irrelevant or misleading, or information sources may be biased.<sup>31</sup> Asking questions enables students to unearth complexities, to structure problems so that they are amenable to further logical inquiry, to devise their own hypotheses and tests for their hypotheses, and, eventually, to develop solutions. Inquiry skills like these may be taught in science classes, but they are also relevant to history, politics, literature, social relations, and so on.<sup>32</sup>

Students can learn to ask questions like the following about problems or arguments that they confront in and out of class: “What additional information would you want before answering the question?” (which teaches them to ask whether relevant information might be missing); “Are all assertions in the question credible or valid?” (which reminds them to check for misleading claims); and “What are two potential solutions to the problem?” (which encourages them to think creatively about the possibility of multiple solutions).<sup>33</sup> In part, such activities can teach students that arguing and questioning in the classroom are appropriate and that confusion is part of the learning process rather than a problem to be avoided or papered over.<sup>34</sup> Also, the process underscores the importance of examining the underlying assumptions and logic behind the claim, evaluating those assumptions and logic, and generating and considering alternatives.

### *The Importance of Thinking about Thinking*

Interventions that teach “metacognition”—how to think about thinking—have received substantive research support.<sup>35</sup> Such interventions intend to help students understand, review, and revise their thought processes. A 2010 study that examined the thought processes of low- and high-performing critical thinkers (matched on cognitive ability, thinking disposition, and academic achievement) found that skilled critical thinkers displayed better use of metacognitive strategies, especially planning for specific steps in thinking and revising their task approach after identifying problems.<sup>36</sup> In a series of studies, Zohar and her colleagues demonstrated the effectiveness of explicitly teaching students “metastrategic knowledge,” which they define as general knowledge about higher-order thinking strategies such as planning, classifying, establishing and analyzing causal relationships, constructing good arguments, formulating and testing hypotheses, and drawing valid conclusions.<sup>37</sup> In both laboratory and classroom-based research, these researchers found that explicitly teaching children about these higher-order thinking strategies improved the children’s use of the strategies and their success in relevant academic tasks. This was the case for both high- and low-achieving students and over time.<sup>38</sup> Like Perkins and Grotzer, they point out that whereas students may use components of the various thinking strategies implicitly or explicitly, the advantage of teaching them in class is that there they can be articulated, discussed, and negotiated.<sup>39</sup>

### *The Challenge of Transfer of Learning*

One of the hardest aspects of teaching thinking is getting the learning to “transfer.” That a student learns to think in a certain way about her latest science experiment, for example, does not mean that she will automatically apply that learning to real-world problems with different surface characteristics. This is true not only because there are aspects of thinking about a science project that simply don’t carry over to other domains, but also because students do not necessarily analyze which thinking strategies might apply to other, seemingly unrelated situations.<sup>40</sup> They need help, modeling, and practice in order to develop the habits of mind necessary to transfer thinking skills learned in one domain to another.<sup>41</sup>

## *The Importance of Classroom and School Environments*

In addition to explicitly teaching students to think critically and to transfer skills from one domain to another, schools can create environments—cultures of learning and thinking—that encourage critical thinking as an integral part of daily life.<sup>42</sup> Researchers and program developers are increasingly recognizing that programs to teach thinking cannot just be “implemented,” but rather must be “enacted, developed, and sustained within a social context.”<sup>43</sup> This means that effective teaching of critical thinking is not limited to specific classroom lessons, but also takes place spontaneously in the classroom and school as teachers both create school and classroom environments that support critical thinking and also capitalize on situations that arise outside of planned lessons.

The school experience for students includes far more than just the curriculum, and all kinds of “real-world” situations show up for students in school—such as when they have to negotiate and make decisions about joint projects, extracurricular activities, and social events, or navigate complicated social interactions. Teachers are not aware of every such

*School and classroom environments, for better or worse, create a “common-sense culture” in which critical thinking is—or is not—desirable and normative.*

situation that arises, of course, but when they are aware, they can encourage their students to apply their thinking skills. They can help students learn to deconstruct their school environment, to ask questions about the nature of their curriculum and other features of the school. By doing so, teachers help students learn how the thinking skills they learned in class can be of broad use to them in their lives in and out of school. In addition, to the extent that teachers model critical thinking themselves, they show students the varieties of opportunities the students have to transfer what they have learned.<sup>44</sup>

Research conducted by Weinstock and his colleagues demonstrates that teachers, working within a supportive school structure, can actively encourage critical thinking that transfers to out-of-classroom situations. In the Israeli “democratic schools” that were the focus of this research, teachers encourage their students to express their opinions regarding important class and school issues, including the content of the curriculum, methods of learning, and social relations within the class and the school. In weekly, democratically run school meetings, attended by all school staff, parents, and students, teachers justify their own positions on issues, demand the same from students, and model respect for disagreement by taking students’ viewpoints seriously even if they differ from their own. The study examined how students who attended either democratic or regular schools responded to moral dilemmas. Students from the democratic schools made more autonomous moral judgments than did students from the regular schools. Causal modeling showed that this difference in the students’ moral judgments could be attributed to teachers’ practice, in the democratic schools, of actively encouraging their students to think critically. Alternative explanations, such as that students were given more choices in

general in the democratic school or that parents of democratic school students encouraged them more to think critically, were not supported.<sup>45</sup>

Such supportive school and classroom cultures sustain the gains in critical thinking made by the explicit teaching of relevant skills. They also encourage intelligent behavior over time and in a variety of situations.<sup>46</sup> When school environments support engagement and critical thinking in the random day-to-day opportunities that pop up (such as when students are making decisions about a school dance, for example), they can provide the advantage of “ubiquity” ascribed to informal science education settings by the National Science Foundation (NSF).<sup>47</sup> The NSF rightly points out that “almost any environment can support informal science education,” and that learners need to be supported to make conscious and strategic bridges between what they learn in one setting and another.<sup>48</sup>

Also, and especially relevant to understanding how school commercialism shapes thinking, is that culture shapes what children attend to, care about, and focus their energies upon.<sup>49</sup> So not only do the school and classroom cultures influence whether a child’s inclination to think critically develops at all, they also influence the focus of children’s thinking, or what children think *about*. School and classroom environments, for better or worse, create a “common-sense culture” in which critical thinking is—or is not—desirable and normative.

### **How Commercializing Activities Discourage Critical Thinking**

Promoting critical thinking is the essence of what John Dewey termed an “educative” experience.<sup>50</sup> Educative experiences increase students’ ability to have fruitful, creative, and enjoyable experiences in the future. *Mis-educative* experiences, according to Dewey, are those that arrest or distort the growth of future experience.<sup>51</sup> They may be fun at the time, or even increase some automatic skill, but they narrow the range and richness of possible future experience. When for-profit corporations are involved in schools, irrespective of what the particular surface aspects of a given relationship may be, the heart of the relationship is mis-educative. This is because for-profit corporations must maintain a focus on the bottom line—they must make a profit. The mission of the school, on the other hand, is to provide educative experiences for students. The tension between the educative mission of schools and the corporate imperative to earn profits means that when corporations enter the schools, there is going to be pressure to create student experiences and shape student attitudes in ways that support, or at least do not undermine, the corporate bottom line. This pressure is inherent in the relationship. When Gary Gutting considered the implications of the corporate profit motive more generally in a recent *New York Times* op-ed, he pondered what corporations do in the case of conflict between profit and responsible action. He concluded: “Given their *raison d’être*, when push comes to shove corporations will honor their commitments to shareholders’ profit.” Moreover, he pointed out, from a profit perspective, the appearance of social responsibility is worth more than actual social responsibility. Both of these conclusions are relevant to corporate activity in schools, which is portrayed as socially responsible action but almost always involves an attempt to influence students to buy, either immediately or in their future. In their attempts to influence public policy regarding advertising to children in schools

(through lobbying) and public perceptions (through advertising), corporations promote first and foremost their profits, even when that goal undermines genuinely educative experiences.<sup>52</sup> And although it is true that all curriculum has limits, and that some of the schools' non-corporate curriculum may very well be mis-educative as well, all corporate commercializing activity in schools has a core element that is inherently mis-educative.

Commercializing activities in school foster a common-sense culture that favors both the specific brands that get their advertising into the school and a noncritical mindset that facilitates the effectiveness of such advertising. At their most simplistic, corporate commercializing activities discourage thinking of any kind (“Hungry? Grab a Snickers!”). When more complex, they discourage aspects of critical thinking that might lead to disagreement with or discrediting of the sponsor’s message—especially critical thinking skills having to do with identifying and evaluating sponsors’ points of view and biases, considering alternative points of view, and generating and evaluating alternative solutions. They insinuate sponsors’ points of view or products into the daily life of the school in a

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way that students accept them without thinking about them. They also (either actively or passively) inhibit critical thought about those points of view or products.

Even if teachers explicitly teach critical thinking in their classes, they would be unlikely to demonstrate its applicability with respect to corporate messages when those corporate messages are endorsed by the school or district.<sup>53</sup> At best, teachers might be expected to be neutral with respect to corporate messages. While it is accurate to say that such neutrality may not explicitly inhibit students from thinking critically, neither would it encourage them to do so; thus by default, students would not experience an important opportunity to learn how the critical thinking taught in class can be applied to important, real-world issues. In effect, sponsorship allows the sponsor to set the agenda for where critical thinking is applied. Whether or not students are successfully attracted to a particular product is less important than the implicit lesson that there is no need to think critically about corporate messages, a lesson taught by the fact that teachers rarely, if ever, suggest that students’ critical thinking skills might transfer to that domain.

When Nike adopted the fourth grade at Rachel Cloues’s school for a year, for instance, the company’s employees played games with the children and gave them branded gifts. In an article she wrote about her experience with Nike’s sponsorship in her school, Cloues described watching “... as our students were indoctrinated into a corporate culture, experiencing the lovely Nike Campus without being asked to consider where Nike products are made, who makes them, and under what conditions.”<sup>54</sup> She, however, was wondering about those questions that Nike was happy to avoid. Back at school, she tried to teach her students to think more critically about their consumer choices.<sup>55</sup> She designed a math

lesson to help them think about where their sneakers were made and an advertising unit to help them see how media influences their decisions. This teacher felt, however, that such lessons were not supposed to be happening as Nike support flowed into the school. In the end, she wrote, “I didn’t have the tools or the support to take either of these projects to any great depth. I also was not comfortable using Nike as an example for critical study. I worried that people at our school would view it as ‘inappropriate.’”<sup>56</sup> If Nike had been aware of her efforts, it seems very likely the corporate sponsors would have found the lesson “inappropriate.”

## Commercializing Activities in Schools in 2010-2011

Overall, commercializing activities in schools encompass a wide array of strategies.<sup>57</sup> Unlike regular school activities, which are theoretically determined on the basis of their pedagogical value, commercial activities are adopted by schools opportunistically, based on whoever shows up with a marketing idea or, at best, whoever offers the best deal. The examples below, from the 2010-2011 school year, are consistent with our developing theory of how corporations and trade associations subvert the development of critical thinking by promoting their agendas in schools and making potential challenges to those agendas hard to imagine, including the challenge of why or whether corporations should have a presence in schools. As was evident in Rachel Cloues’ Nike experience, corporate sponsors usually don’t actively prohibit alternative approaches. Instead—and unsurprisingly—sponsored programs, activities, educational materials, and so on present a worldview consistent with the corporate perspective, including the development of a common-sense culture that takes the presence of products and brands—both specifically and in general—in school for granted and accepts that corporate “partners” in education are viable sources of educational materials, programs, activities, and funds. On the surface, sponsored efforts may sometimes seem to encourage creativity and critical thought, but when we look deeper, we see that such thinking is channeled in a corporate-friendly direction. Teachers and students are on their own to initiate oppositional questions, often in school and classroom environments unsupportive of such questioning.

Scholastic Inc.’s production this year of educational materials for two competing interests in the energy market exemplifies how cynically this material is designed and disseminated to bias children’s learning toward sponsors’ agendas.<sup>58</sup> The materials produced for the Shell’s “Energize your Future” curriculum address the importance of developing many energy sources and link Shell to such endeavors. For example, a classroom poster features multiple alternative energy sources and casts Shell as a leader in alternative technologies.<sup>59</sup> In contrast, the materials produced for the American Coal Foundation’s “The United States of Energy” fourth-grade curriculum emphasize the use and production of coal in many states.<sup>60</sup> This coal curriculum caught the attention of a coalition of advocacy groups in the spring of 2011 and led to a campaign that culminated in Scholastic’s decision, in July 2011, to halt distribution of the coal-related materials and to reduce its production and promotion of sponsored content.<sup>61</sup> Scholastic has produced content for such varied sponsors Brita, Disney, Microsoft, Nestlé, Playmobil, and the American Egg Board, and as of November 2011, is promoting the “Lexus Eco Challenge.”<sup>62</sup>

The materials in Scholastic's fourth-grade coal curriculum, no longer distributed by the company, appear at first to be fair and neutral. Closer examination finds that the materials never address the potential negative effects associated with any aspect of the mining, washing, transport, or burning of coal. They are vocal about coal's advantages, but restrained about other energy sources' advantages and completely silent about coal's disadvantages.<sup>63</sup> Finally, although they present cost and availability as ways to evaluate potential sources of energy (coal is presented as relatively inexpensive and available), they fail to consider environmental or health concerns.

Although the coal industry's attempt to influence fourth-graders around the United States via the Scholastic materials was stymied this year, it continues its educational activity in the coal-producing states of Kentucky, Virginia, and North Carolina via a nonprofit organization called "Coal Education Development and Resource" (CEDAR), that explicitly works to forward the mission of "securing coal's future today by educating the leaders of tomorrow."<sup>64</sup> CEDAR is a not-for-profit corporation, formed in Pikeville, Kentucky in July 1993 by the North Carolina Coal Institute and Coal Operators and Associates of Pikeville, Kentucky, for the purpose of improving the image of the Coal Industry.<sup>65</sup> It uses monetary prizes to encourage teachers to develop units about the coal industry and to engage students in producing projects for regional Coal Fairs.<sup>66</sup>

CEDAR focuses students' learning on the engineering and technology of coal mining and on the industry's importance to the local culture and economy. Students' coal fair projects can be in any academic or creative area, and some of the winning projects featured on CEDAR's website are truly impressive.<sup>67</sup> However, environmental and health-related concerns related to coal mining are ignored because, although not explicitly forbidden to do so, a student or teacher gunning for a prize would be unlikely to introduce any of these taboo topics.<sup>68</sup> Although it is reasonable for students in coal-producing states to learn in school about an industry important to their local economy, it is mis-educative if these students are never asked to consider and think about the full range of implications of that industry on their lives. As citizens who will eventually be needed to make judgments about their livelihoods, their local economy, and their environment—among other things—they would be better served if they were taught, instead, how they could thoughtfully consider the full range of advantages and disadvantages of this particularly relevant local concern.

School trips are another form of sponsored activity. In Ireland, school trips to Tayto Park are advertised to teachers as providing an assortment of educational benefits. Tayto Park is owned and operated by Tayto, the leading potato chip maker in Ireland. Students learn about a variety of plants and animals featured at the park and can lunch in replica Native American "tipis." They also tour the Tayto potato chip factory, where they learn that 10 percent of the local Irish potato crop is made into potato chips, and walk away with six free "limited edition" bags of the product.<sup>69</sup> Not surprisingly, the "learning section" of the Tayto Park School Tours brochure does not advertise discussion about the nutritional value of potato chips.

Whereas a trip to a potato chip factory may raise some eyebrows, student participation in Google's virtual science fair appears to most observers as beyond reproach. The virtual

science fair, after all, provides students with an outlet for creative and critical thinking in the scientific domain. It also sidesteps any critical thinking around either the value of a virtual fair or the assumption that high tech is best and Google products are the default, normative choice for search and other high-tech applications. Google's marketing department oversees the science fair, and Tom Oliveri, head of product marketing for Google Apps, told the *New York Times* that “Part of this program is helping students use the apps to discover new things and develop their hypotheses.”<sup>70</sup> As the *Times* points out, this strategy is similar to one Apple used in the 1980s and early 1990s, when it provided school computer labs with its computers, desktop publishing software and CD-ROM drives.

Currently Google is struggling to replace Microsoft in offices, but to the extent that children become used to Google products in school, they will be likely in the future to transfer those products to their workplaces.<sup>71</sup> Consistent with this strategy, for the past several years Google has supplied schools with the premium version of its Google Apps, for which it typically charges corporations.<sup>72</sup> On the one hand, these Google initiatives are a boon for students, who get computer equipment to use and a high-tech science fair. On the

### *Marketing companies actively promote corporate advertising aimed at schools.*

other hand, however, those same students are being played as Google's digital marketing in schools helps the company define their perception of how their work—current and future—ought to be done. Work decisions are best made based not as a result of habit, but rather on the rational weighing of the advantages and disadvantages of alternatives. This is another example of how a sponsor's presence in the school influences children to short-circuit their consideration of alternatives.

Google is also active in a currently popular type of fundraising incentive program: a contest in which students are encouraged to participate by their schools, which may or may not win money or products as a result. Unlike “scrip” programs (such as those run by many supermarkets, or by the Target corporation, for instance), in which all participating schools get a percentage back from purchases, contests entice many schools and students to participate but save money by offering a prize to only a few winning contestants or schools. In Google's “Doodle 4 Google” program, children worldwide are solicited through their schools to create “their own Google doodle” on a yearly theme and submit it for a prize.<sup>73</sup> In 2010 20,000 U.S. schools participated, and Google received over 33,000 entries.<sup>74</sup> In 2011, with the program opened up to selected after-school programs and to parents to enroll their children directly, the company received more than 107,000 doodles.<sup>75</sup> As is the case with other incentive programs, the program's agenda, to put the brand front and center in the role of benefactor, is satisfied.

Kohl's department stores' “Kohl's Cares for Schools” contest ran in cooperation with Facebook in the summer and fall of 2010.<sup>76</sup> As the contest wound toward its conclusion, schools leading the race for a \$500,000 prize engaged in a variety of efforts to garner votes, including setting up booths at local community events, creating YouTube videos,



and distributing bumper stickers urging people to vote for the school.<sup>77</sup> The 20 schools with the most votes on Facebook won the contest, and everyone who voted was put on the Kohl's mailing list to receive advertisements and promotions.<sup>78</sup>

Also for collecting votes, the five grand prize-winning schools of the Avery Give Back to Schools Program won \$10,000 worth of Avery school supplies, 10,000 Box Tops for Education coupons, and \$1,000 worth of gift cards. Twenty-five runner-up schools won 5,000 Box Tops coupons.<sup>79</sup> The extent and nature of students' participation in their schools' efforts to win the Kohl's and Avery contests varied by school, but as with the Google contest, it is likely that students' thinking about the programs was guided in two directions, neither of which involves critical thinking: the common-sense assumption of the corporation as benefactor and the goal of getting more votes.

Marketing companies actively promote corporate advertising aimed at schools. According to the *Sacramento Bee*, for example, Education Funding Partners (EFP) is trying to sign up enough school districts to make advertising in gyms, cafeterias and other spaces at schools attractive to big-name corporations such as Apple, Sprint and Adidas.<sup>80</sup> On EFP's website, photos show potential sponsors "The Your Name Cafeteria," the "Company Auditorium," the "Central High School Gymnasium, Sponsored by Company," and various locations at a generic school with "Your [Name, Ad, Logo] Here."<sup>81</sup> California's San Juan Unified School District signed up with EFP in May 2011, and Twin Rivers Unified School District is also considering it. Similarly, in the North Branch school district in Chisago County, Minnesota, the company School Media Inc. measured schools to determine the space available for promotions. For their purposes, a unit of advertising space is 5 feet by 10 feet and can include lockers, floor space, and walls.<sup>82</sup> The amount of advertising revenue that the district collects is determined by the number of units placed in its schools. According to the contract, in effect through 2014, the school district will receive \$162 for each unit of space sold each year.<sup>83</sup>

Sacramento-area school district officials report that they are entertaining an increasing number of pitches from businesses.<sup>84</sup> And, although districts are entering into agreements with corporations because they need the money they hope these companies can bring, they are often doing so without a clear understanding of how much money the company is likely to raise.<sup>85</sup> The spokesman for the San Juan district, Trent Allen, commented oddly, "This will not be a hard sell. We're not interested in selling things to families." Echoing Titus from the novel *Feed*, Allen went on to say that any signs will help build brand awareness for sponsors and will show their support for education.<sup>86</sup> Obviously, the sponsors—and whether they know it or not, the schools that contract with them—are most definitely interested in selling things to students and their families.

Corporate relationships cannot help but shape school practices. According to one Martin County, Kentucky, biology teacher, for example, her school is so reliant on the funds brought in by its school store that even an academic decision like when to add time to the school day was influenced by the likelihood of store sales.<sup>87</sup> The store is sponsored by and named for Fast Lane, a local convenience store chain that sponsors other programs in the school (most notably the fundraising Fast Lane Classic basketball tournament), and sells

Pepsi products in accordance with the school's exclusive pouring rights contract with a local Pepsi bottling plant.<sup>88</sup> For students in Martin County, both Fast Lane and Pepsi are the normal, common-sense choices for convenience and soft-drink purchases.<sup>89</sup> In school, they are the only option, and out of school, they are preferred because they are familiar.<sup>90</sup> The exclusive agreements with the school thus dissuade students from considering any other possible choices.

Although we have focused here on explicating how commercializing activities in schools discourage students from thinking critically, the other, more obvious educational harms resulting from allowing these activities into schools are also significant. Many displace more valuable educationally valid activities, and others outright contradict or subtly subvert what students learn in classes. Teachers pushing virtual science fairs have less time to promote hands-on fairs; students visiting the Tayto potato chip factory might be traveling to a museum instead, and students doodling for Google might be doing a more meaningful art project. And foods like Tayto chips and Pepsi are exactly the kinds of foods that students are taught in their nutrition classes to avoid.

These educational harms are even more worrisome because in 2010-2011, the presence of commercializing activities is growing at fast pace. Agreements that allow corporations to

*Commercializing programs in schools should not be approved until they are proven to cause no harm to the children who will be their targets; and further, that they demonstrate a clearly understood educational benefit for those children.*

appropriate school space, such as walls, lockers, gymnasiums, scoreboards, and buses, are not at all new, but these tried-and-true marketing methods are blossoming and taking new twists in the current economic and educational climate.<sup>91</sup> School bus marketing is a good example. Whereas decisions about whether to allow it used to be made at the local level, now those decisions are also being made at the state level, allowing the practice to spread even faster. In March 2011, New Jersey became the seventh state (following Arizona, Colorado, New Mexico, Tennessee, Texas, and Utah) to allow school bus marketing statewide.<sup>92</sup> Several other states (Kentucky, Ohio, and Rhode Island) have bills under consideration.<sup>93</sup> The nature of school bus marketing is also changing in that middleman companies are signing exclusive agreements with multiple districts to provide advertising. Their ability to offer potential advertisers many districts allows them to sell advertising to large corporations rather than to small local advertisers.

## **An Agenda for Further Research**

In this year's report, we have continued our exploration of how commercial activities in schools are not inconsequential, but do harm to students. Whereas the 2010 report focused on psychological harms, this year we focused on the educational harms of schoolhouse commercializing activities. Those harms are: undermining the school's curriculum,

displacing educational activities, and discouraging the teaching, modeling, and practice of critical thinking. Our analysis is an attempt to develop a theory of how commercial engagement in the schools can cause educational harm; it relies on a logical exploration of theory and data about learning, evidence of contemporary commercial activities in schools, and individual teachers' reports of their experience with sponsorship at their schools. It hypothesizes a complex chain of effects.

We offer this analysis for empirical exploration, and hope that it can serve as a basis for the collection of data that would shed light on the connections we suggest exist. At the most basic level, research could begin by exploring the effect of marketing and advertising programs on students' attitudes toward sponsors and their products. Although the amount of corporate money and effort put into schools makes it seem obvious that advertising has substantive impact, direct evidence of an attitudinal effect would be a good start to building an evidence base showing the extent to which corporate presence in schools really matters.<sup>94</sup>

Research exploring our theory might also examine the effect of advertising and marketing on the school and classroom environments. We propose that sponsorship creates an environment friendly to sponsors' worldviews, in which teachers, even if administrators do not directly censor their classrooms, censor themselves and refrain from creating the potentially awkward situation of biting the hand that feeds the school. Such research could, for instance, examine the treatment of the same issue—say, energy—across different schools, including schools with a related commercial presence as well as those where there is no such presence. Other research might examine the discussion of potentially controversial issues at schools where sponsorships make a substantive contribution more to the school's bottom line. Finally, research might examine the effect of corporate engagement in schools on students' thinking. If students are taught critical thinking strategies in class and are then offered opportunities to use them, will they do so to evaluate the positions of their schools' commercial sponsors? Will they do so with respect to other, unrelated issues? This type of research would examine our suggestion that the transfer of learning of critical thinking is either enhanced or inhibited by the culture and example that teachers and schools set up for their students.

## Conclusion

So often, when policy makers consider allowing some kind of corporate presence in a school, they worry about the type of product that would be advertised to children. They assure themselves that they will allow only pro-social ads, or prohibit ads for alcohol or tobacco, or prohibit ads with sexual, political, religious, criminal, violent or profane undertones or depictions.<sup>95</sup> As one superintendent said, "You want to be careful of what type of advertising. Once you open your building up, if you don't have any policy in place, where do you stop?"<sup>96</sup>

That's a very good question. As matter of policy, the best way to stop is before you start. This can be accomplished by changing the current tacit presumption that commercializing

activities in schools are not harmful unless proven to be so to an explicit presumption that commercializing activities are harmful unless proven not to be. This is, in fact, the way new drugs are tested and reviewed before being allowed on the market. Pharmaceuticals are not approved for use until they are proven to cause no harm to potential patients and that they provide the benefits claimed. So too, commercializing programs in schools should not be approved until they are proven to cause no harm to the children who will be their targets; and further, that they demonstrate a clearly understood educational benefit for those children.

The particular product advertised is only part of the problem. Educational harms associated with advertising and marketing programs in school are more general in nature, and independent of any particular product domain. The harm caused by corporate commercializing activities is obvious when, for example, marketing and advertising programs contradict what children learn in classes, such as when food advertising on school buses, lockers, or vending machines promotes eating behaviors that the nutrition curriculum discourages. It is also apparent when marketing and advertising programs displace other, non-commercially-oriented educational activities, such as when a class trip to Tayto Park replaces an excursion to a museum. It is less obvious, but even more corrupting, when the corporate commercializing activity appears, on the surface, to promote education.

We know quite clearly that it is never in a sponsor's interest for children to learn to identify and evaluate its points of view and biases, to consider alternative points of view, or to generate and consider alternative solutions to problems. In the materials we have seen, instead of promoting this kind of higher-level thinking, sponsors promote their message and encourage activities that appear to forward children's education without risking touching on anything that might lead to thinking inconsistent with that message. This is the natural, unsurprising course of action for a corporation. It does not, however, promote the intellectual development of students or serve the broader interests of society.

Commercial programs in schools vary in the extent to which they are straightforward advertising or try to engage children with a product or issue. Some seem "educational" on the surface because they bring to the school activities or materials that meet national standards for things like basic math and language skills—even analytic thinking at the higher grade levels—and target topics like energy use in colorful and seemingly progressive ways. Their harm becomes apparent only when we look for what is most hard to find, because it resides in what is *not* there rather than what is. What is not there—with any and all types of corporate engagement in the schools—is dedication to the best interests of the children. It bears repeating and keeping at the forefront of any discussion of corporate involvement in the schools: corporations are self-interested entities in business for one purpose—to make money. Publicly traded corporations are required by law to put the interests of their shareholders first. Educating children is not their mission. Thus, corporate involvement with schools necessarily bends what students learn, how they learn, and the nature of the school and classroom environment in a direction that favors the corporate bottom line and attempts to shape the habits of mind that children internalize and carry with them, to the detriment of us all.

## Appendix A

The following websites associated with advertising and marketing, health care and nutrition, government policy, education, and academic research were regularly reviewed for material relevant to this report.

**Table 1.**

Source	Website
Advertising Age	<a href="http://www.adage.com">http://www.adage.com</a>
American Advertising Federation	<a href="http://www.aaf.org/">http://www.aaf.org/</a>
American Association of Advertising Agencies	<a href="http://www2.aaaa.org/Portal/Pages/default.aspx">http://www2.aaaa.org/Portal/Pages/default.aspx</a>
American Beverage Association	<a href="http://www.ameribev.org/">http://www.ameribev.org/</a>
Association of National Advertisers:	<a href="http://www.ana.net/">http://www.ana.net/</a>
Center for Science in the Public Interest	<a href="http://www.cspinet.org/">http://www.cspinet.org/</a>
Junk Food Generation (Consumers International)	<a href="http://www.junkfoodgeneration.org">http://www.junkfoodgeneration.org</a>
Consortium for Media Literacy	<a href="http://www.consortiumformedialiteracy.org">http://www.consortiumformedialiteracy.org</a>
Federal Communications Commission	<a href="http://www.fcc.gov/">http://www.fcc.gov/</a>
Federal Trade Commission	<a href="http://www.ftc.gov">http://www.ftc.gov</a>
Institute of Medicine	<a href="http://www.iom.edu/Reports.aspx">http://www.iom.edu/Reports.aspx</a>

**Table 1** (continued).

Source	Website
Interactive Food and Beverage Marketing - Montgomery & Chester	<a href="http://www.digitalads.org/">http://www.digitalads.org/</a>
Kidscreen	<a href="http://www.kidscreen.com">http://www.kidscreen.com</a>
Big Blue Dot	<a href="http://bigblue.com/">http://bigblue.com/</a>
British Psychological Society Research Digest Blog	<a href="http://www.bps.org.uk/publications/rd/rd_home.cfm">http://www.bps.org.uk/publications/rd/rd_home.cfm</a>
Campaign for Commercial Free Childhood	<a href="http://www.commercialfreechildhood.org/">http://www.commercialfreechildhood.org/</a>
Canadian Centre for Policy Alternatives	<a href="http://www.policyalternatives.ca/">http://www.policyalternatives.ca/</a>
Commercial Alert	<a href="http://www.commercialalert.org/">http://www.commercialalert.org/</a>
Empowered by Play	<a href="http://www.empoweredbyplay.org/">http://www.empoweredbyplay.org/</a>
Journal of Consumer Research	<a href="http://www.journals.uchicago.edu.ezproxy1.lib.asu.edu/loi/JCR/?cookieSet=1">http://www.journals.uchicago.edu.ezproxy1.lib.asu.edu/loi/JCR/?cookieSet=1</a>
Medpage Today	<a href="http://www.medpagetoday.com">http://www.medpagetoday.com</a>
Nielson	<a href="http://www.nielsen.com/">http://www.nielsen.com/</a>
Pediatrics	<a href="http://ejournals.ebsco.com.ezproxy1.lib.asu.edu/Journal2.asp?JournalID=102792">http://ejournals.ebsco.com.ezproxy1.lib.asu.edu/Journal2.asp?JournalID=102792</a>
PEN Weekly Newsletter	<a href="http://www.publiceducation.org/newsblast_current.asp">http://www.publiceducation.org/newsblast_current.asp</a>
Youth Markets Alert	<a href="http://www.epmcom.com/">http://www.epmcom.com/</a>

## APPENDIX B

### Gubbins' Matrix of Thinking Skills<sup>97</sup>

#### **Problem Solving**

Identifying general problem

Clarifying problem

Formulating hypothesis

Formulating appropriate questions

Generating related ideas

Formulating alternative solutions

Choosing best solutions

Applying the solution

Monitoring acceptance of the solution

Drawing conclusions

#### **Decision Making**

Stating desired goal/condition

Stating obstacles to goal/condition

Identifying alternatives

Examining alternatives

Ranking alternatives

Choosing best alternatives

Evaluating actions

#### **Inferences (Inductive and Deductive)**

### ***Inductive***

Determining cause and effect  
Analyzing open-ended problems  
Reasoning by analogy  
Making inferences  
Determining relevant information  
Recognizing relationships  
Solving insight problems

### ***Deductive***

Using logic  
Spotting contradictory statements  
Analyzing syllogisms  
Solving spatial problems

### **Divergent Thinking Skills**

Listing attributes of objects situations  
Generating multiple ideas (fluency)  
Generating different ideas (flexibility)  
Generating unique ideas (originality)  
Generating detailed ideas (elaboration)  
Synthesizing information

### **Evaluative Thinking Skills**

Distinguishing between facts and opinions  
Judging credibility of a source  
Observing and judging observation reports  
Identifying central issues and problems



Recognizing underlying assumptions  
Detecting bias stereotypes clichés  
Recognizing loaded language  
Evaluating hypotheses  
Clarifying data  
Predicting consequences  
Demonstrating sequential synthesis of information  
Planning alternative strategies  
Recognizing alternative strategies  
Recognizing inconsistencies in information  
Identifying stated and unstated reasons  
Comparing similarities and differences  
Evaluating arguments

### **Philosophy and Reasoning**

Using dialogical/dialectical approaches

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2 Glazer, Gerald S (2011, March 8). New Money for MPS. *OnMilwaukee.com*. Retrieved March 25, 2011, <http://www.onmilwaukee.com/myOMC/blog/show/4873>.

3 See, for example,

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4 Our focus on North America and Ireland is based on where we as authors live and what we see around us, but we believe this is not particularly problematic. The theory we are trying to develop is about the effect on children of corporate engagement in their schools, not about such engagement in any particular location. Our examples are meant to be illustrative, not exhaustive.

5 Jhally, Sut (2005). *Advertising as social communication* (online course; part one: Why study advertising?). Retrieved July 22, 2009, from <http://www.comm287.com/partone/>.

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7 For simplicity's sake we include "adolescents" in with "children," but adolescents are even more susceptible than younger children to the psychological harms caused by advertising because of the sensitivities associated with their

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Steinberg ,Laurence. (2008). A social neuroscience perspective on adolescent risktaking. *Development Review, 28*, 78-106.

8 Kilbourne, Jean (2006). Jesus is a brand of jeans. *New Internationalist, September*, 10-12. Retrieved June 25, 2010, from <http://www.newint.org/features/2006/09/01/culture/>.

See also:

Jhally, Sut & Barr, Willian (n.d.). *Advertising, cultural criticism, and pedagogy: An interview with Sut Jhally* (conducted by William O'Barr). Retrieved November 23, 2010, from <http://www.sutjhally.com/articles/advertisingcultura/>.

9 Cultural observers long have noted that propaganda is most effective when it goes unnoted:

"This is the secret of propaganda: those who are to be persuaded by it should be completely immersed in the ideas of the propaganda, without ever noticing that they are being immersed in it." Attributed to Nazi propagandist Joseph Goebbels, cited in, among many other places,

Pratkanis, Anthony and Elliot Aronson (2001). *Age of Propaganda: The Everyday Use and Abuse of Persuasion*. New York: Holt Paperbacks (87).

"Individuals are controlled through the power of the norm and this power is effective because it is relatively invisible. In modern society, the behaviour of individuals is regulated not through overt repression, but through a set of standards and values associated with normality which are set into play by a network of ostensibly beneficent and scientific forms of knowledge."

McNay, Lois (1994). *Foucault: A critical introduction*. Cambridge: Polity (94-95).

"To not be influenced by advertising would be to live outside of culture. No human being lives outside of culture." Sut Jhally, cited in

Kilbourne, Jean (2006). Jesus is a brand of jeans. *New Internationalist*, September, 10-12. Retrieved June 25, 2010, from <http://www.newint.org/features/2006/09/01/culture/>.

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14 For a discussion of related terminology to describe the tendency toward and attitudes relevant to critical thinking, see,

Ritchhart, Ron (2002). *Intellectual Character*. San Francisco, CA: John Wiley and Sons, Inc. (xxii).

15 Sternberg, Robert J. & Spear-Swerling, Louise (1996). *Teaching for Thinking*. Washington, DC: American Psychological Association (151).

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For a hierarchy of thinking skills, see,

Bloom, B.S. (Ed) (1956). *Taxonomy of educational objectives: The classification of educational goals. Handbook I: Cognitive domains*. New York: David Wiley.

17 Sternberg, Robert J. (1986). *Critical thinking: Its nature, measurement, and improvement*. ERIC Document Reproduction Service No. 272882. Retrieved March 30, 2011, from <http://www.eric.ed.gov/PDFS/ED272882>.

18 Fairweather, Elizabeth & Cramond, Bonnie (2010). In Beghetto, Ronald A. & Kaufman, James C (Eds.), *Nurturing Creativity in the Classroom*. Cambridge, England: Cambridge University Press (113-141).

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20 Abrami and his colleagues, for instance, discuss psychological approaches that focus on skills such as interpreting, predicting, analyzing, and evaluating, and philosophical approaches that emphasize the ability and disposition to evaluate beliefs effectively and to identify and assess their underlying assumptions. Halpern refers to skills in verbal reasoning, argument analysis, hypothesis testing, likelihood and uncertainty, decision-making, and problem-solving.

Abrami, Philip C., Bernard, Robert M., Borokhovski, Evgueni, Wade, Anne, Surkes, Michael A., Tamim, Rana, & Zhang, Dai (2008, December). Instructional Interventions Affecting Critical Thinking Skills and Dispositions: A Stage 1 Meta-Analysis. *Review of Educational Research*, 78(4), 1102-1134.

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See also,

Ennis, Robert.H. (1986). A taxonomy of critical thinking dispositions and abilities. In J.B. Baron and R.S. Sternberg (Eds.), *Teaching thinking skills: Theory and practice* (pp. 9-26). New York: Freeman.

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Zohar, Anat & Peled, Bracha (2008). The effects of explicit teaching of metastrategic knowledge on low- and high-achieving students. *Learning and Instruction*. 18, (4) 337-353.

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See also,

Abrami, Philip C., Bernard, Robert M., Borokhovski, Evgueni, Wade, Anne, Surkes, Michael A., Tamim, Rana, & Zhang, Dai (2008, December). Instructional Interventions Affecting Critical Thinking Skills and Dispositions: A Stage 1 Meta-Analysis. *Review of Educational Research*, 78(4), 1102-1134.

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40 Halpern (1998), points out (p. 453) that the transfer and use of critical thinking skills to a variety of real-world situations is facilitated by the creation of elaborated cognitive structures associated with those skills. Although she does not focus on the classroom and school environments as a source of developing those elaborated cognitive structures, she emphasizes that any program to teach thinking should draw questions and scenarios from the real-world contexts of the workplace and “in the exercise of citizenship” (p. 453). To the extent that students get practice extending the thinking skills they learn in class to the “real-life” contexts they face out of class, they may be more likely to recognize when other real-life situations emerge that warrant the application of their skills.

Halpern, Diane F. (1998, April). Teaching critical thinking for transfer across domains: Dispositions, skills, structure training, and metacognitive monitoring. *American Psychologist*, 53(4), 449-455.

See also,

Rogoff, Barbara, & Lave, Jean (Eds.) (1984). *Everyday cognition: Its development in social context*. Cambridge, MA: Harvard University Press.

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Scardamalia, Marlene, Bereiter, Carl., & Lamon, Mary. (1994). The CSILE Project: Trying to bring the classroom into World 3. In K. McGilly (Ed.), *Classroom Lessons: Integrating Cognitive Theory and Classroom Practice* (pp. 201-228). Cambridge, MA: MIT Press.

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Fairweather, Elizabeth & Cramond, Bonnie (2010). In Beghetto, Ronald A. & Kaufman, James C (Eds.), *Nurturing Creativity in the Classroom*. Cambridge, England: Cambridge University Press (113-141).

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See also;

Scardamalia, Marlene, Bereiter, Carl., & Lamon, Mary. (1994). The CSILE Project: Trying to bring the classroom into World 3. In K. McGilly (Ed.), *Classroom Lessons: Integrating Cognitive Theory and Classroom Practice* (201-228). Cambridge, MA: MIT Press.

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50 Dewey, John (1938). *Experience and education* (pp. 16-17). Indianapolis, IN: Kappa Delta Pi.

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52 Bakan, Joel (2011). *Childhood under siege: How big business targets children* (p. 11). New York: Free Press.

Norris, Trevor (2011). *Consuming schools: Commercialism and the end of politics* (p. 57). Toronto: University of Toronto Press.

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<http://opinionator.blogs.nytimes.com/2011/10/12/corporations-people-and-truth/?ref=opinion>.

53 Consistent with this analysis, nutritionist Dr. Rosemary Stanton commented as follows about a proposal to ban advertising in Australian schools by companies that sell “junk food”: “If you have spellathons, walkathons, anything that’s sponsored by a junk food company, it effectively silences the teachers from being critical of those products.”

Tovey, Josephine (2011, March 22). Greens want to curb junk food ads. *The Sydney Morning Herald*. Retrieved March 27, 2011, from

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54 Cloues, Rachel (2011). My year with Nike: A story of corporate sponsorship, branding, and ethics in public schools. In Elizabeth Marshall and Özlem Sensoy (Eds.), *Rethinking popular culture and media*. Milwaukee, WI: Rethinking Schools.

55 Cloues, Rachel (2011). My year with Nike: A story of corporate sponsorship, branding, and ethics in public schools. In Elizabeth Marshall and Özlem Sensoy (Eds.), *Rethinking popular culture and media*. Milwaukee, WI: Rethinking Schools.

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57 In our prior work, we have defined seven categories of commercializing activities in schools: (1) sponsorship of supplementary educational materials, (2) sponsorship of school programs, (3) digital marketing, (4) sponsorship of incentive programs, (5) appropriation of space on school property, (6) exclusive agreements, and (7) fundraising. The examples provided in this year’s report fall into all seven of these categories.

See, for example,

Molnar, Alex, Boninger, Faith, Wilkinson, Gary & Fogarty, Joseph (2010). *Effectively Embedded: The thirteenth annual report on schoolhouse commercialism trends: 2009-2010*. Tempe, AZ: Commercialism in Education Research Unit, Education Policy Studies Laboratory, Arizona State University. Retrieved March 11, 2011, from <http://nepc.colorado.edu/publication/Schoolhouse-commercialism-2010>.

58 Scholastic's InSchool Marketing and Solutions unit developed and distributed branded in-school materials for private companies and non-profit agencies and organizations, including products geared to "Brand Awareness, Direct to Home Marketing, Retail Tie-In, Consumer Loyalty, Cause Marketing, QSR Programs, One-to-One Marketing, Public Relations Tie-Ins, and more," according to Scholastic's website. The page of the company website that described these programs was revised in the wake of the campaign against "The United States of Energy" and no longer publicly lists these products. In July, 2011, Scholastic announced a reduction of its InSchool Marketing division by approximately 40%, much of which is from its corporate sponsored materials.

Lewin, Tamar (2011, July 31). Children's Publisher Backing Off Its Corporate Ties. *The New York Times*. Retrieved August 2, 2011, from [http://www.nytimes.com/2011/08/01/education/01scholastic.html?\\_r=1](http://www.nytimes.com/2011/08/01/education/01scholastic.html?_r=1).

Scholastic, Inc. (2011). Scholastic Marketing Partners. Retrieved May 6, 2011, from <http://www.scholastic.com/aboutscholastic/scholasticmarketingpartners.htm> [no longer available].

Paty, Alma Hale (2010, November 30). American Coal Foundation and Scholastic, Inc.: Partnering for energy education. Retrieved May 6, 2011, from <http://www.coalblog.org/?p=1590>.

59 Shell (2011). Educators. Retrieved October 11, 2011, from [http://www.shell.us/home/content/usa/environment\\_society/education/teacher/](http://www.shell.us/home/content/usa/environment_society/education/teacher/).

Shell and the American Coal Foundation are not the only energy interests attempting to influence children in schools. Climate Science Watch, a sponsored project of the Government Accountability Project, cites BP, Chevron, ConocoPhillips, Halliburton, and Pacific Gas and Electric as funders of energy education programs in schools.

*Climate Science Watch* (2010, December 23). Corporate funding in public education — is anyone watching? Author. Retrieved October 28, 2011, from <http://www.climatesciencewatch.org/2010/12/23/corporate-funding-in-public-education-is-anyone-watching/>.

See also,

National Energy Education Development Project (n.d.). Sponsors. Retrieved October 28, 2011, from <http://www.need.org/Sponsors-Partners>.

60 Alma Hale Paty's post presents a coal industry perspective on the partnership between the American Coal Foundation and Scholastic:

Paty, Alma Hale (2010, November 30). American Coal Foundation and Scholastic, Inc.: Partnering for energy education. Retrieved May 6, 2011, from <http://www.coalblog.org/?p=1590>.

61 Lewin, Tamar (2011, July 31). Children's Publisher Backing Off Its Corporate Ties. *The New York Times*. Retrieved August 2, 2011, from [http://www.nytimes.com/2011/08/01/education/01scholastic.html?\\_r=1](http://www.nytimes.com/2011/08/01/education/01scholastic.html?_r=1).

Scholastic, Inc. (2011, May 13). Statement from Scholastic on “The United States of Energy.” Retrieved May 17, 2011, from <http://oomscholasticblog.com/2011/05/statement-from-scholastic-on-the-united-states-of-energy.html>

62 Lewin, Tamar (2011, July 31). Children’s Publisher Backing Off Its Corporate Ties. *The New York Times*. Retrieved August 2, 2011, from <http://www.nytimes.com/2011/08/01/education/01scholastic.html>.

Scholastic, Inc. (2011). Lexus Eco Challenge. Retrieved November 2, 2011, from <http://www.scholastic.com/lexus/>.

Scholastic, Inc. (2011). Freebie Corner. Retrieved November 2, 2011, from <http://www.scholastic.com/freebiecorner/>.

63 Bigelow, Bill (2011). Scholastic, Inc. Pushing coal: A fourth-grade curriculum lies through omission. *Rethinking Schools*, 25(4).

Campaign for a Commercial Free Childhood (2011, May 14). Scholastic Severs Ties With the Coal Industry. Author. Retrieved May 17, 2011, from <http://www.commercialfreechildhood.org/pressreleases/coalandscholasticwin.html>.

Lewin, Tamar (2011, May 11). Coal curriculum called unfit for 4th graders. *The New York Times*. Retrieved May 18, 2011, from <http://www.nytimes.com/2011/05/12/education/12coal.html>.

64 CEDAR, Inc. (2011). CEDAR, Inc: Coal Education Development and Resource. Retrieved May 5, 2011, from <http://www.cedarinc.org/>.

65 CEDAR, Inc. (n.d.) Coal Education Development and Resource. Retrieved May 5, 2011, from <http://www.cedarinc.org/>.

NCCI (2011). Welcome to NCCI The Coal Institute. Retrieved October 17, 2011, from <http://www.thecoalinstitute.org/>.

In addition to the original organization, CEDAR, Inc., the following child organizations are also active: CEDAR of West Kentucky, CEDAR of Southern West Virginia, and CEDAR of Virginia.

CEDAR, Inc. (2010). CEDAR, Inc: Coal Education Development and Resource: Expansion Activities. Retrieved October 17, 2011, from [http://www.cedarinc.org/coal\\_fair.htm](http://www.cedarinc.org/coal_fair.htm).

66 CEDAR, Inc. (2006). CEDAR, Inc: Coal Education Development and Resource. Retrieved May 5, 2011, from <http://www.cedarinc.org/> (see subpages for much of what’s copied here).

CEDAR, Inc. (2010). CEDAR, Inc: Coal Education Development and Resource: Regional Coal Fair: 1993-2010. Retrieved May 5, 2011, from [http://www.cedarinc.org/coal\\_fair.htm](http://www.cedarinc.org/coal_fair.htm).

CEDAR, Inc. (2010). CEDAR, Inc: Coal Education Development and Resource: Teacher Coal Study Unit (CSU) Program: 1993-2010. Retrieved May 5, 2011, from [http://www.cedarinc.org/teacher\\_CSU.htm](http://www.cedarinc.org/teacher_CSU.htm).

CEDAR, Inc. (2010). CEDAR, Inc: Coal Education Development and Resource: Program Statistics 1993-2010. Retrieved May 5, 2011, from <http://www.cedarinc.org/statistics.htm>.

Donour, Regina (2011, May 8). Personal communication (e-mail) with Nina McCoy.

67 CEDAR, Inc. (n.d.). Featured Projects. Retrieved May 25, 2011, from [http://www.cedarinc.org/featured\\_projects.htm](http://www.cedarinc.org/featured_projects.htm).

68 In an e-mail to another high school teacher, Letcher County, KY, chemistry teacher described CEDAR's work in local schools:

I am not sure if you know the background of the CEDAR program --- it is a state funded program that offers educational grants to teachers that want to show how the coal industry is a part of our historical, economical, and environmental background. Now with that said -- this is strongly supported by coal operators/companies (I think CEDAR has financial support from them) They really want to spotlight the positive side of the industry (environmental -- how it produces areas for animal grazing or industrial sites). I am not saying that they would say no to any type of grant that might address some of the negative issues --- but your application would more likely be funded if --- in the end it makes the coal industry look positive.

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76 The Avery Dennison Corporation ran a similar program in 2011, in conjunction with Box Tops for Education, called “Avery Give Back to Schools,” but with a smaller payoff. The top five schools at the end of the promotion won \$10,000 worth of Avery school supplies, 10,000 Bonus Box Tops coupons, and \$1,000 worth of gift cards. Twenty-five runner-up schools won 5,000 Bonus Box Tops coupons.

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