
COMMERCIALISM, EPISTEMOLOGY, AND CHANNEL ONE:
THE PROBLEM OF CONSUMER MATERIALISM, RELIABILISM,
AND AN AGE OF TECHNOPHILIA

Deron R. Boyles
Georgia State University

With an increasing emphasis on technology in the schools and the enormous amount of money being spent (both for initial outlay and seemingly *ad infinitum* upgrades and support), the issue of technology calls out for critical evaluation.¹ Technology that fosters commercialism in schools should be of particular concern, as it uses the technology trend to further an economic agenda rarely critiqued (like the technology itself) by those entrusted with students. By taking the specific example of Channel One, this paper intends to reveal (or reiterate) a confluence of issues that should concern those interested in pedagogy unfettered by commercialism and murky conceptions of knowledge. Another intent is to provide a broad framework for criticism of technology in the general sense, a realm that appears “uncriticizable,” paying particular attention to epistemological concerns and their connection to commercial interests. Importantly, technology is not understood here as a purely scientific “advancement,” nor is it understood only or primarily as “inert” machinery or software. Instead, technology is, in addition to being machinery and software, a capital venture rife with values, presuppositions, and power. Questioning those features via the example of Channel One reveals often hidden values, presuppositions, and instances of power that impact the lives of students and teachers in arguably negative ways.

At a conference concerning technology (titled “Asking the Right Questions”) Neil Postman offered six questions as ways of evaluating the merits of technology. I paraphrase and amend Postman’s questions for this paper in order to inquire about the epistemological implications of technology use, especially as represented by Channel One.

1. What is the epistemological problem to which Channel One is a solution?
2. Whose problem is it? (Who benefits from it/Who pays for it?)
3. Given a solved problem, what new problems emerge as a result of Channel One/the solving of the old problem?
4. Which people/what institutions might be most seriously harmed by Channel One?
5. What changes in the requirements for knowing are enforced by Channel One and what is being gained and lost as a result?
6. What sort of people and institutions acquire special economic and political power as a result of Channel One?

Question 1: What is the epistemological problem to which Channel One is the solution? De Vaney notes that “the program attempts to combat a perceived teenage ignorance and apathy about current events.”² Channel One uses a twelve minute television news program as the means by which to rectify the lack of current events “knowledge” students are charged with not having. Indeed, Garramone and Atkin assert that “TV news exposure is generally the strongest predictor of political knowledge among youth.”³ Based in part on this claim, Greenberg and Brand hypothesized that “adolescent viewers of ‘Channel One’ will learn more about news events presented on the program than nonviewers.”⁴ They note:

To test whether viewers of “Channel One” would gain more general knowledge than nonviewers, multiple-choice responses for 10 items were created and were interspersed among items assessing [the hypothesis]. Correct responses to these 10 items were summed to form a *General News knowledge index*.⁵

I argue that the epistemology asserted and assumed by Garramone, Atkin, Whittle, Greenberg, and Brand represents, at best, only non-propositional knowledge. Non-propositional knowledge is, simply, “how-to.” How to ride a bike, how to balance a checkbook, how to type, etc., are all examples of non-propositional knowledge. While important, non-propositional knowledge nonetheless does not have as a requirement any version of justification. Propositional knowledge, however, does carry the requirement for justification, which simply means that those claiming to know something are obligated to provide either evidence, reasons, warranted assertions or other forms of support and substantiation. While far too dualistic, the distinction between non-propositional and propositional knowledge nonetheless helps us compare different kinds of knowing, rather than assuming that one version of knowing is the same as (or worse or better than) all others. In terms of Channel One, for example, Greenberg and Brand, et al., seem to confuse propositional knowledge with lucky guesses. Steup clarifies by telling us, first, that a “belief can be lucky because, in relation to certain relevant *facts*, its truth was not a likely outcome. Second, a belief can be lucky because, in relation to the subject’s *evidence*, its truth was not a likely outcome... Justification is what prevents a true belief from being a lucky guess, but not from being a lucky truth.”⁶

To say, for example, that students who *view* a news program will, as a result, *know* more or even *learn* more is to reduce the complexity of knowing processes and conflate information transfer with knowing. The point here is that the modified first question results in a sort of non sequitur. It asked what the *epistemological* problem is to which Channel One is the solution. Data transfer and lucky guesses (the typical result of Channel One?) underscore a reliabilism that limits students’ knowledge and reinforces a consumer materialist

assumption—that “getting” information equals knowing, even if the person cannot connect, interpret, or otherwise warrantably assert or make meaning of the “knowledge” they “got” from, in this instance, Channel One.

To the second question: Whose problem is it? Who benefits from Channel One? Who pays for it? According to the premise (that students are lacking current events knowledge), the problem resides with schools—teachers and students more specifically. It might appear that teachers and students would also be the ones who benefit from Channel One. They do, after all, “get” “a free satellite dish and cable wiring for the building, plus videotape recorders and televisions in exchange for the promise. . . [to] view the twelve minute news program every day.”⁷ Consider, however, a further amendment to the second question. Instead of who benefits from Channel One, ask the question “Who benefits *most* from Channel One?” The modifier “most” raises important issues about exploitation and allows us to see Channel One in a different way.

Not only is the fundamental question about information and knowledge, the question includes modes of transmitting information (and claiming it as knowledge) in the form of machinery/technology, as well as a programming format (“news show”) interspersed with advertising. Assuming, for the sake of argument, that more than lucky guesses result from news show viewing, is there an imbalance in the benefits derived from Channel One? On one hand, there is a moving intangible (news show viewing resulting in knowledge). On the other hand, there is the very tangible revenue generated by the company that owns Channel One. For the 30 second advertisement slots Channel One generates over \$100 million per year.⁸ Schools get free equipment, however, so perhaps balance is restored. Yet, the subtle epistemological question seeps out: Since the admitted goal of Channel One is profit, what impact do advertisers have over the content of the news shows and, by extension, what students know? If Channel One can exacerbate the too-oft cited laments of ill-informed education commentators (including parents, media, and, sadly, teachers) regarding the “*need*” for technology in schools, and if Channel One can then *supply* schools with the hardware and software (television sets and news shows), knowledge becomes the controlled purview of private sector interests. There is nothing particularly new here, as textbooks suffer this same control, but the difference is that with books, those students who read them are at least partially active in the processes of knowledge construction (including textual visualization and meaning making). Very differently so are viewers of Channel One. The viewers watch and they do so passively. Epistemologically, this means a kind of faithful reliabilism where *S* need not justify the claim *p* in order to say she knows it.⁹ To this point we will return momentarily.

The third question gives any benefit of the doubt to Channel One: Given a solved problem (students increase their current events “knowledge”), what

new problems emerge as a result of the new technology and/or the solving of the old problem? There are three points to consider here: (1) further reduced autonomy of teachers; (2) reified conceptualization of knowing as simple data transfer and (3) consumer materialism.

In addition to the lack of autonomy teachers already face, Channel One designates a twelve minute block of time wherein teachers are *required* to have the television program running (ninety percent of all televisions in ninety percent of all of the rooms equipped with them). Even given Robinson's and Knupfer and Hayes' observations that teachers generally work on lesson plans or other paperwork during the news program (and students are not always attentive),¹⁰ the fact remains that Channel One exerts a control heretofore not seen in such stark terms. It's as though the formal autonomy attributed to teachers is undermined such that informal autonomy (or resistance) takes over. Principals are known to monitor teachers in terms of the teacher's effectiveness in classroom management, but principals monitoring teachers monitoring the monitor (TV) might just be overkill. We touched on the reified conceptualization of knowing as simple data transfer before. What should be made clear, if it already has not been done so, is that knowing requires information, but on most epistemological views it requires more than information (and efficient means of transferring it). While the traditional justified-true-belief syllogism may not ultimately hold under careful scrutiny, it nonetheless carries with it doxastic freedom and justification. Channel One and other technologies rarely if ever include either one of these notions.

Doxastic freedom means knowers are not bullied into holding beliefs they do not freely accept. Justification requires varying forms of evidence, demonstration, support, etc. What Channel One effectively does is caricature news programs (also rife with contradictions and what Edward Reed calls "processed second hand experiences"¹¹) that are developed by profit-minded entrepreneurs from the private sector. Advertisements blur viewers' versions of reality (as in what is "cool," what is beautiful, what is valuable, etc.) rendering doxastic freedom a quaint-but-arcane artifact of "*techne-episteme*."¹² Similarly, except for those rare instances when Channel One is used as the object lesson for critical discernment between facts, values, politics, perspectives, etc., Channel One is not intended for students to demonstrate and engage in justificatory debate. It is, recall, a mechanism intended to transmit current events to passive listeners. This point brings us to consumer materialism. Consumer materialism commodifies existence by reducing searching, being, thinking, etc., to objectified and reductionistic particulars. For schools it means, in part, that students have roles whereby they "get" correct answers to questions instead of searching for meaning and understanding by contesting, for our purposes, Channel One "factoids."¹³ The "correct answers" are material goods, "getting" is what consumers do. Commercials played for captive audiences are the vehicle for

corporations to reach a specified market and the news show is an extension of that point. Students as consumers fits the epistemological agenda because it mirrors the larger point of having students (at earlier and earlier ages) adopt materialist want as consumers (v. critical consumerism). If “knowledge” can be “had” only by receptor-like listening and viewing, companies are able to dissociate justification and critique, thus making the larger consumer materialist agenda possible--and profitable.

Question 4: Which people/what institutions might be most seriously harmed by Channel One? This question may force an unwanted dualism, but it seems to pit public and private interests against one another and leaves, as usual, students and teachers as (unwitting?) pawns. The larger concern within this dualism is one detailed by De Vaney when she notes Channel One’s founder Chris Whittle’s larger agenda: for-profit schools. In terms of knowledge, it suggests that teachers and students are, again, displaced by an authorized and economically brokered system of information delivery (called knowledge). Debates about Channel One are largely centered in administrative circles and involve some issues raised by parents and the general public. Academics are on the margin of this debate, but teachers and students are rarely heard. They may thus have the better posture, if one considers that any program which depends on students’ and teachers’ use of it will actually be in the ultimate power position. Channel One, however, represents a program which uses teachers and students, not the converse. It uses under-funded schools and overworked teachers to make the feeble-but-passable argument that, for “free” equipment, teachers need only have the program on ninety percent of the time. The harm may be nothing more than symbolic extortion, but one wonders if, at root, that’s all the process boils down to be.

The fifth question asks what changes in the requirements for knowing are being enforced by Channel One and what is being gained and lost. It’s already been noted that schools gain a satellite dish, televisions, VCR’s, etc. Depending on one’s perspective, teachers and students gain or lose 12 minutes per day watching, listening to, or tuning out Channel One. But this is somewhat beside the point. In terms of epistemology, that which is lost or gained includes the conditions for knowledge. My argument is that Channel One represents an extension of a form of reliabilism in which lucky guesses satisfy educationists’ claims that students “know.” Channel One literally capitalizes on this perspective and extends the problem cloaked in desirable techno-speak. Said differently, schools with Channel One rely on a form of reliabilism when they assert students “know.” When reliabilists talk about justification, they talk about beliefs being justified in terms of reliable processes (generally understood in scientific terminology and exemplified in U.S. schools by standardized testing). They do not consider justification calling for evidentialist language, i.e., terms like “reasonable,” “certain,” or “evident.”¹⁴ To do so would be to open up the project

of epistemology to justificatory claims that represent internalism, i.e., “self evident epistemic principles, beliefs, and perceptual, introspective, and memorial experiences, all of which are accessible on reflection [for foundationalism and] self-evident epistemic principles, beliefs, and coherence relations among beliefs [for coherentism].”¹⁵ Instead, *externalism* privileges the reliabilist theory of knowledge which maintains that the classical definition of knowledge (justified-true-belief) is wrong in requiring the justification condition. Reliabilism maintains that human knowledge requires only reliably produced true belief and that the reliability of such processes is *not* internal to the mind. Consequently, for reliabilists, according to Almeder, human knowledge does not require of a person any “awareness that the belief is reliably produced (or caused by appropriate information).”¹⁶ A form of externalism, where inter- and intra-personal distinctions further elaborate the problem,¹⁷ the important point is that reliabilism does not require of a person any *awareness* or *personal reflection* in order to claim knowledge. Neither does Channel One. Students who are claimed to have increased knowledge (as by Greenberg and Brand noted earlier) as a result of Channel One viewing are claimed as “knowers” based on the reliabilism just outlined. Additionally, Channel One represents externalism since the students who take the “knowledge of current affairs tests” have applied to them criteria not contingent on their awareness or personal reflection, only criteria that represent reliably produced true beliefs that result in claims to knowledge. The fact is, researchers cannot know which of the answers are lucky guesses and thus cannot discern between knowers and lucky-guessers.

Finally, we turn to the last question: “What sort of people and institutions acquire special economic and political power as a result of Channel One?” As has already been pointed out, Channel One reaps huge profits from advertising. Advertisers are obviously willing to pay the high costs for entry into a captive market. There is the larger issue of consumer materialism to consider here, however. It is not enough that advertisers present their images and their goods. Schools, *ipso facto* of advertisements on Channel One, have allowed their sphere to become a market. This is not to say, however, that consumer materialists are the ones who acquire special economic and political power, unless by special we mean “less” or “marginalized” because consumer materialists are *reactionary* agents of *external* stimuli and status quo expectations.

The larger point here is to highlight the technophilia impacting school programs, including Channel One, and the resulting capitalist regress that most U.S. citizens will not only be unable to escape--they will hegemonically participate in their own demise. Channel One recurs here as teachers have, either by their vocal willingness or not-so-vocal apathy, allowed (again and further) encroachment of “other-than-teacher” forces to enter *their* classrooms.

Recall Dewey's position regarding technology. He advocated a "vision of a day in which the natural sciences and the technologies which flow from them are used as servants for a humane life..."¹⁸ The particulars of his technology stance (objects, data, etc.) are subsumed under his larger argument about the principle of interaction.¹⁹ For Dewey, external conditions *and* internal conditions are unified by experience. Experiences are "educative" when they result in more unification and when continued inquiry occurs (and recurs). The role of the teacher, accordingly, is as a kind of regulator. Teachers have as their "immediate and direct concern... the situations in which interaction takes place. The individual, who enters as a factor into it, is what he is at a given time. It is the other factor, that of objective [external] conditions, which lies to some extent with the possibility of regulation by the educator."²⁰ The topics, coverage, commercials, and the televisions teachers (must) use, the way the "news broadcast" is presented, the way the "broadcasters" talk and what they say, for instance, all comprise the objective/external "situations" to which Dewey refers. These make up, in Dewey's words, "that environment which will interact with the existing capacities and needs of those taught to create worth-while experience[s]."²¹ Yet as Seals notes,

[Channel One], quite obviously and understandably, stand[s] Dewey's argument on its head. When incorporated into the external environment of the students' educational situation, [Channel One] present[s] a feature of that environment crucially outside the power of the educator to control, manipulate, or regulate. The inflexibility associated with [Channel One] "conversational" interaction forces the educator to practice manipulation of the other side of the educational situation. In short, the internal state of the student must be brought to the point of matching the latest member of the classroom's external environment. Since [Channel One] can't be moved from [its] preferences concerning styles of interaction, students must be moved from theirs.²²

At this point, we might suggest that there is no problem here after all. The purpose of schooling, so this argument goes, *is* to change the internal conditions of students. Dewey even admits to this when he suggests his companion principle to the principle of interaction--the principle of continuity. The principle of continuity holds that, like "educative experiences," changes for the better and growth as a result of interaction must obtain for "education" to be said to occur. On this point, Channel One can only be said to give teachers a new job to do: they must train students to "listen" to the program being transmitted. As a result, students are enabled to learn on their own by watching Channel One. Dewey is satisfied and Channel One no longer represents a problem. Unfortunately, as Seals points out,

[t]his objection . . . misses the point of the problem of the inversion of the principle of interaction. The problem occurs, not after students adapt to [watching Channel One], but before and during their adaptation to it. That is, the problem of the inversion of the principle of interaction cannot be used to argue about any alleged interruption or enhancement of a student's continual growth qua student. It may be true that [Channel One], inflexible and strict as [it is] in [its] interactions with humans, indoctrinate students into passivity, docility and compliance. It may also be true that [Channel One], entertaining and fascinating as [it] can be, unlock[s] untold treasures of educational interest for some students. But those problems, whatever merit they may have, have no bearing on the current issue. Instead, the problem of the inversion of the principle of interaction concerns an anthropological point and arises at the place where students are being [exposed to Channel One]. The upshot of identifying [Channel One] as an [informational and] conversational subculture, and an inflexible, strict, and narrow one at that, is that [economic] differences among users will determine differential responses to [viewing Channel One]. Therein lies the rub. As a[n informational and] conversational subculture in their own right, [Channel One is] guaranteed to interact more or less well with members of other, more or less well-adapted and adaptable subcultures.²³

Dewey's vision is not realized under this interpretation because *humane interaction* does not happen. The structure of the technology in question subsumes any potential *interaction* in favor of furthering the passivity required of a consumer materialist agenda—an agenda that, *de facto*, privileges those who play the game and follow along while the securing the power (and profits) of those in command of the technological and commercial encroachment into schools. Even if one disagrees with the criticism of Channel One, specifically, and technology, generally, the argument is nonetheless to raise serious questions about the seemingly “anointed” field of technology and the rarely-if-ever critiqued commercialism in schools.

RESTRUCTURALISM AND INCREMENTALISM—HURRY FOR WHOM?

The stage was set for Channel One's encroachment into schools when economist-minded politicians drafted *A Nation at Risk*. The 1983 document holds a unique position in the world of education policy as being far-reaching and influential. The document criticized schools at the time for being the cause of the economic ills of the U.S. and is still used to argue that schools are “failing.” What is odd, of course, is that if the cause-and-effect rationale was to hold true,

schools in the year 2000 should be applauded for reaping huge national surpluses and should get at least some of the credit for what has been called the largest economic expansion in forty years. Those who use the *Nation at Risk* report are not interested in giving credit, however, as their interests are of a different kind. Instead of a cause-and-effect rationale, what economist-minded reformers have in mind is a kind of “cause-to-cause” effect. The impetus for viewing schools as economic engines (thus students and teachers are reduced to mere widgets) is itself a viewpoint that represents a cause–cause as in a movement, not as in anything producing a result. Call it a hyper-capitalist cause, the stage was set in 1983 for the “new” economy of technology and the vital way schools would be used to advance that cause.

Connected with the rise in consumer materialism so clearly seen in the Channel One example from above, the “new” economy of technology represented a wave of what we will call restructuralists’ technophilia. As though in a hurry to grab hold of the latest fad (one which is well-funded by legislatures) restructuralists wanted their cake and they not only wanted to eat it too, they wanted everyone else to gorge themselves immediately. Restructuralism is founded, according to Van Dusen,

on the doctrine of progress and its corollary, the doctrine of regress. The doctrine of progress, heavily influenced by an expanding market economy and a plethora of technological innovations to facilitate it, asserts that continued economic growth and a corresponding improvement in the human condition directly depend on the nature and quality of our educational system. To restore American economic hegemony, our schools and colleges must produce skilled knowledge workers able to function in a highly competitive, technologically intensive economic environment. Failure to “fix” an educational system perceived to be on the skids, according to the corollary doctrine of regress, will result in a devastating backward slide, socially and economically.²⁴

By almost, if not, literally “buying into” restructuralism, schools were (and are) faced with outside interests who considered schools “public” enough to justify their involvement, but not reciprocally so. That is, schools are used to advance the causes noted above, but critique of those causes is rare or eschewed. The Gablers of Texas were successful in persuading the legislature not to adopt any texts that criticized capitalism,²⁵ and as markets go, Texas influences many other states. We should not think that the Gablers are either alone in their thinking or restricted only to textbooks. Channel One succeeds because educators, parents, and educational policy makers are willing to trade independence (of time, thought, procedures, etc.) for technology. While excluding Channel One from schools will not automatically mean critique will emerge, using Channel One (and other

technologies) as an object lesson regarding commercialism and the place/role of technology in schools and society would go farther toward thwarting consumer materialism than what currently exists. Whether it is enough to stem the tide of what appears to be an overwhelming meta-narrative in favor of glitz, gadgets, and giga-bytes is yet to be seen. One only trusts that highlighting the issue will open new avenues for critique and criticism, it's overdue.

Langdon Winner, at the same conference at which Postman presented his six questions, revealed (to the accompaniment of "2001 Space Odyssey") the APM (Automatic Professor Machine). It looked just like an ATM (Automatic Teller Machine) and had buttons students would be able to press for answers and inquiries (fees would be incurred for each transaction at a different-than-host machine). His point, as the tongue-in-cheek CEO of the Educational Development of User Software and Hardware Advertising/Marketing Corporation (E.D.U.S.H.A.M [pronounced edu-shaahm]), was that we are facing a period in history where the quest for technological advancement has reached a religiously fevered pitch, with few questions being raised about the value of what technological "advancement" brings along with it (recall Postman's third question). Winner also made the point that the ATM replaced a human being, much the same way as he proposed the APM will replace the professor. It's a question of dislodging humans and replacing them with machines. Given the pervasiveness of movie and film strip projectors, VCRs, stereo/CDs, televisions, computers/Internet/e-mail connections, etc., one cannot help but wonder if the trend isn't toward reducing the number of humans in authentic conversation and dialogue (Dewey's humane interaction)--and all under the supported fervor for "technological" efficiency and effectiveness. The direct implications for epistemology are as clear as they are disturbing. Reduce the difficult aspects of knowing by "streamlining" the requirements and we have, almost exactly, a replication of the reliabilism which Channel One both fosters and furthers--all the while advancing consumer materialism deeper into the classroom.

NOTES

1. For the purpose of this paper, "technology" refers to televisions, satellite dishes, video tape players, computers, etc., and is distinct from pencils, pens, and papers which, on a broader definition, would also be "technology." Channel One is clearly not the only example that could be used. The "Zap Me" program is another and many more illustrations exist. The point here is to use Channel One, given its prevalence and its unabashed commercialism, as an exemplar of the larger problems--both epistemological and commercial. See Alex Molnar, *Giving Kids the Business* (Boulder, CO: Westview, 1996).

2. Ann De Vaney, ed., *Watching Channel One: The Convergence of Students, Technology, and Private Business* (Albany: SUNY Press, 1994), 2.

3. See G. M. Garramone and C. K. Atkin, "Mass Communication and Political Socialization: Specifying the Effects," *Public Opinion Quarterly* 50 (1986): 76–86.
 4. Bradley S. Greenberg and Jeffrey E. Brand, "Television News and Advertising in Schools: The 'Channel One' Controversy," *Journal of Communication* 43, no. 1 (Winter 1993), 143.
 5. *Ibid.*, 146.
 6. Matthias Steup, *Contemporary Epistemology* (Upper Saddle River, NJ: Prentice Hall, 1996), 9. A lucky guess is also noted as follows: *S*'s belief that *p* is a lucky guess *iff* (i) *p* is true; (ii) *S* believes that *p*; (iii) *S* has no evidence for believing that *p* is true.
 7. De Vaney, *op. cit.*
 8. *Ibid.*; See, also, Jonathan Kozol, "Whittle and the Privateers," *The Nation* (21 September 1992).
 9. See, for example, Keith Lehrer, *Theory of Knowledge* (Boulder, CO: Westview Press, 1990), 66-67. For the purpose of this paper, Plato's traditional syllogism (*S* knows that *p iff: p* is true, *S* believes that *p*, and *S* justifies that *p*) represents propositional knowledge. See Myles Burnyeat, *The Theaetetus of Plato*, trans. M.J. Levett (Cambridge: Hackett, 1990).
 10. See Rhonda Robinson, "Investigating Channel One: A Case Study Report," *Watching Channel One: The Convergence of Students, Technology, and Private Business*, Ann De Vaney, ed. (Albany: SUNY Press, 1994): 21-41; and Nancy Nelson Knupfer and Peter Hayes, "The Effects of the Channel One Broadcast on Students' Knowledge of Current Events," in De Vaney, *op. cit.*, 42–59.
 11. Edward S. Reed, *The Necessity of Experience* (New Haven: Yale University Press, 1996).
 12. See Molnar, *op. cit.*; and David Noble, "Selling Academe to the Technology Industry," *Thought and Action* 14 (1998): 29–40.
 13. Deron Boyles, *American Education and Corporations: The Free Market Goes to School* (New York: Falmer, 2000), xv.
 14. See Steup, *op. cit.*, 160–176.
 15. *Ibid.*, 84.
 16. Robert Almeder, "Dretske's Dreadful Question," *Philosophia* (Spring, 1996), 24.
 17. See Robert Almeder, *Blind Realism* (Lanham, MD: Rowman & Littlefield Publishers, Inc., 1992), 64-71. Almeder notes: "On one hand, if the intrapersonalist gives reasons in order to establish the falsity of solipsism then the intrapersonalist must admit that giving reasons, or being in a position to give reasons, is sometimes a necessary condition for justification." (p. 70)
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18. John Dewey, *Individualism Old and New* (New York: Capricorn, 1962 [1929]), 155–156.
 19. See John Dewey, *The Quest for Certainty* in Jo Ann Boydston, ed., *John Dewey: The Later Works, 1925-1939*, Vol. 13. (Carbondale, IL: Southern Illinois University Press, 1988), 3–62.
 20. *Ibid.*, 26.
 21. *Ibid.*
 22. Greg Seals, “Ritual: The Hidden Curriculum of Education in Cyberspace,” *Insights* 32, no. 1 (June, 1996): 7.
 23. *Ibid.*, 7–8.
 24. Gerald C. Van Dusen, *Digital Dilemma: Issues of Access, Cost, and Quality in Media-Enhanced Distance Education* (San Francisco: Jossey-Bass, 2000), 4–5.
 25. See Joel Spring, *Conflicts of Interest: The Politics of American Education* (New York: Longman, 1988), 128–129.
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