

# ETHICAL ISSUES OF EDUCATIONAL TECHNOLOGY APPLIED BY THE UNCRITICAL MASS

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## บทคัดย่อ

บทความนี้กำหนดนิยามจริยศาสตร์ของเทคโนโลยีทางการศึกษาในแง่ของประโยชน์ที่ครูและนักศึกษาได้รับและเพื่อค้นหาว่ายังมีแรงจูงใจอื่น ๆ มากำหนดการใช้เทคโนโลยีหรือไม่ จุดอ่อนของวิธีการและพัฒนาการของการสื่อสารออนไลน์ช่วยการศึกษาทางไกลในปัจจุบันได้รับการตรวจสอบโดยพิจารณาถึงการเน้นหนักในประสิทธิภาพของเทคโนโลยีในการเรียนการสอน บทความนี้อภิปรายถึงลักษณะที่เป็นดาบสองคมของสื่อเพื่อการสื่อสารและชี้ให้เห็นความสำคัญของการประเมินผลการศึกษาเพื่อเป็นการรับประกันว่าจะนำสื่อใหม่ ๆ มาประยุกต์ใช้ก็ต่อเมื่อมั่นใจว่ามันดีกว่าของเดิมที่ใช้อยู่ ธรรมชาติเก่าแก่ของปัญหาเหล่านี้ได้ถูกหยิบยกขึ้นมานำเสนอด้วยการวิเคราะห์เสียงพรั่นของพวกลัทธิไดท์ ซึ่งต่อต้านแนวปฏิบัติของอุตสาหกรรมสิ่งทอในอังกฤษเมื่อ 200 ปีมาแล้ว

## Abstract

The article defines the ethics of educational technology in terms of its benefits for teacher and student, and whether other motives determine its use. The various drawbacks of current online methods and developments in the distance education field are examined in view of its emphasis on the efficiency of its course delivery technologies. The double-edged nature of all communications media is discussed, and the importance of evaluation studies is suggested to ensure that new media are not adopted unless they represent clear improvement over existing options. The age-old nature of these issues is illustrated by an analysis of the grievances of the Luddites, who opposed practices in the British textiles industry 200 years ago.

## INTRODUCTION

In a recent interview, American teenage star Miley Cyrus explained why she terminated her online social media account at *Twitter.com*:

That's because you announce everything you are doing...friends on the Internet (are) not cool, not safe, not fun and most likely not real...I'm telling kids, "Don't go on the Internet. It's dangerous, not fun, and it wastes your life" ...I (now) have a personal life. (Morgan, 2010)

Social media and networking software are the current technology involving the integration of text, audio and video communication methods that have been available since the 1990s. For example, *Twitter*, the mobile text-message equivalent of broadcast e-mail, allows the user to send a message to a potentially unlimited number of people at once. A celebrity such as Miley Cyrus is in a strong position to recognize the security dangers of this practice. Unguardedly disclosing one's location in a *Twitter* message (or 'tweet') has caused the actress and her hotel to be surrounded by thousands of fans in minutes; and a teenage role model is an ideal person to warn other teenagers of the stalking and predatory practices that such methods enable.

Social networking sites provide many useful educational services. *Twitter* has been used as a tool for helping students to organize their homework (Chisa, 2008); *Facebook* is used for social and political campaigns (Goldfarb, 2009); students scour their cities in scavenger hunts using both of these sites and location-tracking software on laptops, cell-phones, and GPS systems (Bradshaw, 2010); and the writer's own University has a social media research group dedicated to defining valid educational uses of the new options. Each new medium has a potential "dark side", however (Evans, 2010). Bradshaw's 'Social Media Treasure Hunt' teaches journalism students how to "hunt" individuals and online and collect information about them. As long as the individuals have given permission to be tracked, the activity is useful and acceptable. Yet, the recent Australian case of a teenager lured to her death by a 'friend' on *Facebook* (Dickinson, 2010), demonstrates that the same facilities and skills can be used for other purposes entirely.

Society in general needs a greater understanding of these risks. Any-

one can be stalked, blackmailed, bullied, or threatened by other online users, especially when the software facilitates it. The *Facebook* web servers contain personal information about, currently, 400 million users; and one can identify individuals' tastes and relationships from their *Facebook* profiles even without needing to create an account of one's own. Meanwhile, "location-aware" web sites such as *Brightkite*, *Foursquare*, and *Loopt* make use of users' cell-phones to help "keep up with your friends, meet new people, and discover new places. All while you're out and about" (*Brightkite.com*, 2010). *Foursquare* similarly allows its users to know exactly where their 'friends' are, and to link their account directly to their *Facebook*, *Twitter* and *Google* e-mail (*Gmail*) accounts. This aggregated information makes it possible to check the identities, addresses, and personal information of passersby in the street, and to rob their houses before they get home (Yamshon, 2010). Software such as *Anonymizer* and *MuteMail* disguise the location of the online searcher, thereby protecting the identity of the innocent and guilty alike; and adding the *Recognizwr* face recognition software to one's cell phone carries this identification process to a new level, allowing users to point their cell phone cameras at passers-by and to download their personal details without their knowledge (Dillow, 2010).

One would not easily guess at the intrusive potential of the *Recognizer* software simply by looking at its web site, which not surprisingly stresses the tool's benefits for legitimate purposes only – by, for example, students, professionals, and college alumni associations. Numerous social networking products strategically identify themselves with credible users in this way: e.g. *Second Life* with educational institutions including Harvard University and the UK Open University; and *Facebook* with thousands of users among the world's leading broadcasting networks, programs and professionals. Meanwhile, *Second Life* has been shown to host activities including child pornography (Connolly, 2007), prostitution (Boyes, 2009), and illegal gambling (Raby, 2007) – problems only partly addressed by the company responsible for its operations (Ferret, 2007; Linton, 2009; *Secondlife.com*, 2010a).

The risks of joining social networking communities are well documented (O'Neill, 2010), and web sites such as *PleaseRobMe* and *QuitFacebook* are emerging to warn the public about social media risks. These are also attracting increasing attention by agencies including the US Electronic Privacy Information Center (EPIC, 2010; Raphael, 2009), and

Canada's Office of the Privacy Commissioner (OPCC, 2009), which have required *Facebook* to tighten its procedures in order to protect users' security. *Facebook's* response has been to make modifications to its services and web site design, while still leaving the responsibility for secure configuration of user accounts to the individual subscribers. In the words of the company's 26-year-old chief executive, Mark Zuckerberg (2009): "(We) understand that everyone's needs are different...the best way for you to find the right settings is to read through all your options and customize them for yourself".

Since making this statement, Zuckerberg has announced that *Facebook* will soon be adding its own location-tracking software, so that users can know "where a person is and to personalize what's around them" (Schweizer, 2010). Presumably, this refers to ways of delivering, for example, local advertising material directly to individuals based on their interests and tastes. If *Facebook's* new tracking software has the same functions as the 'location-aware' services cited earlier, one may also assume that it will subject even more users to the same predatory risks. Meanwhile, information is readily available on how to optimize the design of a *Facebook* page for marketing purposes (e.g., socialmediaforum.com, 2010; and socialmarketingforum.net, 2010); and the risks of social software continue to escalate as the cautions of agencies and individuals are ignored by millions of users who have no comprehension of the risks, nor of how to configure their personal software settings so as to avoid them.

When technologies are developed and implemented without sufficient concern for their personal consequences, ethical questions arise.

## **DOUBLE-EDGED SWORDS**

All media have the potential for harm as well as good. Film and television have carried violent and potentially harmful content throughout their histories. These broadcast media typically direct their messages at types of consumer defined in demographic terms (e.g. the female teenager, or the young professional). Today's online media, however, owing to their added interactivity, are capable of directing their effects at people individually identified by the profiles they have placed online, by the history of their online activities, and by the unique Internet protocols (IPs) of their computers. Thus, the Internet has

created a new era of social risk, with new media recalling Boyle's description (1661) of double-edged swords "as well applicable to the service of Falsehood, as of Truth". The warnings about online media risks expressed by observers and government agencies seem plaintive and unavailing in the face of the enthusiastic acceptance of these media by millions of cell phone users and endorsements by countless credible media figures, political leaders, academics and their institutions.

How aware are these individuals, one wonders, of the risks attached to the methods they encourage? In the educational world at least, one would assume that the necessary research and evaluation skills are available to ensure that the adoption of new technologies is based on carefully weighed evidence of their merits. The basic question seems a simple one: do the new educational media and methods benefit the teaching process and especially the learner? On the other hand, do they involve side-effects that can detract from educational benefits? In practice, however, the multi-way interactions of media technique, content, and the capabilities of the teacher and learner are difficult to disentangle (Salomon, 1993); and reliable and predictive conclusions about cost effectiveness require complex and often impracticable research and evaluation designs (Flagg, 1990). As a result, decisions about educational technology implementation are commonly based on other criteria than cost-effectiveness, raising distinct ethical concerns (Morningstar, 2004).

The ethical problems of technology implementation are particularly acute in distance education (DE), which relies entirely on the efficiency of its communication technologies rather than employing them as supplementary to campus-based options. Without an adequate technological infrastructure, the goals of DE are unattainable and distance educators have a prime responsibility to ensure that appropriate technologies are in place. Unfortunately, efforts to validate technological usage in DE have been no more successful than in conventional educational media contexts—a fact lamented by numerous writers; e.g., Moore in his discussion (1985) of field's weakness in relation to disciplined research under controlled conditions; in Farrell's analysis (2001) of the "dysfunctional" development of DE technologies; and in McKee's account (2010) of the field's 30-year "identity crisis, defined by a developmental deluge of pedagogies and technologies, depending on the favored course delivery methods of the day".

Particular issues in online DE implementation relate to lack of student

access to the technologies selected (Samaranayake *et al.*, 2010), and to the concerns of students and teachers in relation to, for example, online learning management systems (LMS). Hotrum (2005) has suggested that LMS methods have caused students to lose “control of their learning process and activities, while the LMS vendors/ administrators (and by implication instructors) have increased their control over a fixed style of learning that fails to evolve”. In relation to social media activities, Cleal (2009) reports that students who are concerned about the outcomes of their work express frustration at being asked to join in *Second Life* ‘virtual world’ activities that they regard as mere play. Dissatisfaction and loss of interest of this type have been identified as reasons for the rapid decline and closure of online communities (Garber, 2004); and Hughes (2010) indicates that the need for evidence of pedagogical validity is as central in the adoption of the new social networking methods as in the case of any previous technology.

During the same 2005-10 period, open-source software (OSS) and open publishing approaches have evolved with the laudable goal of reducing the commercial domination of the educational content industry. Yet these same approaches also involve a loss of quality control, as indicated by analyses of open editing biases in the popular *Wikipedia* information source (Sydney Morning Herald, 2007), and by the repository’s own official self-description, “the free encyclopedia that anyone can edit” (Wikipedia.org, 2010). In addition, an increase is evident in student plagiarism based on the ease of online ‘copying and pasting’ (Derby, 2008); and a corresponding increase is observed in multiple publications of individual journal articles by academics (Errami & Garner, 2008). Ignoring such practices can seem to condone them. Educators have an ethical responsibility to address these unacceptable side-effects of technological usage, using plagiarism checking services (e.g. *Turnitin.com*), and devising firm but fair procedures for dealing with abusers (Baggaley & Spencer, 2005). The current writer’s most recent uses of the *Turnitin* service have indicated the frequent use of *Wikipedia* and online essay providers as unattributed sources of student work (analyses in progress); and the fact that the writer and his academic professors are noting increasing examples of students breaking University’s conduct codes by hiring “professional academic editors” may indicate that some students are at very least confused as to the ethical standards now expected of them.

The ease of online referencing has also had a discomfiting impact on

the current writer's practices. The reference list of the current article, for example, contains an unusually high proportion of citations (35/73) which would have been impossible before the expansion of online resources. While it is satisfying to be able to illustrate one's points with such a large amount of up-to-date material, it is worrying that so many of the sources increasingly cited are 'blogs' by unknown and unaccredited people rather than quality-assured traditional sources. The four-year 'shake-down' period whereby submitted articles were reviewed, published in print form, absorbed, and cited in subsequent articles, is a thing of the past. The ethical responsibility of ensuring quality in the world of instant online publication is not simplified by ease of access to this increasing repertoire of un-reviewed information.

## **CONFLICTING MOTIVES AND PRIORITIES**

The technologies themselves would not be double-edged swords at all if those involved in technology selection did not bring conflicting motives and priorities to the process. These can influence decisions about appropriate technologies in ways detrimental to the teachers' and learners' interests. Each party in the process has the ethical responsibility of ensuring that decisions about technology selection and implementation protect the institution's educational objectives, and the teacher's and student's efficiency. The stakeholders in question, and examples of their ethical responsibilities, are as follows.

### **1) Personnel who base their careers on encouraging technology innovation.**

The educational media literature of the last 50 years has chronicled a steady parade of new technologies, in articles by academics and resource staff who welcome the opportunity to suggest that each new medium might possibly replace other options already in place. Those who encourage innovative technologies are ethically responsible to provide reasonable evidence that new media represent improvement. When students are required to take part in online virtual-world activities, for example, it is ethically vital for the teacher to inform them in advance of the risks of incautious social media use, and of how to configure their software for personal security.

## 2) Hardware and software vendors.

Salesmen are probably the last people one expects to give impartial and objective accounts of new technologies. In Baggaley's first week (Baggaley, 2011) of University employment forty years ago, he asked for a demonstration of a shiny box designed to convert Super-8 film into TV images. Unfortunately, the University had paid £3,000 for the gadget before discovering that compatible educational film was not being produced for it. One can hardly blame vendors for failing to mention basic information of this type when their livelihoods depend upon it. The ethical responsibility of today's social media developers to fully explain the security risks of their products, however, is crucial; and the failure of social media vendors to clamp down on illegal activities and security loopholes before subscribers are exposed to them seems ethically indefensible. *Second Life* did not put its 2007 curbs in place before a Federal investigation required it, by which time the number of active users was already an estimated 90,000 (Reuters, 2007); and *Facebook* only created adequately secure facilities after 400 million active users had been exposed to its security loopholes (Schweizer, 2010; Facebook, 2010a).

## 3) Instructional designers.

A tendency to over-complicated visual designs was one of the factors that lead to the marginalization of television as an educational medium in the 1970s. Lesser (1974) wrote of the importance of constant evaluation in educational TV production and delivery, and of the leadership of the Children's TV Workshop (producer of *Sesame Street*) in making evaluation a central part of the process. As a result of its in-house research, the CTW learned to simplify its delivery style to appropriate levels for its preschool audience – a valuable lesson for all educational media designers. Today's online software also tends to be over-complicated in its facilities and navigation procedures (Hotrum *et al.*, 2005); and a recent analysis by Elias (2010) indicates that in-house designers of the popular open-source software *Moodle* tend to use relatively few of the accessibility options available for it. The ethical responsibility of instructional design specialists is to be aware of the accessibility problems that affect the users, and to ensure that the materials overcome them.

#### **4) Educational researchers and evaluators.**

The difficulty of isolating the effects of individual media and design features has been mentioned above. In the 1970s and '80s, this methodological issue was a major focus in the educational media literature, and the predictive value of research and evaluation studies evolved as the technological and psychological variables of the educational delivery process were defined. A notable framework for such studies was provided by the aptitude-treatment-interaction (ATI) concept, which stressed the need to isolate the effects of specific media techniques upon specific types of student (Cronbach & Snow, 1977). The generation of researchers and evaluators that has since emerged to address the pedagogical value of, for example, online conferencing and social networking methods, has an ethical responsibility to uphold that detailed level of analysis, distinguishing between the broad technologies and the specific techniques of their use, and focusing on the most efficient approaches for specific purposes, rather than merely reporting general student reactions to innovative treatments without giving details of the activities' content and design.

#### **5) Institutional administrators.**

The tendency of institutional administrators to invest in educational technologies without justifying them via evaluative evidence is illustrated in Morningstar's analysis (2004). At that time, a popular but expensive learning management system, *WebCT*, was launching an even more expensive version to which many educational institutions were upgrading. Morningstar presented evidence of the cost-ineffectiveness of transferring to the new system, and pointed out that the 1<sup>st</sup>-year costs of implementing it at a large academic institution would be over USD 600,000, compared with the minimal operational costs of more flexible open-source freeware alternatives. Institutional administrators have an ethical responsibility to ensure that the features, licensing fees and running costs of educational hardware and software are compared with those of alternative products each time a new commercial license or license renewal is considered.

## 6) Funding agencies.

Decisions to purchase and explore the value of educational technologies are commonly dictated by financial support from external agencies. When a new educational medium emerges with innovative potential, it is quite likely that a request for funding to investigate it will be more successful than an equally good proposal to explore new uses of an older medium. Education using television or radio, for example, is no longer a prime candidate for support by international funding agencies, even though these are the only accessible media for the vast majority of developing country students. After funding an initial investigation of a new medium, agencies commonly regard it as new no longer, and are less interested in supporting studies of its use in new situations. Funding agencies have an ethical responsibility to address these accessibility and sustainability issues, and to make reliable interpretations of the evolving techniques for media usage.

## 7) Government policy-makers.

Ultimately, the technology implementation decisions of many of the above parties depend upon the priorities and concerns of national and regional governments. In countries where sophisticated Internet and cell-phone technologies have major commercial potential, their development is naturally encouraged. That these media may have no potential for teachers and students who cannot access them does not necessarily deter policy-makers from encouraging their educational adoption. Policymakers have a responsibility to invest in new and promising technologies for society's benefit; but they also have an ethical responsibility to ensure that traditional media are preserved side-by-side with the emerging media, to provide education and training until the new media have the same penetration and efficiency and can take over the task.

When the priorities of any two of these decision-making parties come into conflict, the result can be the adoption of an educational technology that makes little or no improvement on the *status quo*. If individual motives lead to the selection of a technology, or of ways of using it, that do not benefit the teacher and the learner, they may well be unethical. The conflicting criteria and

priorities of its decision-making process has led the educational media field to evolve in a hit-and-miss fashion over the years. For the teachers and students who must use the technologies, it can feel at times like “trying to hit a moving target” (McKee, 2010). The situation was described in a classic jibe attributed to the Roman writer Gaius Petronius (though actually by Ogburn, 1957):

We trained hard ... but it seemed that every time we were beginning to form up into teams we would be reorganized. I was to learn later in life that we tend to meet any new situation by reorganizing; and a wonderful method it can be for creating the illusion of progress while producing confusion, inefficiency, and demoralization.

That problems in the adoption of new technological infrastructures are by no means new is illustrated by a notorious event that occurred exactly 200 years ago, in which conflicts of priority between the parties in a workplace disagreement had disastrous consequences.

## **A 200-YEAR PROBLEM**

This year (i.e. 2011) marks the bicentenary of the Luddite Revolt, in which British textiles workers expressed their opposition to changes in the activities and policies of their workplace. These workers have since been vilified as ignorant opponents of technological progress; but latter-day analysts including Thompson (1963), Pynchon (1984), and Thomas (2009) have indicated that the Luddites actually held concerns markedly similar to those commonly expressed about technology today, and that they were violently and unjustly obstructed in their efforts to raise their concerns. A direct comparison between the points made by the Luddites in 1811 and those commonly expressed about modern educational technology indicates that the central ethical dilemmas have remained basically unchanged. The case has been discussed in relation to educational media practices by Baggaley (2011a), and is summarized as follows.

The Luddites claimed to have a legal right to decommission workplace machinery that was not being used according to their prior agreements with the management (Luddite Manifesto, 1812); and they smashed or at least disabled their machinery to draw attention to their grievances about workplace practice. Yet they were not, as commonly supposed, hostile to the tech-

nology *per se*, for they had already been using the same machines for two hundred years. Their grievance was with non-agreed increases in the sales prices of their products, with new industry practices of “not marking the work according to quality”, and with a resulting loss of artistry in their products as handed down from fathers to sons. In return they were branded as thugs, arrested, in some cases executed, and in many cases deported. The factory managements were more concerned to ally with the evolving commercial interests of the Industrial Revolution, and the British government sent the strongest possible message that workplace revolt would not be tolerated, by calling in the army to quell it.

This historical event illustrates the conflicting interests of those who feel that their responsibility is to encourage innovative technologies; those who design, fund, and create the goods; workplace administrators; and government policy-makers. Each of the parties involved in the Luddite Revolt could no doubt argue that their priorities and decisions were ethically justified, although it seems impossible to justify the British government’s decision to smash the Luddite workers with an army of 12,000 troops – twice as many as were sent to Europe to defeat Napoleon.

Today, teachers and students continue to grapple with the problems of adapting to new technologies, and “fast-adopters” (Rogers, 2003) still call “slow-” and “non-adopters” Luddites! But technologies commonly used in global education (e.g. online) are inaccessible to hundreds of millions of students; thus demands to preserve traditional media techniques are as justified today as in the 19<sup>th</sup> century. The Luddites’ concern for the raising of prices for their goods is echoed in the criticisms of educational institutions today which invest in expensive commercial software when open-source freeware is more flexible and customizable. Concern for loss of artistry caused by automated methods is seen in the modern-day criticisms of educational technology as destroying the artistry of the individual teacher and the personal relationship of the teacher and student (Noble, 1993; Robertson, 1998). Possibly the strongest message sent by the Luddites over the centuries, addressing each of these concerns, is the need for more efficient quality control in technological adoption. Their Manifesto gave specific, expert examples of how managements were “not marking the work according to quality”. Today, quality assurance and ‘best practices’ in educational media tend to be globally defined without reference to local conditions and cultures; and the justifications for

them tend to be undisciplined. Thus, demands for greater professionalism in technological adoption are as needed today as 200 years ago. The fact that the name Luddite, adopted by the concerned workers of 1811, is still used disparagingly owing to shameless political propaganda against them, is the cruelest cut of all.

## **CONCLUSIONS: THE UNCRITICAL MASS**

The educational world tends to follow the currents of technological innovation rather than leading them. Television and the Internet were only adopted as educational tools in the 1970s and '90s after becoming a part of the social fabric in general; and educational methods using, for example, today's social media methods are suggested by their popularity in society at large rather than by visions for their educational use. Research and quality control relating to the latest online techniques are still in their infancy, as Hughes (2010) has indicated, and are *post hoc* rather than pre-emptive. To anticipate the central ethical issues of today's educational technology, researchers and evaluators need to give prime consideration to the techniques of media usage, as in educational television's intensive development period of the 1970s and '80s. The distinction between technology and technique is far less upheld in the analysis of today's online methods than in earlier educational media research, possibly because the researchers of today's online methods have not absorbed the literature of the previous generation, believing it to be pass?

As a result of undisciplined research and evaluation, technologies are liable to be adopted in education once a critical mass of the population has embraced them for their personal purposes; but these users cannot be expected to base their selections on educational criteria. One might describe them as the "uncritical mass" that drives the decisions about uses of innovative technology regardless of the lack of justifying evidence. Those who design and promote educational technologies have long failed to see the need for needs assessment and usage research, and have discouraged it via arguments such as "If the Romans had to consider how their roads would be used, they would never have built them"; and questionable mottos such as "If we build it, they will come!" The conflicting motives and priorities of the individual parties in the educational technology selection and design process need to be weighed

and harmonized by the professional bodies that advise the issue internationally. Their guiding criterion in testing these motives should be whether or not the educational interests of the teacher and the student are protected or undermined. Ultimately, a fundamental shift is required in the professional attitudes of the educational technology field as a whole, if ethical issues such as these are to be resolved. The risks arising out of the lack of control over current educational media are greater than ever before, owing to the ability they provide to infiltrate the personal data, lives, and identities of individuals. Solutions to ethical issues arising in this situation are currently being offered by increased attention to quality assurance and ‘best practices’ in international distance education (Baggaley & Belawati, 2010, Belawati & Baggaley, 2010; Jung & Latchem, 2011). Nonetheless, based on his involvement in this field of research, the current writer sees a need for greater attention to ways of ensuring that quality principles leap from the page into action and policy, rather than languishing on the academic shelf. The literature of international education habitually proclaim the advantages of new technologies without admitting that the local infrastructure and skills to use them are inadequate; and many writings about quality assurance amount to little more than empty public relations statements, to the effect that “quality is important, and at University X we are in favor of it!”

The abiding message to educational technologists worldwide is that hundreds of millions of would-be students will have no access to the education and vocational training they need unless accessible and appropriate distance-based technologies are devised for them. Criticisms of distance education quality are often well justified, though do not ultimately undermine this basic *sine qua non*. The prospect of expanding the reach and value of global education can keep an educational technologist challenged and involved in the field despite its hurdles, distinguishing the technologies capable of moving the field forward from those which let it down, and focusing on the ethical practices and the potential risks that attend them. Educational institutions have a key responsibility to acquaint their teachers and students with the risks associated with novel technologies, especially when students may be pressed into using them for obligatory coursework activities. Celebrities such as the teenage star applauded at the beginning of this chapter for closing her *Twitter* account to prevent its abuse have a prime role to play in passing on this message to the public.

Sadly, in the decision-making of that particular celebrity, the “uncritical mass” appears to be triumphing. After closing her *Twitter* account a year ago, Miley Cyrus has since reopened it, following a fan’s threat to kill a cat if she refused to do so (Hollywood Gossip, 2009).

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