Technology and academic virtue: Student plagiarism through the looking glass

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Abstract. Plagiarism is the misuse of and failure to acknowledge source materials. This paper questions common responses to the apparent increase in plagiarism by students. Internet plagiarism occurs in a context – using the Internet as an information tool – where the relevant norms are far from obvious and models of virtue are difficult to identify and perhaps impossible to find. Ethical responses to the pervasiveness of Internet-enhanced plagiarism require a reorientation of perspective on both plagiarism and the Internet as a knowledge tool. Technological strategies to "catch the cheats" send a "don't get caught" message to students and direct the limited resources of academic institutions to a battle that cannot be won. More importantly, it is not the right battleground. Rather than characterising Internet-enabled plagiarism as a problem generated and solvable by emerging technologies, we argue that there is a more urgent need to build the background conditions that enable and sustain ethical relationships and academic virtues: to nurture an intellectual community.

Key words: Internet, plagiarism, trust, community, ethics

Introduction – Down the rabbit hole

The Internet presents more than a technological change, like that from pen to typewriter, simply bringing new efficiency and accuracy to what we do. The effects of the Internet are deep and complex. It has changed the nature of communication and privacy by expanding the amount and enhancing the quality of words and images that can be exchanged at low cost and by changing temporal aspects of text based communication, for example, from letters or faxes to chat and long attachments. We can make our communications public in message boards or email lists, and messages thought to be deleted can be recovered from computer hard drives. We construct some of our relationships differently, flirt differently, express appreciation differently, tell jokes differently, and present our selves (our e-selves) differently. Many interactions that were face to face now occur in the relatively private world of a single user computer, we rarely share queuing space and time waiting to pay a bill, but just log-on and key in the transaction. In this space users can feel uninhibited and unconstrained by the usual social and ethical standards. In the real world, no one can plausibly claim to be an atomistic agent always autonomous and never dependent. But online, the illusion of being a lone and independent agent is powerful. Often surfing is a solitary even a secretive pursuit: it feels like I have only my own wits to guide my decision to share information, to take

another at her word, to send my bank account details to e-bay. Questions of community, responsibilities to others and binding norms of conduct fade into the background. Immersed in such a world, people can often fail to see their social and intellectual dependence on others. This can lead to an ethical blind spot when it comes to the attribution of ideas. But this blind spot should not be mistaken for complete ethical breakdown. Ethical interactions can and do occur online. Witness the increase in online relations requiring trust.

Despite the well-publicised presence of spoofers, spammers and hackers, activities that involve trust, such as e-commerce and the building of social and romantic relationships, are increasing on the net. In Australia, in the period 2000–2002, the number of people trusting the net enough to make online purchases rose by over 500% to include over 30% of the population.[1] The increase in the use of the net for romantic encounters is even more dramatic than the surge in e-commerce. Dating and personal-ad content recently surpassed investment and business news in the US as the leading paid-content category.[2] It seems then, that despite cases in which trust is abused

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[1] *News Interactive*. http://www.news.com.au/technology. December, 2003.

[2] *Online Publishers Association*. Online Paid Content: US Market Spending Report. September, 2003. The *Online Publishers Association* is an organization comprising 20 major publishers including the New York Times, Wall Street Journal and MSNBC.com.

online, increasing numbers of us trust the net with our money, social hopes and more.

The net is a normative environment though some of its ethical standards might differ from those offline, and not just in matters of convention and netiquette. For example, notions of privacy are challenged, identities can be fluid and so on. But not everything is up for grabs. Certain behaviours – preying on vulnerable innocents, obtaining money by false pretences and the like – remain reprehensible. Copying, however, has far more ambiguous status, both ethically and legally. Internet users routinely download images and music. Sometimes this is both legal and ethical: there are a number of lawful sites devoted to the provision of copyright-free images and music. Sometimes copying is clearly both illegal and immoral: there are just as many sites dealing in the delivery of other people's copyright-restricted products. Often it is difficult to tell whether copying is legal or not, and even more difficult to identify the moral status of a particular activity or practice. When the information in question is more abstract than an image or music – words, phrases and ideas for instance – the legal and ethical issues become doubly difficult to navigate.

Plagiarism occupies a strange ethical space online. The very structure of the Internet allows for the easy storage, manipulation and reproduction of ideas. People have access to the ideas of others before they can possibly understand such an abstract notion as the ownership of ideas. The amount of information available is so vast that it is a relatively easy task to hide or disguise the appropriation of another's ideas. And the task of appropriation merely requires the movement of a mouse. In this environment plagiarism is unsurprising. This is not to imply that the Internet causes or is somehow responsible for plagiarism, but rather to note that the Internet presents mixed messages that may confuse people as to what is and what is not acceptable appropriation practice. Furthermore, the net may allow those already attracted to plagiarism to steal another's work more efficiently and, more critically, that the breath of the content available online may make disguising such dishonest appropriation far easier. Thus the net makes plagiarism *easier* than ever before. Nevertheless, the net can be and often is used ethically to seek information.

Ethics online – At the tea party

Plagiarism is not the only Internet practice of ethical concern. The most discussed and urgent problem online is spam, which is a serious practical threat to the value of the Internet as it makes email a worthless communicative tool. Recent studies have suggested that approximately a quarter of all email traffic is spam and that it costs worldwide Internet subscribers over $US10 billion a year.[3] Spamming undermines the conditions in which trust can operate. Notice, however, that it does so indirectly, by clogging the system. Unlike fraud, spam interrupts trust by making dependence (and all activity) impractical. Spamming depletes the necessary conditions for trust and ethical communication and, like plagiarism, means that we cannot take people at their word.

Spamdexing also causes ethical concerns about the presentation of information online. Internet search engines use "keywords" as one means of ranking web sites for their relevance to particular search phrases. Web pages include code that is not displayed in the browser and, hence, not seen by most surfers, that provides other computers, web servers particularly, with the information needed to handle files correctly. Such code typically contains a range of keywords used to index the site in the databases used by good search engines like Google. For anyone with a little coding knowledge it is easy to add these tags. What is more, a coder can add any tags she likes. To generate traffic to her site she can simply add common search terms regardless of whether they have any relevance to her site. So it is pretty easy to generate a page with a bunch of very popular search phrases even when the site content is unrelated to these terms. This is spamdexing.[4] The phenomenon of spamdexing shows that the appropriate way to deal with information online is complex and occasionally morally ambiguous. We are not claiming that spamdexing parallels plagiarism or even that the norms governing search engine indexing are likely to lead students astray (very few students would be aware of these norms to start with). Consider how spamdexing is employed by some well-respected institutions.

You may think that spamdexing is a practice isolated to a small group of highly unethical

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[3] *The Age*. Spam is everywhere. February 1, 2004.

[4] There are at least two caveats to the foregoing discussion. First, the best search engines do not use keywords as the only means of ranking a site. Thus simply adding popular search terms will not guarantee a high ranking. A common control involves crosschecking the keys with the page content. Some of the best search engines will actually ban a site that includes keys that do not match the page's content. Second and relatedly, there are other means of spamdexing. For example, to generate a good ranking and also to get around the control just mentioned, some webmasters will include words related to spammed keywords in the same colour as the web page background, or in tiny font or at the very bottom of the page. Thus the search engine will be fooled into think the page does have the relevant content, but any person viewing the page will not actually see this content.

webmasters. This is not the case. One Australian university recently sent out an email to academic staff asking for words relevant to each department's area of expertise, but that "don't necessarily appear in the content of our departmental web sites" to be included in the university's metatags. Such a request may appear legitimate, after all, the webmaster was interested in keywords related to the department's discipline. Nevertheless, including keys that are within the subject domain of a discipline even though there is no content related to those areas on the web site is questionable. There is much grey area between presenting relevant information in a way that is designed to suit the context and incorporating irrelevant terms in order to boost traffic.[5]

Spamdexing is *prima facie* deceptive when used to attract traffic to a site unrelated to the search term. Since the web cannot be navigated without search engines, spamdexing can in effect endanger the web as an information-seeking tool, if search engines become unreliable. But there may be a limit to the spamdexing that search engines can accommodate and remain functional, and to this extent, the interests of the spamdexer, search engine provider and user coincide. It seems to us, because of this, that spamdexing is, in many ways, a contemporary example of the free-rider paradox. The spamdexer, like all Internet users, relies on the effectiveness of such engines: the practice would not be possible without the general reliance on and reliability of search engines. Nevertheless, the spamdexer attempts to use this reliance without paying the price of compliance with the rules by which search engines work. A spamdexer requires a trustful (largely trusting and largely trustworthy) environment: like all free-riders, she depends on an environment where most comply.

The phenomenon of spamdexing is one example of the moral ambiguity and complexity of practices involving web-based information. Spamdexing is a problem specific to the Internet as a knowledge tool. Examples of credible and ethical institutions manipulating keywords to increase exposure suggests that information norms are taken to be more akin to those of an advertising space than those of a library. Yet when students use the Internet for research, academics expect compliance with "library-type" norms. This case supports our claim that a web-savvy student inhabits an ambiguous environment without a clear ideal on which to model their web-research.

The case of online plagiarism – It's my own invention

It is common wisdom among academics and teachers that as Internet use increases so does Internet-enhanced plagiarism. No doubt the Internet means that less planning is required to "successfully" plagiarise. At the extreme, it is possible minutes before a paper is due to buy one from an online cheat site.[6] Detection is difficult as the potential plagiarist has access to more information sources than any instructor could ever master. As the net seems to enhance the prospects of the plagiarist, some people and institutions look to the Internet for the solution to plagiarism: the net has created the problem, so the net should be able to solve it.

The Internet offers solutions in the form of plagiarism detection. By far the most popular service is provided by Turnitin.com. Papers submitted to Turnitin.com are scanned for passages copied or paraphrased from web pages, journals or other papers. Submissions are delivered to the instructor with any potentially plagiarised sections highlighted. Turnitin.com is a very successful commercial enterprise, with over 600,000 registered users from 3500 institutions worldwide. But its success as a plagiarism detector depends on the breadth of its database. Only those who plagiarise content already in the database will be caught out. For this reason, Turnitin.com has a vested interest in ensuring their database is as complete as possible. Thus it includes millions of published works (including periodicals and electronic books), a copy of the publicly accessible Internet and all papers previously submitted to Turnitin.com.

Technical solutions like Turnitin.com suffer from two general kinds of ethical problem: they set up a distrustful relationship with students and they generate a range of difficulties relating to their databases.[7] The generation of their database creates certain ethical difficulties, but the establishment of a distrustful student–teacher relation generates more serious ethical problems. We suspect that this use of technology actually encourages the attitudes and community failures that are ultimately responsible for the proliferation of plagiarism. But it is worth noting that Turnitin.com uses the content of others for financial advantage without the consent of owners of that content. This is highly problematic for an institution dedicated to the values of proper information use. For academics with online papers and resources, and Internet content providers, the problem with this is the

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[5] For a great deal more on the morality or otherwise of spamdexing, with particular reference to copyright infringement, see Richard A. Spinello. The use and abuse of metatags. *Ethics and Information Technology*, 4: 23–30, 2002.

[6] To find one of the many cheat sites simply Google the terms "cheat" and "term paper".

[7] A paper addressing issues such as ownership of student work, transfer of intellectual property and privacy is in progress.

commercial nature of the use: their (our) content is used for commercial benefit without remuneration. Strictly, this does not constitute an infringement of copyright – so long as the use is acknowledeged – but it does display a worrying lack of respect for the owners of the copyright's moral rights and in some instances contravenes their expressed preferences not to have their work appropriated for such purposes. This problem is non-trivial, but at least academics and web site owners have some recourse to address this infringement if they so desire. For students, however, inclusion in Turnitin.com's database is beyond their control.

From the perspective of a student, Turnitin.com is coercive. Students enrolled in a course in which the instructor uses Turnitin.com have no real choice but to have their papers submitted through the service and thereby have their intellectual products used as a resource. While students give formal consent to such use, given the nature of the power structure implicit in the system, it is difficult to see this as a form of genuine informed consent. All the power resides with the instructor, the institution and Turnitin.com. Engaging in such practice displays a lack of respect for the student's choice not to have their work collected in a database and potentially for their privacy. The worry is not just about abstract principles: students are already objecting to this practice. For example, Jesse Rosenfeld of Montreal's McGill University recently refused to submit his papers through Turnitin.com. Mr Rosenfeld expressed two concerns. He did not like the presumption of guilt and objected strongly to his work being absorbed into the profit-making Turnitin.com.[8]

There is, moreover, a serious defect in a strategy that relies on plagiarism-detection instruments. The problem is simple: technological solutions can always be overcome by more sophisticated technology. We call this the Red Queen phenomenon, after the character in *Through the Looking Glass* who had to run faster and faster to say in the one spot.[9] No doubt technical measures like those offered by Turnitin.com will catch out many cases of plagiarism where the student copies

or paraphrases large sections of text. It will not, however, catch a more sophisticated plagiarist. It will not catch someone thoughtful enough to make liberal use of a thesaurus, engage in some sentence reconstruction or find resources in a library.[10] Even more technically advanced solutions cannot possibly catch all forms of plagiarism. Such solutions will never stop students paying someone else to write their papers, an option already available on the web. And, sooner or later, a technique will be found and marketed that offers "Turnitin-proofing". In any case, technology can at best provide a measure of reliance in a particular essay. It can never work to establish a relation with the student in which they, not one piece of their work, are trusted.[11] To explore this we need to return to the academy and the Internet.

It is not only online that students encounter ambiguous models of intellectual attribution. The university lecture-hall also delivers complex standards. Students are instructed not to duplicate material in classes, but they know that their instructors recycle teaching materials. In some cases the materials of other instructors are used. Even where permission has been obtained, acknowledgement is not made transparent to students. Lectures are by far the most common academic environment experienced by students, but instructors rarely present a robust model of academic attribution in teaching.[12] Worse,

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[8] In Australia, a consortium of Victorian-based universities sought legal advice on this matter. Blake Dawson Waldron supplied the opinion that obtaining a signed declaration from students that their work may be tested for plagiarism amounts to an "express licence" that should provide the universities with legal protection. (The *Australian Newspaper Higher Education Supplement* October 22, 2003, p. 26). This does nothing to alleviate our concerns. There is no sense in which the student can refuse to sign such a declaration. Thus the students are being coerced into submitting their intellectual work to a profit-making organization over which they have no control. Whatever the legal situation, such enforced submission is coercive and treats students as untrustworthy.

[9] Lewis Carroll. *Through the Looking-Glass and What Alice Found There*. New York Oxford University Press, 1998.

[10] It is perhaps worth noting that turnitin.com is not only the "police-officer" approach it is commonly thought to be. Tumitin.com actually offers some really nice teaching resources that promote good scholarship. Nevertheless, institutes and individuals purchase Turnitin.com licenses for its plagiarism policing abilities.

[11] Lawrence M. Hinman. (The impact of the Internet on moral lives in academia. *Ethics and Information Technology*, 4: 31–35, 2002) frames a similar distinction in terms of a tension between "data-trust" and "person-trust". The claim is that anti-plagiarism software can give us data-trust, but it does so at the expense of person-trust. In a sense we agree with Hinman. We accept that the software can provide a measure of reliance in the student's work at the expense of trust in the person. But, as should be clear from the notions of reliance and trust developed throughout this paper, we do not consider reliance a form of trust. Such reliance is actually gained at the expense of trust. The reliance in a single piece of work offered by Turnitin.com is gained by having distrust as the default position and employing checking behaviour to remove this suspicion. Thus such reliance comes at the expense of being able to establish a long-term trusting relation with the individual or a community of trust with one's students.

[12] Of course, academics do display the correct model of attribution in their published work. But this is not what students experience as their typical university life. Few students read academic journals – or at least do not spend substantial time doing so – but rely on lectures as their primary source of knowledge. And anecdotally at least, it is the students more prone to plagiarism – that is, those less engaged in the academic community – that are the least exposed to the ideals of intellectual honesty demonstrated in journals.

most of a student's life experience is outside the academy altogether.

In the everyday world students are not routinely exposed to academic norms of attribution. Instead, they constantly see others using the Internet to copy the intellectual property of others. Music and videos are downloaded and copied to CD without either thought of wrongdoing or fear of retribution. Images, cartoon characters and logos are dropped to tee-shirt designs and printed with no compensation to the owners of the copyrights. Quotes are lifted for insertion into email signatures without thought of attribution. What is more, the very structure of the Internet entails the practice of copying data. The simple act of viewing a web page copies it to your local machine. It is possible to link to material on the web for your own site without the consent, or knowledge, of the owner of the other site. The model of intellectual attribution available on the Internet is (at best) ambiguous and at times presents the opposite of what the academy expects. Even more problematically, a climate of distrust is likely to be fostered by the employment of internet-enhanced plagiarism detection sites.

Detection and deterrence – Pepper won't stop a baby crying

Trust has been variously characterised as a positive belief or expectation, an affective attitude, a form of gullibility and a commitment,[13] but there is consensus that trust involves risk. Our discussion remains neutral between the above analyses of trust, but concentrates on the element of vulnerability within trust, and the need for trust in learning. In a teaching and learning context, a climate of trust means, among other things, an environment where both instructors and students can be vulnerable. Annette Baier makes the general point: "One leaves others an opportunity to harm one when one trusts, and also shows one's confidence that they will not take it".[14] Students risk error, failure, humiliation, teachers risk disappointment, deception, and indifference.

As Baier makes clear, not only valuable things can thrive in conditions of trust. Cheats might flourish, undermining the pedagogical aims of educational institutions. Teachers need to avoid crediting students for work they have not completed themselves.

Alongside the requirement to check the proliferation of plagiarism, however, we must also consider the collateral effects of the strategies we employ, and whether these reinforce or undermine other dimensions of teaching practice. The point is not to ignore the possibilities and realities of plagiarism. Indeed, doing so would itself undermine a trustful intellectual community. Yet trust and trustworthiness are essential for good teaching and learning, and might not be promoted nor preserved by any strategy that succeeds in catching plagiarists.

To treat others as trustworthy entails avoiding conduct that smacks of distrust. Trusters refrain from checking up, abjure leaping to certain kinds of conclusions and so on. In mere reliance,[15] my dependence can be withdrawn, or I can seek evidence to confirm the wisdom of my dependence, but when trust is at stake, doing these kinds of things can harm the relationship, inviting the accusation "you don't trust me". Trust can be breached by distrust, and learning and teaching environments can be disrupted by distrust as well as by untrustworthiness. This consideration problematizes technical solutions to student plagiarism, such as Turnitin.com.

A social relationship can be substantially harmed if one party feels the other is untrusting. Undeserved distrust can be insulting and degrading, and just as a relationship is maintained by trustworthy behaviour, so it is secured by appropriate trustfulness. If I refuse to take my friend at her word, she will likely cease to take me to be her friend. My unwillingness to take any degree of risk makes that relationship less, not more secure. Frauds play on such norms, and often succeed by manipulating relationships with both social and financial aspects. What would be prudent financial checking is characterised as derogatory social checking up, and when the victim is made to feel as if her own conduct is threatening the relationship, the real danger is obscured.

What does this mean in the educational context? We want our students to be trustworthy, and to trust us, to present their own work to us with confidence in our fairness, integrity and competence. We want them to participate virtuously in our community,[16]

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[13] See, for example, Bernd Lahno. On the Emotional Character of Trust. *Ethical Theory and Moral Practice*, 4: 171–189, 2001. Karen Jones. Trust as an Affective Attitude. *Ethics*, 107: 4–25, 1996 and Elizabeth Fricker. The Epistemology of Testimony, *The Aristotelian Society, Supplementary*, LXI: 57–84, 1987.

[14] Annette Baier. Trust and anti-trust. *Ethics*, 96: 231–260, 1986. p. 235.

[15] This corresponds roughly to Koehn's (2003) conception of 'calculative trust'. Daryl Koehn. The Nature of and Conditions for Online Trust. *Journal of Business Ethics*, 43: 3–19, 2003.

[16] The community in question is the interpersonal learning environment, understood broadly to comprise relationships between teachers and students, teachers and colleagues, and students and their peers. It extends to authors of books, articles, and online material, but of particular concern is the immediate academic environment in which teachers are responsible for transmitting not only discipline-specific content, but an appreciation of intellectual enterprises and the norms that govern them.

recognizing and upholding its norms and values. The prevalence of plagiarism tells us that this is not happening. But in seeking only to catch the cheats, we are responding to the symptom, not the cause. A response to Internet-enhanced plagiarism that tells students "don't plagiarise because you will be caught and penalised" does not cultivate trust nor does it encourage an appreciation of or disposition to intellectual integrity. A long-term solution to plagiarism must address the underlying motivations and causes of plagiarism. When the Internet is identified as one of the causes of plagiarism, it is at least plausible to look to the Internet and information and communication technology (ICT) generally as a solution to the problem. It seems clear to us that it is not the Internet or ICT that is primarily responsible for plagiarism, but the failure of the academic community to engage properly with issues emerging from the new information world of which ICT is a significant part. Certainly, the structure of the Internet promotes copying. But it also enables attribution. Thus it is not the Internet or ICT that causes plagiarism, but its use and abuse by people. As such, the case of online plagiarism mirrors the case of spamdexing: in both cases it is technology's abuse, not the technology itself, that is to blame.

The problem of online plagiarism results from a failure of community and cannot be attributed to the structure of technology. It is a failure of adults and educators correctly to engage with and provide a model for children and students immersed in the new structures, not a failing intrinsic to the structures themselves. A failure of community is, among other things, a failure to transfer valued practices, understandings and attitudes between generations. Undergraduate students are not being successfully enculturated to appreciate and respect academic standards of practice. From this perspective we can again see the failure of the reasoning behind the use of technology to eliminate the problem of plagiarism. The Internet is seen by many as the cause of the rise in plagiarism, hence, the Internet is proposed as the solution. But this misplaces the real cause of plagiarism: our failure to reproduce the intellectual virtues and academic values we espouse. To find a lasting solution to the problem of online plagiarism we need to change our focus from technology to community: from the Internet as problem (and solution) to engagement (or failure to engage) in a community of trust.

Alongside the inversion from technology to community, we need an inversion of focus from vice to virtue: from the vice of the student to academic virtue. Rather than focussing on the failures of students we need to recognise the possibilities of our own failures as instructors in the new electronic environment. Our failures are many: to engage students, to offer clear exemplary guidance, to promote a "love of wisdom" and a respect for academic virtues, including trust, reciprocity and community. But most of all, we must address the failure to provide a clear and robust model of academic attribution in a world where the very notions of intellectual ownership and plagiarism are cloudy. The solutions to plagiarism, online or not, need to be internal to the practice of teaching. For example, we could not only teach and assess appropriate uses of Internet resources, but also make our own (individual, disciplinary, institutional) practices transparent and exemplary. Our resources should go to engaging with students in ways that cultivate intellectual virtues and develop and maintain trustworthiness, and to demonstrating concern and respect for our students by being involved in the processes by which trust develops. For students to understand acknowledgement norms, to appreciate their significance and to develop intellectual virtue requires that they see their own work in the context of a community sustained by trust, recognition and respect.

To look to technology for a solution to plagiarism is, in effect, to commit the same error and to display the same vice which underlie the pull to plagiarism itself. The error is a misunderstanding of the nature of the practice; the vice is a lack of respect for knowledge and truth-seeking. To look for a solution from Turnitin.com, for example, is to treat our students as resources, to allow their knowledge and truth-seeking to be commodified. It is hard to imagine that such an approach will encourage our students to engage with us and the broader academic community in a trustworthy manner. If we treat our students as resources or instruments, how can we expect them to see the academy as anything more than a resource for them to exploit? And can we blame them for attempting to exploit this resource with the minimum of effort on their part? The very structure of Turnitin.com begins by treating every student as a potential plagiarist: distrust is the default position. Beginning in this way likely pushes our students towards a similar untrusting and thereby untrustworthy stance, and as the Red Queen problem demonstrates, it is a game we cannot win in the long run.

It is undeniable that some students will be tempted by plagiarism and that in some situations it is beyond the control of the individual instructor to set up and maintain an environment of trust and respect. When an instructor is responsible for 100-plus students, developing a relationship with each whereby virtue can be cultivated is impossible. Suspicion, as the

default, seems the only viable option. In such circumstances, the instructor cannot be blamed for employing methods like Turnitin.com. But such situations reflect the decline in the value placed in academia. Knowledge is merely another commodity and the academy no more than the factory for its production. Such institutional contexts will not sustain an environment of trust and respect sufficient to overcome the pull of plagiarism. But notice that this pull would exist without the Internet. It is the structure of modern education policy and the contemporary attitude to knowledge that is in need of remedy, not the students nor the Internet. The problem is ultimately a lack of a community caused in part by policy, but also by a failure of academics and university structures to engage students raised with the Internet. In any case, with the blame squarely on the lack of community, whatever its cause, the solution can be correctly located in the same place.

Conclusion

To the extent that our diagnosis of the problem is correct, a focus on technological solutions to Internet-enhanced plagiarism is misguided. While Turnitin.com offers useful advice and some helpful tools for both instructors and students, it is dangerous to see it as a perfect or complete solution. Increases to class sizes, casualisation of tertiary teaching and the reduction of universities to economic producers undermine the intellectual community in ways that should concern both teachers and students far more than students' misuse of net-trawled material. Internet plagiarism is symptomatic of declining trust and the degrading of the conditions needed to maintain a community strong in intellectual virtue. It is not the disease itself. Furthermore, if our response to remedying this symptom teaches our students to treat plagiarism as an issue of getting caught, not only have we adopted a strategy likely to be futile, we have done nothing to extend and deepen virtuous interactions, and we have endorsed a way of treating our students as mere instruments and resources. If we take the academic world to involve relations of interdependence in which commitment, respect, reciprocity and integrity are vital, the plagiarism problem is not technology, nor is the solution.

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