Paradigms of Plagiarism: Fair Use and Plagiarism Detection Software in *A.V. ex rel. Vanderhye v. iParadigms, LLC*[*]

INTRODUCTION

Multiple surveys taken over the past four years indicate that a large portion of undergraduate students at America's colleges and universities admit to cheating on a college exam or assignment.[1] In fact, in one survey, over fifty percent of college students confessed to having plagiarized from the Internet.[2] As information has become easier to access, students are increasingly tempted to plagiarize content from online sources. More troubling, many students who use the Internet to conduct research are unable to define plagiarism.[3]

Plagiarism has been described as an epidemic plaguing the nation, but it is not a novel concept.[4] Despite plagiarism's historical presence, it is a real problem in academic institutions that threatens, not only the original work of those who are victimized by this type of intellectual thievery, but also jeopardizes the continued intellectual

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1. Trip Gabriel, *To Stop Cheats, Colleges Learn Their Trickery*, N.Y. TIMES, July 6, 2010, at A1, *available at* http://www.nytimes.com/2010/07/06/education/06cheat.html (reporting that sixty-one percent of American college students have admitted to cheating on a college assignment or exam). Another study indicated that nearly eighty percent of college students have cheated on an assignment. *See Facts About Plagiarism*, PLAGIARISM.ORG, http://plagiarism.org/plag_facts.html (last visited Mar. 31, 2011). In the wake of a recent cheating scandal at the University of Central Florida, one student commented, " 'This is college. Everyone cheats, everyone cheats in life in general.' " Yunji De Nies & Karen Russo, *University of Central Florida Cheating Scandal Prompts Professor to Issue Ultimatum*, ABC NEWS (Nov. 10, 2010), http://abcnews.go.com/Business/widespread-cheating-scandal-prompts-florida-professor-issues-ultimatum/story?id=11737137&page=1.

2. *See* Zach Brendza, *Plagiarism Software Usage on Rise*, DUQUESNE DUKE (Duquesne University, Pittsburgh), Nov. 4, 2010, http://www.theduquesneduke.com/news/plagiarism-software-usage-on-rise-1.2090069 (reporting that an estimated fifty percent of first year students at Indiana University are guilty of "minor plagiarism").

3. WENDY SUTHERLAND-SMITH, PLAGIARISM, THE INTERNET, AND STUDENT LEARNING 117–18 (2008) (explaining that nearly fifty-two percent of students who used the Internet for research purposes were not confident in their perception of plagiarism).

4. *See* RICHARD A. POSNER, THE LITTLE BOOK OF PLAGIARISM 49–50 (2007). "The Latin word *plagiarius*, from which the English plagiarist derives, was first used . . . in something like its modern sense by the Roman poet Martial in the first century A.D." *Id.*; *see also* Gabriel, *supra* note 1 (describing how the "eternal temptation of students to cheat has gone high-tech").

growth of society.[5] Teachers have begun to describe plagiarism as a form of "intellectual rape,"[6] and some journalists have even opined that the standards of education universally have been "dumb[ed] down" because of this pestilence.[7]

In order to combat the rise of plagiarism in academic institutions, software companies have created novel and effective programs designed to detect and deter plagiarism.[8] An estimated fifty-five percent of colleges and universities use some type of anti-plagiarism software.[9] With the increased use of these advanced software programs, which can identify portions of a student's work that are similar to other works in the programs' massive and ever-growing document databases,[10] Zack Morris tactics[11] can no longer go on undetected.

As could be expected, the burgeoning market for plagiarism detection software has been accompanied by litigation challenging the use of such programs. In the recent case, *A.V. ex rel. Vanderhye v. iParadigms*,[12] the U.S. Court of Appeals for the Fourth Circuit held that iParadigms, LLC ("iParadigms"), a company specializing in plagiarism detection software, was not liable for infringing on the copyrights of four students when its software, Turnitin Plagiarism Detection Service ("Turnitin"), archived digital copies of the students' works in its database.[13] The court held that iParadigms' use of the student works qualified as fair use.[14]

This Recent Development explores the Fourth Circuit's fair use analysis and argues that its decision was, not only the correct application of the law, but also aligns with both the legislative purpose of fair use and the underlying constitutional purpose of copyright law. In Part I, this Recent Development examines the fair

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5. *See* SUTHERLAND-SMITH, *supra* note 3, at 20. When the media identifies a school as the site of a plagiarism controversy, the school's reputation is often compromised. *See id.* at 59–62.

6. *Id.* at 20.

7. *Id.* at 59.

8. *See* Ralph D. Mawdsley, *The Tangled Web of Plagiarism Litigation: Sorting Out the Legal Issues*, 2009 BYU EDUC. & L.J. 245, 245.

9. Gabriel, *supra* note 1.

10. *See* Jonathan Gingerich, Article, A.V. *ex rel.* Vanderhye v. iParadigms, LLC*: Electronic Databases and the Compartmentalization of Fair Use*, 50 IDEA 345, 346 (2010).

11. *See generally Saved by the Bell* (NBC television broadcast 1989–1993) (containing the character Zach Morris, who successfully games various teachers in a comical and entertaining manner).

12. 562 F.3d 630 (4th Cir. 2009).

13. *Id.* at 634.

14. *Id.*

use exception within the historical and constitutional context of copyright law. Part II briefly describes how Turnitin detects and deters plagiarism and provides a summary of the facts of *A.V. ex rel. Vanderhye*. Part III argues that the Fourth Circuit properly affirmed the district court's decision by performing a valid fair use statutory analysis but that the panel missed an opportunity to strengthen its argument by failing to interpret the factors in light of the purpose of copyright. Part III further contends that a finding of fair use comported with the constitutional purpose of copyright law because iParadigms' use contributes to the "Progress of Science and useful Arts."[15]

I. BACKGROUND LAW

The U.S. Constitution authorizes Congress to enact laws "To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."[16] The text of this clause suggests that the framers intended to promote the creation and dissemination of knowledge, in turn providing benefits to both the copyright owner and the public.[17] The public benefits from broader access to materials infused with the creative expression of others because this access provides the public with the opportunity to evolve intellectually.[18]

The Copyright Act of 1976,[19] as it exists today, grants six exclusive rights to copyright owners, including the right "to reproduce the copyrighted work."[20] Infringement occurs when one of these

15. U.S. CONST. art. I, § 8, cl. 8.

16. *Id.* The constitutional purpose of American copyright law aligns with the western world's first copyright law, which was promulgated with the clear and direct purpose of being "[a]n act for the encouragement of learning." Statute of Anne, 1709, 8 Ann., c. 19 (Eng.).

17. *See* Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d 1146, 1163 (9th Cir. 2007) (discussing how copyright law must promote learning and creativity to accord with the Constitution); *see also* Deborah Gerhardt & Madelyn Wessel, *Fair Use and Fairness on Campus*, 11 N.C. J.L. & TECH. 461, 462 (2010) ("The power to protect copyright law was written into the U.S. Constitution in order to stimulate, rather than limit, creative expression.").

18. *See* Gerhardt & Wessel, *supra* note 17, at 462.

19. 17 U.S.C. §§ 101–810 (2006).

20. *See id.* § 106(1). The six exclusive rights are the rights

> to do and to authorize [another] . . . : (1) to reproduce the copyrighted work in copies or phonorecords; (2) to prepare derivative works based upon the copyrighted work; (3) to distribute copies . . . of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending; (4) in the

exclusive rights is violated.[21] Congress, however, provided for a complete affirmative defense to copyright infringement by codifying the common law fair use exception.[22] Fair use is an affirmative defense born out of the equitable concept that a defendant should not be liable for infringement when imposing liability would be unfair or undermine the true purpose of copyright law—the promotion of intellectual progress.[23]

Fair use allows someone to reproduce a copyrighted work without the copyright owner's permission "for purposes such as criticism, comment, news reporting, teaching . . . scholarship, or research."[24] The Supreme Court has recognized that this statutory list was designed to be illustrative, not exhaustive.[25] Section 107 explicitly provides four nonexclusive factors that must be analyzed on a case-by-case basis to determine whether an act constitutes fair use.[26] A court must examine:

> (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes; (2) the nature of the copyrighted work; (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and (4) the effect of the use upon the potential market for or value of the copyrighted work.[27]

The Supreme Court provided guidance as to how courts should

> case of literary, musical, dramatic, and choreographic works, pantomimes, and motion pictures and other audiovisual works, to perform the copyrighted work publicly; (5) in the case of literary, musical, dramatic, and choreographic works, pantomimes, and pictorial, graphic, or sculptural works . . . , to display the copyrighted work publicly; and (6) in the case of sound recordings, to perform the copyrighted work publicly by means of a digital audio transmission.

See id. § 106(1)–(6).

21. *Id.* § 501(a). It should also be noted that plagiarism and copyright infringement are not interchangeable terms. *See* Mawdsley, *supra* note 8, at 261. Not every act of plagiarism constitutes illegal copyright infringement. *See id.*

22. 17 U.S.C. § 107 (2006); *see also* Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 576 (1994) (discussing how fair use originated as an "exclusively judge-made doctrine").

23. *See Campbell*, 510 U.S. at 575.

24. 17 U.S.C. § 107.

25. *See Campbell*, 510 U.S. at 577 (explaining how section 107 provides an " 'illustrative and not limitative' " list of examples of fair use (quoting 17 U.S.C. § 101 (1988 & Supp. IV 1993))).

26. *See* Harper & Row, Publishers, Inc. v. Nation Enters., 471 U.S. 539, 560–61 (1985).

27. *Id.* Furthermore, " '[t]he fact that a work is unpublished shall not itself bar a finding of fair use if such finding is made upon consideration of all the above factors.' " *Campbell*, 510 U.S. at 577 (quoting 17 U.S.C. § 107 (1988 & Supp. IV 1993)).

apply these factors in four influential cases.[28] The Court's interpretation of section 107 described this analysis as highly factual and demanded that the factors be "weighed together, in light of the purposes of copyright."[29] The Court has cautioned that the fair use analysis is not a bright-line test and that no specific equation will determine how many borrowed lines, images, or strings of musical notes will constitute fair use.[30]

The purpose of American copyright law is unambiguously stated in the Constitution. According to Article I, Section 8, Congress has the power to create create copyright legislation that "promote[s] the Progress of Science and useful Arts."[31] Scholars have agreed that the framers intended for this law "to fuel the educational mission" by providing financial incentives to authors.[32] Therefore, courts must ask whether a finding of fair use will hinder or enable the intellectual development of our society.

Applying this statutory regime, the Fourth Circuit recently held that when iParadigms archived student works in its database, its actions did not infringe on the students' exclusive rights because the software company's actions constituted fair use.[33]

II. *A.V. EX REL. VANDERHYE V. IPARADIGMS*

Four high school students[34] from Virginia and Arizona filed suit against iParadigms in 2007 for copyright infringement, alleging that

28. *See generally Campbell*, 510 U.S. 569 (reversing a court of appeals decision that denied a fair use defense to defendants who created a parody song based on plaintiff's song, "Oh, Pretty Woman"); Stewart v. Abend, 495 U.S. 207 (1990) (holding that defendant's unauthorized commercial use of plaintiff's work was not fair use); *Harper & Row*, 471 U.S. 539 (holding that defendant did not assert a valid fair use defense when it published full excerpts of an unpublished manuscript in its magazine for purposes of scooping the unpublished story); Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417 (1984) (holding that the private, noncommercial household recording of television shows using a video tape recorder was fair use).

29. *See Campbell*, 510 U.S. at 578.

30. *See id.* (directing that the factors must "[a]ll be explored, and the results weighed together, in light of the purposes of copyright"); *Harper & Row*, 471 U.S. at 549.

31. U.S. CONST. art. I, § 8, cl. 8.

32. *See* Gerhardt & Wessel, *supra* note 17, at 527; *see also* Douglas L. Rogers, *Increasing Access to Knowledge Through Fair Use—Analyzing the Google Litigation to Unleash Developing Countries*, 10 TUL. J. TECH. & INTELL. PROP. 1, 11 (2007) (recognizing that "[t]he principle behind the Copyright Clause is that the prospect of receiving these exclusive rights will provide financial incentives for individuals to create literary works, and society will benefit as a result").

33. A.V. *ex rel.* Vanderhye v. iParadigms, LLC, 562 F.3d 630, 645 (4th Cir. 2009).

34. *See id.* at 635. All four plaintiffs were minors at the time the suit was filed. *Id.* A.V. and K.W. attended McLean High School in Fairfax County, Virginia, while plaintiffs E.N. and M.N. attended Desert Vista High School in Tucson, Arizona. *Id.*

iParadigms unlawfully archived their works into an online database without permission.[35] The students' high schools required all students to submit written assignments through Turnitin in order to receive credit for their work; noncompliance with this school policy would result in a failing grade on the assignment.[36] The plaintiffs' high schools consented to Turnitin's archiving option when they purchased the software license.[37]

Before the students submitted their assignments to Turnitin, their lawyer registered the students' papers with the U.S. Copyright Office.[38] After the papers were submitted to Turnitin, the students filed a copyright infringement suit against iParadigms.[39]

iParadigms is the most successful and widely used anti-plagiarism service in the world.[40] Its product, Turnitin, is a web-based program designed to detect plagiarism.[41] At the time the lawsuit was filed, "[o]ver 7,000 educational institutions worldwide use[d] Turnitin, resulting in the daily submission of [over] 100,000 works."[42] By September 2010, Turnitin's subscription base had increased to 9,500 schools;[43] since its inception in 1997, Turnitin has reviewed more than 135 million student papers.[44]

Schools purchase Turnitin software licenses on an annual basis[45]

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35. *Id.* at 633–34.

36. *Id.* at 634.

37. *Id.*

38. *Id.* at 635 n.3. Interestingly, iParadigms presented evidence showing that the lawsuit was not the ingenuity of enterprising students but rather the idea of one of the plaintiff's fathers and their attorney. Brief for Appellee/Cross-Appellant at 4, *A.V. ex rel. Vanderhye*, 562 F.3d 630 (No. 08-1424), 2008 WL 2959038 [hereinafter Brief for Appellee].

39. *See* Brief for Appellee, *supra* note 38, at 4. The plaintiffs originally claimed that their schools coerced them into using Turnitin and that such coercion violated the Thirteenth Amendment. *Id.* at 4–5 (citing Complaint for Copyright Infringement at 9–10, A.V. v. iParadigms, LLC, 544 F. Supp. 2d 473 (E.D. Va. 2008) (No. 07-0293), 2007 WL 965549).

40. Samuel J. Horovitz, Note, *Two Wrongs Don't Negate a Copyright: Don't Make Students Turnitin if You Won't Give It Back*, 60 FLA. L. REV. 229, 236 (2008).

41. *See* TURNITIN, Registration No. 2,812,598. Turnitin is self-described in its trademark registration as providing "[e]ducational services, namely providing on-line grading; statistical analysis; plagiarism detection; peer review; class assignment, submission and retrieval; and class information services accessible through the internet or through an intranet." *Id.*

42. A.V. v. iParadigms, LLC, 544 F. Supp. 2d 473, 478 (E.D. Va. 2008), *aff'd in part*, *rev'd in part sub nom.* A.V. *ex rel.* Vanderhye v. iParadigms, LLC, 562 F.3d 630 (4th Cir. 2009).

43. Gabriel, *supra* note 1.

44. *Quick Facts*, TURNITIN, 1 (Sept. 14, 2010), http://turnitin.com/static/resources/documentation/turnitin/sales/Turnitin_Quick_Facts.pdf.

45. *Answers to Questions Students Ask About Turnitin*, TURNITIN, 1 (Sept. 14, 2010), http://turnitin.com/static/resources/documentation/turnitin/sales/Answers_to_Questions

at an estimated cost of eighty cents per student.[46] Once a teacher creates a "class" and "assignment" page for a particular assignment, either the teacher or the student can upload the paper into the system.[47] Students must also create a student profile and agree to Turnitin's "Clickwrap Agreement" that prevents the student from holding iParadigms liable for any " 'damages arising out of or in any way connected with the use of [the] web site.' "[48]

After the work is submitted, Turnitin creates a digitally coded "fingerprint" of each work and then digitally compares the submitted work to its ever-growing database consisting of over 12 billion pages of archived Internet content, 110 million previously submitted student papers, and over 80,000 commercial works, including academic articles and commercial publications.[49] Turnitin then produces an "Originality Report" which displays a percentage of the student's work that appears to be taken from other sources and highlights the problematic passages for the teacher's individualized review.[50] The alleged problematic step of Turnitin's process is that once a student has submitted his work to the system, the student's work is permanently archived as a digital code in the Turnitin database for future comparison purposes unless the student's school chose not to archive its students' works when it purchased the software license.[51]

At trial, the *A.V. ex rel. Vanderhye* plaintiffs argued that the permanent archiving of copyrighted works does not constitute fair use because iParadigms' archiving is a commercial exploitation of an entire, unpublished creative work.[52] However, on iParadigms' motion for summary judgment, the district court found that the students had

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_Students_Ask.pdf.

46. POSNER, *supra* note 4, at 82.

47. *Answers to Questions Students Ask About Turnitin*, *supra* note 45, at 1; *see also* A.V. *ex rel.* Vanderhye v. iParadigms, 562 F.3d 630, 634 (4th Cir. 2010).

48. *A.V. ex rel. Vanderhye*, 562 F.3d at 635 (quoting terms of Turnitin's Clickwrap Agreement). The district court held that the students validly entered into a contract with iParadigms by assenting to the clickwrap agreement. A.V. v. iParadigms, LLC, 544 F. Supp. 2d 473, 480 (E.D. Va. 2008), *aff'd in part*, *rev'd in part sub nom. A.V. ex rel. Vanderhye*, 562 F.3d 630. Such a discussion is beyond the scope of this Recent Development.

49. *Answers to Questions Students Ask About Turnitin*, *supra* note 45, at 1; *see also A.V. ex rel. Vanderhye*, 562 F.3d at 634 (discussing Turnitin's procedure for comparing the content of submitted student pieces to that of other documents); Horovtiz, *supra* note 40, at 237 (explaining how Turnitin "checks for originality based on 'exhaustive searches' of three database types").

50. *A.V. ex rel. Vanderhye*, 562 F.3d at 634.

51. *Id.*

52. *See* Brief for Appellants at 22–23, *A.V. ex rel. Vanderhye*, 562 F.3d 630 (No. 08-1424), 2008 WL 2724990 at *22–23.

entered into a valid contract with iParadigms by consenting to the clickwrap agreement, and even if that agreement did not preclude liability, iParadigm's archiving of the students' copyrighted works amounted to fair use.[53] Accordingly, the district court concluded that iParadigms was not liable for copyright infringement.[54] On appeal, the Fourth Circuit affirmed the lower court's holding that iParadigms' archiving qualified as fair use and therefore provided a complete affirmative defense against the students' copyright infringement claims.[55]

III. THE FAIR USE ANALYSIS OF TURNITIN'S ARCHIVAL PROCESS

A. The Statutory Fair Use Factors

As discussed earlier, 17 U.S.C. § 107 provides four factors that must be analyzed in light of the purpose of copyright law to determine whether a defendant's alleged infringing use qualifies as fair use.[56] Such an analysis is highly factual and must be done on a case-by-case basis.[57] This section analyzes iParadigms' use of student works under the fair use statutory regime and argues that the Fourth Circuit properly analyzed the factors but missed an opportunity to fortify its opinion by failing to discuss how iParadigms' use aligns with the purpose of copyright law.

1. Turnitin Used the Students' Works in a Highly Transformative Manner

The first factor in section 107's fair use analysis directs courts to look at the alleged infringing work and examine the "purpose and character of [its] use, including whether such use is of a commercial nature."[58] According to the Supreme Court, if the alleged infringer uses the copyrighted material for a commercial purpose, such use "tends to weigh against a finding of fair use," but "[t]he crux of the profit/nonprofit distinction is not whether the sole motive of the use is monetary gain but whether the user stands to profit from exploitation of the copyrighted material without paying the customary price."[59] The primary inquiry of the purpose and character prong is to

53. *A.V.*, 544 F. Supp. 2d at 481–84.
54. *Id.* at 484.
55. *A.V. ex rel. Vanderhye*, 562 F.3d at 645.
56. *See* 17 U.S.C. § 107 (2006).
57. *See* Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 577–78 (1994).
58. *Id.* at 578 (quoting 17 U.S.C. § 107(1) (1988 & Supp. IV 1993)).
59. Harper & Row, Publishers, Inc. v. Nation Enters., 471 U.S. 539, 562 (1985).

determine "whether the new work merely 'supersede[s] the objects' of the original creation"[60] or whether it is transformative in nature, meaning that the new work contains new material or has "a further purpose or different character."[61] The Fourth Circuit properly explained that although iParadigms realizes a commercial profit from archiving student papers, the transformative nature of its archiving favors a finding of fair use.[62]

Since iParadigms realizes a substantial profit from archiving student works for future comparison purposes, its use is commercial in nature.[63] However, commercial use does not preclude a finding of fair use, and the panel properly did not give overwhelming weight to this fact.[64] Turnitin's archiving process, after all, protected the students' works by making it more difficult for others to plagiarize the material in the future. Although the success of Turnitin can be attributed in part to the fact that the company has archived millions of pages of student content, iParadigms ultimately profits from its novel software design, which filled a niche in the software market. Yet when iParadigms sells licenses for its software, the licenses do not permit third parties to freely view and publish archived content.[65] Therefore, iParadigms does not exploit the commercial value of the student works. These facts further diminish the significance of iParadigms' use being characterized as commercial, particularly in light of the highly transformative nature of iParadigms' archiving.

Furthermore, the inquiry into how transformative the new work is tends to carry more weight than the commercial aspect of the defendant's work in the analysis of this factor.[66] The Fourth Circuit correctly analyzed the transformative nature of iParadigms' use and thoroughly discussed how a work can be "transformative in function

60. *Campbell*, 510 U.S. at 579 (quoting Folsom v. Marsh, 9 F. Cas. 342, 348 (D. Mass. 1841)) (alteration in original).

61. *Id.*

62. A.V. *ex rel.* Vanderhye v. iParadigms, LLC, 562 F.3d 630, 640 (4th Cir. 2009) (finding that iParadigms' use was transformative because their "use of [the student works] was completely unrelated to expressive content and was instead aimed at detecting and discouraging plagiarism").

63. The plaintiffs argued that Turnitin's most marketable attribute is the ever-increasing archive it utilizes to detect plagiarism because the archive is filled with student submissions. *See* Brief for Appellants, *supra* note 52, at 23; *see also* Horovtiz, *supra* note 40, at 247 (describing how Turnitin revels in the fact that they archive student papers for future comparison purposes).

64. *A.V. ex rel. Vanderhye*, 562 F.3d at 639.

65. *See id.* at 641.

66. *See id.* at 639.

or purpose without altering or actually adding to the original work."[67] This argument was reinforced in a recent high-profile opinion that defined a work as transformative " 'where a defendant changes a plaintiff's copyrighted work *or uses the plaintiff's work in a different context such that the plaintiff's work is transformed into a new creation*.' "[68] In *Perfect 10, Inc. v Amazon.com, Inc.*,[69] the Ninth Circuit held that Google's use of copyrighted thumbnail images in its search results was "highly transformative" because the images were used in a completely different context to provide the public with an image-based search engine.[70]

Similarly, in *A.V. ex rel. Vanderhye*, the students created their papers for the purpose of submitting the work to their teachers to receive class credit.[71] Such use served an individualized educational function. iParadigms' purpose was highly transformative because it used the papers in a different context when it archived the works to detect plagiarism. Further, the works were transformed into a new creation when they were digitally coded and archived for future comparison purposes. Although such a function arguably serves an educational purpose as well, it can be better defined as providing a public benefit of preventing plagiarism, guarding others' protected content, and promoting the creation of original work.[72]

The Fourth Circuit could have further strengthened its holding that the first factor favors iParadigms by following recent decisions from the Ninth Circuit, which placed great emphasis on whether the transformative use benefits the public.[73] In two cases, the Ninth Circuit discussed how the "transformative nature of a search engine" and the fact that a search engine served a useful public function tipped the scale in favor of the defendant asserting the fair use defense.[74] The Fourth Circuit should have followed the Ninth Circuit's lead and taken into account the extent to which Turnitin's use of the students' works provides a readily observable benefit to the

67. *Id.*

68. Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d 1146, 1165 (9th Cir. 2007) (emphasis added) (quoting Wall Data Inc. v. L.A. Cnty. Sheriff's Dep't, 447 F.3d 769, 778 (9th Cir. 2006)).

69. 508 F.3d 1146 (9th Cir. 2007).

70. *See id.* at 1165.

71. *See A.V. ex rel. Vanderhye*, 562 F.3d at 635.

72. *See, e.g.*, *Perfect 10*, 508 F.3d at 1166 ("[T]he significantly transformative nature of Google's search engine, particularly in light of its public benefit, outweighs Google's superseding and commercial uses of the [thumbnail images].").

73. *See id.* at 1164; Kelly v. Arriba Soft Corp., 336 F.3d 811, 818–20 (9th Cir. 2002).

74. *See Perfect 10*, 508 F.3d at 1164; *Kelly*, 336 F.3d at 818–20.

public by deterring plagiarism and protecting the original work of authors. One possible inference from the fact that the Fourth Circuit failed to discuss the public benefit the software provides is that the panel feared criticism for basing its decision on public policy rather than the letter of the law. However, such an analysis would have been well within the bounds of the statutory analysis.[75]

2. The Copyrighted Work was Expressive in Nature

Next, section 107 requires analysis of the "nature of the copyrighted work"[76] by recognizing "that some works are closer to the core of intended copyright protection than others, with the consequence that fair use is more difficult to establish when the former works are copied."[77] Although the students' copyrighted works in *A.V. ex rel. Vanderhye* were expressive and creative content,[78] the Fourth Circuit correctly held that iParadigms did not exploit these aspects of the works. Turnitin created a digital fingerprint of the copyrighted works for comparison and archiving purposes—not to pass off the students' creativity as its own.[79] This purpose was "not related to the creative core" of the plaintiffs' copyrighted works.[80] Indeed, Turnitin protected the students' creative content by archiving the digital fingerprint in its database.[81] With the papers archived, Turnitin will be able identify future papers that plagiarize from the archived works.[82]

The Fourth Circuit correctly discussed that the fair use exception for unpublished works is necessarily thinner in scope because an author has the right to publish and disseminate the first public copy of his work.[83] The concern against an unauthorized publication of an

75. *See Perfect 10*, 508 F.3d at 1163–64.

76. 17 U.S.C. § 107(2) (2006).

77. Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 586 (1994) (describing how facts are not eligible for copyright protection).

78. The students' copyrighted works consisted of poetry and works of fiction. *See* A.V. *ex rel.* Vanderhye v. iParadigms, LLC, 562 F.3d 630, 641 (4th Cir. 2009). These works are deemed "highly creative" and thereby demand increased protection. *See id.*

79. *See id.* at 638.

80. *See id.* at 641.

81. *See* A.V. v. iParadigms, LLC, 544 F. Supp. 2d 473, 480 (E.D. Va. 2008) ("iParadigms' use of Plaintiffs' works has a protective effect, preventing others from using Plaintiffs' works as their own and protecting the future marketability of Plaintiffs' works."), *aff'd in part*, *rev'd in part sub nom. A.V. ex rel. Vanderhye*, 562 F.3d 630.

82. *See A.V. ex rel. Vanderhye*, 562 F.3d at 634 (describing how Turnitin archives submitted works for future comparison purposes); *see also* Horovitz, *supra* note 40, at 245 (arguing that the archiving process is the "most legally sensitive . . . aspect of the Turnitin system").

83. *See A.V. ex rel. Vanderhye*, 562 F.3d at 640; *see also* Harper & Row, Publishers,

otherwise unpublished work predates American copyright law and is based on the common law right that an author's intellectual creation is the absolute property of the author until he voluntarily publishes the work.[84] The panel followed the statute's directive that clearly states that simply because a copyrighted work is unpublished does not automatically preclude a finding of fair use; the four statutory factors must still be properly analyzed.[85]

In *A.V. ex rel. Vanderhye*, there is no risk that iParadigms would preempt the public distribution of the students' works. Since iParadigms did not collect the plaintiffs' works in order to distribute the works to the public, iParadigms did not supersede the students' right to first publication. Furthermore, because the digital archiving process is completely computerized and prevents even an employee from reading the submitted works, not only does the student retain his right to publication, but he has not published his paper to anyone beyond his teacher.[86] Accordingly, the Fourth Circuit properly did not give overwhelming weight to the fact that the students' works were unpublished.

Although the copyrighted work was creative in content and unpublished, iParadigms did not exploit the students' creative expressions or rights to first publication. The Fourth Circuit found that neither party clearly tipped the scale in their favor, and held that the second factor favored neither party.[87] However, since iParadigms did not exploit the students' unpublished works, and actually has prevented other parties from exploiting the creative worth of these works, the Fourth Circuit should have found that this factor favored iParadigms.

3. The Amount and Substantiality of the Copyrighted Work Used

The third statutory factor asks courts to examine "the amount and substantiality of the portion [of the copyrighted work] used in relation to the copyrighted work as a whole."[88] The Fourth Circuit concluded that iParadigms' use of complete copyrighted works did

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Inc. v. Nation Enters., 471 U.S. 539, 551 (1985) (describing how the fact a work has not yet been published will tend to favor a finding of infringement because the author has the right to decide when and whether to publish the work).

84. *See Harper & Row*, 471 U.S. at 550–51 (citing Am. Tobacco Co. v. Werckmeister, 207 U.S. 284, 299 (1907)).

85. 17 U.S.C. § 107 (2006).

86. *See A.V. ex rel. Vanderhye*, 562 F.3d at 641 (finding that iParadigms did not violate the students' right to first publication).

87. *See id.*

88. 17 U.S.C. § 107(3).

not favor either party, even though iParadigms used the entire work.[89] The Fourth Circuit's determinations were undoubtedly correct.

As the Fourth Circuit acknowledged, "as the amount of the copyrighted material that is used increases, the likelihood that the use will constitute 'fair use' decreases."[90] Along with determining the quantity of the copyrighted work used by the defendant, courts must examine the substantive content of the work copied.[91]

Even a defendant's use of the entire copyrighted work, however, is not dispositive. A recent Second Circuit decision held that when an entire concert poster was reproduced in reduced size to appear in a coffee table book, the third factor did not weigh against fair use.[92] In that decision, the Second Circuit determined that such reproduction was necessarily related to the transformative purpose of the book—to provide a history of the Grateful Dead.[93] Although Turnitin archives the entire copyrighted work, "the extent of permissible copying varies with the purpose and character of the use."[94] Therefore, the fact that the entirety of a student's paper is stored in the archive does not necessarily favor the students.[95]

The Fourth Circuit adopted the district court's finding that iParadigms' use of the students' works was "limited in purpose and scope as a digitized record for electronic comparison purposes only" and, therefore, did not prevent a finding of fair use.[96] However, given that this test calls for examining whether the quantity used was "reasonable in relation to the purpose of the copying," it is even possible that this factor favors iParadigms since the purpose and function of its archive necessarily requires the entire work be stored in order for Turnitin to detect future cases of plagiarism.[97]

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89. *A.V. ex rel. Vanderhye*, 562 F.3d at 642.

90. *Id.* at 641; *see also* Edward Lee, *Technological Fair Use*, 83 S. CAL. L. REV. 797, 851 (2010) (discussing how a study of fair use decisions found that "the more the defendant takes of the plaintiff's work, the less likely it is that the taking will qualify as a fair use").

91. Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 587 (1994).

92. Bill Graham Archives v. Dorling Kindersley Ltd., 448 F.3d 605, 607, 613 (2d Cir. 2006).

93. *See id.* at 613.

94. *Campbell*, 510 U.S. at 586–87.

95. *See Bill Graham Archives*, 448 F.3d at 613 (discussing how no federal circuit court has found that "copying of an entire work *favors* fair use" but that "such copying does not necessarily weigh against fair use because copying the entirety of a work is sometimes necessary to make a fair use").

96. A.V. *ex rel.* Vanderhye v. iParadigms, LLC, 562 F.3d 630, 642 (4th Cir. 2009) (internal quotation marks omitted).

97. *Campbell*, 510 U.S. at 586 (finding that the copying of the melody of "Pretty Woman" was essential to the subsequent parody of the song).

Of course, since this factor was the students' strongest argument, the Fourth Circuit could have decided that this factor favored the students and still have found fair use when weighing the factors together in light of the purpose of copyright law. Nevertheless, since iParadigms' use of an entire work is necessary to achieve its transformative purpose, the Fourth Circuit was well within the bounds of relevant precedent when it held that this factor did not prevent a finding of fair use.

4. Turnitin Did Not Usurp the Copyrighted Work's Market

The final factor the statute directs courts to consider is "the effect of the [defendant's] use upon the potential market for or value of the copyrighted work."[98] The primary inquiry is "whether the secondary use usurps the market of the original work."[99] This market effect factor has been described as both the most important[100] and most debated of the statutory factors.[101] The Fourth Circuit correctly acknowledged that "the transformative nature of the use is relevant to the market effect factor" and properly held that iParadigms did not create a market substitute that usurped the student works.[102]

The students argued that by archiving their works in Turnitin's database, they were unable to sell their own works to "paper mills."[103] They also claimed that they might encounter difficulties in the future if they were to resubmit their own original work for another purpose, and the work was then flagged in the database as unoriginal content.[104] Neither argument is compelling.

Even though the students argued that the value of their papers in the paper mill market was severely diminished after they submitted a

98. 17 U.S.C. § 107(4) (2006).

99. NXIVM Corp. v. Ross Inst., 364 F.3d 471, 482 (2d Cir. 2004).

100. Harper & Row, Publishers, Inc. v. Nation Enters., 471 U.S. 539, 566 (1985) (describing the fourth factor as the "single most important element of fair use"). *But see Campbell*, 510 U.S. at 584 (finding the Sixth Circuit had erroneously "giv[en] virtually dispositive weight" to the market effect factor); Barton Beebe, *An Empirical Study of U.S. Copyright Fair Use Opinions*, *1978–2005*, 156 U. PA. L. REV. 549, 617 (describing the fourth factor as a "metafactor under which courts integrate their analyses of the other three factors and, in doing so, arrive at the outcome not simply of the fourth factor, but of the overall test"); Gerhardt & Wessel, *supra* note 17, at 492 (discussing the "market myth" that fair use will not be found if an existing market for the copyrighted work exists).

101. Lee, *supra* note 90, at 852.

102. A.V. *ex rel.* Vanderhye v. iParadigms, LLC, 562 F.3d 630, 643 (4th Cir. 2009).

103. The "paper mill market" refers to websites that purchase students' papers and sell those papers for a nominal fee to other students. *See* A.V. v. iParadigms, LLC, 544 F. Supp. 2d 473, 484 n.1 (E.D. Va. 2008), *aff'd in part*, *rev'd in part sub nom. A.V. ex rel. Vanderhye*, 562 F.3d 630.

104. *See A.V. ex rel. Vanderhye*, 562 F.3d at 643–44.

paper to Turnitin, the students testified that they had no intention of reselling their papers.[105] The Fourth Circuit rejected the paper-mill-market argument because the transformative nature of iParadigms' use did not serve as a market substitute for the students' works but instead "suppress[ed] demand for them" indirectly.[106] Any potential harm the plaintiffs may have suffered by this decreased demand in a hypothetical paper market, the court explained, is not the type of harm copyright law seeks to rectify.[107]

Such an argument—if advanced after the students had actually attempted to resell their works to a paper mill and had included evidence that iParadigms' unauthorized use discredited the original works—might have helped the students' case.[108] However, the court's "market substitute" reasoning still would have applied, given the transformative nature of iParadigms' use. And any protection of a market for student plagiarism would seemingly weigh against copyright law's purpose of promoting intellectual progress.

The plaintiffs' argument that they might be adversely affected if they were to resubmit their paper for a different use in the future because it could be flagged in the Turnitin database[109] also seems convincing. Not only do authors often reuse their own works, but most authors utilize a personalized writing style, employing common phrases and word choices in their works.[110] If authors were identified as plagiarizers because the Turnitin archive contained other works they created, the creativity of authors could be stifled, as authors may fear turning their papers into a publication that may compare their work to all other works they had previously written. If evidence was presented that the students actually attempted to sell their papers to a periodical and that the presence of their works in the Turnitin archive discredited the authenticity of their work, the court may have found that this factor favored the students.[111]

Still, to the extent that a false positive is at least a theoretical problem, the way the Turnitin software functions ameliorates such concerns in practice.[112] Indeed, after reviewing how Turnitin identifies possibly plagiarized works, the Fourth Circuit concluded that the

105. *Id.* at 644.
106. *Id.*
107. *Id.*
108. *See id.*
109. *See id.* at 644–45.
110. *See* James W. Pennebaker & Laura A. King, *Linguistic Styles: Language Use as an Individual Difference*, 77 J. PERSONALITY & SOC. PSYCHOL. 1296, 1296 (1999).
111. *See A.V. ex rel. Vanderhye*, 562 F.3d at 644–45.
112. *See supra* notes 45–51 and accompanying text.

plaintiffs' concerns were "implausible."[113] The issue the students posed could be easily prevented by iParadigms in its archiving and comparison process by identifying if a work has previously been scanned in to the system and indicating who submitted the work and when it was submitted. Furthermore, if authors truly feared that they might suffer from their works being locked up in Turnitin's archive, they could display a disclaimer on their work advising the secondary recipient that it had been previously submitted and archived in the Turnitin database.

A critic of Turnitin has suggested that the students were also prevented from seeking licensing fees from plagiarism prevention software companies, and they thereby suffered potential market harm.[114] However, since the plaintiffs did not advance this argument in their brief,[115] the court did not address this issue in their opinion. Based on the highly profitable licensing industry, this argument may have had some clout if the plaintiffs' attorney had properly briefed the issue on appeal. Then again, it would be extremely difficult and expensive for software programs to purchase licenses from countless students before archiving their works. Such a requirement would hinder the efficiency and efficacy of Turnitin, thereby making the proposed argument implausible. And even assuming that a licensing opportunity was forfeited, when interpreting the four fair use factors together with the guiding principle that copyright law should promote learning and academic advancement, the Fourth Circuit still could have applied fair use.

Based on this analysis, it is clear that Turnitin does not create a market substitute for the papers it archives. To the contrary, Turnitin protects authors from being victimized by plagiarizers in the future. The software could even be viewed as protecting the market value of works by identifying other works that attempt to usurp the creative content (and arguably potential market value) of the copyrighted works. Therefore, the Fourth Circuit correctly found that the fourth factor favored iParadigms.

B. Viewing the Factors in Light of the Purpose of Copyright Law

The Supreme Court has clearly articulated that the statutory fair use analysis must be evaluated "in light of the purposes of copyright"

113. *See supra* notes 45–51 and accompanying text.

114. *See* Horovitz, *supra* note 40, at 252.

115. *See generally* Brief for Appellants, *supra* note 52 (failing to argue that the students' inability to seek licensing fees constituted harm).

law.[116] This requires that courts determine whether the "copyright law's goal of promot[ing] the Progress of Science and useful Arts would be better served by allowing the use than by preventing it."[117] Such an analysis allows courts to refrain from applying the strict language of the copyright statute " 'when, on occasion, it would stifle the very creativity which [the] law is designed to foster.' "[118]

Not only does the fair use defense follow the Constitution's directive by "encourag[ing] and allow[ing] the development of new ideas that build on earlier ones, thus providing a necessary counterbalance to the copyright law's goal of protecting creators' work product,"[119] but the constitutional purpose of copyright law is inherently infused into each statutory factor. For instance, Congress requires an analysis of the copyrighted work's market effect because one of the goals of copyright law is to provide financial incentives to authors in order to encourage them to create original content.[120] Furthermore, "the goal of copyright, to promote science and the arts, is generally furthered by the creation of transformative works" because transformative works add to society's intellectual database by building upon preexisting works.[121]

The Fourth Circuit properly balanced the four factors without giving overwhelming weight to any single factor.[122] The Fourth Circuit recognized that the fair use analysis must be done " 'in light of the purposes of copyright,' "[123] but it failed to actually perform such an analysis. Consequently, the court missed an opportunity to further fortify its holding by discussing how the factors, when weighed together and aligned with the purposes of copyright law, demand a finding of fair use.[124] Taking the Supreme Court's direction and balancing the fair use factors, along with the guiding principle that copyright law should foster creative expression, Turnitin's archiving

116. *See* Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 578 (1994).

117. Castle Rock Entm't, Inc. v. Carol Publ'g Grp., Inc., 150 F.3d 132, 141 (2d Cir. 1998) (citations omitted) (quoting U.S. CONST. art. I, § 8, cl. 8; Arica Inst., Inc. v. Palmer, 970 F.2d 1067, 1077 (2d Cir. 1992)) (internal quotation marks omitted).

118. *Campbell*, 510 U.S. at 577 (quoting Stewart v. Abend, 495 U.S. 207, 236 (1990)).

119. Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d 1146, 1163 (9th Cir. 2007).

120. *See* A.V. *ex rel.* Vanderhye v. iParadigms, LLC, 562 F.3d 630, 642–43 (4th Cir. 2009) (citing Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 450 (1984)).

121. *See Campbell*, 510 U.S. at 579.

122. *But see* Gingerich, *supra* note 10, at 357 (arguing that the Fourth Circuit tried to squeeze the defendant's use into a category of fair use exceptions, "rather than as a straightforward application of the statutory factors").

123. *A.V. ex rel. Vanderhye*, 562 F.3d at 638 (quoting *Campbell*, 510 U.S. at 578).

124. *See* Gingerich, *supra* note 10, at 360 (postulating that "the Fourth Circuit's application of the statutory . . . analysis was far from a foregone conclusion").

of student papers easily qualifies as fair use. Not only was iParadigm's use of the students' works transformative in purpose and nature, the company does not act as a market substitute for the students' papers. In fact, Turnitin actually encourages students to create new expression by deterring them from plagiarizing the content of others.[125] A finding of fair use is clearly in line with the constitutional directive of promoting the progress of learning.[126]

Indeed, Turnitin has become a valuable tool for teachers, helping to foster original works of student scholarship.[127] One iParadigms survey of Turnitin users concluded that the software provides teachers with the opportunity to discuss academic integrity and proper citation methods with students.[128] Research has also shown that consistent use of plagiarism-detection software reduces the temptation of students to use unattributed, unoriginal content from the Internet in their own work.[129] Arguably, use of the program encourages even the most honest students to produce the most original and creative work because of their fear that Turnitin might flag their papers. In 2010, iParadigms surveyed teachers that utilize Turnitin and found that seventy-five percent believed use of the product helped build better writing skills in their students.[130] These results demonstrate that by archiving students' papers as digital fingerprints, Turnitin is a powerful tool for combating plagiarism and fostering creative expression among students across the globe. By promoting the importance of original creative expression among students, the future scholars and leaders of our society, our intellectual development will be accelerated, not stifled.

The Fourth Circuit's finding of fair use in *A.V. ex rel. Vanderhye* comported with the legislative purpose of section 107, the language of the statute, and the constitutional purpose of copyright law.[131] Nevertheless, it did so by sidestepping a very important step in the statutory analysis that could have added even more bite to its opinion.

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125. *See* SUTHERLAND-SMITH, *supra* note 3, at 193.

126. *See* U.S. CONST. art. I, § 8, cl. 8.

127. *See* SUTHERLAND-SMITH, *supra* note 3, at 115 ("Overall, the majority of teachers [interviewed in a four-campus study of Turnitin] said Turnitin was a useful tool but they also strongly urged that it should not be the only means of plagiarism detection.").

128. IPARADIGMS, LLC, WHITE PAPER: THE EFFECTIVENESS OF TURNITIN 9 (2010) (on file with North Carolina Law Review).

129. *See* SUTHERLAND-SMITH, *supra* note 3, at 193.

130. *See* IPARADIGMS, LLC, *supra* note 128, at 10.

131. Although there are valid distinctions between plagiarism, better writing, and copyright law, when students improve their writing abilities at a young age and learn how to properly use content in the academic setting, they are contributing to the intellectual progress of science and the arts.

By failing to discuss how a finding of fair use furthers our society's intellectual growth, the panel strayed from a strong precedent of fair use cases that perform such an analysis.[132] This omission may prevent this opinion from having as lasting a precedential effect as it would have had if it included a more thorough statutory analysis.

CONCLUSION

As Mark Twain once observed, "Nothing is ours but our language, our phrasing. If a man takes that from me (knowingly, purposely) he is a thief."[133] Plagiarism is a real threat to academic integrity and learning that teachers devote a large amount of time and energy to preventing and detecting.[134] Turnitin has been described as "one of the most viable instruments for addressing plagiarism in education" because of its ability to assist teachers with this onerous task.[135]

Although the Fourth Circuit may have been influenced to find fair use because of the public policy objective of preventing plagiarism, such a consideration is valid under the fair use statutory regime because the public policy objective of preventing plagiarism is encompassed within the goal of copyright law.[136] By creating software that identifies unoriginal content, iParadigms incentivizes authors to continue creating original material, thereby further enriching society with original and creative works. In its holding, the Fourth Circuit provided an insightful and thorough analysis of each of the four fair use factors. However, the panel ignored the Supreme Court's directive to balance the factors in light of copyright law's constitutional purpose—to foster intellectual growth. Not often the leader in producing precedential copyright decisions,[137] the Fourth Circuit missed an opportunity to provide an influential fair use

132. *See, e.g.*, Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 580–81 (1994) (discussing the intellectual benefit parody plays in our society); Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d 1146, 1166 (9th Cir. 2007) (discussing how Google's search engine provides a technological benefit to society).

133. Letter from Samuel Clemens to Robert J. Burdette, *in* ROBERT J. BURDETTE: HIS MESSAGE 136 (Clara B. Burdette ed., 1922).

134. *See* SUTHERLAND-SMITH, *supra* note 3, at 114–15.

135. Mawdsley, *supra* note 8, at 265.

136. *See* discussion *supra* Part III.A.1.

137. Most copyright cases arise in California, New York, and other areas with a dense population of publishing houses, movie studios, and software companies. *See Case Law & Judicial Opinions*, COPYRIGHT & FAIR USE: STANFORD UNIV. LIBRARIES, http://fairuse.stanford.edu/primary_materials/cases/ (last visited Apr. 4, 2011) (listing major copyright decisions of the past twenty years, with cases from the Fourth Circuit notoriously absent).

analysis of a software program that will likely be at the forefront of future litigation.

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