Computers & Education 69 (2013) 1–14

Contents lists available at SciVerse ScienceDirect

Computers & Education

journal homepage: www.elsevier.com/locate/compedu

Design and usability testing of a learning and plagiarism avoidance tutorial system for paraphrasing and citing in English: A case study

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ARTICLE INFO

Article history:
Received 24 January 2013
Received in revised form
13 June 2013
Accepted 23 June 2013

Keywords:
Evaluation of CAL systems
Intelligent tutoring systems
Interactive learning environments
Interdisciplinary projects

ABSTRACT

The prevalence of information and communication technology (ICT) has considerably converted the means of/for publication and circulation, as well as transforming academia and English pedagogy. However, with the availability and convenience of online resources, one of the critical issues emerged is that non-native English speakers are constantly accused of committing textual plagiarism: either intentionally or unintentionally. While many writing tools and plagiarism detectors are available to help solve the problem, none of them were customized for the great population of Chinese learners of English. Accordingly, *DWright*—a Chinese-interfaced online writing tutorial for paraphrasing and citing English—was developed in the hope of ensuring academic integrity through the avoidance of textual plagiarism.

The purpose of this study was to evaluate the design and efficacy of DWright regarding plagiarism prevention and improvement of English writing. A questionnaire and semi-structured interview were administrated to participants to test DWright and its technology acceptance model (TAM) to identify the effect of perceived usefulness, usability and user attitudes of DWright. Results show that users of DWright were in high agreement regarding the content effectiveness of all DWright-based tasks, indicating the reading activities, multiple-choice exercises and paraphrasing practices were effective to help users enhance writing knowledge and skills to avoid plagiarism. Furthermore, perceived usefulness and system usability affected DWright user attitudes significantly and positively, which mirrors their attitudes toward continued use of DWright. In this study, DWright met its users' needs by extending their knowledge to avoid plagiarism while simultaneously enhancing their paraphrasing and writing skills. The conclusion suggests that tutorial designers, content experts and subject teachers should support effective communication to improve content usefulness, so as to help users achieve their writing goals with a research proven learning and plagiarism avoidance tutorial system.

1. Introduction

Web-based instruction (WBI) and e-learning have transformed traditional instruction and learning, and have benefited learners greatly (Liu, Liu & Hwang, 2011; Wang and Chiu, 2011). The prevalence of information and communication technology (ICT) has also accelerated knowledge exchange and development (Chiu & Liu, 2013; Liu, 2008; Liu & Hwang, 2010), which has converted the channel for publications resulting in a greater need for research publication and circulation. Publishing studies has become a trend in academia worldwide (Colpaert, 2012), which in turn has inspired more refined scientific and social scientific research. As a consequence of this trend, English has become the most prevalent global language due to chronological evolvement, economic concerns and educational policies (Montgomery, 2013; Pecorari, 2010).

However, this practice has led to some non-native English speakers (NNES) experiencing frustration and anxiety throughout the process of writing and submitting English papers (Iida, 2011). In addition to the inherent difficulty of providing adequate research quality and significance with appropriate or acceptable academic conventions (Abasi & Graves, 2008; Davis, 2013), NNES must also struggle with English writing for academic and industrial publications (Spence & Liu, 2013). In response to this, online writing tools have been developed for practice and improvement.

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http://dx.doi.org/10.1016/j.compedu.2013.06.011

In the field of computer-assisted learning, one key research goal has been ensuring academic integrity through the prevention of academic plagiarism (Butakov & Scherbinin, 2009; Kaner & Fiedler, 2008), as the Internet has become a convenient means to countless resources and thus aroused un/intentional plagiarism issues (Davis, 2013; Sutherland-Smith, 2008). Despite the available writing aids, student writers or even advanced learners of English are accused of plagiarizing or patchwriting to some degree (Cargill, O'Connor, & Li, 2012; Howard, 2010; Sun, 2012). More specifically, they are said to "use … words and/or ideas from another source, without appropriate attribution (Pecorari, 2010, p. 4)" or "copying from a source text and then deleting some words, altering grammatical structures, or plugging in one synonym for another" (Howard, 1999, p. 17), which could be due to students' problematic skills or perceptions of paraphrasing (Hirvela & Du, 2013). Accordingly, plagiarism detectors have been developed to examine possible word-lifting. Many of the detectors, such as the renowned Turnitin, are employed in writing courses to raise awareness of academic integrity and also provide opportunities for the students to rewrite their work, thus helping reduce cases of academic misconduct (Betts, Bostock, Elder, & Trueman, 2012; Brown, Jordan, Rubin, & Arome, 2010; Cox, 2012; Davis, 2007; Kiriakidis, 2012; Rolfe, 2011; Stappenbelt &Rowles, 2009). Student writers using anti-plagiarism software in the literature have been reported to have reduced plagiarism. In short, with the use of this type of software they "developed a sense that avoiding plagiarism is important" (Stappenbelt and Rowles, 2009, p. 6). Instructors have also responded positively toward plagiarism detection software for its value of encouraging student writers to "re-think their citation methods and … to learn a citation format" (Brown et al., 2010, p. 120). The limitations of plagiarism detection tools are the instruction of actual paraphrasing skills and the detection of ideas' appropriation (Betts et al., 2012), as well as the teaching of referencing and citation skills (Rolfe, 2011).

DWright, a Chinese-interfaced learning tutorial for paraphrasing and correct citation of studies written in English, was thus developed in 2012 for Chinese learners of English to prevent plagiarism and advocate academic integrity.

In this study, the researchers investigated learners' attitudes with respect to perceived usefulness and system usability of DWright, as well as intentions toward the continued use of the tutorial. This study evaluated whether DWright, the English writing tutorial and anti-plagiarism detector, could provide sufficient direction for avoiding idea appropriation and patchwriting, as well as helping users manage paraphrasing and citation correctly. Results may contribute to both online tutorial development and writing course design to increase the satisfaction and efficacy of online writing tools.

1.1. The needs for and the difficulties of English writing and their relationship with plagiarism

With the goal of publishing research in English, sophisticated English writing skills are in great demand. The primary concern, however, is the possibility of the work being suspected of plagiarism. Baždarić, Bilić-Zulle, Brumini, and Petrovečki (2012) suggested that editors may reject plagiarized manuscripts due to their inappropriateness and quality. Although text similarity in the Methodology section is considered less offensive owing to the nature of procedural descriptions (Wager, 2013), it may indicate the dubiety of research data and serious plagiarism (Mason, 2009) that warrants rejection. NNES are thus constrained by higher degrees of frustration due to inadequate competence of English, which can in turn lead to fear of failure (Baždarić et al., 2012; Iida, 2011; Howard, 2010). This phenomenon has prompted the development of writing software and anti-plagiarism detectors. Accordingly, these detectors are beneficial to all readers (reviewers, article readers, and teachers) and writers (researchers and students), and increases the quality of research and the reputation of the institution (Colpaert, 2012).

1.2. Online writing tools to improve writing: Criterion, MyAccess, WhiteSmoke, and WriteToLearn

There are some pay-tools developed for helping users improve their writing skills and knowledge online, such as Criterion, MyAccess, WhiteSmoke and WriteToLearn. Subscribers will receive corrective feedbacks on grammar errors, organization, or usage after they submit the guided writings online. Most of them are commercial software packages and can be expensive to individual or student users.

Criterion helps the user plan and write, and then offers summative feedback on grammar, spelling, and usage, etc. (ETS Criterion, 2013; Roscoe, Kugler, Crossley, Weston, & McNamara, 2012). Criterion is considered effective in decreasing grammatical errors (Kellogg, Whiteford, & Quinlan, 2010) and increasing the length of the work (Shermis, Burstein, & Bliss, 2004). However, the summative feedback is not sufficient enough to improve writing ability when compared with formative feedback (Roscoe et al., 2012), nor will it provide strategies and education to help writers avoid plagiarism.

MyAccess offers services such as planning and drafting, and then provides a summative grading report for further modification (MyAccess.com, 2013). Grimes & Warschauer (2010) suggested that it helped motivate the student, but users might question the usefulness of its scoring system. Moreover, both students and the instructors felt overwhelmed by the length of the summative report.

WhiteSmoke is a pay-tool that "can be plugged into various software tools as an integrated part" (Wang, 2012, p. 108) to check spelling, punctuation, grammar, style and structure (WhiteSmoke.com, 2012). Moreover, it conveniently provides an extended vocabulary, translator, multilingual dictionary, thesaurus and templates for its users to make writing more efficient and effective (Pratt, 2011; Wu, Wu, Kung, & Hsieh, 2011; Zakaria, Aziz, Rizan, & Maasum, 2010). Nevertheless, it falls short in detecting informal words or phrases when formal writing is required; further, it requires an Internet connection to perform its functions (Zakaria et al., 2010).

WriteToLearn contains two components: Summary Street and Intelligent Essay Assessor to promote reading comprehension, summarizing skills, and writing ability (Landauer, Lochbaum, & Dooley, 2009; Roscoe et al., 2012). Users of WriteToLearn benefit from its summary prompts and detailed feedback report on grammar, spelling, usage, length and content. Students also demonstrated higher motivation and more engagement in addition to better summary skills and writing ability (Wade-Stein & Kintsch, 2004).

While many online tools aim to improve English writing, avoiding plagiarism is still problematic. The following section discusses online software aimed at avoiding plagiarism.

1.3. Software to prevent plagiarism: CrossCheck, EVE2, and Wcopyfind

In order to help teachers and students identify possible plagiarism, numerous plagiarism detectors have been developed over the past two decades; to name a few: ArticleChecker, CodeMatch (incorporated in CodeSuite), CopyCatch, Copyscape, CrossCheck, Duplichecker.com,

Copycatch, EVE2, Glatt, Jplag, Turnitin, Wcopyfind, eTBLAST, MyDropBox, etc. These detectors provide either a similarity rate between texts online or in published materials, or mark certain texts as an indication of possible word-lifting (Baždarić et al., 2012; Garg, 2011; Zhang, 2010).

Some are commercially available online tools, such as EVE2, while others are free to download, such as Wcopyfind. For example:

CrossCheck includes authored works from 4149 participating publishers and societies (Crossref.org, 2013), allowing it to run similarity checks against all published/subscripted articles from these publishers. Publishers or editors of Taylor and Francis journals, for example, may reject suspicious manuscripts after CrossCheck detects plagiarism (Baždarić et al., 2012; Butler 2010; Zhang, 2010). While the database of CrossCheck is increasing, its lack of content from non-participating publishers may constitute a loophole for members.

EVE2, the Essay Verification Engine, is a windows-based pay-tool that compares and analyzes a document against Internet resources and records the site URL(s) with the percentage of the essay plagiarized (Arefint, Morimotot, & Shariftt, 2011; Canexus.com, 2013; Garg, 2011). Users of EVE2 receive a full report on suspect sites with plagiarized text highlighted in red. The limitations, nonetheless, include the detection of plagiarism in other languages (Arefint, Morimotot, & Shariftt, 2011) and the amount of time required to identify suspected sites (Garg, 2011).

WCopyFind compares similarity between different sources in texts, html or .doc format (The Plagiarism Resource Site, 2013). Users of WCopyFind download this detector and compare a paper against up to 500 documents in a local file server. Similar to Turnitin, WCopyFind users are expected to know how to rephrase and reference sources correctly, as well as have ethics training (Roberts & Wasieleski, 2012).

Besides the software mentioned above, a few tools also include paraphrasing and referencing instruction in addition to plagiarism detection. Below is an introduction to such tutorials.

1.4. An integration to detect plagiarism and assist proper referencing: Glatt, Turnitin, and DWright

The *Glatt* Plagiarism Program is a pay-tool that provides both teaching instruction and a plagiarism detection service (Plagiarism.com, 2013). Two major features of Glatt are the teaching program, GPTeach, and the screening program, GPSP. GPTeach is designed to develop knowledge of what constitutes plagiarism and the skills for preventing it, such as paraphrasing and citing a source. GPSP provides a Plagiarism Probability Score after a student finishes its screening "test". The testing material is actually from the completed paper written by the student. Glatt will eliminate every fifth word in the paper and produce a cloze test for the student to fill in all the blanks. The system then evaluates the number of correct answers, the amount of time required to complete the exercise, and other factors to provide a score. "If a student cannot fill in 77% of the missing words from his or her paper, he or she is probably plagiarizing" (Bahadori, Izadi, & Hoseinpourfard, 2012, p. 74). However, research on the use of Glatt in formal writing classes and its effectiveness for building paraphrasing or citing skills is still limited.

Turnitin is probably the most popular pay-tool at present (Lampert, 2008), and contains three major services: OriginalityCheck, GradeMark, and PeerMark. OriginalityCheck compares a text passage with those in web pages, student works and publications, and then provides a similarity index with color-coded highlights on the suspected text (Turnitin, 2013). Instructors can also grade and effortlessly give various types of feedback with GradeMark, including: (a) QuickMark to indicate errors or suggestions, such as "Citation needed" or "Weak transition"; (b) VoiceComments to elaborate QuickMark comments; (c) Rubrics to evaluate student works with a self-generated grade; and, (d) GeneralComments to leave a text comment for an overall evaluation. Moreover, PeerMark provides opportunities for students to learn from each other, and also assists student users in how to assess a paper with guiding questions. Although the company iParadigms designed Turnitin mostly for educators, it also cooperates with ETS® *e-rater*® to make WriteCheck commercially available for student users to improve writing quality and originality through grammar and plagiarism checking and feedback from professional tutors (Whitecheck.com, 2012).

As ingeniously designed as Turnitin is, this software sometimes labels properly referenced texts as suspicious and also fails to detect synonym replacement and thus appropriated ideas (Menai, 2012). As mentioned in Betts et al. (2012), "Turnitin does not take into account that someone could paraphrase ideas by changing some words but not appropriately acknowledging the source. Consequently, Turnitin may be more prone to detect plagiarism in non-native English speakers because of differences in language abilities" (Hayes & Introna, 2005). In particular, it lacks: (a) teaching of textual plagiarism; (b) training of paraphrasing skills; and, (c) training of referencing skills (Betts et al., 2012; Hayes & Introna, 2005; Kaner & Fiedler, 2008; Rolfe, 2011; Stapleton, 2012). Despite these shortcomings, Turnitin remains very effective for raising awareness and deterring possible misconduct.

DWright was developed to help Chinese users learn about issues and textual behaviors of plagiarism and anti-plagiarism, paraphrasing strategies, and correct citation style when writing English sentences and papers. The goal is to provide users the *know-how* and necessary paraphrasing strategies via a Chinese interface to increase the understanding and efficacy, and reduce learning anxiety. A more elaborated introduction is as follows.

2. The design and development of DWright

In the following, the need and characteristics of DWright are outlined to demonstrate the instructional design behind it.

2.1. The need of DWright

Previous studies have established that online tools, such as Criterion, MyAccess, CrossCheck, or EVE2, provide either writing practice or plagiarism detection. As such, users of these writing tools may not learn to cite sources appropriately, while users of plagiarism detectors may have their writing labeled as plagiarized without knowing which part of their writing violates academic ethics. Moreover, avoiding textual plagiarism is not simply about knowing how to cite correctly (Flowerdew & Li, 2007; Office of Research Integrity, 2013; Sun, 2009). Research suggests that online writing tools can help the user with formative feedback to achieve instructional efficacy and truly foster writing ability (Roscoe et al. 2012; Shute, 2008). The provision of proper feedback of paraphrasing skills and referencing tasks can actually reduce plagiarism (Betts et al., 2012; Cox, 2012; Rolfe, 2011). In response to this, DWright is developed and aims to train its user to be fully

aware of textual plagiarism, and provides paraphrasing and citation practice. A comparison of DWright and other plagiarism detectors and writing software is provided in Table 1.

2.2. Functions and layout of DWright interface

There are five entries on the menu bar (see Fig. 1) of DWright, namely: (1) Recognizing Plagiarism, (2) Paraphrasing and Citation, (3) Tests and Practice, (4) E-portfolio, and (5) Settings and Help. Each entry can be expanded to show a sub-menu with options related to the selected entry. Learning units are arranged from fundamental learning materials to more difficult exercises that demand more cognitive attention. Colors are also used to distinguish different learning topics. An outline of DWright's functions and layout is given follows:

Six units are offered for the users to learn about the goals of DWright, its definition, the reasons for and ten textual behaviors of plagiarism, guidelines of paraphrasing, and citation formats. Except for the reasons of plagiarism, every other learning unit is followed with either multiple-choice quizzes or paraphrasing exercises. A very important feature for multiple-choice practice is its layout design. Two parallel boxes are provided for the users to efficiently compare the source and the suspicious texts (see Fig. 2). Users then select an answer and receive feedback.

Another vital and promising function is the detection of patchwriting. According to the guidelines for paraphrasing, DWright directs its user to switch from the prompt page to the paraphrase page to prevent patchwriting (see Fig. 3). After submitting one's paraphrase, the user gets a diagnostic report and an example of a paraphrase. All reports can be retrieved in the e-portfolio section, which also records learning progress and the percentage of correctness for exercises. Moreover, DWright saves records of paraphrases that allow users to compare one's previous practice and evaluate their "improvement and achievements" (Kirszner & Mandell, 2013).

While the functions are important, it is equally crucial to provide teachable knowledge and proper activities. The following is a description regarding DWright materials and activity design.

2.3. Course and task design in DWright

The arrangements of learning units and tasks are based on the ASSURE Model (Savenye, Olina, & Niemczyk, 2001) and Broek's (2010) learning theory. Accordingly, DWright aims to expand a users' background knowledge, and establish and enhance understanding of plagiarism and anti-plagiarism. Learning units are in text format and serve as the input to acquire necessary knowledge for textual plagiarism. After each reading task, either multiple-choice exercises or paraphrase practice functions as a form of output evaluation for reading comprehension. The practice also works as stimuli to expand overall acquisition and increase long-term memory retention (Karpicke, 2012). Compared with repeated reading and concept mapping, this retrieval-based learning method has been shown to be most effective for maximizing the learning of content knowledge (Karpicke, 2012; Karpicke & Roediger, 2010).

Feedback is vital for language acquisition (Roscoe et al., 2012; Shute, 2008) and helps learners modify their knowledge structures, increase learning achievement, and become more confident and motivated (Wu, Hwang, Milrad, Ke, & Huang, 2012). Therefore, DWright provides two kinds of feedback based on the types of tasks: one is immediate formative feedback for multiple-choice exercises, and the other is the diagnostic report that marks word-strings, substitutions, additions, deletions, and reversals. Users can then review and confirm their understanding of prototypical plagiarism, patchwriting (Howard, 1995; Pecorari, 2010; Roig, 1997, 1999; Walker, 2008), and citation formats. Furthermore, the diagnostic report indicates whether or not the user patchwrites. Accordingly, the user improves their writing by employing more strategies and being more creative to paraphrase properly.

2.4. Perceived usefulness and usability with user's attitudes and continuous use

Perceived usefulness and system usability (ease-of-use) have a decisive influence on the attitudes of a system user (Lee, 2010; Liaw & Huang, 2013; Palacios-Marques, 2012; Sun, Tsai, Finger, Chen, & Yeh, 2008). According to Davis (1989), perceived usefulness is "the degree to which a person believes using a particular system would enhance his/her job performance (p. 320)" while ease-of-use means "the degree to which a person believes that using a particular system would be free from effort (p. 320)." The international standard ISO 9241 also defines the usability of a product as the degree of ease with which it helps its users achieve specific goals effectively and efficiently. Developing a good tutorial requires collaboration between program designers, content experts and subject teachers (Baehr, 2012). Accordingly, to develop a good e-learning environment, two elements should be considered: (1) content effectiveness, such as clear instruction, appropriate activities and assessment to foster learning and achieve goals (Joo, Lim, & Kim, 2011); and, (2) an easy-to-use interface that offers effortless and pleasant learning experiences.

Users' attitudes and satisfactory technology experience are considered major predictors for continuous online learning (Joo, Lim, & Kim, 2011; Lee, 2010; Shee & Wang, 2008). Specifically, positive attitudes can be a reliable predictor affecting behavioral intention for continuous

Table 1
Comparison of DWright and other plagiarism detectors and writing software.

Function	Software								
	Cross check	Turnitin	Writecheck	Wcopyfind	ESL Assistant	Criterion	MyAccess	WriteToLearn	DWright
Plagiarism detection	✓	✓	✓	✓	–	–	–	–	*
Chinese interface	–	✓	–	–	✓	✓	–	–	✓
Instruction of plagiarism avoidance	–	✓	✓	–	–	–	–	–	✓
Instruction for paraphrasing	–	–	✓	–	–	–	–	–	✓
Instruction for citation format	–	–	✓	–	–	–	–	–	✓
Writing practice	–	–	–	–	–	✓	✓	✓	✓
Exercises to detect textual plagiarism	–	–	–	–	–	–	–	–	✓

*The asterisk indicates that detection of plagiarism is in sentence or paragraph level, instead of a whole article or chapter.

Fig. 1. Five entries on the menu bar of DWright.

system use (Yeh & Teng, 2012; Sun et al., 2008). Moreover, successful web-based learning relies on learner persistence (Joo et al., 2011) and ultimately may decide learning outcomes and performance. Therefore, the successful design of an online tool should evaluate content usefulness, system usability, user's attitudes and persistence to help users reach their goals efficiently and effectively.

With consideration to the above, and with the intention of further understanding the characteristics of plagiarism and how to avoid it, this study intended to answer the following research questions:

1. Regarding content effectiveness, can DWright help achieve learning goals and prevent plagiarism with different task designs, specifically reading tasks, multiple-choice exercises, and paraphrasing practice?
2. Does perceived usefulness have a direct and positive effect on users' attitudes and/or satisfaction toward DWright?
3. Does system usability have a direct and positive effect on users' attitudes and/or satisfaction toward DWright?
4. Do users' attitudes have a direct and positive effect on persistent use of DWright?

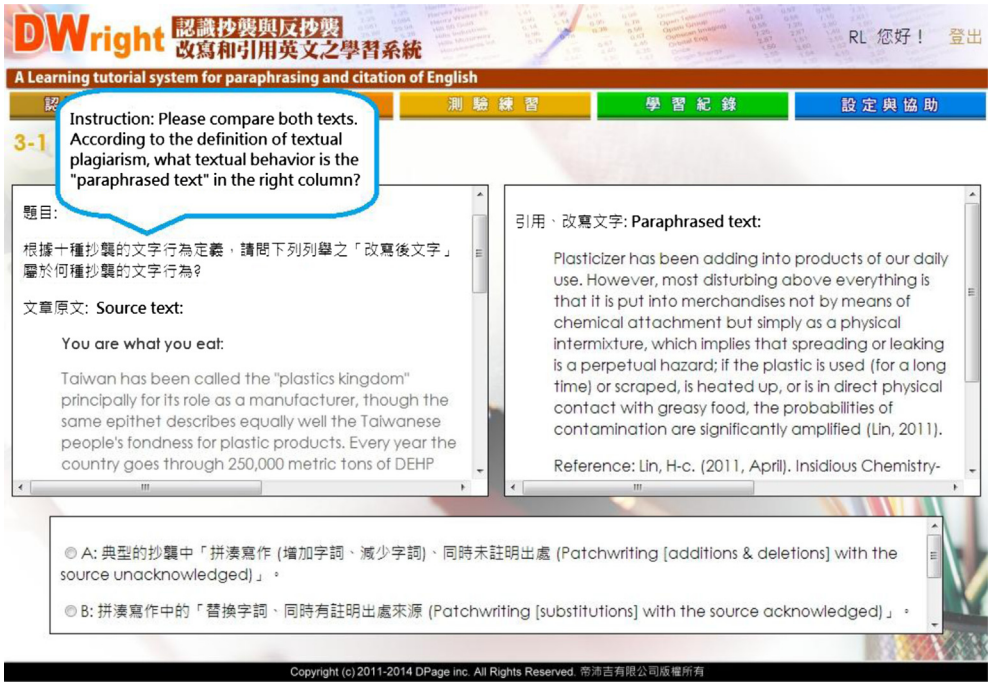

Fig. 2. Texts comparison.

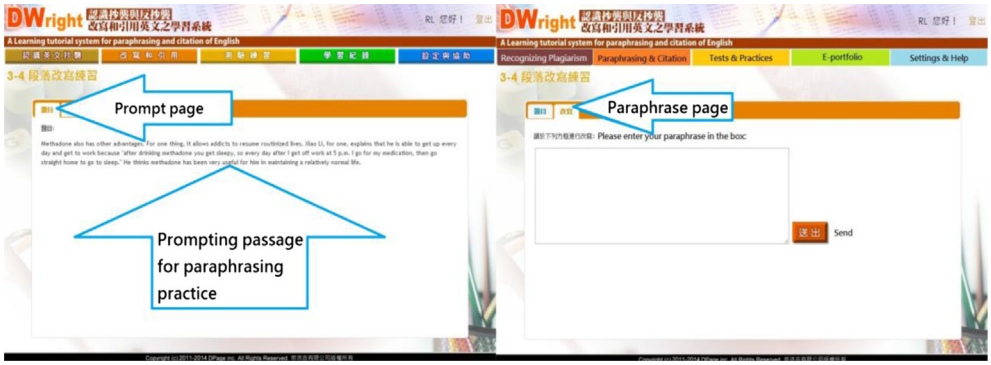

Fig. 3. Patchwriting detection.

3. Methodology

3.1. Instrument

DWright was developed as an online tool to help Chinese learners of English have a better understanding of paraphrasing and plagiarism prevention. Both the questionnaire and semi-structure interview were conducted as instruments to investigate the Technology Acceptance Model (TAM; Davis, 1989) regarding DWright users' attitudes and tendencies for technology use. A 5-point Likert scale (5 = strongly agree and 1 = strongly disagree) was used in the questionnaire. In addition, the researcher-interviewer decided the sequence of the questions according to the participant's responses in the interview, so as to gain detailed and truthful data (Kvale, 2007).

3.2. Participants

Thirty-five volunteering Chinese-speaking participants with academic writing needs were recruited with convenience sampling (Malhotra, 2009) at a research-based university. The target users of DWright are intermediate-proficiency-level learners of English. All participants had at least the intermediate proficiency level of English in this study, and had at least seven years of formal English education. More importantly, they had various English writing needs, including English term papers or conference and journal papers. With their writing needs, DWright could serve to help educate its users (participants) to avoid textual plagiarism by understanding the definition of plagiarism, through developing the skills to discern ten textual plagiarism behaviors in writing, and with practicing paraphrasing and citing a source. Nine of the participants were instructors, but they were especially reminded to use DWright and answer the item questions as a user, so that the researchers could evaluate the indication of certain relations between usefulness, usability and user attitudes. Because DWright is a Chinese-interfaced tutorial; all the reading tasks and the instructions are in Chinese. Moreover, the paraphrasing practices and multiple-choice exercises start with easy and short prompts that are suitable for intermediate English proficiency, and most of the prompts have equivalent Chinese translations because the materials are excerpts of Taiwan Panorama. After the 35 participants completed the questionnaire, five were excluded due to inconsistent answers. Therefore, these thirty users were convincing participants (see Table 2), and four students and five instructors of which were invited for a face-to-face interview to evaluate the effectiveness of content materials and system ease-of-use.

3.3. Research design, quantitative and qualitative data analysis, and procedures

The initial items of the questionnaire were drawn from the literature and based on DWright's design. Reliability of the survey was tested by Cronbach's Alpha, with results indicating a high internal consistency and robustness (see Table 3).

Regarding quantitative analysis, multiple linear regression was implemented to test the hypotheses in the TAM model using SPSS. A P–P plot revealed that most of the residuals fell nearly on the P–P line; consequently, normality holds. The residual to fitted plot and Durbin–Watson Statistics showed that the assumption of homogeneity also holds (D–W Statistic = 2.183).

NVivo 9 was utilized to analyze the qualitative interview data and to further specify the advantages of using DWright. Specifically, interview scripts were scrutinized and different ideas were categorized based on usefulness, usability, attitudes and persistence of use. Data

Table 2
Subject Demographic ($n = 30$).

Measure	Items	Frequency	Percentage
Gender	Male	14	46.7%
	Female	16	53.3%
English learning experience	<10 years	16	53.3%
	10–20 years	12	40.0%
	>20 years	2	6.7%
Education	Undergraduate	20	66.7%
	Master	9	30.0%
	PhD	1	3.3%

Table 3
The factors and their Cronbach's Alpha.

Factor	Cronbach's Alpha
Perceived usefulness	0.927
System usability	0.916
Perceived attitude	0.950
Persistence	0.902

consistency was confirmed and data triangulation was applied for reliability and validity (Patton, 2002). Also the reliability was achieved as the researchers thoroughly observed and investigated a phenomenon, and provided meaningful and exhaustive explanation (Patton, 2002).

The researchers organized a conference for users to explain the design background and introduce DWright content and exercises. The volunteer audience was invited to participate and complete all reading units and exercises. They were given enough time to familiarize themselves with the tutorial system and ask questions. Afterward, participants needed to finish all reading tasks and try out each follow-up practice or exercise specifically designed for each learning unit. As the participants had different reading and writing paces, they were not required to finish all practices and exercises, for DWright contains about 50 paraphrasing practices and 100 multiple-choice exercises. The amount of time provided to the user was around an hour. Participants then completed the online questionnaire and some were invited for an interview. Both questionnaire and interview participants were given a gift certificate as a reward.

4. Results

4.1. Task design for content effectiveness in DWright

In this section, the researchers asked questions regarding three different tasks to evaluate content effectiveness, namely perceived usefulness of DWright (see Table 4).

DWright users agreed that the tasks helped them avoid plagiarism effectively and efficiently. Among the survey items in the questionnaire (see Appendix A), reading task design on the definition of plagiarism was the most effective (mean = 4.47), followed by those on reasons (mean = 4.30) and on textual behaviors of plagiarism (mean = 4.30); however, the introduction to APA citation style was perceived less effective (mean = 3.87). Regarding multiple-choice practices, the sentence- and paragraph-level exercises to discern different types of prototypical plagiarism and patchwriting were perceived most effective (mean = 4.23), followed by the e-portfolio record (mean = 4.17). The least effective (mean = 3.77) was the design of the combination on textual plagiarism and the citation formats. Regarding paraphrasing practice, the feedback report was perceived as the most effective (mean = 4.17), followed by sentence-level practice of paraphrasing (mean = 4.13). The task perceived least effective was the self-entered source and paraphrasing section (mean = 3.70).

4.2. Perceived usefulness of DWright and users' attitudes

The direct effect of perceived usefulness to users' attitudes was .546 ($p = .001 < .05$), indicating that usefulness has a significant impact on users' attitudes (see Table 5).

The qualitative research results of DWright usefulness are listed above (see Table 6), representing affirmative attitudes toward DWright (see Table 7). Results indicate that learning goals can be achieved with clear instruction, enriched content and well-designed exercises with proper learning procedures. Overall, users had positive attitudes with very few concerns.

Both quantitative and qualitative results demonstrate high agreement toward the usefulness of DWright. The positive results of task effectiveness coincided with the users' affirmative attitudes, revealing the significance of the material and task design for a tutorial.

4.3. System usability of DWright and users' attitudes

The direct effect of system usability was .356 ($p = .021 < .05$), implying its significance to users' perceived attitudes toward DWright (see Table 8).

The qualitative results of DWright usability are given below (see Table 9), and reveal that practical, easy-to-use functions with a good layout and color scheme had a positive effect on user attitude (see Table 10). With a highly functional and effective design, DWright can help its users navigate easily, provide a stable pleasant e-learning environment, and facilitate its users in achieving learning goals. Contrarily, certain functions were deemed in need of improvement, such as the additional scroll bars or complex color labeling, which seems contradictory to the original design of DWright and this finding will be elaborated in Discussion section. Overall, the positives outnumbered the negatives.

Table 4
Quantitative result of the task design evaluation and DWright content effectiveness.

DWright learning tasks	Mean	Variance	Reliability
1. Reading tasks in DWright is effective in enhancing my knowledge on how to avoid plagiarism.	4.207	0.415	0.731
2. The exercises in DWright, specifically multiple choices, are effective in enhancing my knowledge on how to avoid plagiarism.	4.230	0.617	0.061
3. The writing practices and patchwriting detection in DWright are effective in enhancing my knowledge on how to avoid plagiarism.	4.170	0.852	0.831

Table 5
Quantitative result of perceived usefulness of DWright and users' attitudes.

	Unstandardized coefficient			Standardized coefficient	
	Factor	βEst.	SD	*p*-value	βEst.
Variables: perceived attitudes	Perceived usefulness	0.867	0.232	0.001*	0.546

Critical value: 0.05.

4.4. Users' attitudes and continued use of DWright in the future

The direct effect of perceived attitude toward continued use was statistically significant at .898 ($p = .000 < .05$), as shown below (see Table 11). The model served to predict users' attitude and behavioral intention of continuing DWright in the future.

Regarding the effect of attitudes toward continued use, DWright users reflected an overall positive attitude that DWright is practical, educational, satisfactory and distinct from other writing tutorials. They reported a willingness to purchase the tutorial given its reasonable price and utility in fulfilling learning goals. They also suggested promoting the product so that more users could benefit from it. For example, the school could introduce DWright to the students in a workshop or class to provide more assistance, so that users can experience less frustration when doing the exercises. The qualitative results are offered below (see Table 12).

5. Discussion

5.1. The effectiveness of DWright task designs to achieve learning goals

DWright users highly agreed with the effectiveness of DWright task designs and believed that different learning goals, such as plagiarism prevention, were accomplished. Among all tasks, those deemed most effective were the reading task on the definition, reasons and textual behaviors of plagiarism, and multiple-choice exercises to discern different textual types of prototypical plagiarism and patchwriting. This corresponds with previous research in that inexperienced writers and NNES were claimed to plagiarize or patchwrite because of a lack of knowledge (Cargill, O'Connor, & Li, 2012; Howard, 2010; Sun, 2012). It also reflects the actual need for preventing academic misconduct with well-designed and practical training of anti-plagiarism, paraphrasing and correct citation style (Betts et al., 2012; Flowerdew & Li, 2007; Kaner & Fiedler, 2008; Rolfe, 2011; Stapleton, 2012). Writers may have a vague concept of plagiarism and understand that one should not commit text appropriation; however, education and policy on plagiarism prevention is essential for student writers and young researchers (Liu et al., in press), especially education for textual behaviors of plagiarism that constitute intentional and unintentional text appropriation.

Moreover, while software users could be suspicious of the scoring system and remain perplexed by feedback (Betts et al., 2012; Roscoe et al., 2012), DWright users reacted positively toward the learning records and the feedback reports for paraphrasing and patchwriting detection. With clear, precise and formative information (Betts et al., 2012), users understand why their text is detected as plagiarized, and know how to improve their writing. Users of plagiarism detectors need to be equipped with paraphrasing skills (Hayes & Introna, 2005). With the problems identified in their reports, DWright users can evaluate and modify their sentences with different writing strategies and avoid plagiarism. Furthermore, if writers have the ability to detect textual plagiarism, any mistrust between the instructor and the students would be eliminated (MacMillian, 2007).

Table 6
Qualitative results of DWright usefulness.

	Mentioned/total number of references
Positive ideas and advantages regarding reading tasks	
1. The reading content is clear and precise.	61/225
2. The learning materials are a great collection of information with a good use of lists, tables and links so as to organize the reading content with appropriate learning procedure.	50/225
3. The reading content helps achieve the learning goals.	35/225
Positive ideas and advantages regarding multiple-choice exercises	
1. The exercises are well-designed, comprehensive and clear.	69/150
2. The exercises are learning-oriented and help achieve the goals step-by-step.	27/150
3. The feedback answers of multiple-choice exercises help identify textual behaviors of plagiarism and citation formats.	20/150
Positive ideas and advantages regarding paraphrasing practices	
1. The paraphrasing practices are practical and have long-term use of value.	29/106
2. The paraphrasing practices are well-designed and great learning process.	24/106
3. The paraphrasing practices provide effective and clear feedback and sample examples.	23/106
Suggestions for improvement regarding reading tasks	
1. Some of the reading tasks are too long.	22/58
2. Some picture or tables are not easy to understand.	18/58
Suggestions for improvement regarding multiple-choice exercises	
1. Some reading prompts/passages are too long.	14/33
2. The amount of exercises is not enough.	5/33
Suggestions for improvement regarding paraphrasing practices	
1. The feedback report is difficult to understand.	10/20
2. The layout or labeling is confusing.	4/20

Table 7
Qualitative results of user attitudes based on perceived usefulness.

	Number of references
Positive attitudes	
1. Learning goals are achieved in each learning unit.	17
2. The teaching/reading content is detailed and enriched with effective learning procedures.	16
3. DWright provides clear instruction and guidance.	10
Concerned attitudes	
1. The prompting passages of the multiple-choice exercises cover insufficient materials/examples from journal articles.	2
2. The report can be confusing at first; instructions for the feedback report are insufficient.	2

5.2. The effect of perceived usefulness on users' attitudes toward DWright

In this study, qualitative interview data consistency was confirmed and data triangulation was applied for reliability and validity (Patton, 2002). DWright usefulness significantly and positively affects users' attitudes, specifically regarding: (1) content clarity and enrichment; (2) well-designed and step-by-step exercises to achieve different learning goals; (3) practical function; and, (4) useful feedback for the exercises. The above points are reflected in the following comments from the interview participants; feedbacks are translated from Chinese. Here, *T* stands for teacher and *S* for student participants.

(1) [The reading content] is really clear and very specific, so I really think the learning unit is a great design. You immediately get to the point and understand the main idea of the unit. (T1)
Taking Unit 2-1 as an example, it introduces clearly the definition and the ways to paraphrase with examples, so you learn precisely how to paraphrase. (S2)
[Unit 2-3] is very clear and provides its user so many possibilities all at once. (T2)
(2) I think it's a great design to distinguish paraphrased text from plagiarized text. A lot of time I thought I paraphrased properly but actually I'm still making mistakes and plagiarizing the text. (T1)
Users can improve their writing ability through different exercises. (T4)
(3) [Unit 2-2] It's practical and isn't just for one-time use; this is spot-on. (T1)
For someone who is writing a paper, [DWright] provides the most prompt help. It's a powerful and reliable tool to help the writer identify whether the text plagiarizes. (T4)
(4) It's great to get prompt feedback. I can learn immediately whether my "paraphrase" plagiarizes or patchwrites; I can learn something. (T4)
The suggestions from the feedback are very practical to the user. (S2)
The analytic feedback is very good and helpful for me to write papers, because sometimes the source is so well-written that we may forget to paraphrase and patchwrite the source accidentally. (T3)

These properties can greatly influence users' attitudes (Liaw & Huang, 2013; Sun et al., 2008) and further decide whether users would continue to use the tutorial. Moreover, based on regression analysis, perceived usefulness had a greater influence on the users' attitudes than did system usability. Therefore, designers of a tutorial should prioritize the content and tasks to maximize the effectiveness and practicality of the tool.

Comparing the advantages and suggestions, the strength of DWright is its pedagogical design and tasks being appropriate, detailed and helpful. This finding accords with Joo, Lim, & Kim (2011) who stated that effective content fosters learning and achieving goals. On the other hand, two learning units contain a longer reading passage or table, and may exhaust users' cognitive load. Therefore, the design of self-study tasks should take learning fatigue into consideration; otherwise, less-motivated users might simply ignore the reading part, regardless of how important it may be for their academic careers. Despite the length of the two units, the users had positive attitudes toward the content and stated that they are "practical" (T3; S1), "valuable and effective" (T2; S3) and "educational" (S3). Perhaps the solution is to use this tutorial in class for blended-learning, as teacher participants commented: "Now I don't have to prepare lots of materials and activities for my students to avoid plagiarism and the students can practice writing at the same time. How convenient!"

Overall, DWright users showed a positive attitude toward DWright for its effective content, proper learning procedures, clear instruction and guidance.

(1) My learning goals can be achieved after using the tutorial. (T5)
(2) I think the content provides appropriate useful information and the tasks are sufficient for the users. (S3)
(3) The strength of DWright tutorial is that it has clear learning goals, and then provides precise and detailed teaching/reading instructions. It's great for the students to do self-study. (T1)

Table 8
Quantitative result of system usability of DWright and users' attitudes.

	Unstandardized coefficient			Standardized coefficient	
	Factor	βEst.	SD	*p*-value	βEst.
Variables: perceived attitudes	System usability	0.393	0.161	0.021*	0.356

Critical value: 0.05.

Table 9
Qualitative results of DWright usability.

	Mentioned/total number of references
Positive ideas and advantages regarding DWright function	
1. The function to practice paraphrasing enhances writing ability, and the function of 2-2 is especially practical.	53/134
2. DWright is clear, simple, and easy to use.	24/134
3. It's smooth.	19/134
Positive ideas and advantages regarding DWright interface: layout, bars, tables, wording and webpage design	
1. The layout is simple and clear.	49/138
2. The layout and bars can guide the users.	26/138
3. The layout is satisfactory.	24/138
Positive ideas and advantages regarding DWright color scheme design: color, highlight, background and picture	
1. The color labels for the text increases learning effectiveness.	47/77
2. The color scheme and overall design is beautiful, fresh, uncluttered and smooth.	16/77
3. The use of the picture reduces cognitive load.	14/77
Suggestions for improvement regarding DWright function	
1. The scroll bar in the answer option part of multiple-choice exercises is annoying.	14/29
2. When clicking "Previous page" or "FQA page" to review reading content, you cannot go back to the same question of the exercise.	6/29
Suggestions for improvement regarding DWright interface: layout, bars, tables, wording and webpage design	
1. The content or the table is too long and can exceed the user's cognitive load.	19/81
2. The option box is too narrow to show all three options, which is the reason why there is an extra scroll bar. The scroll bar for the option box is especially irritating.	19/81
Suggestions for improvement regarding DWright color scheme design: color, highlight, background and picture	
1. The color labels are a bit complicated.	29/43
2. The labeling is not clear enough; there are no descriptions for it.	5/43

Although the participants have a few concerns, both quantitative and qualitative results indicated that high perceived usefulness decides users' positive attitudes. Moreover, the results demonstrate a need for DWright academic writing practice: "The categories are really clear and detailed" (S3). Overall, this tutorial can save time and effort for instructors, help prevent plagiarism and enhance NNES writing. Furthermore, DWright can be used to help users better understand writing styles, as well as to provide ample opportunities for brainstorming and creative writing.

5.3. The effect of system usability on users' attitudes toward DWright

As the international standard ISO 9241 claims, DWright offers a pleasant e-learning experience, effectively and efficiently helping its user achieve their goals. Specifically, DWright provides: (1) effective and user-friendly paraphrasing functions for its user to enhance both paraphrasing skills and writing ability; (2) a clear and simple layout that guides users to do different online activities; and, (3) various color labels in the texts to increase learning efficiency.

(1) It is an interesting, useful and reliable tool for users to identify whether their written works contain plagiarism. It provides powerful evidence immediately to show that you committed plagiarism … (T4)[Unit 2-2] provides a practical opportunity for users to practice paraphrasing. Also, it points out which plagiarism behaviors you make, such as word strings, etc. (S3)
(2) The layout makes each learning activity clear and users can go to different sections quickly and without much effort. (T1)The layout is simple and clear, so I understand what I should do right away. (T5)The content of each section is well-presented and organized. It makes it easy for first-time users to learn and practice. (S2)
(3) It is clear to read the texts with various color-labels because they highlight the important information in texts. (S3)[The color-labels for the texts] make the texts clear and easier to read, especially when text is long. Readers catch the key points immediately and have higher motivation to read. (S4)

Table 10
Qualitative results of user attitudes based on DWright usability.

	Number of references
Positive attitudes	
1. DWright provides clear instruction and guidance.	10
2. DWright is smooth and stable.	6
3. DWright can enhance paraphrasing and writing skills.	5
Concerned attitudes	
1. There is room for improvement regarding the interface.	9
2. It will take some time to understand all the functions.	2

Table 11
Quantitative results of DWright users' attitudes and continued use in the future.

	Unstandardized coefficient			Standardized coefficient	
	Factor	βEst.	SD	*p*-value	βEst.
Variables: Persistence (continued use)	Perceived attitudes	1.055	0.098	0.000*	0.898

Critical value: 0.05.

Given these characteristics, users had positive impressions that DWright provides clear instruction and guidance, the system is smooth and stable, and is capable of enhancing its users' paraphrasing/writing skills. Still, the designers could perfect the function and interface by minimizing scroll bars and improving an introduction to all DWright functions. Also, some of the color-labeling can be complicated that can be regarded as both an advantage and disadvantage. Different users may respond differently due to personal preferences, habits, learning behaviors and needs. While more users respond positively toward color-labeling, it would be helpful if DWright offered a list of definitions or design pop-up windows to remind its users of the meaning, instead of using both different colors and highlights simultaneously.

While perceived usefulness of DWright greatly impacts a user's attitude, system usability also contributes to the continued use of the tutorial. The function, interface and color scheme provide a "first impression" to a system user. Therefore, system designers should consider users' needs, learning styles and online behaviors to attract and retain learners. Understanding users' needs would help designers improve the interface and plan practical functions to achieve users' goals more efficiently and enjoyably. This also reflects Baehr's (2012) suggestion for healthy and effective communication between the program designers, content experts and subject teachers.

5.4. The effect of DWright users' attitudes on continued use

The quantitative results show that DWright users' attitudes positively influenced its future use:

(1) It's really practical and that's why it has long-term use value … Therefore, I would like to use and purchase this tool because of its functionality. (T5)
(2) I think it's very useful and I'll use it when I need to write or learn. (S1)
(3) I want to use this tool because I can use it for teaching. (T2)
(4) I'm satisfied with the function of 2-2 because I don't need to proofread suspicious texts for plagiarism. (T4)

For continued future use, the participants expressed a willingness to continue using the tutorial since their needs were fulfilled. Overall, teacher participants provided very specific uses and insights of DWright with precise description, while student participants had positive attitudes but described with vaguer language. For continued use, DWright can be used in writing class to do brainstorming practices on creative thoughts. The instructors can also do peer review to compare different expressions and strategies for paraphrasing. DWright users can observe and practice various sentence structures and writing styles through different exercises, and eventually become more sophisticated in writing.

Regarding users' perception toward technology acceptance, the testing with technology acceptance model (TAM) was confirmed to provide predictions for attitudes and continued use. That is, DWright users believe that they can use this tutorial effortlessly and that they can enhance their performance and achieve their goals. DWright usefulness and usability have positive and significant influence upon users' attitudes and their intentions for future use. User attitude has been shown to be a major predictor for continuous online learning (Joo, Lim, & Kim, 2011; Lee, 2010). Accordingly, designers should evaluate the target users to learn more about their needs, learning preferences and online behaviors, which are the essence of system design.

Table 12
Qualitative results of DWright users' attitudes toward continued use in the future.

	Number of references	Continued use	Number of references
Positive attitudes			
1. DWright not only is practical and educational, but also meets its user's needs.	33	1. The price is reasonable and inexpensive; people with need will purchase the tutorial.	7
		2. Integrated resources could extend DWright usage.	3
2. DWright is highly satisfactory.	23	3. More promotion and marketing is needed so that more people could be aware of this tutorial.	3
3. DWright is unique/distinct from the other writing tutorials.	2	4. The tutorial can be used continuously; the tutorial has appeal for continued usage.	1
Concerned attitudes			
1. Without motivation, users will experience more frustration.	2	1. Since writing in another language is not easy, there is a need that the school provides this tutorial to better help the students with their writing and to increase their knowledge on plagiarism prevention.	7
2. 3-1 and 3-2 exercises are not easy.	1		

5.5. Limitations and future research

There were only thirty users providing feedback at one university. The research can be further developed and incorporate more aspects of anti-plagiarism, plagiarism, and psychology of writing into the testing, such as e-learning behaviors of an individual, learning preferences and learner anxiety. Moreover, since English writing is involved, it can be useful for future researchers to conduct a longitudinal study to further evaluate the effectiveness and overall improvement of NNES writing and paraphrasing strategies with DWright. In addition, to distinguish the age and gender groups might help understand user needs, and thus provide more specific assistance and increase user satisfaction.

As no software is perfectly designed to meet the needs of all users, DWright also has limitations that can be improved. For instance, the seriousness of plagiarism is not stressed enough in the Recognizing Plagiarism section, which is considered critical for educating and preventing student writers from plagiarizing. Moreover, novice writers with low or intermediate English competency may need assistance with grammar and paraphrasing instruction. Otherwise, they may not know how to revise their paraphrases because they have difficulties even writing an English sentence. Although DWright is effective for motivated users that finish all the exercises and/or practice paraphrasing, users with lower motivation may experience frustration when the reading texts are long or when they lack ideas for paraphrasing, which constitutes a feature not provided by this system.

6. Conclusion

One research area rising in importance in the field of computer-assisted learning is safeguarding academic integrity through the prevention of academic plagiarism (Butakov & Scherbinin, 2009; Kaner & Fiedler, 2008). In this case study, 30 participants completed a questionnaire, while 4 students and 5 instructors were invited for face-to-face interviews to identify the design and efficacy of DWright in order to help users avoid plagiarism and improve English writing skills. The researchers investigated the effects of the perceived usefulness and system usability of DWright, and the attitudes toward continued use of the tutorial. This study evaluated whether DWright, the English writing tutorial and anti-plagiarism detector, could provide sufficient direction for avoiding idea appropriation and patchwriting, as well as helping users manage paraphrasing and citations correctly.

Results show that the most significant factors of perceived usefulness affecting user attitudes include: (a) content clarity and enrichment, (b) well-designed and step-by-step practice to achieve different learning goals, (c) practical functions, and (d) useful feedback for exercises. In addition, the most important features of system usability that influenced user attitudes include: (a) effective and user-friendly paraphrasing functions for users to enhance both paraphrasing skills and writing ability, (b) a clear and simple layout that guides users to complete different online activities, and (c) various color labels in the texts to help increase learning efficiency. Furthermore, user attitudes toward the continued use of DWright were positive.

To conclude, while the function, interface and color scheme of DWright could help determine user attitude, the essence of the tutorial design is its usefulness. In this case study, DWright met its users' needs by extending their knowledge of how to avoid plagiarism and by enhancing their paraphrasing and writing skills. Program designers, content experts and subject teachers should support communication (Baehr, 2012) to improve the effectiveness of content usefulness *before*, *during* and even *after* the design and developing process, so as to help users achieve their goals.

Acknowledgments

We are grateful to the graduate and undergraduate students, instructors and professors who participated in the study. This work was partially supported by the National Science Council in Taiwan (NSC 100-2631-S-006-001-CC3, NSC 100-2511-S-006-003-MY2, NSC 98-2511-S-006-003-MY2 and NSC 101-2631-S-006-001-CC3).

Appendix A. Items regarding three tasks on plagiarism prevention

	Mean	SD
Reading tasks in DWright is effective in enhancing my knowledge on how to avoid plagiarism.		
1. I think "Unit 1-2: The definition of plagiarism" is effective in enhancing my knowledge on the definition of plagiarism.	4.47	.507
2. I think "Unit 1-3: The reasons of plagiarism" is effective in enhancing my understanding on the reasons of plagiarism.	4.30	.596
3. I think "Unit 1-4: The textual behaviors of plagiarism" is effective in enhancing my knowledge on ten textual behaviors of plagiarism.	4.30	.535
4. I think "Unit 2-1: The definition of paraphrasing and guidelines" is effective in enhancing my understanding on paraphrasing in English.	4.10	.607
5. I think "Unit 2-3: Citation formats: Take APA style as an example" is effective in enhancing my knowledge on how to refer to a source properly.	3.87	.900
The exercises in DWright, specifically multiple choices, are effective in enhancing my knowledge on how to avoid plagiarism.		
1. I think "Unit 1-2-1: A quiz on the definition of plagiarism" is effective in enhancing my knowledge on the definition of plagiarism.	4.13	.681
2. I think "Unit 1-4-1 and Unit 1-4-2: Exercises on discerning the differences between textual behaviors of plagiarism" is effective in enhancing my knowledge on textual behaviors of plagiarism.	4.00	.743
3. I think "Unit 2-3-1: Citation format exercise" is effective in enhancing my knowledge on citing a source correctly.	4.00	.983
4. I think "Unit 3-1: Sentence-level exercise on discerning the differences between textual behaviors of plagiarism" is effective in enhancing my judgment on ten textual behaviors of plagiarism.	4.23	.774
5. I think "Unit 3-2: Paragraph-level exercise on discerning the differences between textual behaviors of plagiarism" is effective in enhancing my judgment on ten textual behaviors of plagiarism.	4.23	.728
6. I think "Unit 3-5: Sentence-level exercise on citation formats and plagiarism avoidance" is effective in enhancing my knowledge on textual behaviors of plagiarism and in improving my skills on paraphrasing and citing a source correctly.	3.87	.629

(*continued*)

	Mean	SD
7. I think "Unit 3-6: Paragraph-level exercise on citation formats and plagiarism avoidance" is effective in enhancing my knowledge on textual behaviors of plagiarism and in improving my skills on paraphrasing and citing a source correctly.	3.77	.817
8. I think "Unit 4-2: Records of multiple-choice exercises" is effective in evaluating my learning progress, as well as the knowledge and skills acquired.	4.17	.874
The writing practices and patchwriting detection in DWright are effective in enhancing my knowledge on how to avoid plagiarism.		
1. I think "Unit 2-1-1: Sentence-level practice on paraphrasing", its feedback report and example are effective in enhancing my knowledge on how to avoid textual plagiarism and in enhancing my skills of paraphrasing in English.	4.10	.803
2. I think "Unit 2-2: Self-entered source and paraphrasing practice" and its feedback report are effective in enhancing my knowledge on how to avoid textual plagiarism and in enhancing my skills of paraphrasing in English.	3.70	.915
3. I think "Unit 3-3: Sentence-level practice on paraphrasing", its feedback report and example are effective in enhancing my knowledge on how to avoid textual plagiarism and in enhancing my skills of paraphrasing in English.	4.13	.730
4. I think "Unit 3-4: Sentence-level practice on paraphrasing", its feedback report and example are effective in enhancing my knowledge on how to avoid textual plagiarism and in enhancing my skills of paraphrasing in English.	4.07	.691
5. I think "Unit 4-3: Records of paraphrasing practices" is effective in evaluating my learning progress, as well as reviewing my writing and paraphrasing skills.	4.17	.747

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