International Journal of Education and Development using Information and Communication Technology (IJEDICT), 2005, Vol. 1, Issue 2, pp. 145-155.

DITonline: A journalistic experiment in blended, collaborative teaching and learning

Tara Turkington and Richard Frank University of Witwatersrand, South Africa

ABSTRACT

DITonline is an independent, daily news website run by students, for students, at the Durban Institute of Technology (DIT) in Durban, South Africa. The website is a collaborative project, emanating from blended teaching and learning environments in the university's journalism department. *DITonline* was launched in August 2003, in response to a need for a credible student publication which would be an independent and reliable news source and which would provide a training ground for student journalists. By June 2004 more than 100 students had contributed to the site, which now attracts thousands of hits each day. This paper discusses the philosophical underpinnings of the project, and the growth of the site in terms of contributors, content served and its user community. Particular attention is paid to the development of student collaboration in the cyclical context of action research. The paper is mostly narrative, as we seek to document the growth of *DITonline* as a collaborative teaching and learning environment.

Keywords: Blended, collaborative, online journalism, student publication, WebCT, php

INTRODUCTION

The idea for an independent, student news website for the Durban Institute of Technology (DIT) was born out of a pioneering, semester-long online journalism course of about 30 second-year students in April 2003. Students were exploring the new field of online journalism (also known as "Internet journalism") through the use of a virtual WebCT classroom in a blended environment. In one assignment, students working in small groups developed a basic website for DIT students, in response to the question: "What would students like to read?" Their suggestions included sections on news, sport, features and opinion.

The students found this project so exciting that they regularly arrived early for their bi-weekly face-to-face sessions in a computer laboratory, and always left late. Soon they started to speak of undertaking a student news website "for real", not just as a once-off assignment. While the students' enthusiasm for the new medium of online journalism was unprecedented, both students and staff in the Journalism Department had long recognised the need for a student publication to showcase student work. The prohibitive costs of printing and paper had constrained potential student publications previously; such limitations do not curb the possibilities of an online publication.

With this in mind and her conviction borne out by the students' passion for the project, journalism lecturer, Tara Turkington, approached DIT's Vice-Chancellor, Professor Dan Ncayiyana. She requested funding for two third-year intern positions for six months, in order to spearhead the student website. It was to be the first daily updated, student-run publication in South Africa, and it was uniquely conceived of in a virtual format. Vice-Chancellor Ncayiyana agreed.

However, before telling the story of *DITonline*'s birth, it is necessary to mention some of the project's pedagogical underpinnings. While the supporting student structures and the look of the *DITonline* website have changed in its first year of existence, the understanding of teaching and learning that underpins the project remains unaltered.

PEDAGOGICAL UNDERPINNINGS

The pedagogical philosophies in teaching online journalism at DIT owe much to Ortrun Zuber-Skerritt and Paulo Freire, whose approaches are embraced by the ICT-Ed section of DIT's Centre for Higher Education Development. Two staff members in this unit, Mari Pete and Charl Fregona, run a voluntary year-long course for DIT lecturers in online teaching and learning, called the Pioneers Online programme. The teaching focusses on the transformation of the individual rather than the transmission of knowledge, and the course encourages self-directed, active learning rather than teacher-directed, passive learning.

In 2003 Turkington was fortunate enough to be a participant on this course, in which she imbued much of this philosophy and sought to implement it practically in her classrooms. Drawing on this experience, Turkington's approach to teaching online journalism is collaborative and constructivist, and is based on an action research and action learning model, in keeping with the ideas of Zuber-Skerritt (1996). Most basic to this is the idea that knowledge is *constructed* rather than transmitted. Zuber-Skerritt suggests that an appropriate approach to teaching and learning must include problem solving, experiential learning and learning by discovery. "It is in these active and creative learning situations that theoretical knowledge can be generated by the participants themselves and that generative learning and action research by practitioners into their own practice may advance knowledge in that field" (1996, p. 10).

Zuber-Skerritt points out: "The process of action research [...is...] a spiral of cycles of action and research consisting of four major moments: plan, act, observe and reflect. The basic assumption is that people can learn and create knowledge: on the basis of their concrete experience; through observing and reflecting on that experience; by forming abstract concepts and generalisations; and by testing the implications of these concepts in new situations, which will lead to new concrete experience and hence to the beginning of a new cycle." (1996, pp. 11–12). Action research, according to Zuber-Skerrit (1996, pp. 12–14) is *practical, participative* and *collaborative* in that the researcher is not an outside expert but a co-worker; it is *emancipatory* for both the learner and the teacher in that the approach is not hierarchical, but that all people concerned are equal participants; and it is *interpretive* and *critical*.

The teaching and learning philosophy that underpins *DITonline* also subscribes to Freire's critical pedagogy in which he posited, among other things, that the teacher has as much to learn as the student. Bentley (1999, p. 1) sums this up: "For education, Freire implies a dialogic exchange between teachers and students, where both learn, both question, both reflect and both participate in meaning making."

For the learner, knowledge is most meaningful when it is internalised through personal experience. Students come to *know* because they *do*. For this to happen, they must be exposed to authentic, real-world situations, or what Dunlap and Grabinger (1996) call "REALs" – Rich Environments for Active Learning. REALs encourage student responsibility and decision-making in collaboration with other learners and lecturers; they promote study within meaningful and information-rich contexts; and they use participation in dynamic activities that promote high-level thinking processes such as problem solving, experimentation and creativity.

REALs are based on constructivist values including "collaboration, personal autonomy, generativity, reflectivity, active engagement, personal relevance, and pluralism" (Lebow 1993, p. 5). Constructivist learning environments provide opportunities for learning activities in which students, instead of having knowledge 'transferred' to them, are engaged in a continuous collaborative process of building and reshaping understanding as a natural consequence of their experience and interaction with the world (Dunlap & Grabinger 1996, p. 66). Finally, REALs encourage students to reflect on the processes and outcomes of learning activities (Dunlap and Grabinger 1996, p. 80). It is this sort of REAL environment that *DITonline* — a teaching material and process rolled into one — sought to create from the outset.

LAYING THE FOUNDATIONS: ACTION RESEARCH CYCLE ONE

June 2003
2 senior students lock themselves away for a month. They study PHP, HTML and other stuff which makes them wish they'd studied IT.
They forego sleep. They don't eat. (Except Big Korn Bites and Frisco).
Their mums yearn to see them again

The first cycle of the action learning and action research project that is *DITonline* was the period between the development of the site from June 2003, to its launch in August 2003, and up the end of November, when publication ceased for the university holidays.

In June 2003, two third-year journalism students, Richard Frank and Alec Stafford, were invited to develop the website under the working title "DIT.com" as part of their compulsory six months of experiential training, which is a requirement for the National Diploma in Journalism. While both students had a firm grasp of the Internet landscape and were computer literate, they had only a basic knowledge of web publishing.

Frank and Stafford settled on using PHP-nuke, a popular open-source content management system (CMS) which is powered by PHP/MySQL. Although PHP-nuke is a complete prepackaged CMS, it needed to be customised to suit the needs of a student news website. Most of their learning was derived from the experiences of others. Forums dedicated to the development and troubleshooting of PHP-nuke and related systems allowed Frank and Stafford to interact with a global community of developers. Most problems they encountered – bugs, vulnerabilities and limitations – were experienced by dozens of others, who had collaboratively developed workarounds and fixes to these problems. Apart from the global interaction afforded by the open-source community, Frank and Stafford relied on DIT's ICT-Ed Centre for technical and logistical support. The Centre provided server space for the site, supported the troubleshooting process, facilitated the development of WebCT classrooms and helped set up "online newsrooms" for the student journalists. Once up and running, the website suffered technical setbacks. In the initial stages, the *DITonline* news operation was hamstrung by limited access to the administration of the website. A glitch in the institutional network meant that the web administrator did not have root directory access to the site through Frontpage Extensions. The local IT technicians took months to solve the problem, during which time pictures were either emailed to ICT-Ed and then uploaded, or were hosted on a free international image-hosting server. The site could not be maintained or upgraded during this time, and many glitches went unresolved until the December break.

The technical difficulties proved less demanding than the challenges of creating a committee to run the website. The first rallying call took the form of a poster with an Africanised Uncle Sam urging: "We want YOU for DIT.com". "Rallying the troops" would become a favourite saying in the newsroom. Over 30 applications were received for the *DITonline* executive committee. An organisational structure was established with a hierarchy that saw five section editors (news, features, sport, arts and opinion) and four special editors reporting to the editor and the web administrator in an executive committee. Each section editor headed a group of journalists who would file stories in their respective beat. The executive committee would then consult an advisory board, composed of journalism lecturers, if any ethical, legal or financial problems surfaced.

The formation of the committee was not very successful. Executive committee members found it difficult to form the hierarchical or vertical relationships which were required for success in their roles. The concept of the website was also hard to communicate because those leading it were themselves caught up in a challenging journey of discovery. Finally, resources were limited – cameras and computers had to be borrowed – and there was no enabling budget.

Another obstacle was that of achieving lecturer buy-in. Some lecturers doubted whether the project would work, and once it was up and running, referred to the site disparagingly in their lectures, criticising story selection and editorial quality. This did not help the students' confidence and discouraged potential contributors. While attitudes have since shifted, there remain divisions between students who work for the site and those who don't, precipitated to some degree by a few discouraging lecturers.

Despite these setbacks, the website enjoyed success far beyond its founders' expectations during 2003. Rising tensions in the institution caused a magnificent run of stories with student and staff protests, court action, bomb threats and sit-ins dominating headlines and attracting users to the site. However, the most frequently viewed story in 2003 was not a news story, but a feature headlined, "Sex at DIT: The bare facts", which proved the old adage 'sex sells'. At the end of 2003, the site had recorded 119 830 page hits and had become, in the words of Vice-Chancellor Prof Dan Ncayiyana, "the news provider of choice" at DIT.

While *DITonline* had started off as a purely voluntary exercise for contributors, at the end of this first action research cycle a process of exploration began to integrate the site with elements of the curriculum and course outcomes. This formal integration was intended both to maintain student interest in the site and ensure academic recognition for their published work. At the same time the opportunity to recurriculate innovatively was provided by the journalism department introducing its first B Tech (Honours) level course in online journalism, and committing to a semester-long module in the subject at third-year level. The department was the first in the country to implement this new diploma teaching new skills required by the international and national growth of online journalism, with learning areas only broadly described in the South African Qualification Authority's registration documentation.

One of the outcomes for the B Tech course in online journalism was a "multimedia package" for *DITonline*. This required students to produce a news or feature article with photographs, video,

audio or other graphic elements for *DITonline*. While the package was marked by the lecturer, the ultimate decision over whether it would be published or not lay with the editor – at that time still third-year student, Richard Frank. Students were particularly motivated to see their work online as, according to the marking rubric, 15% of marks depended on publication. All the students in the class saw their work published online for the first time in this way. Through this exercise, the students learnt to negotiate with an editor in a meaningful way, and to deliver a package professional enough for online publication. The collaboration between the third-year editor and the fourth-year journalists was then *vertical*, and helped to break down the traditionally hierarchical academic structure, in which students in separate years of study did not interrelate or communicate. The collaboration was also a dynamic three-way affair, involving lecturer, student editor and student reporter. The enthusiasm of the students to have their work published, and their delight in achieving publication, reaffirmed the power of the site as a collaborative tool for teaching and learning.

After this first semester of *DITonline's* existence and the end of the first cycle of action research, most journalism students progressed to the next level of study or graduated, although the two founding senior students – Richard Frank, the editor, and Alec Stafford, the website administrator – remained in these positions for the second cycle, the first semester of 2004. With the close of the first action research cycle, those involved reflected on some of the shortcomings and successes of the site, and planned for the future. It was apparent by then that the site had drawn on average more than 1 000 hits per day Monday to Friday through October and November 2003, a hit count encouragingly sustained throughout the first four months of publishing. The most burning issue identified at the end of this cycle was the need for more diverse content.



Figure 1: A recent DIT online edition at http://olcweb.dit.ac.za/ditonline/html/index.php

CONSOLIDATING THE BRAND: ACTION RESEARCH CYCLE TWO

The B Tech project in the first action research cycle was a pilot in many ways. Through its success, a more radical experiment in blended collaboration was embarked on in a semesterlong, third-year course in online journalism, offered for the first time in 2004. The course was again offered in a blended environment, with the students attending class in a computer laboratory for two two-hour sessions a week.

A concerted attempt was made to make the course as authentic a learning space – a Rich Environment for Active Learning - as possible. A WebCT classroom was constructed and customised by changing all the icons to images that had been published on DITonline, in order to give the class a sense of ownership and belonging. The students in this course became employees in a "virtual newsroom" that was assessed on a weekly basis in terms of how much the class – or editorial team – managed to publish as a team. This was balanced with marks for individual performance within the team context. The lecturer and students negotiated that the basic requirement for the 15-week course for each member would be to publish ten articles (news, features, sport or opinion) on DITonline. Only published work would be assessed, but if students published more than ten pieces, the ten best would be used for their final mark. Students strove for negotiated targets each week; if they published 15 or more articles with pictures and/or multimedia elements, they would achieve 100% for their group mark for that week. Even students who achieved their ten published articles guickly were motivated to continue contributing to the class's output, to ensure a good group mark each week. Just as a publication is created afresh for each edition, so the class's group marks were set back to nothing at the beginning of each new week.

The class employed role plays extensively. The first class agreed on the roles needed in the virtual newsroom: two news editors, two sub editors, a multimedia editor, photo editor, two photographers and 12 reporters. Each week students selected to perform a role, and at the end of the week were peer-assessed by their classmates on how well they performed. Roles rotated weekly, so that by the end of the course everyone had had an opportunity to play all the roles at least once. At the same time, they built up impressive portfolios of their work published online. We brainstormed job descriptions for each role, and published them in the classroom. The news editors were ultimately responsible for their class's performance each week. Their job was to liaise with the overall editor over what would be published, and to motivate, cajole, plead, threaten, and inspire their classmates to work ever harder in pursuit of a good group mark. The sub-editors edited writing, spelling and grammar, wrote headlines, and ensured the website's style was maintained (through a guide that was continuously updated and developed, using WebCT's glossary tool). The multimedia editor was assessed on how much video or audio material provided by the class was used on the site, and the photo editor on the quantity and quality of photographs published. Effective collaboration - teamwork - was carefully tied in to assessment. As time went on and students became more proficient at taking their own photographs, the role of photo editor was dropped and the number of photographers reduced to one.

The discussion areas were the engine of the class. Here students filed stories, peer-edited them, chose to publish them, sent them back for additional work, or rejected them outright (with some suffering the public shame of having at least one story consigned to the "story graveyard" section of the discussions area). The collaboration here was transparent and recorded – anyone in the class could refer to it at any time. Learning was blended in that students physically attended two news meetings each week (unless they had interview appointments for stories), and worked together from time to time in *DITonline*'s small newsroom. But all of their work was filed electronically, often from off campus and sometimes late at night (such as one scoop, from a student who landed an unexpected interview with renowned poet Antjie Krog). At times, students

took several weeks to work on an investigative piece (such as one on the national Scorpion Unit investigating DIT for corruption), but would keep in touch through the virtual newsroom.

Each Monday, the class reviewed the work it had produced the week before, while they were able to access an html page in their WebCT classroom providing the lecturer's written comments on the original version of every story published. This was an attempt to break down one-way feedback between lecturer and student, and expose the interaction to all students, in the belief that they could learn from one another's successes and shortcomings. Each week, the lecturer would award a small prize for the best article published in the previous week. This helped to motivate students and to enhance the competitive edge in the classroom.



Figure 2: Some of the 100 DIT Online authors in the first two semesters

Students were also encouraged to reflect regularly and openly in the discussion area on some of the things they had learned. This feedback in itself formed a platform for collaborative teaching and learning. Some of the lessons were practical, and related specifically to journalism skills:

"I learnt that stories need to be multi-sourced and a great deal of preparation has to be taken in conducting interviews."

"This past week I have learnt how to handle those big bouncers who protect VIPs and how to run for cover in case of riots. I have learnt that in order to get your story published, sometimes you need to work on Sundays and miss church. I have also learnt that as a journalist you make a few enemies."

"It is not always easy to get quotes from management, no matter how much you hound them."

"Being a sub-editor is not as glamorous as it sounds. It requires a lot of patience and is time-consuming. I also had to become friends with the dictionary again. To my horror I

also learnt that journalists have the worst grammar and are too scared to use spell check."

"When you have a story that falls through it's always good to have backup."

Some students' reflections were more personal, and related to themselves as people as much as to what they learned about journalism:

"I learnt to stay determined and believe in myself."

"I learnt that you have to keep pushing even if you feel the going gets tough. I also learnt that working with your classmates can only make you a better person who is able to communicate with others on any level."

"I learnt to be persistent. Do not listen to NO!"

After the Monday morning review, the student news editors ran the class, planning for the next week in a news meeting. They assigned stories and set deadlines for their peers using WebCT's calendar tool, while all students were encouraged to come up with story ideas. On Wednesdays, the student news editors ran another news meeting in which they checked story progress, and again motivated their classmates with a mixture of charm and berating. This was followed by a weekly workshop on an area of weakness, including, for example, sub-editing and introduction writing.

This third-year course was a turning point for *DITonline*. The depth and diversity of content on the site developed considerably, as did the number of hits on the website. In a period of 15 weeks, the 20 students in the class published nearly 250 articles, hundreds of photographs and dozens of multimedia items. In May 2004, the site received the most number of hits ever in a month – over 75 000.

By the end of the course the students were exhausted, but many expressed the belief that the experience had helped prepare them for the industry. In the words of one student:

"I have learned to write news items. I have learned to sub stories. I have learned even computer skills. To summarise the whole thing, I can say I learned all journalistic skills that the journalist working in the media today needs."

For some students, the course engaged them on an emotional level beyond merely learning new skills. As one student put it:

"I am crying while writing this last lesson. I have learnt so many things from this course. Online has been more than going out, finding and filing the story. It has been a bonding experience, a self-esteem booster and a great help in showing me that I can write anything as long as I put my mind to it."

By the end of the course, all 20 students had published ten articles, while many produced substantially more. The student who achieved the top grade in the course published 25 articles in 15 weeks. The course provided an example of relatively "formalised collaboration". At the same time it influenced informal collaboration in associated years of study as during this time there was a marked increase of voluntary contributions for the site from students in their first and second years of study.

However, students producing the content for the site are only half of the *DITonline* community; the other half is made up of those that read and interact on the site online.

INTERACTIVITY AND THE USER COMMUNITY

The challenges in developing a user community arose from the cultural, technological and economic factors that influence the South African browsing experience. It goes without saying that if people cannot access the Internet, they cannot read online news. According to the latest South African Advertising Research Foundation's All Media and Products Survey (AMPS) which surveys media usage by people 16 years and older, 1,724 million people (5.8% of their sample) had accessed the Internet in South Africa in the past four weeks. In the same study, the SAARF calculated that 14,676 million (49.2%) had watched television and 27,318 million (91.2%) adults had listened to radio in the last seven days (SAARF 2004).

South Africa's overall Internet penetration rate of 6.8% pales in comparison with developed countries such as the USA (55.1%), the United Kingdom (42.3%) and Germany (43.6%). (International Telecommunication Union 2004). Thus, at present, the Internet is still a "marginal medium" in South Africa (Stewart quoted *in* Alden 2004). It is of note, however, that research (OPA 2004a) shows that American 18–34 year-olds are "most likely to use the Internet than any other" age group. This research concludes that, "18–34 year olds' addiction to the Web manifests itself in above-average likelihood to go online even when they are not in front of their own PCs" (OPA 2004a, p. 34).

Whether this data translates into a South African context is debatable. The AMPS study cited earlier does indicate that 524 000 of the 1,724 million people using the Internet, used an "educational institute where they study" as one of their access points. Research also indicates that where there is flat-rate access – normally associated with broadband or educational network access – the 18–34 year-olds' time spent on news sites increases by 72% (OPA 2004b). This study, although American, is instructive considering 90% of *DITonline's* hits come from within the institution – where the limited open-access available is free and purposed browsing is non-essential.

Against this national background, computer usage for ordinary students at DIT is extremely difficult (Zwane 2004). It is estimated that only a few hundred computers are shared between more than 20 000 students at DIT. Nevertheless, *DITonline's* user community has grown steadily through the last 11 months, with a range of staff, students, alumni, parents and outsiders prompting diverse discussion in the various interactive features.

The comments section of the site enables instant, unmoderated and anonymous feedback on news items from users. The site has attracted over 1 900 comments – many of them critical – on about 600 stories. Student journalists, like their colleagues in the mainstream press, have had to learn to deal with fair and unfair criticism. The comments have also sparked another form of anonymous collaboration: that between journalist and reader. Sometimes stories that have been unfairly or inadequately reported have been followed up or corrected after complaints from readers. In the normal press, responses are recorded in the letters page days after publication of the article. In the online media, responses can be recorded minutes after the article is published, and a story can be updated or corrected at any time. Although some reader comments have bordered on hate speech, readers have also posted many affirming messages. Whatever the case, student journalists realise their work is public and that people are reading it.

The interactive community ensures that the site is organic and content is not simply imposed on the user. A popular module is the "Shoutbox", which allows users to enter a message onto the front page instantaneously. The survey polls are another interactive aspect of the site, where users can vote on questions from the serious (Has the SRC represented students well this year?), to the more light-hearted (Should men wear g -strings?). While every unique "active user" (a user who returns to the site on a regular basis) is not accounted for, there is evidence that the

average number of page-hits per day on the site more than doubled in the site's second action research cycle, the second semester of operation. *DITonline* received 262 340 hits in the first semester of 2004, compared to 119 830 hits in the last semester of 2003.

CONCLUSION

By the end of its second action research cycle *DITonline* had established itself as an independent, authoritative news website at DIT and as a useful training ground for student journalists. The site provides ongoing opportunities for experimentation with formal and informal collaboration involving both assessment and voluntary participation. It allows for the implementation of a variety of cross-curricula projects performing the dual function of enabling cross-programme student interaction as well as growing the site's user base.

As graduating students depart into industry, the site is faced with the ongoing challenges of producing regular, good content. Changes in student leadership present additional challenges, not peculiar to *DITonline*. However with a good foundation laid, it is anticipated that the energy and enthusiasm of incoming student leadership groups will consolidate and grow the project as an innovative tool for collaborative, blended, teaching and learning at the Durban Institute of Technology.

REFERENCES

- Alden, C. (2004), "For Most Africans, Internet Access Is Little More Than a Pipe Dream". Online Journalism Review [online]. Available from http://www.ojr.org/ojr/workplace/1079109268.php. Accessed 25 June 2004.
- Bentley, L. (1999), "Paulo Freire: A Brief Biography". Pedagogy & Theatre of the Oppressed [online]. Available from http://www.unomaha.edu/~pto/paulo.htm. Accessed on 30 March 2004.
- Dunlap, J. & Grabinger. R.S. (1986), Rich Environments for Active Learning in the Higher Education Classroom. In B.G. Wilson (ed.) [1996] *Constructivist Learning Environments*, Educational Technology Publications, New Jersey.
- International Telecommunication Union. (2004), "Internet indicators: Hosts, Users and Number of PCs". Available at http://www.itu.int/ITU-D/ict/statistics/at_glance/Internet02.pdf. Accessed 30 June 2004.
- OPA (Online Publishers' Association). (2004a), "18 to 34 Year-Olds: Behavioral Analysis". Available at http://www.online-publishers.org/opa-comScore_18-34_Study_032904_Release_FINAL.pdf. Accessed on 25 June 2004.
- OPA. (2004b), "The Broadband-enabled 18 to 34 year-old: Behavioural Analysis". Available at http://www.online-publishers.org/18-34%20BB%20Presentation%20-%20052804%20FINAL.pdf. Accessed 25 June 2004.
- SAARF (South African Advertising Research Foundation). (2004), "SAARF AMPS: Internet Access." Available at http://www.saarf.co.za/internet.htm. Accessed on 25 June 2004.

Zuber-Skerritt, O. (1996), Action Research in Higher Education, Kogan Page, London.

Zwane, S. (2003), "Students still struggle for open-access computers at DIT", (*DITonline*), Available at http://olcweb.dit.ac.za/ditonline/html/modules.php?name=News&file=article&sid=387. Accessed 13 June 2004.

Copyright for articles published in this journal is retained by the authors, with first publication rights granted to the journal. By virtue of their appearance in this open access journal, articles are free to use, with proper attribution, in educational and other non-commercial settings.

Original article at: http://ijedict.dec.uwi.edu//viewarticle.php?id=84&layout=html