




CHANGING THE GAME: THE SMARTHINKING EXPERIENCE

Dr K. H. Ashford-Rowe & D. J. Howarth
Information Services
Learning & Teaching
Griffith University, Queensland, Australia

Background



- Two semester intensive trial - SMARTHINKING™
- An *offshore online tutor* (OFOT) service
- Sponsor - DVC (Academic)
- Project scope and delivery - Director INS (L&T) and Project Manager
- Assisted by Learning Services (academic skills) & Learning@Griffith (the technology)
- Trialed extensively at Griffith University Sem 1/2, 2010
- Semester 2 results reported here
- Two distinct cohorts accessed SMARTHINKING™; a number of targeted courses (TC) and students supported through the Widening Participation (WP) Project



SMARTHINKING™ Project Drivers

- massification of higher education
- increased student diversity
- the student experience – ‘*stay, play, or give it away*’²
- Bradley Review - removal of capping 2012
- universities struggling with student retention; and thus
- successful completion of degree programs¹


Aim

lift academic literacy skills, consolidate discipline specific knowledge, and alleviate the pressure on academic colleagues to mark poorly constructed texts

Anticipated Outcome

positively influence grade success and retention

Information Services Griffith University 3

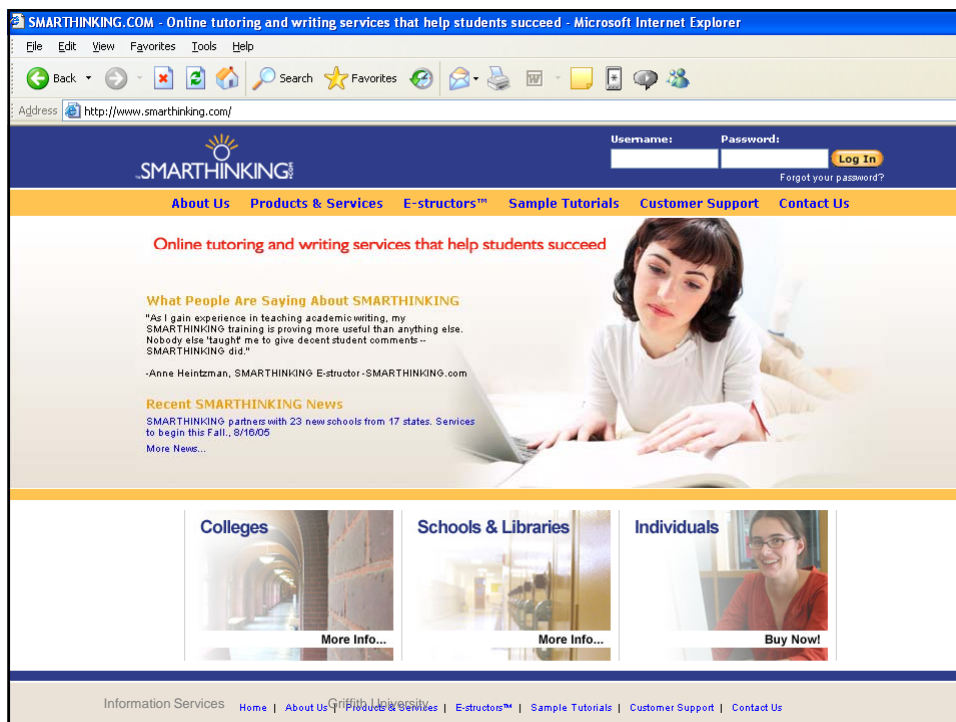


Changing the Game

- teaching and learning innovation, together with practice, reflect who constitute the game changers
- consciously change modus operandi to meet the needs of a key player; an *increasingly disparate student demographic*
- student expectations
 - » sustained learning & subject discipline support
 - » readily available, online, 24/7 services (*timely & relevant*)
 - » greater depth & clarity in assessment feedback from tutors
- the *offshore online tutor* (OFOT) service heralds a different way of thinking about teaching and learning support as a means of retaining students

Enter..... **SMARTHINKING™**

Information Services Griffith University 4



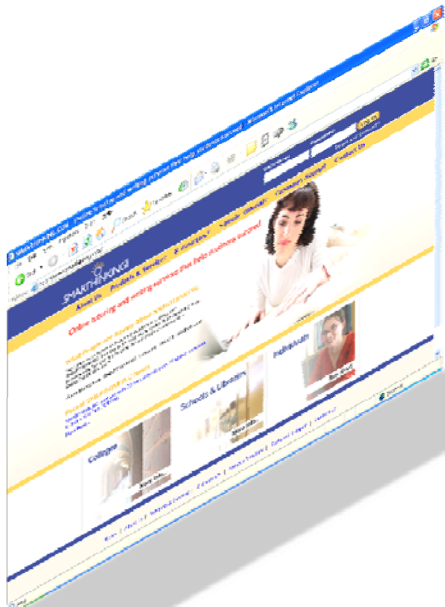
The Tool




- off shore online tutoring (OFOT) service based in Washington DC
- synchronous and asynchronous tutoring possibilities
- aims to 'increase student achievement and enhance learning'³



www.smarthinking.com



Information Services Griffith University



What is Smarthinking?

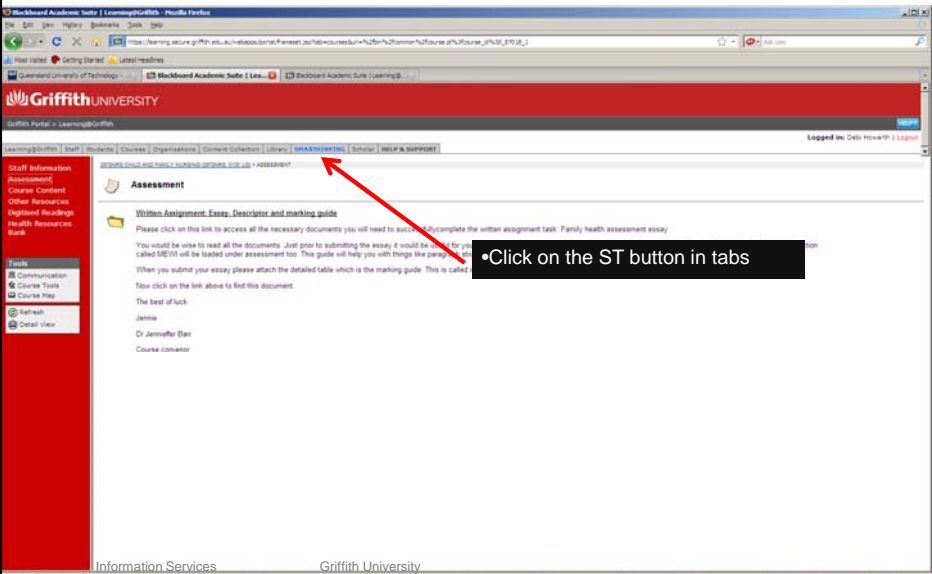
Synchronous and asynchronous access to tutoring up to 24 hours a day, 7 days a week

Students:


- Connected with an e-structor for **live tutoring**
- Submit text for **review and critique**
- Submit questions and **receive a reply the next day**
- Accessed up to **3hrs online** synchronous tutoring &/ or asynchronous tutoring (**free**) Purchase more (**own expense**)
- Encouraged to refer all content/course specific issues to their uni lecturer/tutor

7

The Technology - Access



Information Services Griffith University





The Study

- Extended on previous research ^{4,5}
- Study sample - reflection of Griffith University student demographic
 - » representations across age ranges & socioeconomic groups
 - » international students and non fluent speakers of English
 - » alternative pathway groupings (e.g. EEN-BN)
 - » number of year levels
 - » Widening Participation Project (predominantly low SES)
- Seven high attrition courses targeted

<ul style="list-style-type: none"> » Economics for Decision Making 1 (Sem 1 & 2) » Foundation Studies-Tourism (Sem 1 & 2) » Child and Family Nursing (Year 2 & EEN-BN) 	} GBS N=1,050
<ul style="list-style-type: none"> » Lifelong Learning & Work (Masters) » Lifelong Learning & Work (Year 1) 	} Nursing School N=696 School of Education N=10
<ul style="list-style-type: none"> » Mathematics Education 2 (Year 3) » English Education 2 (Year 3) 	} School of Education N=999 <i>Literacy & Numeracy</i>
- Widening Participation (Sem 2) N=2,665

Information
Griffith University
10

The Methodology



Mixed method

Quantitative – online student survey

- » tool - LimeSurvey™
- » 22 questions
- » 6 categories: *teaching & learning, communication, satisfaction, primary use, technology, & demographics*
- » 310 respondents (N=302 useable data)

Qualitative

- » focus groups (students) across 3 campuses (contextual aspects)
- » individual interviews (academic staff – course convenors/tutors)
- » professional staff (academic skills advisers)
- » text analysis - Nvivo™

Primary considerations

- » effectiveness in teaching & learning, generally, & academic literacy skill development, specifically
- » significance of courses studied to usefulness of the tool
- » correlations between SMARTHINKING™ usage and grade success
- » impact for high need learners e.g. international students, WP students, NESB

The Results



The SMARTHINKING™ trial produced significant, measurable benefit.

- Raised awareness of, and legitimised, offshore online academic tutoring possibilities – **a game changer**
- Was shown to have been associated with **raising the grade levels** of SMARTHINKING™ users as opposed to non-users
- Students believe access to the tool increased their academic literacy skills **and** changed their approach to assessment through **enhanced confidence**

The Detail



- 2,171 students registered to use SMARTHINKING™ and of that total >23% used the services frequently
- GU tracked “on average”³ take-up rates (11.7% of all TC students excluding WP stds)
- If linked to assessment submission, ST usage might have been even higher⁴ - majority used OWL
- 72% of survey respondents agreed they would use SMARTHINKING™ again given the opportunity

The Detail



- Use of live tutoring services poor (<0.7% across TC and WP students)
- Users were very satisfied with responses from ST tutors - 71.6% of users nominated a POSITIVE description i.e. *the tutor's response was useful/excellent/gave enough information for me to finish the task*
- 93% of users rated SMARTHINKING™ as Okay or better (72% rated it highly).

The Detail



- The ESL Essay Centre ranked 1 (*most useful*) by 40%
- 88% rated the OFOT support as *helpful or very helpful*
- 64% rated the final draft of essay submissions as improved i.e. *greatly improved or improved* as a result of the SMARTHINKING™ tutor's comments
- Majority rated the service consistent i.e. either *highly consistent* or only *slightly inconsistent* with the lecturer (82.11%), text (85.26%), notes (83.16%), and learning advisor (81.05%)

The Detail



- Usage more frequently in some age/gender groups***
 - » less than expected 18 to 25 year olds
 - » more than expected 36 to 45 year olds who reported making use of SMARTHINKING™
 - » significantly more frequent amongst females than would be expected*** (could be attributed to tendency for females to respond to surveys)

*** (based on the Griffith University norms)



Domestic vs International Usage Rates

Cohort	% using ST	GU Norms
Domestic students	70%	74.2%
International students	22%	25.8%

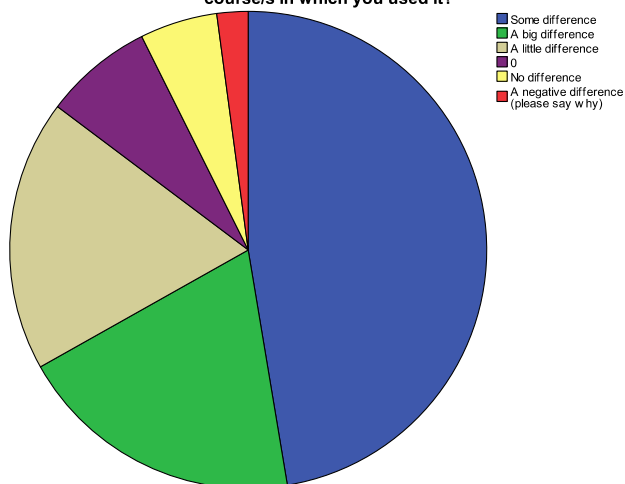
Information Services

Griffith University



Do you think Smarthinking made a difference to your overall performance for the course/s in which you used it?

85% of SMARTHINKING™ users perceived that the services made at least some positive difference to overall performance in their course work.



Information Services

Griffith University



Comparison of Average Marks

- Average marks across TC 2009 (ST not available) compared with 2010 – little difference

BUT

- Sem 2 TC grades for student users compared with those who did not use ST, **medium to strong** effect sizes were observed
- One course - a **very large effect** -14 students used ST - their average overall grade was **69.39%** compared to non SMARTHINKING users who had an average grade of **54.08%**



Caution & Optimism

- Evaluation of ST was not able to control for all factors that contribute to improved grades
- Comparison of marks highlights that the use of ST **appears** to have had some impact upon students improving their grades from between **5% - 17%** (i.e. 5 - 17marks); *almost a full grade improvement.*
- WP – of 91 users who used ST, **56%** improved grades on Sem 1 (no ST available for them)

Conclusions



- Evaluation of the ST OFOT service across TC in Semester 2, 2010 confirmed the trial was successful
- Grade success, and subsequent retention to completion, is dependent upon many factors
- The use of ST can be demonstrated to show benefit in assisting some students to improve grades
- Access to ST assisted students to write better scripts and consolidate discipline specific knowledge
- Consistent use of ST provided a level of confidence when better grades were attained
- Focus groups interviews - *I think it just gave me more faith in my own ability* (2010). Student Reference 9-Nvivo
- Long, Ferrier and Heagney ² - student retention can be improved where a variety of both general learning and discipline support services are not only present and available but also sustained
- SMARTHINKING provides 24/hour 7 days per week access

Griffith University Trial 2010



The 2010 trial of SMARTHINKING at Griffith University has gone some way to demonstrating that OFOT providers can be a satisfactory adjunct to existing services in improving grade success and subsequent retention provided they are readily available and sustained, though it is noted that this does come at a price and that the cost of SMARTHINKING as a commercial service provider needs to be included as an integral component of its future usage.



2011

- Widening Participation
- Griffith English Language Institute
- English Language Enhancement Course



Focus Group Data – Academic Staff

- *From looking at what the feedback that was given and then looking at how the students interpreted that, it did certainly improve their academic writing, which in a term does improve their marks. But also helps them develop for future academic skills. Academic Staff Member*
- *My students in Maths Ed they're all primary students ...they used it to write an essay on their Philosophy of Maths Teaching so a lot of them actually sent it off there [to ST] to get some feedback and there was a significant improvement in the quality of their writing. Academic Staff Member*
- *Some students thought it was a silver bullet.....they assumed it would fix their content shortcomings.....Academic Staff Member*



Focus Group Data - Students

- *My marks went from fails to distinctions and credits. There's not one assignment I failed so far.*
- *I struggle to write essays so I need all the help I can get, I used to pay [a lot] of money for someone to review my essay before ST, so I would love to have ST Online at Uni in every subject.*
- *...it was really cool to be able to draw it and have someone interactively draw it back and point out areas where you know you're putting it the wrong way. It was really good and I found it really useful.*
- *I think you get something out of it every time you submit something, and probably carry it over to a different subject.*



References

1. Crosling, G., Thomas, L., and Heagney, M. (2007). *Improving Student Retention in Higher Education: The Role of Teaching and Learning*. London: Routledge.
2. Long, M., Ferrier, F., and Heagney, M. (2006) *Stay, play or give it away? Students continuing, changing or leaving university study in first year*. Melbourne: Centre for the Economics of Education and Training, Monash University (1-4).
3. Smarthinking <http://www.smarthinking.com/static/aboutus/>
4. De Fazio, T. and Crock, M. (n.d). *Establishing a community of practitioners through an innovative response to student retention in online learning: Thinking smart at Open Universities Australia*. Melbourne: Open Universities Australia. Retrieved from [http://www.caudit.edu.au/educauseaustralasia09/assets/papers/tuesday/Teresa-De-Fazio-\(open-universities\).pdf](http://www.caudit.edu.au/educauseaustralasia09/assets/papers/tuesday/Teresa-De-Fazio-(open-universities).pdf)
5. McDonnell, J., Parkes, M. and Tynan, B. (2010). Virtual tutor support using SMAR THINKING: Preliminary findings. Armidale: University of New England. In draft. Accepted for presentation ASCILITE 2010.