

The Collaborative Classroom: Digital Tools for Academic Writing

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Abstract

Collaborative learning has its roots in Vygotsky's early 20th Century theories of the social nature of learning, which diverged from the traditional individualistic approach. A hundred years later, the introduction of iPads and mobile devices has provided us with new and powerful collaborative learning tools that were scarcely imaginable even a decade ago. Online platforms such as digital walls, applications (apps), and Open Education Resources are providing students with unprecedented collaborative learning possibilities. This paper examines such tools currently implemented on a tertiary level academic English Writing Foundations (FDNS) Programme at the Higher Colleges of Technology (HCT) in the United Arab Emirates (UAE), showcasing examples of students' work and addressing pedagogical and technological considerations. One of the most potent aspects of online learning is the provision of shared virtual platforms which allow students and teachers to collaborate, brain-storm and learn/coach collectively. It has been found that collaborative digital approaches to academic writing tasks are highly beneficial to FDNS level students, who previously found this skill challenging when approached on an individual level. This may partly be attributable to the profile of our students, who are generally of lower intermediate level with little or no experience of academic writing—even in Arabic, their first language. Readily available tools to promote real time and asynchronous collaboration on a variety of academic writing essay topics will be examined, including mind-mapping applications such as Popplet and Mindomo, sharing tools such as Padlet walls and Lino stickies, and Open Education Resources like those available on the “readwritethink” website.

Keywords: iPad, academic writing, EFL/ESL/ELT, collaborative learning

Introduction

iPads are commonly regarded as individual learning devices in the literature, designed for single users (Benson 2013, Melhuish and Falloon, 2010), and not suitable for group activities or collaborative learning. In addition, many in the field have criticized the iPad for not being a suitable device for academic writing activities, particularly extensive writing (Woykes, 2011, Gilksman, 2011, Weider, 2011, and Atallah, Tamim, Colburn, & Al Saadi, 2015) the latter specifically focusing on academic writing at universities in the UAE).

However, here at the Higher Colleges of Technology, iPads have been found to be useful tools in a number of collaborative writing activities, such as brainstorming, planning and most importantly, scaffolding -- providing models, visuals, contexts and co-operational learning tasks, (Ovando, Collier, V, & Combs, 2003). Particular apps that we have used include Padlet, Lino Stickies, Mindomo and Open Education Resources such as “readwritethink”. These apps and the learning context are discussed in more detail later.

Given the English language level of HCT FDNS students — largely lower intermediate and with little experience of academic writing — it has been found that working collaboratively serves to enhance their confidence and expand their skillset in tackling the Academic Writing component of the International English Language Testing System (IELTS), which is their exit point from the FDNS course. Though the IELTS Academic Writing Test is a paper-based, individual assessment, faculty course evaluations and anecdotal evidence provided by both faculty and students appear to support the collaborative learning model. Students report greater confidence in tackling the paper and gaining the skills necessary through the less stressful learning experience of working with peers.

Our experience is our learners can achieve far more when working collaboratively, as they capitalize on one another’s resources and skills. By contrast, working individually students can often find the difficulty of the academic writing tasks overwhelming, especially at the beginning of the course.

Context

The teaching context is a FDNS Programme at the Higher Colleges of Technology (HCT). All federal universities (Zayed University, UAE University, and HCT) have FDNS programmes, which are pre-Bachelor’s courses of up to two years to prepare students for their university majors. With the exception of a few courses such as Arabic and Sharia Law, all courses are taught in English. The gatekeeper for FDNS programmes is an Academic IELTS Band 5 – students can then progress to their Bachelor’s course.

This HCT currently have over 20,000 students at 17 male and female campuses across the UAE, and offers English-taught programmes in Applied Communications, Business, Engineering, Information Technology, Health Sciences and Education. There is a strong emphasis on technology, online courses, and project-based learning, and all students have their own laptop, which has been the policy for several years.

The research participants in this paper are all students from the FDNS course of the Bachelor’s programme, which is a two-year pre-session course aimed at getting students to a level of English proficiency where they will be able to tackle the academic content of their chosen Bachelor’s programme.

The students at the HCT are all Emirati nationals, typically aged 18 – 24, though there are more mature students, many of whom work and study.

Most students who enter FDNS correlate to an IELTS band 4.0, so their level of English is low, and most have little or no experience of academic writing, even in L1. Many also have a low academic level in other subjects and general knowledge (O'Sullivan, 2004), and thus have no schemata to draw on when tackling academic writing questions, and these difficulties are compounded by their limited reading either in L1 or L2 (Peel, 2014).

Academic writing is thus a great challenge for students, and based on our experience the collaborative model helps by reducing the anxiety some students experience during individualistic learning, and instead fosters an atmosphere of non-threatening cooperative engagement.

Literature Review

Much of the theory of Collaborative Learning derived from the work of Soviet psychologist Lev Vygotsky from the early 20th Century. Vygotsky's theories of the social nature of learning were largely forgotten till the 1980s, when social interdependence theory and collaborative learning became popular (Wertscht, 1985). Vygotsky's theories stressed the importance of personal relationships, and considered the mood of a learner to be an important affective factor in the acquisition of knowledge and skills, similar to Krashen's much later input theory (Krashen, 1977). Vygotsky also maintained that different members of a group may have different perspectives and knowledge to offer, and, as a collaborative partnership, improve learning outcomes. Probably the most important of his theories was the Zone of Proximal Development (ZPD) – where learners can do tasks with guidance or peer support that individually they would be unable to do (Foster & Ohta, 2005, Shabani, Khatib, & Ebadi, 2010), as illustrated below in Figure 1.

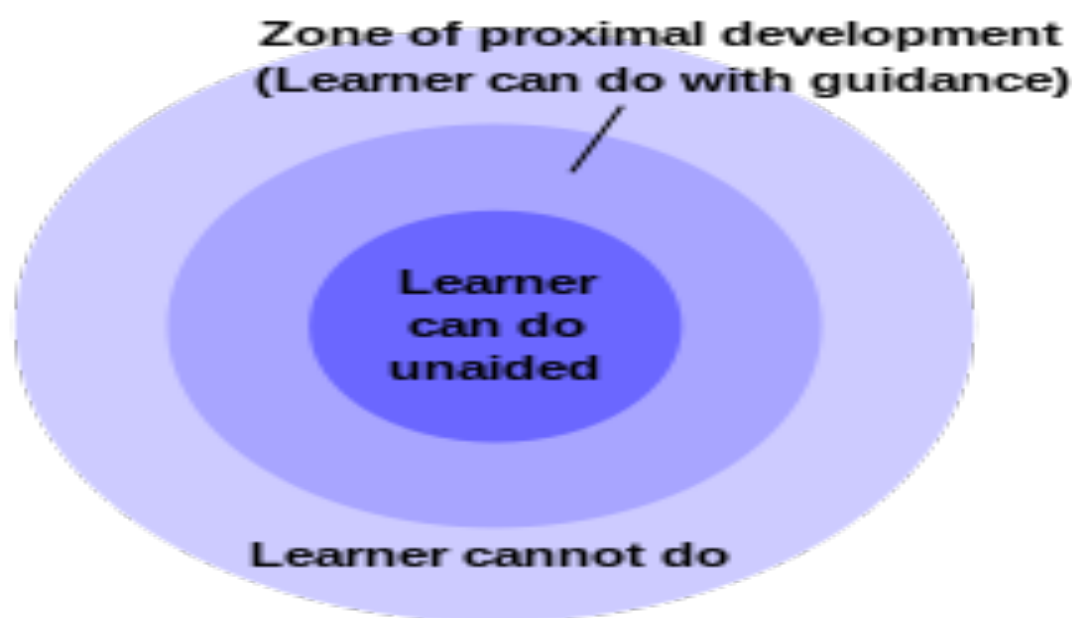


Figure 1. Vygotsky's Zone of Proximal Development

As social interdependence theory and collaborative learning developed in the 1970s/80s, many of its aspects became features of modern English language teaching methodologies, such as the communicative approach, and task-based learning. The collaborative learning model in particular stresses that strong interpersonal relationships are important, and that individuals

depend on and are accountable to each other. Knowledge is created as members interact, sharing experiences and possibly taking on asymmetrical roles (Nevin, Thousand, & Villa, 2009). Many mediums are possible, from traditional ways of interacting such as face-to-face group discussions to digital discussions such as online forums and chat rooms.

Collaborative Learning Research Findings

More than 1200 studies comparing collaborative, competitive, and individualistic efforts have found that collaborative and cooperative learning methods improve students' time on tasks and intrinsic motivation to learn, as well as students' interpersonal relationships and expectations for success (Johnson & Johnson, 2009). Lower and intermediate students appear to benefit the most from this approach, which matches the profile of the students at public tertiary institutions in the UAE. In collaborative learning, student interpersonal relationships are strengthened, and it has been found there is a strong correlation between the latter and academic achievement (Roseth, Johnson & Johnson, 2008).

Collaborative learning is already widely used in contemporary English language teaching via the Communicative Language Teaching (CLT) paradigm which emerged in the 1970s, and since its inception, has remained the dominant methodology in ESL and EFL (Richards, 2006). CLT is the approach used in pre-service training courses such as the Certificate of English Language Training to Adults (CELTA, 2010), and collaborative learning activities such as group and pair work, brainstorming, mind-mapping are typical of CLT activities. Collaborative learning is also firmly embedded in related teaching approaches such as task-based and project-based learning.

Though collaborative theory is nothing new, the emerging digital landscape has provided collaborative learning an entirely new perspective for our students, as digital natives (Prensky, 2001). In our conference presentation (Murray and Peel, 2015), a number of Apps used for collaborative learning were showcased. These included Padlet for brainstorming, Lino stickies for creating and sharing groups of lexical/grammar functions, and Popplet, Mindomo and Open Education Resources such as “readwritethink” for collaborative planning and mind-mapping of academic essays.

Use of These Tools

Though these apps and tools are accessed by HCT students via their iPad, and most available via the Apple store, all except Popplet are also available free of charge for conventional laptops or devices. The first of these collaborative applications is Padlet, a virtual wall on which students and teachers can brainstorm and share ideas through text, video, documents or images from any laptop or mobile device. Figure 2 shows an example of a shared wall on which students have brainstormed reasons for a given cause and effect essay topic, in this case obesity. The wall provides a starting point for initial discussions on the essay topic, which then can lead onto further discussion and the essay planning stage.

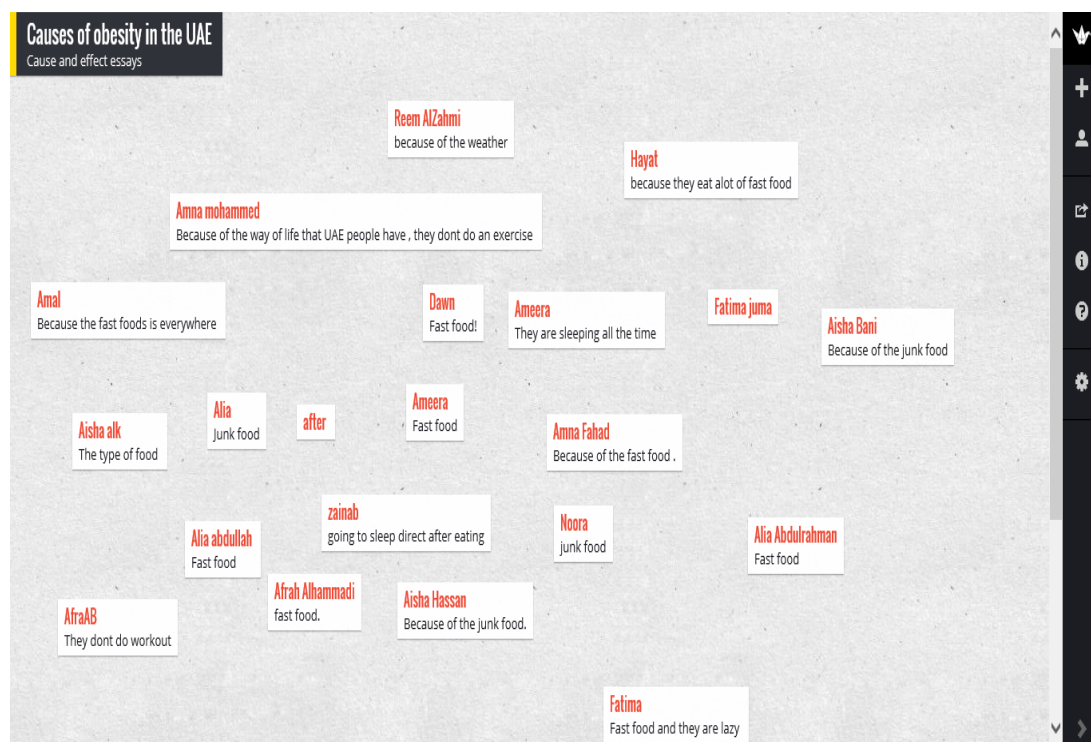


Figure 2. Student collaboration - cause and effect essay example - Padlet

Figures 3 and 4 show Lino Stickies, a similar online web canvas application with the same propensity for student collaboration through a post-it note effect interface. In Figure 3 students have created a lexical set of linking words for compare and contrast essays, while Figure 4 shows the teacher view of created canvases.



Figure 3. Student collaboration - compare contrast lexis example - Lino stickies

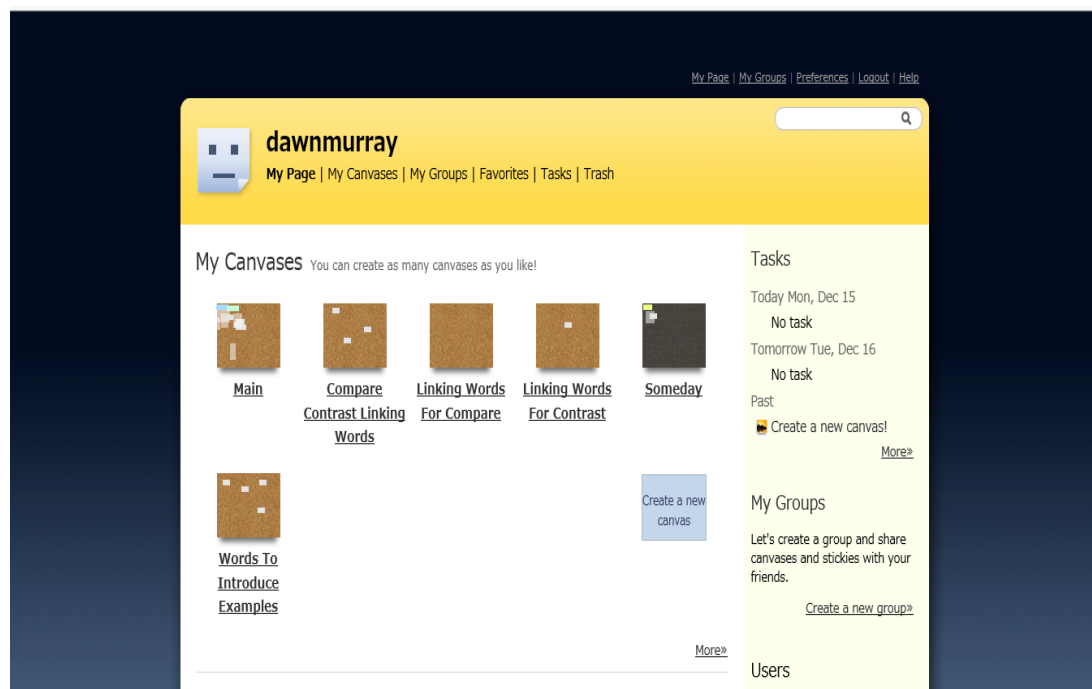


Figure 4. Student collaboration - sharing and creating groups - Lino stickies

Figures 5, 6 and 7 showcase Popplet, an application which allows students to visually organize their ideas and thoughts as they work together on the planning stages of their essays, using text and images to graphically organize the structure of their essays before they go on to use the plan to individually write the essay.

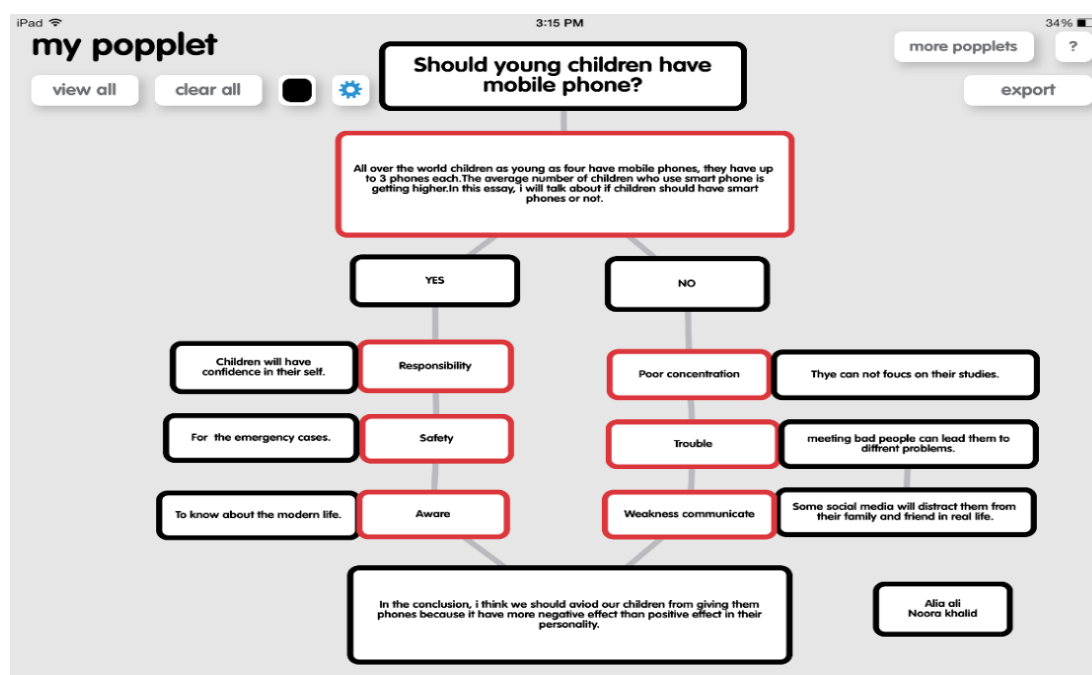


Figure 5. Student collaboration - plan for an opinion essay - Popplet

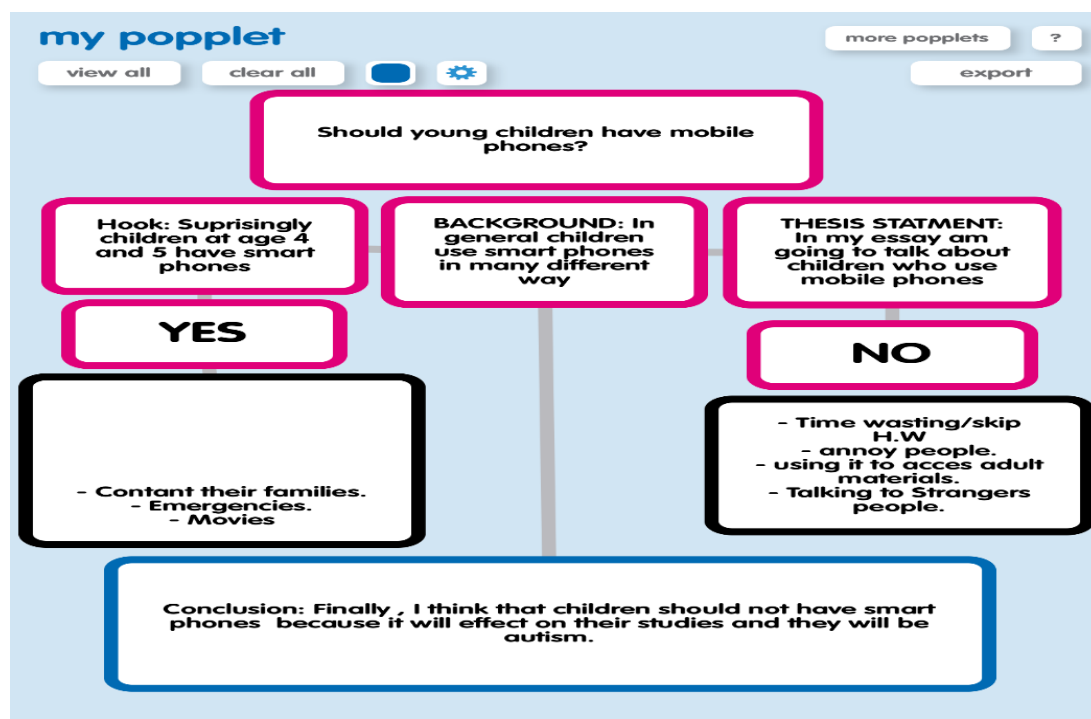


Figure 6. Another plan for an opinion essay – Popplet

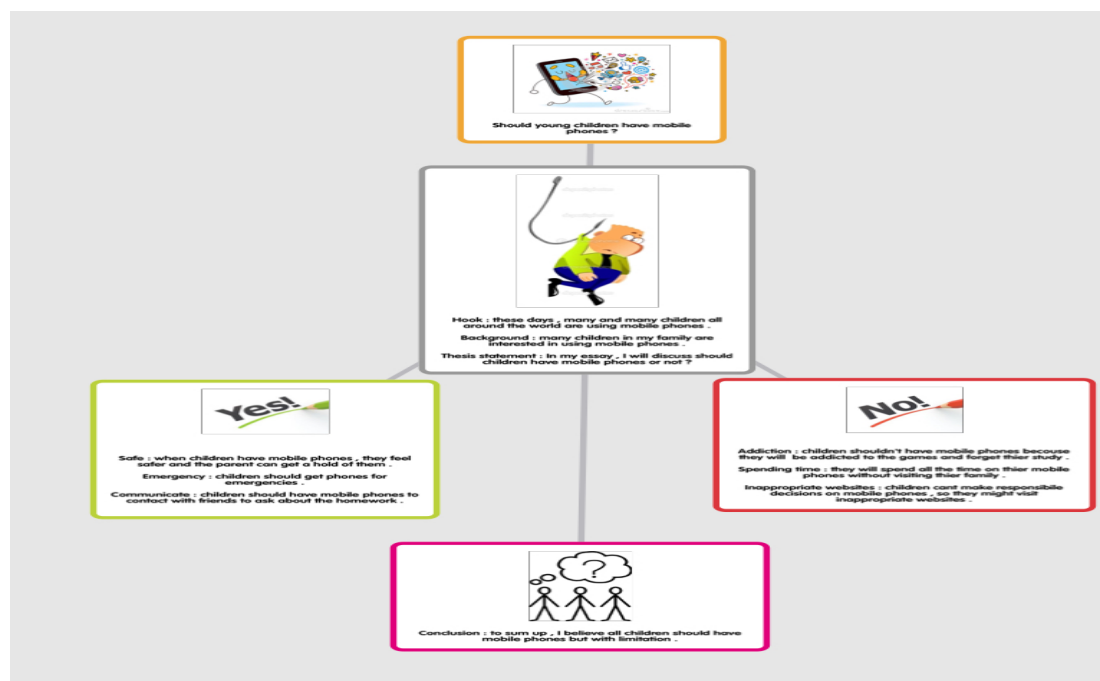


Figure 7. Students' third plan for an opinion essay – Popplet

Mindomo, the planning application shown in Figure 8, has similar functionality but the interface lends itself better to text than images.

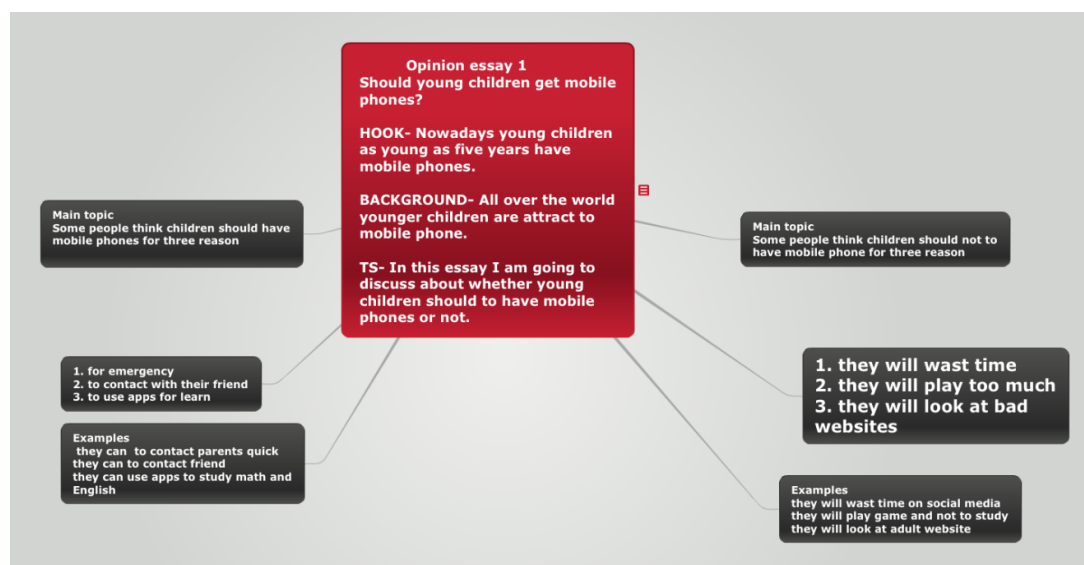


Figure 8. Students' plan for an opinion essay – Mindomo

The last of these collaborative tools is the website www.readwritethink.com, an Open Education Resource and therefore a free, open and accessible tool for both students and teachers. Figure 9 shows the initial planning stages of compare and contrast essay on the topic of women in the past and women of today, whilst Figure 10 displays the finished essay. Although the finished essay is a much reduced form of an academic essay, the pair collaboration allowed the students to initially think through and plan an academic essay which provided the springboard onto much more in depth planning and writing. Figure 11 shows a generic essay template which can be adapted as in the example for a cause and effect essay. Each of these applications allowed for in-depth thought, planning and collaboration and in each case students were able to keep a visual record of the planning which they could refer back to on the mobile devices for further review.



Figure 9. Completing a map - compare contrast – “readwritethink”



Figure 10. A completed map - compare contrast – “readwritethink”

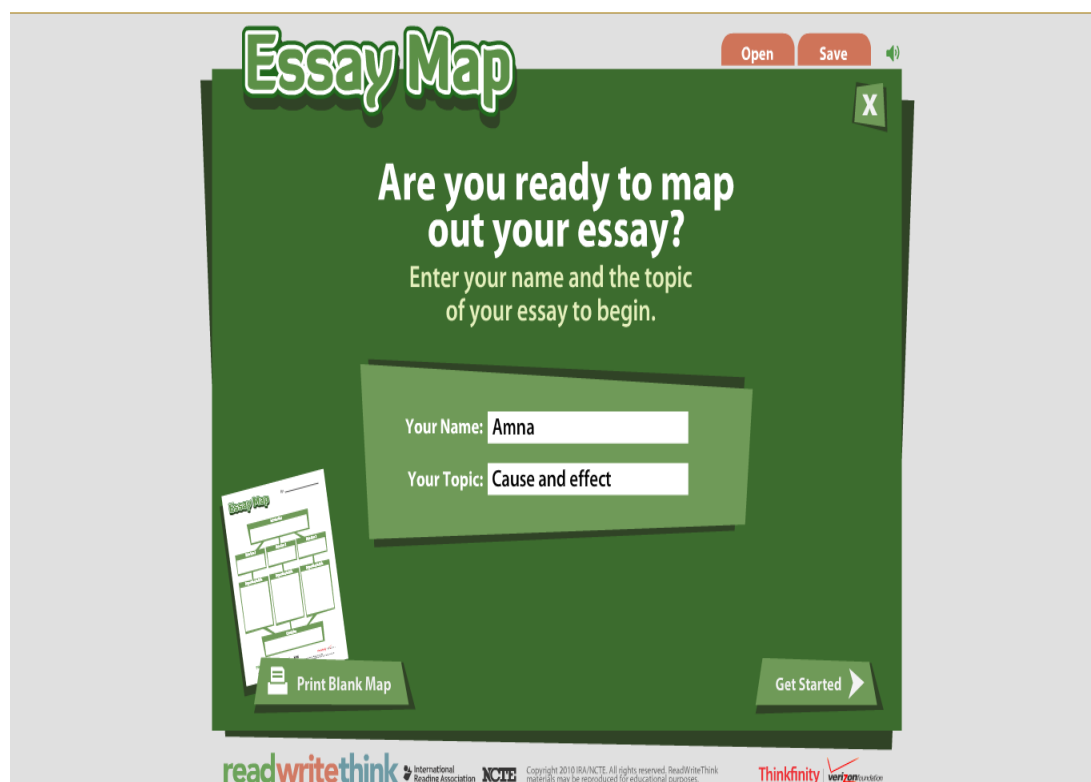


Figure 11. A different type of map from “readwritethink”

Discussion

In conclusion, the researchers have found these apps to be highly effective collaborative writing tools for learners at the beginning of their English writing courses, particularly in the early stages of planning and mapping academic essays. As mentioned earlier, our generally low intermediate level students find academic writing extremely challenging. This is exacerbated if working individually at initial stages of the FDNS Programme, when students are new to the College, perhaps nervous and unsure of their surroundings. Collaborative learning, using these tools closely together provides valuable social bonding at this early stage of their academic career.

The digital platform is one students generally feel very comfortable with, and, working together, students capitalize on each another’s resources and skills, brainstorming and evaluating each other’s ideas. From faculty and student verbal feedback, class observations, and quality of students’ work, this process appears to enhance their skills in tackling the IELTS Academic Writing Test, which is the gatekeeper to their Bachelor’s degree, and future academic success.

References

- Atallah, F., Tamim, R., Colburn, L., & Al Saadi, L. (2015, March). iPads in UAE University Classrooms: Implications for Teaching and Learning. In *Society for Information Technology & Teacher Education International Conference* (Vol. 2015, No. 1, 1576-1581).
- Benson, C. (2013) *The iPad: Novelty or Breakthrough for Science Education?* Available online at: <http://scholarworks.montana.edu/xmlui/handle/1/2757>
- CELTA Syllabus (2010), University of Cambridge. Available online at: <http://www.cambridgeenglish.org/images/21816-celta-syllbus.pdf> Retrieved: 29/02/16
- Foster, P., & Ohta, A. S. (2005). Negotiation for meaning and peer assistance in second language classrooms. *Applied linguistics*, 26(3), 402-430.
- Gilksman, S. (2011). *What do students think of using iPads in class?* Available online at: <http://ipadeducators.ning.com/profiles/blogs/what-do-students-think-of> Retrieved 16/01/16.
- Johnson, D., and Johnson, R. (2009). An Educational Psychology Success Story: Social Interdependence Theory and Cooperative Learning. *Educational Researcher* 2009; 38 365.
- Krashen, S. (1977). Some issues relating to the monitor model. *On Tesol*. 77 (144 -158).
- Melhuish, K., & Falloon, G. (2010). Looking to the future: M-learning with the iPad. *Computers in New Zealand Schools: Learning, Leading, Technology*, 22 (3).
- Murray, M., and Peel, R. (2015). The Collaborative Classroom: Digital Tools for Academic Writing. *Language Learning and Teaching Opportunities in the 21st Century. 21st Century Academic Forum* (15/11/2016), Dubai, UAE.
- Nevin, A. I., Thousand, J. S., & Villa, R. A. (2009). Collaborative teaching for teacher educators—What does the research say? *Teaching and Teacher Education*, 25(4), 569-574
- O’Sullivan, A. (2004) *Reading and Arab College Students - Issues in the United Arab Emirates Higher Colleges of Technology*. Available at: http://bath.academia.edu/AndrewOSullivan/Papers/1056633/Reading_and_Arab_college_students_Issues_in_the_United_Arab_Emirates_Higher_Colleges_of_Technology Retrieved 27/11/15.
- Ovando, C., Collier, V., & Combs, M. (2003). *Bilingual and ESL classrooms: Teaching multicultural contexts* (3rd Ed.). Boston: McGraw-Hill.
- Peel, R. (2014). *Chapter Seven: Challenge and Change in Online Reading: Learner’s Perceptions of Textbooks and Reading Online*. Using Technology in Foreign Language Teaching, pp.134 – 161. Newcastle-upon-Tyne, UK: Cambridge Scholars Publishing.
- Prensky, M. (2001). Digital natives, digital immigrants: Part 1. On the Horizon. *MCB University Press*, Vol. 9 No. 5, October 2001.
- Richards, J. C. (2006). *Communicative Language Teaching Today*. New York: Cambridge University Press.
- Roseth, C. J., Johnson, D. W., and Johnson R. T. (2008). Promoting early adolescents’ achievement and peer relationships. *Psychological Bulletin*, 134, 223–246.
- Shabani, K., Khatib, M., & Ebadi, S. (2010). Vygotsky's zone of proximal development: Instructional implications and teachers' professional development. *English Language Teaching*, 3 (4), 237.
- Weider, B. (2011). iPads could hinder teaching, professors say. *Chronicle of Higher Education*, 57(28), A22-A23.
- Wertsch, J. V. (1985). *Vygotsky and the Social Formation of Mind*. Cambridge, MA: Harvard University Press.
- Woykes, E. (2011). *The pros and cons of iPads in the classroom*. Available online at: <http://www.forbes.com/sites/elizabethwoyke/2011/01/21/pros-and-cons-of-ipads-in-the-classroom/>