

## PRODUCTIVE OR LIFE-WASTING: THE INCREASINGLY-CONNECTED AND SOCIALLY NETWORKED STUDENTS

Nwanesi Peter Karubi, Gursheena Kaur, Esat Kara, Alexander Curnow,  
Nomelyn Eban, Eldiir Mirlanov

University Malaysia Sarawak, Faculty of Social Science  
Kota Samarahan, MALAYSIA.

pknwanesi@fss.unimas.my, sheena\_vanilla@yahoo.com, mesatkara@yahoo.com,  
alex.curnow@hotmail.com, enomelyn@yahoo.com, eddy.minur@hotmail.com

### ABSTRACT

*Productive or Life-Wasting: The Increasingly-Connected and Socially Networked Students. Often the internet, cell phones and the whole lots of ICT, are alleged to be detrimental to our social lives and our progress especially in relation to students' performances. Critics say that drawbacks to student cell phones and other electronic gadgets outweigh the benefits. With cell phone use becoming more and more ubiquitous, particularly among university students, and hand phones and the likes of smart phones are becoming more and more sophisticated, tempers run high when it comes to students, schools, and hand phones. The primary concern is that electronic gadgets like smart phones and social networks distract students. Drawing upon this major postulation, this paper examines the positive or negative degree that students are experiencing while they are more or less electronically connected with their fellow classmates, friends, family members or the larger community members. Eliciting the pros and cons of the usage of these ICT gadgets will assist individual universities to make the difficult decision of whether or not to allow hand phones in the classroom. However, this study has found a moderately constrained use of handheld phones over the unconstrained or unused habits to be better in light of grade point averages.*

**Keyword:** ICT, Social Network, Hand phones, University Students, Performances, virtual learning environment

### INTRODUCTION

The next class you sit in, or meeting, no matter who you are, take out your phone and “blah, blah, blah,” at full volume while in the middle of things. Try it and you will get a reaction. Reactions come because people dislike seeing certain things, or they may be astonished or awed too (Respondent A).

The internet has only been with us since the 1980s (Leiner *et al.*, 32) and public mobile phones for about 40 years (Smith, 2009). In a single lifetime this is a ‘while’ but in terms of human history and in the longer-term scopes of social science this is a very short time. In the geological perspective of the age of the Earth, these technologies have been with us for less than a blink of an eye. This short time frame, no matter how many studies we have done and are doing on it, becomes crippling to social science study when it comes to proper perspective. Because we yet to empirically established an enduring conclusion on how the internet and other related modern gadgets are affecting us over our lifetimes. This is even more particular to the younger generation as most appeared to be hooked to these devices.

In fact, it is common in our newspapers or over generalized gossip magazines to read how this social change, the internet and cell phones, are detrimental to our social lives and our progress. Not to be left out, the academic world is currently through numerous studies are asking: what are the contributions and drawbacks of today's Communication Era and boom?

Young people or students in universities appear to be more socially-connected than their middle-age and elder counterparts. But are we chasing ghosts as was popular when rock and roll took the stage and society decried its evil? Will we soon find Information and Communication Technologies (ICTs) have little or no influence on our lives, or better still, will it be a boon to us as we further ourselves in tandem with society's own technological advances? As pointed out earlier, although studies have been done on the matter, nothing definitive seems to be carved in stone, for we are still in the fray of the communication revolution, so adding more current data and discussion to the matter will be invaluable.

Thus, from the Interpretive Social Science point of view, this research choose the only public and federal university near the city of Kuching Malaysia, primarily to examine the positive or negative degree that students are experiencing while they are more or less electronically connected with their fellow classmates, friends, family members or the larger community members.

### **The Issue with the new Gadgets in the Classroom**

Look around the classroom and you will see both students and teachers checking phones if they dare. One respondent described this class room phenomenon as follows:

In the middle October, 2011, I watched in bemusement as one of my lecturers answered his ringing phone in a class of about 300 students. I was amazed a teacher would do this then I promptly checked my text messages. Some teachers, lecturers and professors would 'kill you' or more accurately openly berate and belittle you if you added a Facebook status update while he or she was talking. On the other hand, other lecturers could not care less as long as you did not interrupt them. So then there is a common disparity

Herewith he added;

Some high schools will seize and auction off your expensive tablet/phone device since you dared nothing more than to bring it to class, while other places are marking you down if you're unable to access the school's own community servers for class work and updates. This double-standard is inevitable while society is in the throes of this social change. Because things are changing so to the positives or negatives of being so well connected electronically may change in nature and degree.

This subject then demands periodic and scientific study so that even if the results will not last in the future, future studies may refer to scientifically collected data to add to their own studies. What is more, it is vital to establish the degree of the affect, and how do more socially connected (by handheld devices) or socially networked students' measure up and performs in their studies? It would be useful to both learners (students) and academic practitioners (teachers) to understand more on whether social networking and connectivity is useful, neutral or detrimental to the studying<sup>34</sup> and learning environment.

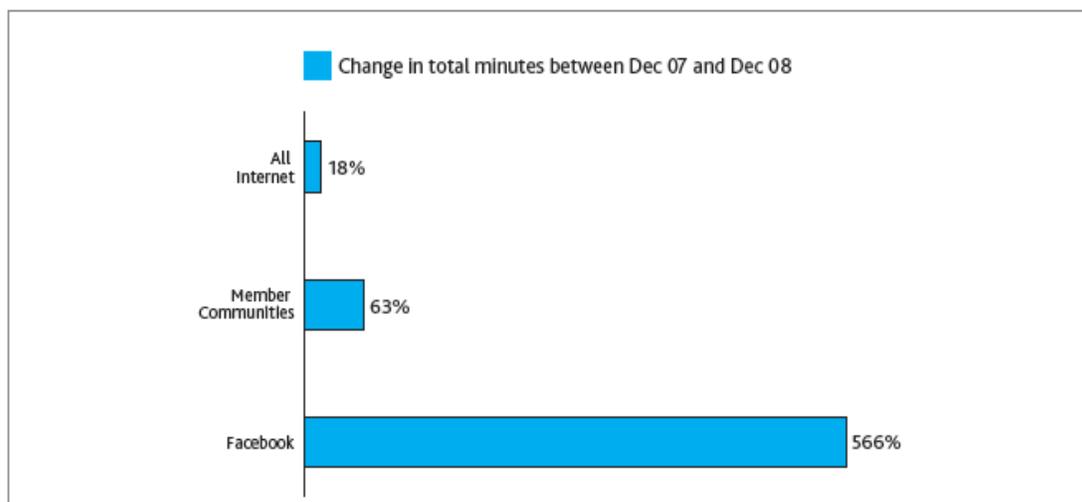
Adding knowledge and understanding to society is a primary concern for this study. Although similar studies of this nature have been done before, this study will help make accurate generalization of whatever is closer to truth. Scientific or empirical data as well as appropriate discussion on the matter helps the general view, it helps readers, and future researchers avoid overgeneralizations, whether this study or others represent the research population closely or not.

<sup>34</sup> This report, however, provides a more provincial perspective since only limited respondents will be engaged and from only one place, leading it to invite further examinations on the subject in other places and covering wider sample populations.

### Evolution of ICT

The birth of the mobile phone and the internet developed roughly in parallel although not precisely. Both technologies were developed in military environments around and after the Second World War and 30 to 40 years ago and later became available to the public market. From the 1980s and onwards, the internet and mobile phones have developed quickly and extensively until today. Mason & Rennie (2008, p.8) noted that, students born from 1982 and onwards show tendency towards pictorial and multitasking behaviours with technological savvy. That these two technologies have existed in the mainstream since then cannot be accidental.

Thus, most people, especially ‘the young people’ are checking their emails regularly, and constantly talking or texting ceaselessly. Between two thirds and three quarters of young people log on to the internet to check their social networks the moment they reached home from school (Watkins, 2009). It only takes a quick look around to see the number of people with cellular phones or like-devices. The depth of telephony seems to have come before internet software depth but since Myspace and Facebook particularly, along with Google and other regularly-used browser-based platforms, the internet has caught up and is in stride.



Source: Nielsen Online, Global Index, December 2007 – December 2008

Figure 1. The total amount of time spent on Facebook

Blogs and personal WebPages were a popular beginning for personal internet exposure; this followed by sites like Myspace which packaged up the blog/personal webpage experience for free. Sites like and especially Facebook took the experience to the next level: social networking. The computer-savvy world was so ready for the user-friendly browser-based software that its usage exploded, as seen between Decembers 2007 and 2008 in Figure 1 (Global Faces & Networked Places, 2009). Such a thrust of use brought out predictions too early of an impending and comprehensive virtual learning environment when predictions of widespread social software use in the classroom did not prove true (Mason & Rennie, 2008, p.1). However, that prediction is just mistimed and not misplaced, *for the use of social networks, due to the recorded increase and velocity of internet and information communication is definitely predicted to increase in the foreseeable future* (Miyata et al., 2005, p.445).

Mobile phones have hardly been left behind the social networks but are working along them in a seeming homeostasis. There are many names for ICTs. One name is that of being called a *handheld* (in the sense of multiple multifunction ICTs) and is described by Louise Mifsud (2005, p.238) as *any small, portable device that provides computing, information storage and retrieval*. Already post 1980s

technologies and their generations are wreaking havoc in the classroom formats developed long ago. Students that have been caught cheating or ‘gaming’ in classes have led to total ICT bans in classrooms or even entire schools (Mifsud, 2005, p.242). Furthermore, the digital divide between users of degree and non-users of the internet is becoming more complex with even stratification between Webphone and PC users perhaps leading to more differentiated people in the world.

### ICT in The Classroom

The current advances and probes into binding up-and-coming technologies with learning is an important matter to consider. *New technologies pushes educators to create new things in new ways, learn new things in new ways, and communicate in new ways* (Klopfer *et al.*, 2009, p.10). The tide of incoming technology seems inevitable as well as an inevitable pain in the butt for educators trained (and learned) in or by way of the pre-1980s era. *The virtual learning environment (VLE)* is in use in places as a resurgence of early prediction mentioned above. The use of phone and social networks seem unstoppable in a freedom-valuing or globalizing work. A wide variety of social networking activities are illustrated in figure 2.



**Figure 2. Popular Social Networking Activities (percentage of online weekly activities by teens)**

**Source:** Creating & Connection// Research and Guidelines on Online Social – and Educational – Networking, (July 2007)

How can educators adapt this self-driven energy of the youths to everyone’s advantage? Although a source of learning enthusiasm exists, ready to be tapped, conflicts are important to note. Issues for teaching practitioners faced with ICTs in the classroom are seen thus as outlined by Mason & Rennie (2008, pp.139-145):

1. Workload seems to increase, at least in perception with the increase of (social) interactions; it is also seen as a diminishment of real content.
2. Promotion of technology is seen as a diminishment or threat to the current or traditional teaching roles.
3. Lacking skills and guidance support doesn’t empower teachers.
4. Intellectual property rights of teachers’ materials come under threat (with such fluid exchange of information).

Thus, in a society structured around the social institution of education, exceptionally important in the institution is to human civilization, both the conflicts and inevitable development of the two technologies in the classroom will not be avoided.

Yet, opposition of phone addicts, *texters*, social network junkies and so on, especially in the classroom itself is nearly as tough as the old institution 'Education'. Unrest, like taking on phones or with others verbally, in class is seen as a resistance to the classroom environment, tradition and culture.

Learning culture is based on the skills of the teachers, of that teachers' dominance and require the one-way students' reception of information (Mifsud, 2005, p.241). Furthermore, Sergerstad (2005, p.331) concludes that text messaging: "for pragmatic reasons of the small-interface asynchronous communication development (of small portable devices) shows syntactical and lexical (in language and punctuation equally) reductions". This economizing of the language can simply be seen as 'different communication' but more likely seen as counter-productive to education. For some, using a phone or checking online is not a clear choice but a hazy 'need', wherein the essay by Woong Ki Park (2005, pp.253-271) shows how people can get *psychologically dependent* (addicted) to mobile phones and media, which, also brings with it habitual ritualizing, withdrawal symptoms and depression problems when usage gets out of balance. Since the *access to ICTs is rarely ideal and unrestricted* (Kirkwood & Price, 2005 quoted in Mason & Rennie, 2008, p.134), institutions fear that more ICTs lead to less control and less hold over target-driven and measurable goals (Mason & Rennie, 2008, p.147).

If phone, for texting or calling in class is a problem, then, and habitual 'social networking' will have equal draws and drawbacks. "Facebook users may feel socially successful in cyberspace but they are more likely to perform poorly in exams; the majority of students who use Facebook every day are underachieving by as much as an entire grade compared with those who shun the site" (Leake & Warren, 2009).

Most readers of this article understand (or agree) that, *there is a strong critique of the scholarly inputs of E-learning sources* (Mason & Rennie, 2008, p.6). The changes that technology brings are fundamental and not always permanent, and therefore often regarded with a wary eye. For example,

Web 2.0 is sporadically seen as a disruptive technology because the potential for it change the model of higher education from the traditional classroom framework to an asynchronous mode. Institutions of higher education historically do not cope well with disruption, especially in the short term. (Thompson, 2007. pp5 quoted in Mason & Rennie, 2008, p.40)

Support for handhelds or mobile phones in learning is not clear-cut but support for computer and social software based learning is. The former or device use in the classroom is dependent on what the students do and can do. Students are often using phones in class, to communicate, and will do so until the phone (or student) is banned as earlier mentioned; what students can do with a phone at this time is limited due to the interfaces (small screen, limited keyboard, little memory storage, formatting problems which are less pronounced in personal computer interfaces). Simple functions do not blend well with a complex learning environment. In deed, towards the end of 2010, Gartner<sup>35</sup> predicted that:

Worldwide mobile connections will reach 5.6 billion in 2011, up 11 percent from 5 billion connections in 2010; Gartner, Inc. maintained that Mobile data

<sup>35</sup> Gartner is the IT professional that addresses IT issues

services revenue would total \$314.7 billion in 2011, a 22.5 percent increase from 2010 revenue of \$257 billion (Gartner, 2011)

In confirmation of their 2010 predication Gartner, analysts noted that,

2011 redefined the landscape of the device market. “The use of applications such as e-mail, social networking and Internet access, that were traditionally the domain of the PC, are now being used across media tablets and smartphones, making these devices in some cases more valued and attractive propositions,”

The above conclusion was drawn from the fact that in 2011 over 5.6 billion mobile phones are in use worldwide. This represents 79.86 percent of the global population (Wikipedia, 2012); out of that population, Malaysia ranked 38<sup>th</sup> highest mobile hand phone user. It is estimated that about 30,379,000 of this device is in-use in Malaysia thereby representing 106% of the country’s population. According to 2006 study by Synovate, sixty percent of Asian consumers are unable to live without their mobile phone. This study noted that, when asked which digital device they are unable to live without, 60% of Asians voted for their mobile phone, with consumers in Hong Kong (76%), Malaysia (71%), and Thailand (69%) particularly mobile reliant.

However, support for social network and software use is already more popular, with teachers “routinely assigning students homework that requires them to access the internet (Lang, 2007)”. Technology-aided learning successes, according to Mason & Rennie (2008, p.3), are proven through Wikipedia, blogging, folksonomy and so on. Supporting both points (computer software bettering the limited handhelds) is seen with “proper technology equipment or systems can lead to equally-more or better critical thinking skills along with improvements of teacher guidance (or the control) in the classroom” (Mifsud, 2005, p.243).

The diversity of communicating online, such as receiving updates on your friends’ pages and chatting with them or even creating communal online social groups create skills that build the foundation of traditional literacy, research skills, technical skills, and critical analysis skills taught in the classroom (Albanese, 2006 cited in Klopfer *et al.*, 2009, p.10).

The most popular social networking site, Facebook, in the Leake and Warren article (2009), defended its site as a good tool for learners as parents since it utilizes many functions that are student-friendly and allow parents or supervisors to monitor progress. “Online social network tools may be of particular utility for individuals who otherwise have difficulties forming and maintaining both strong and weak [social] ties” (Bargh & McKenna, 2004). So the benefits are not just general but also deeper and specific in cases. “Some researches have shown for example, that the Internet might help individuals with low psychological well-being due to few ties to friends and neighbours (Ibid)”.

A discussion of combining the literature so far with a possible outcome is a good opportunity to introduce the *blended learning* technique. This involves a range of techniques, especially mixing face-to-face interactions with online interactions. There are three key factors for social networking and learning to blend successfully. Firstly, positive feedback helps accelerate changes when integrating new technological features and negative feedback enforces change-resistance to promote stability. Secondly, system ecology is the overall interaction of positive and negative factors that are in turn carefully monitored. Thirdly, self-organization as a niche experience for learners that are seeking online resources (Mason & Rennie, 2008. p26; p31).

To be more specific there are strengths and disadvantages of Social Networking in the Classroom given by Mason & Rennie (2008, p.77-80): The strengths show in the flexible internet access with

written records; also, social connection often leads to face to face connections; and ultimately social networking is a practise likely to stay. The disadvantages are seen in the over-exposure of one's private life, improperly constructed web content and traditional conflicts of distractedly checking in on the social life during class time.

Altogether, it is also clear that the internet (and web-based phones) have presented individuals with real possibilities for self-expression, conversation and creative work. "The rise of 'blogging', the exchanges facilitated through peer-to-peer networks, the multiplication of information sources and extension of previously restricted mediated spaces is just some of the examples of symbolic activity opened up by the Net" (Morley & Curran, 2006, p.278).

In summary, many studies support the use of social software more than that of using handheld devices. Both technologies are distracting when used improperly and similarly, both can be used to enhance the learning environment especially as the learners of the post 1980s are becoming teachers too. The system is changing whether people support or oppose the change. Using computers and communication and social software has more support for it since its interfaces are easier to monitor and the students using them are easier guided through networking. Handheld devices are more personal and the interfaces are less conducive to learning. From the literature, therefore, we can surmise that unguided overuse of telephony in the classroom will be more negative for both the teacher and student than overuse of social networking. Normal or guided use of telephony will bring fewer benefits than that of social networking. Underuse of both technologies will likely be detrimental to a student's progress and it is possible that *detrimental* will turn into impossible, when the educational masters make either social networking or mobile devices a required medium for instruction.

The research scope focuses primarily on the degree of connection students experience by way of devices such as mobile phones and on sites such as Facebook or Twitter. The research also determines what the grade point averages (GPAs) are for the same respondents for comparison. Herein, this study aimed to determine if students' utilization of these devices both during lecture sessions and outside this period influence their academic grade in positive or negative bearing.

The research uses the Interpretive Social Science method. Although the bank of closed-ended questions are of a Positivist nature, the limited hypothesis and the fact the report questions some demographics give the analysis the opportunity to observe trends in a less objective, more subjective point of view. The research does not go as far as Critical analysis since, in the end, the data are presented as it is and not extrapolated at length for a universally subjective viewpoint. Quantitative data used here is as to represent the greatest number of respondents in the short time frame available.

Thus, convenience and casual snowball sampling procedures was employed to identify respondents, using non-probability sampling styles. Purposive sampling was used occasionally throughout to try avoiding overrepresentation of people with certain traits. In the case of this research, the purposive focused on mix students apparently conducting more studious activities (like going to the library) with those eating or 'hanging out'. This is done in an attempt to find a balance or proper spread of respondents of differing GPA/CGPA<sup>36</sup> as well as mobile phone and social networking users. A balance of gender between male and female would be beneficial too. The research population are currently attending students of an educational institution possessing normal mental faculties with a definable Grade Point or Collective Grade Point Average.

The sample location is near the city Kuching, Sarawak, Malaysia, in the District of Kota Samarahan. Hence, the study was carried out within the public areas of University Malaysia Sarawak (UNIMAS),

<sup>36</sup> CGPA or GPA is a nearly-universal international method of measuring students' progress in each institution

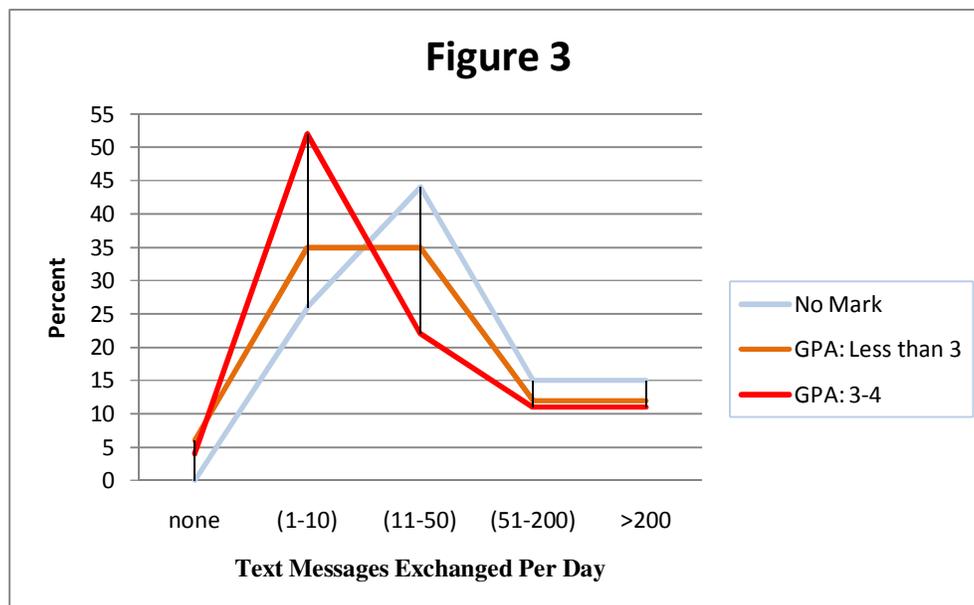
such as common areas of pedestrian travel, food courts, market areas or the library. The choice of UNIMAS as study areas is not farfetched. Because the institution has always been noted as the first university in Sarawak and part of its motto reads; “we spearhead ideas and effort to shine in the Land of the Hornbills”. Besides, it has the highest of number of students’ population in Sarawak and a soaring number of both local and international students.

The study focused on undergraduate students in the main campus only. Although, the sample may appear small given the university’s undergraduate population, our research population’s characteristic was structured in such way that our respondents streamlined in certain specifics. What is more, our data collection gave preference to student’s willingness to participate, convenience of the respondents but more importantly to students residing within the university’s hostels.

In all, 105 respondents from UNIMAS completed this research questionnaire. The analysis is divided into raw facts of interest or importance and then facts and results pertaining to the Research Questions.

### Classroom and ICT Usage

The 105 respondents filled in self-administered questionnaires. These respondents as mentioned above were selected from a pool of undergraduate students at UNIMAS. Our respondents cut-across various disciplines in this university. Males and females were represented with 32 and 73 respondents respectively, which is a very rough representation of the gender population in UNIMAS (that is 70% female 30% male students). In regards to differences of habits or classroom successes between genders, either there are too few respondents<sup>37</sup> or there is no differentiation worthy of note in the analysis. Thus, our analysis explored the correlations between students’ behaviours, academic performances on one side and the usage of communication technology on the other side. As the title of this study epitomizes, we seek to determine whether this technology is creating mayhem or enhancing students’ academic performances and at the same augmenting their social life.



<sup>37</sup> Please Note: Those reporting ‘no mark’ are those students within their first semester and don’t have a GPA or cGPA yet.

The above graph explained, the level of socially-connectedness (*by Handheld devices*) of students and its relation to their studies' performances. Figure 3<sup>38</sup> shows the percentage of each grade reported. It corresponds to the number of text messages sent per day. Of students with a Grade Point or Cumulative Grade Point Average (GPA, also cGPA) between 3 and 4, 74% send and receive between 1 and 50 text messages per day. This is on an average of 52% peak sending between 1 and 10. Of GPA Less than 3, 70% of those respondents also exchanged between 1 and 50 text messages with a peak spread evenly between the two points. Students in their first semester or otherwise not marked also exchanged text messages 1 to 50 times per day representing 70% of those respondents; the peak however rests at 44% between 11-50 text messages.

From the peaks for GPAs 0.0-4.0, students are shown to perform better when they exchange around 1-10 text messages per day and perform less when they exchange around 11-50 text messages per day. Students with no mark are mostly new students and the 11-50 message peak shows that students exchange more *texts* (text messages) perhaps before they settle down to doing class work. These three trends continue for 51 or more exchanged text messages but the margin between them totals only 4%, which is insignificant. Less than 4% of students reported they exchange no text messages per day.

Limiting text messages to below 11 but sending at least one per day shows to be most beneficial, academically. A complete absence of handheld text messaging is unlikely and many students will limit themselves to less than 51 texts per day, but those students sending more than 10 per day show a decrease in Grade Point Average.

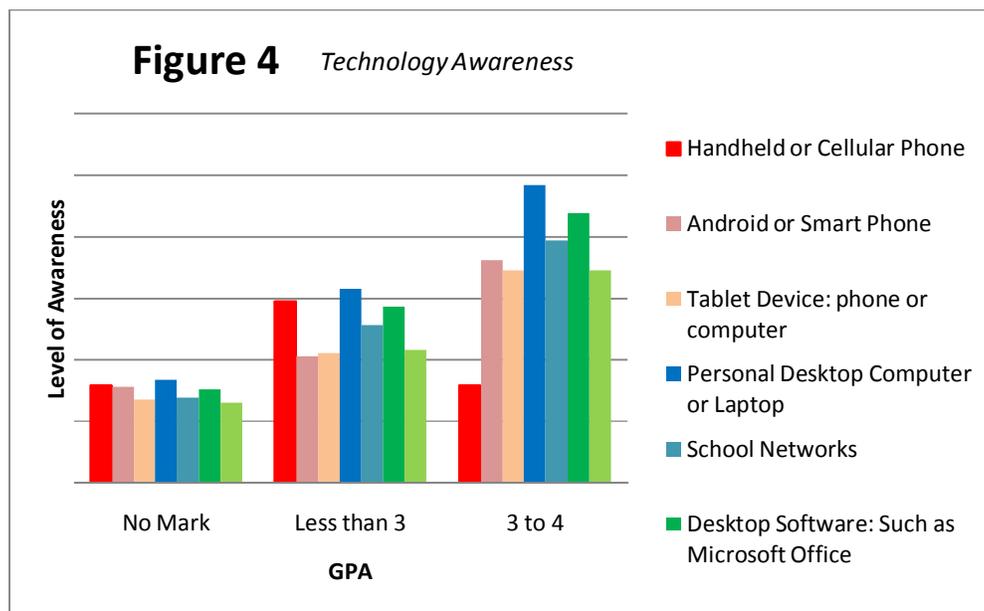
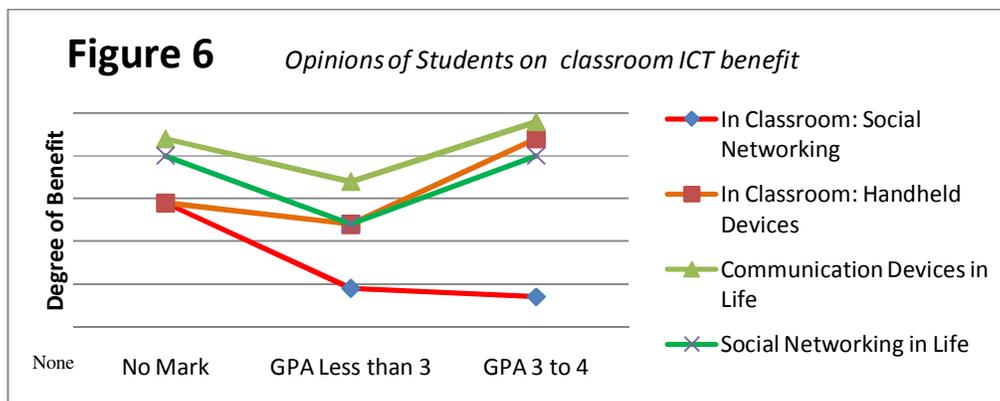
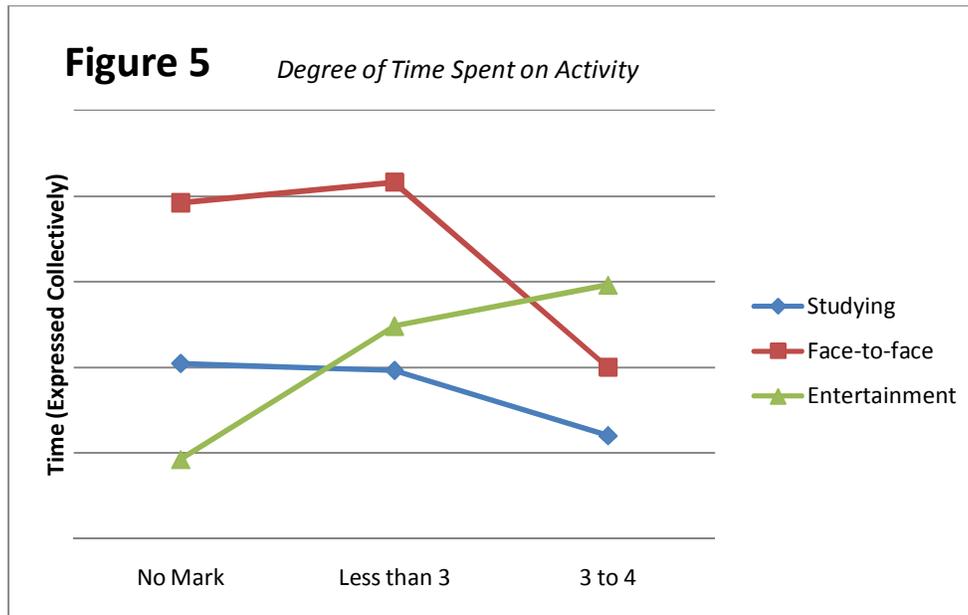


Figure 4 shows technology awareness. Awareness was calculated by assigning increasing integers to increasing awareness values and multiplied by the percentage of students represented by each grade point. Overall, there is an increase of awareness seen by the bar chart in relation to increasing grades. Significantly, however, Handheld or Cellular Phone use is the **only** value of awareness for students of GPA Less than 3, that is above students of GPA 3 to 4. The lower-marked students are almost twice as

<sup>38</sup> Note: Those reporting 'no mark' are those students within their first semester and don't have a GPA or cGPA yet.

confident in the use of handhelds as higher-graded students. This is significant because it goes against the other trends of increased awareness for better-marked students and implies comfort of handheld use before other technology use may be significantly negative. It is logical to understand why students with 3 to 4 GPA fared better than others. They practiced target utilization of object that enhances their academic performances. In comparison to other clusters in the graph, they appeared to take more interests in objects that will increase their GPA. These includes PC, Desktop soft wares etc. These tool or objects are used during lecture seasons. This is more clearly illustrated in figures 5 and 6.



Figures 5 and 6 show that social networking and communicating in general are preferred less by students with GPAs higher than 3 than GPAs less than 3. Figure 5 reports a notable difference between face-to-face interactions in this data. That students with GPAs 3.0 or higher indulge in entertainment more but studying and face-to-face less than entertainment implies that they are better time managers, assuming respondents have similar intelligence and work ethics. Figure 6 highlights that although students are seeing social networking as beneficial, compared to seeing the benefits of handhelds in general; social networking is seen to be as substantially less beneficial in the classroom for all marked students. Only one student gave the opinion that Handhelds and another that Social Networking were 'negatively' benefiting the classroom environment, so as groups, students did not report that they feel using technology in the classroom was counterproductive.

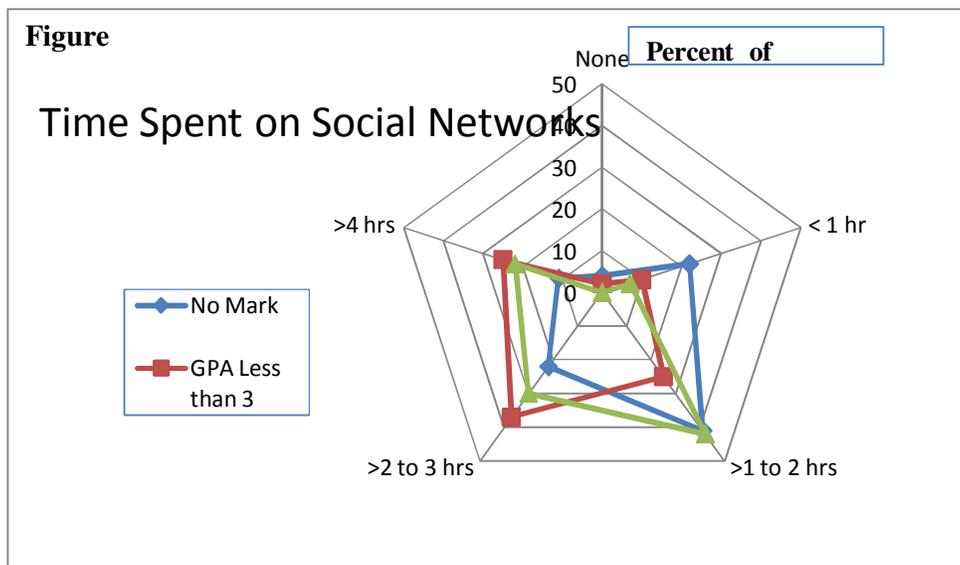


Figure 7 shows time spent per day on social networking sites such as Facebook. New ‘no-mark’ students and students with GPA higher than 3 have a peak usage of 1 to 2 hours per day; students with GPA marked less than three peaked around one hour more per day. No-mark students tend to engage in less social networking, perhaps due to limitations of age, upbringing and access. Students with marked GPAs use social networking more, showing their comfort with the browser-based software is better, but, the trend shows that after the first semester, students faring better academically will use social networking but less-so than those with lower grades.

Furthermore, Figure 4 above shows that students with better grades are more technologically aware in general than those students with GPA less than 3. Adding to this, all students with a current GPA are both more technologically aware than those students without GPAs, perhaps since they are in their first semester.

**Habits and Students’ Time Management**

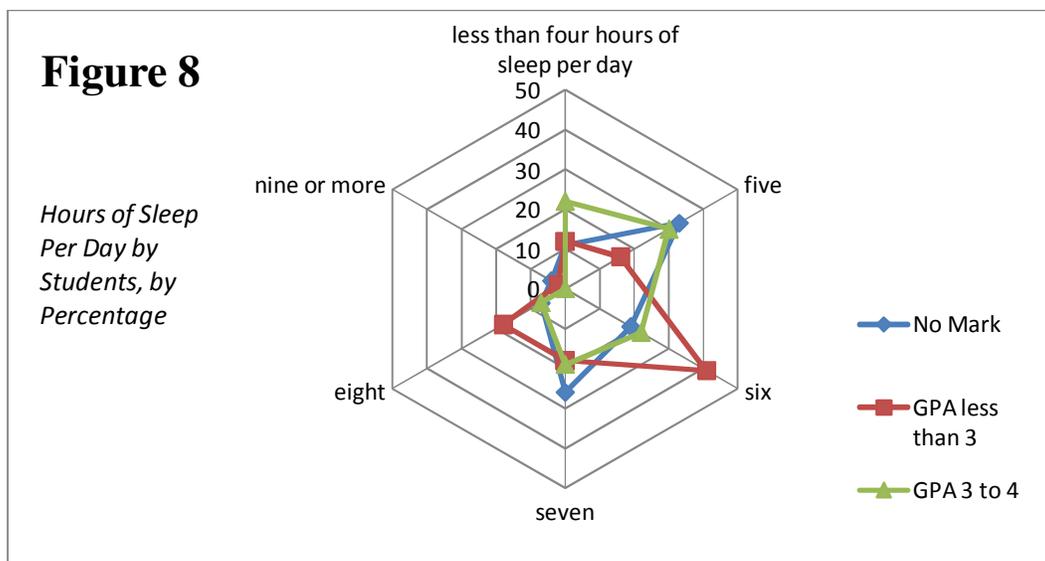


Figure 8 shows sleeping habits of students to help ascertain habits and time management practice. Students with no-mark showed an evenly-spread bipolarity to sleep between five to seven hours. Those

with GPA less than 3, more than 90%, slept from five to eight hours, while for those with GPA 3 to 4, more than 90% slept seven hours or less. There is a slight tendency for students of higher GPA to sleep less and those of lower GPA to sleep more. Additionally, the last data collected was *Time Spent Online* per day by students of the three grade classes seen throughout. The tendencies gave no significant data to the report as all these grade classes were relatively equal. There was a slight tendency for non-marked students to spend more time online than marked ones.

In sum, Students that send more than 10 text messages per day and are more comfortable with their cellular phone than any other device tend to fare poorer in grade points than students, which send less than 10 text messages per day and are more comfortable with other technologies or devices. Social communication in general is less regarded as a benefit for students of higher grade than of those students of lower grade; the use of social networking in the same regards follows these trends. There is an implication that students of GPA 3-4 are better time managers than those unmarked or with GPA less than 3.0.

### **Weighing the Pros and Cons of Handheld Communication Device in the Classroom**

This study set out to determine whether the impact of social media and handheld communications devices is in favour of or against students' academic achievement, and to what degree the results show. Although limited in nature, certain facts are gleaned through this research among the UNIMAS' students. It has been seen that students exchange text messages and use social networking media within the confines of the questionnaire, showing that they do not use these technologies outside the expected reasonable boundaries. The trends show that students relying on cellular phones and text messaging, more often believing there are greater benefits for using social networking browser-based software in the classroom, will maintain lower grades. The report also found that new students are less familiar with the full range of Information and Communication Technologies and students with higher grades are most familiar, excepting cell phone familiarity. Higher-graded students also appear to spread out their use of time more evenly over various activities, in studying, face-to-face 'hanging out' or indulging in entertainment; this implies higher-graded students are not necessarily more intelligent but better time organizers, or more efficient with their time; this is corroborated by the fact that higher-graded students sleep slightly less than lower graded ones.

The Literature Review concluded by saying handheld devices are less beneficial than social networking, and also claims that using either forms in the classroom is more detrimental than using them outside. The students are notably accepting of technology use in general and no surveyed groups, graded high, low or without grade, felt that the technologies were counterproductive to learning, although academic practitioners in the literature disagree. The literature corresponds with the fact and theory that students will respond positively to a light integration of new ICTs and negatively to overuse and underuse, either in the classroom or in general.

In view of the General Hypothesis, the time spent using handhelds or social networking in the class would be of negative impact to the classroom dynamic but acceptable to students; there is a fine line of *correct use* between under and over usage. A general familiarity of the technologies increases with increase of performance in class (or visa-versa), but specific familiarity of handheld cellular phones over other technologies is in line with a decrease in class performance. Surprisingly, higher-graded students use social networking more than lower-graded students, but still within reasonable comparative limits.

The discussion concludes in reporting that in general the literature and data agree on the matter of students correctly, overly or diminutively using mobile phones or social networking sites. Students that

overuse or underuse technologies do not do as well in classes. Using a cell phone in class is seen as more acceptable than checking into social networking sites, according to students, but according to practitioners the phones are more distracting, probably because they are easier to hide and quicker to use in especially larger classes. The report interpreted trends in time management to be better for higher graded students.

## CONCLUSION

These researchers set out to explore whether students are wasting time using Information and Communication Technologies, specifically phones and social-networking or pioneering innovations that are set to become part of our everyday life. The report was, is and will state that conflicts in learning environments require students to pay less attention to their social lives in class and more to the lecture; however, this format appears to be outdated. The study looked at whether the impact on students using their phones or going online leans towards negative or positive. It found a moderately constrained use of handheld phones over the unconstrained or unused habits to be better in light of grade point averages. Social networking is used more liberally but seen to be more distracting in studies by the higher graded students but the time spent online shows no trends to confirm whether general internet or social networking use is beneficial, neutral or counterproductive.

In view of the above findings, we can conclude that the overuse of handheld communication devices in the classroom distracts students and thus the researchers conclude that cutting them out of classrooms entirely, unless the subject matter *is* the devices, for both academic practitioners and students, will bring benefit. Additionally, students require or at least benefit from greater exposure to technology including social networking software, excepting handheld ICTs, to perform better in classes. Furthermore, a more in-depth study is required to analysis the use of online social networking, in times of duration, to determine properly where the optimal balance exists.

Finally, students appear to benefit from better time management and awareness of as many technologies and the benefits of a spread of activities (such as studying or going to watch a movie) as possible. Students oversleeping or over-studying are gaining no benefit from the extra time spent on these matters.

## REFERENCES

- Global Faces and Networked Places, (March, 2009). The Neilson Company [http://socialnetworking.procon.org/sourcefiles/nielsen\\_globalfaces\\_mar09.pdf](http://socialnetworking.procon.org/sourcefiles/nielsen_globalfaces_mar09.pdf) [Accessed: 18/11/2011]
- Gartner. (2011). Why Gartner? <http://www.gartner.com/it/page.jsp?id=1759714> (accessed 7/3/2012)
- Klopper, E., Osterweil, S. Groff, J. and Haas, J. (2009). Using the technology of today, in the classroom today. The Education Arcade, MIT <http://hub.mspnet.org/index.cfm/18746> [Accessed: 18/11/2011].
- Lang, V. (July, 2007). Creating & Connection// Research and Guidelines on Online Social – and Educational – Networking. National School Boards Association. Grunwald Associates LLC. <http://www.scribd.com/doc/239803/creating-and-connecting> [Accessed: 18/11/2011]
- Leake, J. and Warren, G. (2009). Facebook fans do worse in exams. The Sunday Times <http://www.timesonline.co.uk/tol/news/uk/education/article6078321.ece> [Accessed: 18/11/ 2011].
- Leiner, B.M., Cerf, V.G., Clark, D.D., Kahn, R.E., Kleinrock, L., Daniel, C., Lynch, D.C., Postel, J., Roberts, L.G. and Wolff, S. (1989). A Brief History of the Internet, Histories of the Internet. Internet Society <http://www.isoc.org/internet/history/brief.shtml> [Accessed: 20/11/2011].

- Ling, R. and Pedersen, P.E. (Eds), (2005). *Mobile Communications: Re-negotiation of the Social Sphere*. London: Springer-Verlag London.
- McKenna, K.Y.A. and Bargh, J.A. (2004). *The Internet and Social Life*. Annual Review of Psychology. New York: New York University
- Mason, R., and Rennie, F., (2008). *E-Learning and Social Networking Handbook: Resources for Higher Education*. New York: Routledge.
- Mifsud, L. (2005). *Changing Learning and Teaching Cultures?* (pp 237-252).
- Miyata, K., Wellman, B. and Boase, J., *The Wired – and Wireless – Japanese: Webphones, PCs and Social Networks* (pp. 427-449).
- Morley, J.C. (2006). Morley, J.C. and Curran, J. (Eds). *Media and Cultural Theory*. New York: Routledge.
- Park, W.K. *Mobile Phone Addiction* (pp 253-272). Ling, R. and Pedersen, P.E. (Eds), (2005). *Mobile Communications: Re-negotiation of the Social Sphere*. London: Springer-Verlag London LTD.
- Sergerstad, Y.H. (2003). *Language Use in Swedish Mobile Text Messaging* (pp313-331).
- Smith, M. (April, 2009). *Engineering Education: Today in History*” Blog: First public cell phone call. Engineering Pathway [Accessed: 20/11/2011]. <http://www.k-grayengineeringeducation.com/blog/index.php/2009/04/03/engineering-education-today-in-history-blog-first-public-cell-phone-call-2/> (accessed on 11/12/2011)
- Synovate. (2006). <http://www.synovate.com/> (accessed on 11/12/2011)
- Watkins, S.C. (2009). *The Young and the Digital*. Boston: Beacon Press.
- Wikipedia. (2012). *List of countries by number of mobile phones in use* (Accessed 7/3/2012).