

Original Paper

Languages, Code-Switching Practice and Primary Functions of Facebook among University Students

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The purpose of this study was to determine the languages used in Facebook wall posts and comments, code-switching practice of these multilingual university students and functional orientation of their Facebook wall posts and comments. This study was mainly based on the investigation of the latest 50 Facebook comments of 100 Malay public university students in Malaysia. The first language of these university students is Bahasa Malaysia and English is their second language. The content analysis of wall posts was used to analyze the code-switching language used in the Facebook and the primary functions of the Facebook comments by categorizing them using Thurlow's (2003) SMS categories that contain nine orientations. The findings indicate that majority of the Facebook users comments are categorized under friendship maintenance orientation to maintain existing relationships and create new friendships. The findings indicate heavily abbreviated languages in English and Bahasa Malaysia. It is found that situational code-switching between English and Bahasa Malaysia is heavily utilized by multi-lingual Facebook users. The research is significant in a number of ways as it offers the communication culture of Facebook among public university students in Malaysia. In addition, the study indicates that Social Network Sites can also be a potential teaching and learning tool to teach English since learners nowadays are members of various Social Network Sites.

Keywords

wall posts, code-switching, languages, social network sites, computer-mediated discourse

1. Introduction

There is a discrepancy between students' real lives with school content. In classroom, they write for academic purposes with their lecturers and their friends as their audience. Whereas outside of classrooms, they assume the roles of virtual entrepreneurs, authors of blogs, expert gamers, active participants in online communities intellectually contributing and exchanging opinions with members of their communities. Educators often forget to take account of the students' rich lives outside of

classrooms. Thinking and learning for Digital Age are defined and shaped by technology. Digital learners expect learning as a series of active, interesting and offer gratification activities. So when they encounter traditional learning environments and traditional learning instructions, they switch off their learning mode.

The social network sites can act as catalysts to understand the relationship between tools and tasks which influence learning for digital learners in networked learning environments. It is imperative for educators to investigate the languages used in these Social Network Sites (SNSs). The technology used in social network sites influences the growing use of informal language as social network sites have been accused for poor spelling and the decline of Standard English among university students. However the social network sites do present rich learning environments. The findings of the study will provide input on language of the SNSs and language learning in networked learning environments.

In Malaysia, English is considered as a second language since English is taught since primary school. Since Malaysia is a multiracial country, Malaysians are expected to be bilingual or multilingual. Even if Bahasa Malaysia is considered as the national language, other languages such as Mandarin, Tamil, Hokkien, Hindi, Telagu and Arabic are spoken by Malaysians. Thus code-switching is not a novel linguistic phenomenon in Malaysia. The existence of Bahasa rojak is referred as combination of two or more languages in which one language acts as a base language. An example of bahasa rojak is Manglish (Malaysian English) which combines phrases from Hokkien, Malay, Mandarin, and Telagu with English words.

The study is crucial as the study investigates language in Facebook as it represents social network sites. Language educators and policy makers are more exposed and prepared for impending language changes and university students' language proficiency due to the popularity of social network sites among university students. The knowledge will be beneficial to make necessary changes in language policy and the designs of language learning in networked learning environments. This study primary investigates the languages used in Facebook wall posts and comments, code-switching practice of these multilingual university students and functional orientations of their Facebook wall posts and comments.

2. Literature Review

Social network sites require university students to handle cognitive and social processes such as identity formation, critical literacy and information dissemination. The conversational tone of social network sites contributes to its popularity as knowledge is effectively shared through a process of discussing, storytelling and collaborative editing contributes to their popularity among university students. University students employ social network sites to support their existing relationships. Boyd & Ellison (2007) define social network sites as web-based services that allow users to construct a public or private profile within a system, a list of users' friends and a view of their list of connections and those made by others within that system. These university students negotiate their different roles in

social network sites to achieve successful communication with multiple personalities.

Social network users create their profiles by including their pictures and personal details. Facebook users communicate with their friends by posting on their walls or their friends' walls. Users create a list of friends by sending, accepting and rejecting requests to befriend other members. Another way to make friends is to join communities or create groups in the particular network sites. Social network theories study individual users and the relationship between these users. Nodes are the individual users within the networks, and ties are the relationships between the users. Weak ties refer to casual relationships whereas strong ties refer to close relationships. The relationships between the nodes in social network sites explain individuals' choices in their relationships with others. In online social network, there are vaster weaker ties among the nodes.

The demands and functions imposed on computer-mediated communication (CMD) produce varieties of formal properties of the language used. Common sense would determine that people use technology that is appropriate for the task. Computer mediated communication (CMC) is communication produced when humans interact with one another using computers (Herring, 2001). Computer based communication (CMC) encompasses of e-mail, online discussions, instant messenger, forum discussions, text messages, blogs, chat rooms, social network sites and any web-mediated communications which can be asynchronous, synchronous or the combination of both. CMC is similar to spoken language than written language (Crystal, 2006).

The kind of social subject constructed through IM Practices and how social identities shape the nature of IM practices. In order to receive social benefits of online communication networks, one is required to participate and contribute actively in the discussions of the networks (Wellman, 2001). Holloway and Valentine (2003) agree that one of important functions of online networks is the maintenance of offline social networks. In order to be proficient IM users, one must perform a version of one's self; shifting voices for many audiences at once. Writers in digital environments frequently address and are addressed by multiple audiences simultaneously. Users draw on textual chains that exist through the textual history of each exchange and the larger textual network (New London Group, 1996). The way people learn languages independently through the use of a growing range of Web-based tools that are presented in the context of a more participatory framework (O'Reilly, 2005). In addition, electronic communications affect interesting variations in written language use (Biesenbach-Lucas & Wiesenforth, 2001).

Boyd and Ellison (2007) observe that users focus on impression management, friendship management, network structure and bridging of offline and online social networks when they create their profiles and list of friends in social network sites. Carroll (2008) notes that by 2005 social network sites were considered as a Web 2.0 technology with the potential for language learning purposes. Harrison and Thomas (2009) adopt ethnographic approach to examine social network sites (SNS) and focuses on Livemocha, which encourage collaboration between foreign language learners who utilize these social

network sites to explore new relationships, however longitudinal studies are needed as to understand complicated processes of mediation in online community formation and maintenance.

It has been debated about the negative impact of CMC on formal written language. Crystal (2001) warns the decline of language skills of young people. Most of the teenagers believe computer mediated communication (CMC) is not writing as for them, technology tools used in CMC are channels of communication. Lenhart, Arafeh, Smith and Macgill (2008) in their survey of The Parent & Teen Survey on Writing reveal that teenagers know the difference between academic writing and casual writing they use with their friends and they are aware that informal writing does appear in their academic writing. Users in Myspace use a lot of profanity words (Hinduja and Patchin, 2008). This has raised a lot of concerns from the public about the standard of English among the youth. A survey carried out by English Spelling society to investigate the impact of the chat rooms and social network sites on English language to 18 to 24 years old reveals that these online sites have encouraged users to misspell (2010). CMC demands easier and faster communication so the conventional practice of CMC is not to conform to the rules of the language. Baron (2009) emphasizes that digital media influence people to be more tolerance on language change as people pay less attention to language rules as they are empowered with more control on their communication.

However, other findings have shown CMC influences students to be more creative. Bergs (2006) indicates that younger users experiment with different language variants in online communication than face-to-face communication. CMC is situational communication which offers rich linguistic diversity (Androutsopoulos, 2006). It is consistent with the findings in Tagliamonte and Denis' (2008) study of 72 teenagers and their Instant Messages which were compared with their spoken corpus. The findings reveal these teenagers possess adequate linguistic ability to combine the mixture of colloquial and non-standard features with standard register in their Instant messages. Thelwall (2009) in his research of 173,730 comments of Myspace find the language is different from formal written Language as the language is rich of slangs, non-standard spellings and sentence fragments as the contexts require users to express their emotion quickly.

Code-switching is practiced in bilingual and multilingual societies as manifested in other text messages studies. There are some researches which in code-switching comparing English being used with other languages. Deumert and Masinyana (2008) reveal in their study of 22 bilingual South Africans texters (English/isiXhosa) that bilingual texters rely on their extensive vocabulary and sentence structure and knowledge about the languages to overcome constraints imposed by text messages. ALX Zarate (2010) investigates 104 Mexican university students and created 42 text messages. The study suggests the participants use code-switching (Spanish/English) so they could economize their text messages and it is the habit they practice in face-to-face communication. Husni Abu Bakar(2009) interviews native speakers of Kuala Lumpur Malay (KL Malay) which indicate code-switching is practiced by multilingual KL Malay speakers as there are significant number of English words are injected in KL

Malay lexicon. This is because of English is treated as the second language in Malaysia. KL Malay speakers practice code-switching in two patterns; individual words and strings of words.

3. Research Objectives

This study investigated the wall posts found in Facebook on profile page where friends can post messages to a user which are visible to those who can gain access to the user's wall. The study aimed to achieve these objectives:

- a. To determine the languages of Facebook among Malaysian university students
- b. To determine the occurrence of code-switching in the students' wall posts and comments
- c. To ascertain the purpose of wall posts and comments

4. Methodology

The study was conducted on 100 Malay university students of 18-24 years old who have been active Facebook users for more than a year. There are 42 male students and 58 female students whose mother tongue is Bahasa Malaysia. All of them learn third languages such as Arabic, Mandarin, Japanese and Korean. The study concentrated on 50 earliest wall posts and their comments which were evaluated by using content analysis in analyzing the subjects' wall posts. All messages have been made anonymized by the researchers for confidentiality purposes. A computer-mediated discourse analysis, applying the coding and counting approach is used to analyze discourse of social network sites (Herring, 2004). The repeated analysis of data is derived from Glaser and Strauss's (1967) constant comparison model, which allow for coding categories to emerge from the analysis process. Glaser and Strauss's Grounded theory which is "an interpretative research methodology frequently used by social science researchers seeking to discover the underlying social processes shaping interaction. The methodology is useful to create knowledge about the behavioural patterns of a group" (McCallin, 2003). The topics or purposes of Facebook wall posts were determined by using Thurlow's (2003) SMS categories. The categories are arranged according to the "Informational-practical orientation, Informational-relational orientation, Practical arrangement orientation, self arrangement orientation, salutary orientation, Friendship maintenance orientation, Romantic orientation, Sexual orientation and Chain messages." The data was read twice to establish familiarity with the data and to identify emergent trends based on research questions through repeated analysis.

5. Findings and Discussion

5.1 The Languages of Wall Posts and Comments

5000 wall posts and 19728 comments in 100 Facebook accounts were analyzed. There is the average of 3.94 comments for each wall post. There are 2878 wall posts in Bahasa Malaysia. Bahasa Malaysia is the national language of Malaysia and the mother tongue for the Malays. The results reveal students

write in their wall posts and comments using Bahasa Malaysia, the standard Bahasa Melayu. This is expected as Bahasa Malaysia is their mother tongue. The wall posts reveal new orthographic forms of Bahasa Malaysia and the frequent use of dialectical Malay such as Bahasa Melayu Kedah and Bahasa Melayu Kelantan, when communicating with friends from similar states. There are fourteen states in Malaysia and they have their own Bahasa Melayu dialects. It is interesting to note that there are 1534 wall posts in English. It indicates English plays the second most important language in the students' lives. In addition, there are 568 wall posts written in combination of Bahasa Malaysia and English. This finding indicates the occurrence of code-switching among the students. In addition, there are 14 wall posts in other foreign languages such as Spanish, Mandarin, Korean and Arabic. This occurrence is because the students studied other foreign languages at the university and the growing popularity of Korean pop culture among the students. There are two wall posts using emoticons and four wall posts written in numbers.

Table 1. The languages of wall posts

Languages	Wallposts
Bahasa Malaysia	2878
English	1534
Other languages (Spanish, Mandarin, Korean)	14
Bahasa Malaysia & English	568
Emoticons	2
Numbers	4
Total	5000

In Facebook's comments, the predominant language used is Bahasa Malaysia as there are 18,676 comments in Bahasa Malaysia. There are only 570 comments in English. There are 26 comments in Spanish, Mandarin and Korean. It is interesting to note that there are 444 comments in Bahasa Malaysia and English. This finding indicates the occurrence of code-switching in Facebook comments. There are 4 comments in English and Japanese in which English is being used as the base language. It is interesting to note that code-switching involves other foreign languages, English is used as the base language. There are four comments in emoticons. The language of the wall posts wouldn't determine the languages of the comments. Even though the wall posts are written in Bahasa Malaysia, it won't determine the comments would be in Bahasa Malaysia.

Table 2. The languages of comments

Languages	Comments
Bahasa Malaysia	18676
English	570
Other languages (Spanish, Mandarin, Korean)	26
Bahasa Malaysia & English	444
English & Japanese	4
Emoticons	8
Numbers	0
Total	19728

5.2 Code-Switching Practices

The findings indicate the students practice code-switching in their wall posts and comments. Code-switching occurs in wall posts and comments as the writers borrow individual words and string of words from English. Bahasa Malaysia is used as the base language. All the individual words and strings of words in English have their counterparts in Bahasa Malaysia. The findings suggest bilingual participants use their first language as the base language and borrow individual words and strings of words from the second language. In a study of text messaging among Malaysian university students, Latisha, Norizul and Nazira (2011) reveal that the texters combine English words and strings of words with Malay words. Haggan (2007) investigates texters in Kuwait which reveal some Arabic texts and show texters frequently transcribe Arabic texts using English alphabets in their English texts. Bilinguals often practice code-switching to communicate with others (Bullock & Toribio, 2009). Cárdenas-Claros and Isharyanti (2009) in a two month study of code-switching and code-mixing in a chatroom environment of twelve participants of Spanish and Indonesian backgrounds. The findings indicate technologically related terms and introductory terms invoke more code-switching and code-mixing from Spanish and Indonesian participants.

5.2.1 Individual Words

- W1 : Aku nk **share** dgn korg..nnti aku cri blik **playlist2** aku.
(I want to share with you, I will find back my playlist)
- W2 : dah start jd **housewife** ka
(Have you started to be a housewife?)
- W3: **sorry** lambat**approve** :)
(I am sorry for not approving you sooner)
- W4: **Thanks** sahabat
(Thanks my friend)
- W5: xyah nk **speechless**
(Don't be speechless)
- W6: **nex week** hari ahd **nesk** balikarau

(Next Sunday I will and tomorrow I will be back to Arau)

5.2.2 Strings of Words

- W7: **bdway thank you for choc** bole mkn bila **stress** nanti
(by the way thank you for chocolate .I can eat it when I am stress later)
- W8: nkm suk tidoq gakni. Haha **Good Luck** noh **final next week** nih :) Nk **off**
dah..byebye
(I am going to bed. Good-luck for your final next week. I will be offline. Bye bye.)
- W9: **Thanks for being honest** .. hang kawan terbaik pernah aku ada.. **swear** !
(Thanks for being honest. I swear that you are the best friend I ever have.)
- W10: kalu tidornyer pun lambat cmner nak bgn 9AM, **time management is vry important**
xkan itu pnkn di ajar, **if u get up 9am pun u donthvenuf sleep n its no no good**,
cmner nk masuk LA
(If you sleep late, you can't wake up at 9 a.m... time management is very important.
Do I have to teach you that, if you get up at 9 a.m., you don't have enough sleep and
it is not good as you can't learn well?)

5.3 Primary Functional Orientation

The students' majority functional orientation revolve around Friendship Maintenance Orientation as there are 1904 wall posts .There are 1818 wall posts on informational-relational orientation. The third highest is informational- practical orientation at 414.The fourth is chain messages at 312 wall posts .There are 296 wall posts on salutary orientation. There are only 148 wall posts on romantic orientation. This is because the existence of instant messaging and messages. There are only 96 wall posts on social arrangement orientation. Furthermore, there are only 12 wall posts on practical arrangement orientation. Yet, there is no message on sexual orientation.

Table 3. Primary Functional Orientation

Informational-Practical Orientation	414
Informational- Relational Orientation	1818
Friendship Maintenance Orientation	1904
Romantic Orientation	148
Social Arrangement Orientation	96
Salutary Orientation	296
Chain Messages	312
Practical Arrangement Orientation	12
Sexual Orientation	0

5.3.1 Informational-Practical Orientation

Posts in this category deal with practical requests for information as illustrated in W11 in which the writer enquired the whereabouts of the final examination. The students use the Facebook as a place for enquiry among their friends to gain practical information. Grimmelmann (2009) emphasizes on

Facebook culture which encompasses of social connectedness whereby users voluntarily share personal and social information.

W11: sila bg tahu sy lokasi exam bg semua paper
(Please inform me the venues for the examinations)

5.3.2 Informational- Relational Orientation

Posts in this category are more personal in nature such as personal requests or indications of personal feelings. The findings correlate with Hu et al's study on Instant Messaging (IM) which reveals the users prefer to use IM as IM allows user to disclosure personal information, to be sentimental and to be socially connected with other users. It shows that the wall posts allow them to express personal emotions.

W12: ok.....erm..AKU MARAH SANGAT!
(I AM SO ANGRY !)

5.3.3 Friendship Maintenance Orientation

Posts in this category mainly deal with maintaining relationships and create new relationships such as supportive comments, thanks, and apologies.

W13: gudluck :huHu
tq miss.. (^__^)
I believe in you

Facebook is generally used to maintain existing relationships not to create new relationships. Therwall (2009) indicate in his study of Myspace comments the main purpose of 78% of the comments is to maintain friendship. In another study conducted by Therwall (2010) on Friendship emotional homophily on Myspace indicate another interesting finding about posting positive messages will encourage positive emotion. In Social Network Sites (SNSs), users need to be receptive to emotions displayed by their friends and to respond accordingly in order to maintain their friendships.

5.3.4 Romantic Orientation

Posts in this category deal with affection and love declarations towards their partners. Usually the students freely express romantic expressions of love in their wall posts and comments when they are in long-term relationships. The finding supports Therwall's study (2009) which reveals 20% of the messages in Myspace contain love themes.

W14: Kerinduan pada Ms XXX~(I miss you a lot Ms XXX)
W15: Saya rinduu awak jugaaaaa(I miss you too)
W16: Think that is Y is super duper cooollll cause he's gooooodd at music

5.3.5 Social Arrangement Orientation

Posts in this category usually deal with social arrangements and planning such as going to bowl, going out together and going to the cinema. Wall posts in Facebook provide a cheaper and more convenient alternative to plan social activities for financial-constraint university students.

W17: nk main bowling la...spenk join?
(I want to play bowling, anyone like to join?)

5.3.6 Salutory Orientation

Posts in this category are brief, simple and friendly greetings among friends. These posts are deemed appropriate way to initiate social contact among university students.

W18: hey you

5.3.7 Chain Messages

Chain messages are passed from one friend to another friend. Most of the chain messages are announcements by Facebook and information relating to Facebook accounts.

W19: Facebook is deleting inactive profiles please verify as active and save it from getting deleted here

W20: Find out who views your profile the most @ <http://goo.gl/EWwDY>

5.3.8 Practical Arrangement Orientation

Posts in this category mainly deal with coordination of meeting plans such as setting up the time and venues.

W21: nkkuapklbpe(What time will we meet?)

5.3.9 Sexual Orientation

It is interesting to note that there is no wall post and comment in this category. It might be because there are other private applications in Facebook such as private chat and message which provide means for these students to express their sexual messages privately. In addition, these students might be influenced by their culture and religions which make them feel it is inappropriate to use public platform such as Facebook walls to express sexual messages. Thurlow (2003) indicates text messages contain explicit sexual comments; meanwhile, Therwall (2009) emphasizes Myspace comments do not have explicit sexual orientation. This might be due to the private nature of text messages which contain one-to-one messages. Whereas, comments or updates in social network sites like Myspace and Facebook are more accessible to the public. Therefore, users might opt for other private applications in these social network sites.

6. Conclusion

It indicates that even though Bahasa Malaysia is the most popular language used in Facebook wall posts and comments, English still plays an important role. Code-switching occurs in wall posts and comments. Students use code-switching when writing in their wall posts and comments. The students use Bahasa Malaysia as the base language and use individual words and strings of words in English. This is because English is the second language in Malaysia. It is interesting to note that English is also used as the base language when there is occurrence of code-switching with other foreign language like French, Mandarin and Arabic. The most popular purpose for their wall posts and comments are

Friendship Maintenance Orientation. The main purpose of the students' wall posts and comments is to maintain their existing relationships and create new relationships. The study indicates that there is Social Network Sites can be a potential teaching and learning tool to teach English as the social network sites provide conducive and popular learning environment for university students.

Acknowledgement

The researchers wish to thank UiTM(Perlis) and UiTM for their continuous support and encouragement.

References

- Alma Lilia Xochitiotzi Zarate. (2010). Code-mixing in Text Messages: Communication among University Students. *Memorias del XI Encuentro Nacional de Estudios en Lenguas*. Retrieved from <http://filosofia.uatx.mx/ponencias/cuarentaycuatro.pdf>
- Androutsopoulos, J. (2006). Introduction: Sociolinguistics and computer-mediated communication. *Journal of Sociolinguistics*, 10, 419-438.
- Baron, N. S. (2009). Are Digital Media Changing Language? *Educational Leadership*, 66(6), 42-46.
- Bergs, A. (2006). Analyzing Online Communication from a Social Network Point of View: Questions, Problems, Perspectives. *Language@internet*, 3. Retrieved from <http://www.languageatinternet.de/articles/2006/371>
- Biesenbach-Lucas, S., & Wiesenforth, D. (2001). E-mail and word processing in the ESL classroom: How the medium affects the message. *Language Learning and Technology*, 5(1), 135-165.
- Boyd, D. M., & Ellison, N. B. (2007). Social Network Sites: Definition, History, and Scholarship. *Journal of Computer-Mediated Communication*, 13(1), 210-230.
- Bullock, B. E., & Toribio, A. J. (2009). *The Cambridge handbook of linguistic code-switching*. New York, NY: Cambridge University Press.
- Cárdenas-Claros, M. S., & Isharyanti, N. (2009). Code-switching and code-mixing in Internet chatting: Between 'yes,' 'ya,' and 'si' - a case study. *The JALT CALL Journal*, 5(3), 67-78. Retrieved from http://journal.jaltcall.org/articles/5_3_Cardenas.pdf
- Carroll K. (2008). *Skype, social networks and learning*. Retrieved from <http://ken-carroll.com/2008/01/14/skype-social-networks-and-language-learning>
- Crystal, D. (2008). *Txtng: The gr8 db8*. Oxford, UK: Oxford University Press.
- Crystal, David. (2006). *Language and the Internet* (2nd ed). Cambridge: Cambridge Univ. Press.
- Crystal, David. (2001). *Language and the Internet*. Cambridge: Cambridge Univ. Press.
- Deumert, A., & Masinyana, S. O. (2008). Mobile language choices-The use of English and isiXhosa in text messages (SMS). *English World-Wide*, 29, 117-147.
- Dresner, E., & Herring, S. C. (2010). Functions of the non-verbal in CMC: Emoticons and illocutionary

- force. *Communication Theory*, 20, 249-268.
- Glaser, B. G., & Strauss, A. L. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research*. New York: Aldine Publishing Company.
- Grimmelmann, J. (2009). Saving Facebook. NYLS Legal Studies Research Paper No. 08/09-7. *Iowa Law Review*, 94, 1137.
- Guardian.co.uk. (2010, Nov 22). Chatrooms and social websites encourage bad spelling, says study. Retrieved from <http://www.guardian.co.uk/technology/2010/nov/22/internet-encourages-bad-spelling-children>
- Haggan, M. (2007). Text messaging in Kuwait. Is the medium the message? *Multilingua*, 26(4), 427-449.
- Harrison, R., & Thomas, M. (2009). Identity in Online Communities: Social Networking Sites and Language Learning. *International Journal of Emerging Technologies & Society*, 7(2), 109-124.
- Herring, S. C. (2001). Computer-mediated discourse. In D. Schiffrin, D. Tannen, & H. E. Hamilton (Eds.), *The Handbook of Discourse Analysis* (pp. 612-634). Malden, MA: Blackwell Publishers.
- Herring, S. C. (2004). Computer-mediated discourse analysis: An approach to researching online behavior. In S. A. Barab, R. Kling, & J. H. Gray (Eds.), *Designing for Virtual Communities in the Service of Learning* (pp. 38-376). New York: Cambridge University Press.
- Hinduja S., & Patchin J. W. (2008). Personal information of adolescents on the Internet: A quantitative content analysis of MySpace. *J Adolesc* 2008 Feb, 31(1), 125-146.
- Holloway, S. L., & Valentine, G. (2003). *Cyberkids: Children in the information age*. New York: Routledge.
- Hu, Y., Smith, V., Westbrook, N., & Wood, J. F. (2003). *Friendships through IM: Examining the Relationship between Instant Messaging and Intimacy*. Paper presented at the Communication Technology and Policy Division of the Association for Education in Journalism and Mass Communication (AEJMC), Kansas City, MO, July 29-August 2.
- Husni Abu Bakar. (2009). Code-switching in Kuala Lumpur Malay: The ‘Rojak’ Phenomenon. *Explorations A Graduate Student Journal Of Southeast Asian Studies*, 9, 99-109. Retrieved from <http://scholarspace.manoa.hawaii.edu/bitstream/handle/10125/10712/UHM.Explorations.2009.v9.AbuBakr.Rojak.pdf?sequence=1>
- Latisha A. S., Norizul A. D., & Nazira O. (2011). The Sociolinguistics of texted English among Bilingual College Students in Malaysia. *International Journal of Humanities and Social Science*, 1(16), 258-264.
- Latisha A. S., Norizul A. D., & Nazira O. (2010). SMS Language and College Writing: The languages of the College Texters. *International Journal of Emerging Technologies in Learning (iJET)*, 5(1), 26-31.
- Lankshear, C., & Knobel, M. (2003). *New Literacies: Changing Knowledge and Classroom Practice*.

- Buckingham, UK: Open University Press.
- Lenhart, A., Arafeh, S., Smith, A., & Macgill, A. R. (2008). Writing, technology, and teens. Pew Internet & American Life Project. Retrieved from http://www.pewinternet.org/~media/Files/reports/2008/PIP_Writing_Report_FINAL3.pdf.pdf
- McCallin, A. M. (2003). Designing a grounded theory study: some practicalities. *Nursing in Critical Care*, 8(5), 203–208.
- New London Group. (1996). A pedagogy of multiliteracies: Designing social futures. *Harvard Educational Review*, 66, 60-92.
- New London Group. (2000). A pedagogy of multiliteracies: Designing social futures. In B. Cope & M. Kalantzis (Eds.), *Multiliteracies: Literacy learning and the design of social futures* (pp. 9-37). New York: Routledge.
- O'Reilly, T. (2005, Sept 30). What is web 2.0: Design patterns and business models for the next generation of software. [Web log comment]. Retrieved from <http://oreilly.com/web2/archive/what-is-web-20.html>
- Socialbakers. (2010). Malaysia Facebook Statistics. Retrieved from <http://www.socialbakers.com/facebook-statistics/malaysia>
- Tagliamonte, S. A., & Denis, D. (2008, Spring). Linguistic ruin? LOL! Instant messaging and teen language. *American Speech*, 83(1), 3-34.
- Thelwall, M. (2010). Emotion homophily in social network sites messages. *First Monday*, 15(4), 5. Retrieved from <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/viewArticle/2897/2483>
- Thelwall, M. (2009). MySpace comments. *Online Information Review*, 33(1), 58-76.
- Thurlow, C. (2003). Generation Txt? The sociolinguistics of young people's text-messaging. *Discourse Analysis Online*, 1(1). Retrieved from [http://faculty.washington.edu/thurlow/papers/Thurlow\(2003\)-DAOL.pdf](http://faculty.washington.edu/thurlow/papers/Thurlow(2003)-DAOL.pdf)
- Wellman, B. (2001). Physical place and cyber-place: The rise of networked Individualism. *International Journal for Urban and Regional Research*, 25, 227-252.