The Digital Language Divide

A Research Project Paper

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Digital Technology and Culture 375

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8 April 2009

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Introduction

New technologies are a permanent and persistently growing part of our lives. However, the learning curve of new technologies such as computers, cell phones and other personal digital devices is not easy for everyone to keep up with. New technologies allow us to communicate faster than ever before. Computers, cell phones or the combination of both are rapidly creating a language not understood by all users of these devices.Before the wide-spread use of personal computers, text was either handwritten or typed on typewriters. With the development of personal computers the public was introduced to word processing programs. The World Wide Web then made it possible for writing and casual chatting to take place without typewriters and paper. A new form of communication has emerged in video game culture—it is a language that is challenging the written word.

Online gaming language has crept into the lexicon of the users of new communication technologies. The language consists of acronyms and abbreviationsonce only used by online gaming communities. It was created to streamline online conversation. Online gaming has grown in popularity and online-bandwidth has increased the speed and efficiency of the games. Many role-playing games (RPGs) can support hundreds of thousands of players at a time. This has resulted in the development of online gaming communities. These virtual worlds have streamlined real world language into a language of their own. The language is not created to alienate anyone or maliciously leave people out, it is used to streamline conversation and improve play. Furthermore, this cutting edge conversation has crept into other electronic forms of communication such as text

messaging. Text messaging has arguably adopted gaming language to help streamline quick instant messaging among the masses.

But who is being left behind with this alacritous need to communicate with such speed and brevity? This research project focuses on age, income, gender and access to new communication technologies. The research project explores how these characteristics determine a person's knowledge of gaming language. Age, income, gender and access to new communication technologies are factors determining who understands and uses gaming language most frequently. Gaming language has created a digital language divide among users of computers, cell phones and other personal digital devices.

Literature Review

The term "digital divide" defines the difference between the haves and have-nots. The haves are those that have access to the fastest and most efficient forms of digital communication. The have-nots are those who do not. This is a broad term referring to a global divide. Matt Payne, a blogger forKairosnews a weblog discussing rhetoric, technology and pedagogy, has written an article called "Playing the Digital Divide." The article discusses how creative media texts, such as gaming language and text messaging, can be used to promote self-expression and social-activism. The article talks extensively about the digital divide and its effects globally.

Thisarticle has given us fodder for our hypothesis. The hypothesis was then tested on a wide range of people in developed countries. The author refers to the *global divide*—the difference between Internet access in industrialized and developing societies. And he also refers to a *social divide* that is the gap between the

rich and poor. A third group discussed in Payne's article is the *democratic divide*. This latter group is what our research project will attempt to expand on. According the Payne's article, "the *democratic divide*signifies the difference between those who do, and do not use the panoply of digital resources to engage, mobilize and participate in public life" (qtd. in Payne 2). This research paper hypothesizes: age, income, gender and access to new communication technologies are quantifiable variables that will reveal a digital language divide inside developed countries.

Digital language divide (DLD) is a phrase created for this specific research project. The aforementioned "Digital Divide" is a broad term and refers to industrialized (developed) countries versus non-industrialized countries that have limited access to electronic communication devices.The term digital language divide (DLD) has been created to narrow this research project's focus. The DLD refers to individuals in developed countries using language inspired by online gaming regularly in their daily lives. The DLD is partitioning users of computers, cell phones and other personal digital devices. There are quantifiable variables demonstrating this separation in developed countries (see **Results** page 10).

Abbreviations and acronyms rule the world of gaming language. Many users of digital devices adopt this language and use it when text messaging, emailing and chatting on the Internet. This begs the question, are digital mediums changing language? Naomi S. Baron, professor of Linguistics at American University and published author, has explored this question in an article titled, "Are Digital Media Changing Language?" Baron asks, "Are instant messaging killing language" (1)? In her article she studied text messages created by college students. Surprisingly her

findings show only 47 out of 1,473 words to be clear abbreviations. These abbreviations are used in online gaming and text messaging. The article continues to examine the lexical changes taking place with the growth in popularity of gaming language, and its influence over electronic communication devices. Baron's article has inspired this research project's survey used to test subjects (see page 17).This research project's survey contains a question asking subjects to identify and define 35 different gaming language terms (see page 18). These results will factor into the research project's quantifiable variables, demonstrating a DLD exists in developed countries.

A quantifiable variable in this research project is gender. Gender does play a role in who is using gaming language and who is not. An inspiring article by Katherine Blashki, Chair of New Media Technologies at Deakin University, and Sophie Nichol, PhD Candidate at Deakin University, tests this theory. Their scholarly journal, "Game Geeks Goss" sheds light on the world of "leet speak." Leet speak or 1337 5p34k is a language used among gamers to create an elite cultural boundary between gaming experts and gaming newcomers 'newbs.' The language has created a DLD amongst expert gamers 'leets' (elites) and individuals "seeking entrance and acceptance into the game world, generally 12 – 16 years old" (77).The tests conducted only yielded 4 out of 40 female students willing to participate. This article reveals two DLDs. The first is age and the second is gender.

Blashki and Nichol also use visual aids to present their results. This research project not only includes a writing element, but visual elements as well. This research project has taken note of these visual aids and will use them to display

findings (see **Results** page 10).In addition to a writing element with visual aids, this research project will include a tri-fold poster—a two-dimensional analog representation of the research project.

Gaming language is becoming an elite language of its own. This research project has compiled a glossary of frequently used gaming lingo (see **Game Speak** page 14). A DLD is developing among those who understand gaming language and those who do not. Nonetheless, gamers are engaging in discourse that non-gamers are not. Constance A. Steinkuehler, professor at University of Wisconsin, has written a scholarly article examining the world of online video gaming. The article is titled, "Massively Multiplayer Online Video Gaming (MMOG) as Participation in a Discourse."Steinkuehler's article examines complex issues about gaming language including: cognitive ethnography, social and material cognition, individual and collaborative problem solving across MMOGs and other complex analyses relating to online gaming. This in depth examination of online gaming emphasizes discourse and engagement.

Language discourse and engagement takes place quickly in the online gaming world. The language can be learned through cognition. This being the case then a DLD is developing amongst users of computers, cell phones and other new communication devices. But so what? Steinkuehler offers an explanation addressing this question. Steinkuehler elaborates about gaming language discourse:

> Through participation in a Discourse community, an individual comes to understand the world (and themselves) from the perspective of that community. Thus, semantic interpretation is taken as part of

> what people do in the lived-in world; it arises through interaction with social and material resources in the context of a community with its own participant structures, values, and goals. (40)

This research project is not limited to only a writing element, visual aids and a tri-fold poster; it will also go through a process of remediation.

Remediation takes place when virtual reality and the World Wide Web borrow and refashion media. In order for this research project to move into a remediation process, it will have to take on a virtual identity. The DLD can be tested further by adopting Steinkuehler's "participation in a Discourse community" and test it in a virtual reality environment—a gaming environment. This is where the rubber hits the road so to speak. If gamers and non-gamers are placed in a gaming environment, one in which either has participated before, will a DLD hinder ones ability to assimilate themselves in a virtual world? What structures, values and goals can each participant acquire in the virtual community? And does acquiring these reduce the DLD between the two participants? A participation in a discourse community could be developed and placed on a web page.

The web page can remediate written research and visual aid materials. The web page can also introduce the user to the researchers who have developed this project. In addition, each researcher could provide their personal thoughts on this project. The web page may include a link to NowComment.com. NowComment.com is an interactive online commenting tool. The users of the web page can link to the research project paper and interact with the paper. Any comments, questions or opposing viewpoints about any sentence or paragraph within the research project

paper can be posted for other users to read, analyze and comment on. This is another form of participation in a discourse community—a virtual community.

Visual aids will go through the process of remediation and be displayed on a web page. This research project includes an analog tri-fold poster. A web page can display this analog poster in a digital environment. The digital poster may contain clickable links to each of the different visual aids used in this research project. Each link will contain information about the visual aid and the methodology used for each one. A research project web page will allow this project to go through the process of remediation. It will also create a virtual environment where a participation in a discourse virtual community can take place. In addition, the research project members can engage with the web users of a website.

Before any steps of remediation take place, an analysis of this research project's methodology and results must be scrutinized. The following sections titled **Methods and Rationale** and **Results** discuss and provide visual aids to express findings.

Methods/Rationale

The breach of game language into mainstream culture in advertisements, movies, and television raises an interesting question: how far has this language, which was created and used in the secluded world of online text-based gaming, diffused into larger society? Our research project group tested this hypothesis by identifying groups of people who have more knowledge of this language than others, and where those rifts exist. The digital language divides (DLDs) our group created were age, gender, income and access to new technologies. Our group has tested for DLDsby having subjects answer a survey determining their knowledge of gaming language and their use, or lack thereof, of digital communication devices. We compiled the results and identified the DLDs amongst our subjects.

Our research project survey was administered on a wide range of individuals from developed countries. We had people fill out the survey in the local community, nation wide and in other developed countries. We also used new communication technologies such as providing the survey to a subject via email. Some group members administered the survey via a Skype online video conferencing call to friends in foreign countries.Group members called subjects in other parts of America and in foreign countries, administering the survey via phone.

The survey was designed specifically to limit variables amongst test subjects. The first part of the survey asks for: the respondent's age, gender, income, access to new communication technologies and their views on text-based communication. The methodology used in this part of the survey helped identify where the

respondent stood in terms of our 'divides,' and to get them thinking about text-based communication as it relates to culture in developed countries.

We then followed up with a quiz of 35 abbreviations and acronyms testing how knowledgeable the subjects were about game language. The quiz contained common acronyms like LOL (Laugh Out Loud) to game-specific PT (Party). The goal of this quiz was to identify how well the subject knew game language.

Coupling both sections of the survey helped us identify what group(s) of peopleunderstood game language, and how they measured against other groups. We charted the results and visually identified any DLDs in game-language knowledge.

Results

1. What did you learn from those experiments?

- Our research has shown that certain age groups are not as familiar with gaming language while other groups intertwine their gaming language into real world conversations and have vast knowledge of the gaming acronyms. These projections were based from a survey we conducted with the following criteria:
  - Age
  - Income

    $-0.00 - $20,000.00 $21,000.00 - $40,000.00

    $41,000.00 - $60,000.00 $61,000.00 - $80,000.00

    $81,000.00 - $100,000.00 $101,000.00+ Other
  - Whether or not they play online games? For example WOW, online poker
  - Why they play the online game?
  - How often do they play?
  - Is slang from the game(s) they play used in your normal text-based and verbal communications? (For example LOL)
  - Does online games affect how we speak when talking to others more than in the past? Why?
  - What Computer, Internet access, mobile phone, Blackberry, iPhone, iPod, or other devices do they use?

The survey also asked to circle the words that they knew and list what they mean.

LOL	OMG	ROFL	TY	SMEX
GG	NOOB	BBL	LMAO	BRB
AFK	PWN	UBER	BB	BBS
WTF	TBH	LAWL	UR	C
U	R	O	B	SRY
CHAR	VC	NUH	INORITE	PT
WAT	NUB	PLOX	PLOXORX	WUT

2. **Solid findings (aspects that we feel have been proven then backed these upwith the data)**

   - Research was conducted via a survey for 40 people ranging in age from 20s to 60s. The survey captured information on diverse backgrounds and cultures along with different online games.

   - Our statistics consisted of the following:

	Age Count	Gender	Income	Computer	Internet Access	Mobile Phone	Blackberry iPhone	iPod	Other devices	Played Multiplayer Games/ How often?	When playing game do use slang for communication	Numbers of words recognized
	17	M	61000-80000	Yes	Yes			Yes		4-5 every day	Yes	28
	17	M	0-20000	Yes	Yes	Yes		Yes	Yes	1-7 hr per day	Yes	30
17 Count	2											
	18	M	0-20000	Yes	Yes	Yes			Yes	2hrs per day	Sometimes	31
18 Count	1											
	19	M	21000-40000	Yes	Yes	Yes		Yes		Everyday	Yes	25
	19	M	0-20000	Yes	Yes				Yes	3-6 hrs per week	No	30
19 Count	2											
	20	M	21000-40000	Yes	Yes			Yes				4
	20	M	0-20000	Yes	Yes					As often as possible	Yes	35
20 Count	2											
	21	F	21000-40000	Yes	Yes	Yes						11
21 Count	1											
	23	M	21000-40000	Yes	Yes	Yes	Yes	Yes				6
	23	M	Other	Yes	Yes					4-8 per day	Sometimes	16
	23	M	0-20000	Yes	Yes	Yes			Yes	2-12hrs per day	Yes	9
	23	M	21000-40000	Yes	Yes	Yes				3-4 times a week	Sometimes	35
23 Count	4											
	24	F	21000-40000	Yes	Yes	Yes		Yes		Very rarely	Sometimes	21
24 Count	1											

	26	F	21000-40000	Yes	Yes	Yes						10
	26	F	41000-60000	Yes	Yes	Yes						10
	26	M	81000-100000	Yes	Yes	Yes		Yes				9
	26	M	21000-40000	Yes	Yes	Yes						4
26 Count	4											
	27	F	0-20000	Yes	Yes	Yes		Yes				13
	27	M	41000-60000	Yes	Yes	Yes						5
27 Count	2											
	28	M	41000-60000	Yes	Yes				Yes			9
	28	F	21000-40000	Yes	Yes	Yes		Yes				12
28 Count	2											
	29	M	41000-60000	Yes	Yes	Yes			Yes			2
	29	M	41000-60000	Yes	Yes	Yes						4
29 Count	2											
	30	F	21000-40000	Yes	Yes	Yes						10
	30	M	41000-60000	Yes	Yes	Yes						3
	30	M	Other	Yes	Yes	Yes						4
30 Count	3											
	32	M	21000-40000	Yes	Yes	Yes		Yes		4-6hrs per week	Yes	13
32 Count	1											
	33	M	81000-100000	Yes	Yes		Yes	Yes		Age of Empire/3-4mos	No	5
	33	M	61000-80000	Yes	Yes	Yes						2
33 Count	2											
	34	M	61000-80000	Yes	Yes	Yes		Yes		10hrs a week	No	22
	34	M	61000-80000	Yes	Yes	Yes		Yes				1
34 Count	2											
	35	F	61000-80000	Yes	Yes							2
35 Count	1											
	36	M	41000-60000	Yes	Yes		Yes					8
36 Count	1											
	37	M	Other	Yes								2
37 Count	1											
	38	M	81000-100000	Yes	Yes		Yes	Yes				5
38 Count	1											
	39	M	41000-60000	Yes	Yes	Yes						2
39 Count	1											
	40	F	21000-40000			Yes						7
	40	F	61000-80000	Yes	Yes	Yes	Yes	Yes				6
40 Count	2											
	67	M	21000-40000	Yes	Yes	Yes						2
67 Count	1											
	NA	M	21000-40000	Yes	Yes					2 days per week	Sometimes	7
NA Count	1											
Grand Count	40											

3. **Suggestive findings (aspects that might or might not have been proven but look interesting at this point), holes that appeared and what you would do next time, if you had the resources.**

    - We would have asked what electronics were used.
    - What games were more prominent in regards to gaming language?
    - We would generate a more in depth survey.

Survey Results

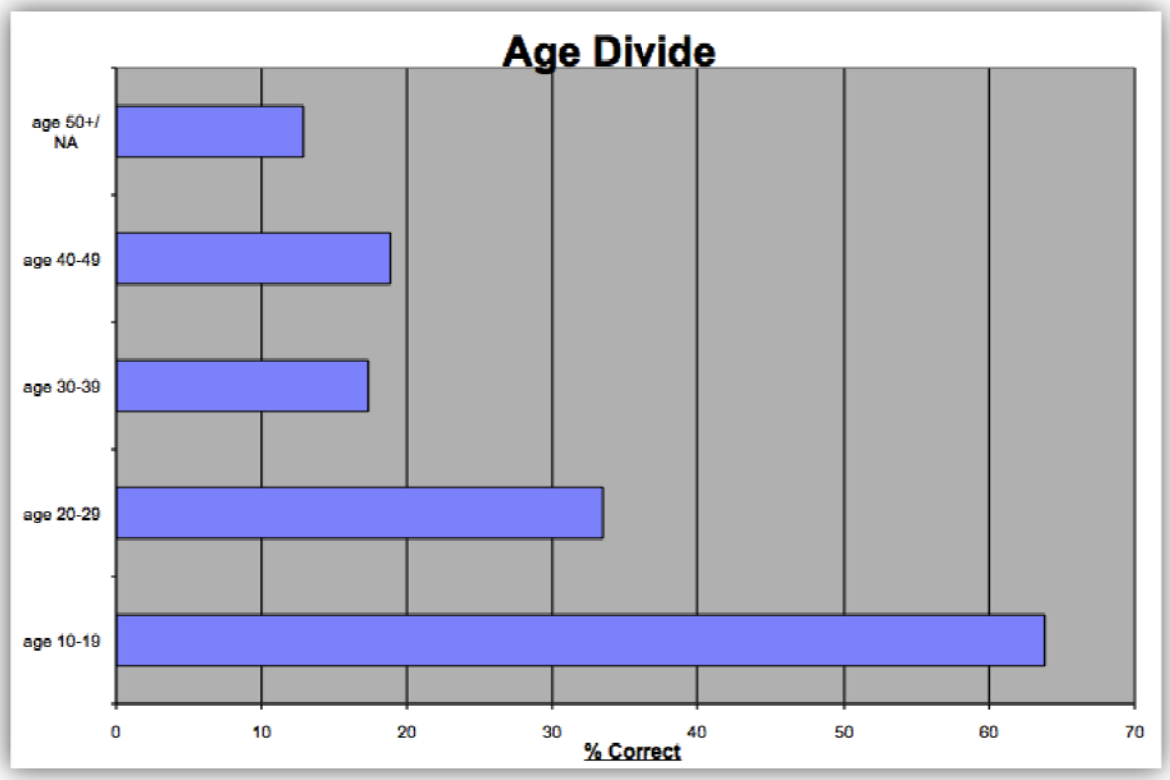

Figure 1: Displays the 'Age Divide' amongst users of new communication technologies and their knowledge of gaming language. This graph represents the percent of gaming lingo each age group answered correctly.

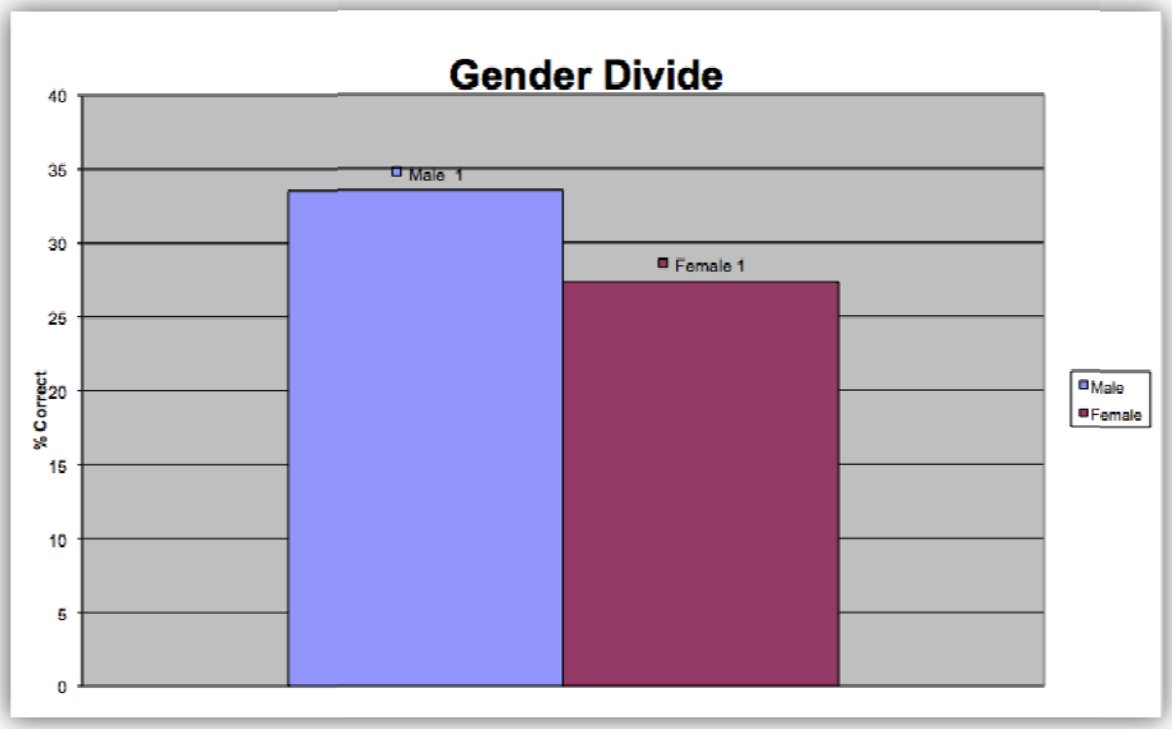

Figure 2: Displays the 'Gender Divide' amongst users of new communication technologies. This graph represents the percent of gaming lingo each gender answered correctly.

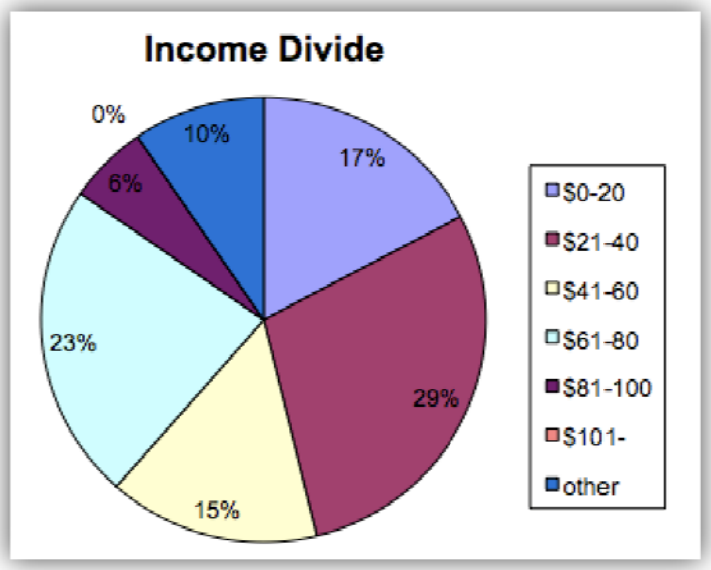

Figure 3: Displays the 'Income Divide' amongst users of new communication technologies.

Appendix A:

Game Speak

Aight = alright
Wht = what
Vc = voice chat
Pt = party
Omg = oh my god
Pwn = pown, as in, pure coolness on an ultimate level. “They dueled in the arena and she totally pwned (defeated him bad) him.” or, “His armor was totally pwn.”
Ownage = that person has such good items it is better than anyone elses. “They’re armor is pure ownage.”
Owned = similar to ownage, except the act of being defeated. “They were owned bad LOL!!!!”
Noob = rude term coined at new players, for “newbie”
Nab = ruder way of saying noob.
Means the person is more stupid than a noob
Nib = the rudest way of calling someone a noob.
Nub = noob, but coined more for fun at people who are not noobs.
Newb = first term for a newbie
Nwb = newb
DEX = dexterity
STA = stamina
INT = intelligence
STR = strength
HP = health points
Pts = points
Tbh = to be honest
Doin = doing
Sry = sorry
Char = character
Smex = slang for ‘sexy’, as in, “they are the smex!”
Lol = laugh out loud
Rofl = roll on floor laughing
Lmao = laughing my ass off
Lawl = slang way of saying ‘lol’
Boi = boy
U = you
Ur = you’re / your
C = see
O = oh
B = be
R = are
Y = why
Bb = bye bye
Def = defense
Uber = extreme
Mo = month
Der = their
Stfu = shut the f#$% up
Nuu - no
Bish = joking way of saying bitch, but not meaning it
Fck = f#$%
Omfg = oh my f#$%^&!god
Brb = be right back
Bbl = be back soon
Afk = away from keyboard
Epic = coined to mean “incredibly” as in, “that was epicly cool” or, “epic fail”
Ty = thank you
Np = no problem
Kewl = cool
Lvl = level
Lv = level
Yeh = yes
Sec = second
Rly = really
Ppl = people
Pls = please
Plox = noob way of saying please. Will get you ignored at times
Plz = please
Gd = good
Btw = by the way
Yh = yes
Prolly = probably
Atk = attack

Atked = attacked
Aspd = attack speed
Gl = good luck
Wassup = what's up?
Hw = homework
Gz = grats
Grats = congratulations
Congrats = congratulations
Tho = though
Ima = I'm going to
Kk = ok
Okie = ok/alright
G2g = got to go
Cya = see you
B> buy
S> sell
Da = the
W/e = whatever
Every1 = everyone
Min = minute
Inorite = I know right?
Nuh = no
Bout = about

Appendix B:

Sample Research Survey

1) Your Age:

2) Your Gender: Female Male Other

3) Your Income:

$-0.00 - $20,000.00	$21,000.00 - $40,000.00	
$41,000.00 - $60,000.00	$61,000.00 - $80,000.00	
$81,000.00 - $100,000.00	$101,000.00+	Other

4) Do you have a computer, Internet access, mobile phone, Blackberry, iPhone, iPod, or other devices? Please list your most commonly utilized electronic devices.

5) Do you, or have you ever played, multiplayer games with in-game text-based communication systems, such as World of Warcraft? (If not, skip to Q#6)

   a. Why do you play the online game?

   b. How often do you play?

   c. Do you use the slang from the game(s) you play in your normal text-based and verbal communications? (For example LOL)

   d. Do you think online games affect how we speak when talking to others more than in the past? Why?

6) Please circle the words you know and list what they mean.

LOL	OMG	ROFL	TY	SMEX
GG	NOOB	BBL	LMAO	BRB
AFK	PWN	UBER	BB	BBS
WTF	TBH	LAWL	UR	C
U	R	O	B	SRY
CHAR	VC	NUH	INORITE	PT
WAT	NUB	PLOX	PLOXORX	WUT

Bibliography

Baron, Naomi S. "Are Digital Media Changing Language?" Educational Leadership. Vol. 66 No 6 (Mar. 2005): 42-46. <http://www.ecommercetimes.com/story/47607.html>.

Blashki, Katherine, Sophie Nichol. "Game Geek's Goss: Linguistic Creativity In Young Males Within An Online University Forum." Australian Journal of Emerging Technologies and Society Vol. 3 No 2 (2005): 77-86.

Payne, Matt. "Playing the Digital Divide." Kairosnews. 10 Jun. 2005. 24 Mar. 2009. <http://kairosnews.org/node/4335>.

Roberts Christina. "Game Speak." 20 March 2009.

Steinkuehler, Constance A. "Massively Multiplayer Online Video Gaming as Participation in a Discourse." Mind, Culture, and Activity 13.1 (2006): 38-52.