

# **A Preliminary Survey of the Use of Cell Phones, Electronic Dictionaries, SMS, Email, Computers and the Internet by Korean College EFL Students with Respect to Patterns of L1:L2 Language Use and the Associated Language Learning Strategies Used in Accessing Online Resources**

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## **Abstract**

*Following Kiernan and Aizawa [1], and Thornton and Houser [2] among others, I have in a separate paper [3] explored the use of cell phones and SMS in the classroom as a means of exploiting what really constitutes an immediately available form of ubiquitous computing, to facilitate second language acquisition. In order to gain information of Korean college students prior to conducting research specifically addressing their language learning strategies used in accessing online resources [4], [5], I conducted a preliminary survey, the results of which are presented here. I surveyed their use of cell phones, electronic dictionaries, SMS, Email, Computers and the Internet, investigating their use of their target second language of English (L2), and questioning whether they used such resources for L2 learning, and to what extent they did so in the target L2 language of English. It is intended to refine and repeat this survey in forthcoming semesters.*

## **1. Introduction**

Rapid technological innovation is significantly affecting Second Language Acquisition, where virtual learning communities are radically redefining the traditional classroom. Computer Mediated Language Learning (CMLL) has become a significant area of research and practice. According to Warschauer [6], mobile computer mediated language learning is becoming widespread, with American schools creating one-to-one classroom environments mainly through connecting laptops wirelessly to the Internet. At the same time the cell phone is becoming ubiquitous.

Prensky [7] observes that penetration rates exceed 100% in some countries, with some individuals owning and using more than one such device. Cell phones are becoming increasingly sophisticated and may now include web browsers, still-cameras, sound-and video-recorders, MP3 players, video and TV displays, games, GPS devices, long-distance digital walkie-talkies, electronic bilingual dictionaries, speech recognition and text-to-speech conversion. Chinnery [8] identifies Internet access, voice- and SMS text-messaging, cameras and even video-recording as common cell phone features that enable communicative language practice, access to authentic content, and task completion. According to Prensky, the browser in web-enabled phones puts a dictionary, thesaurus and encyclopedia into the hand of every student: access to Google and other text search engines turns their cell phones into research tools. Educators might better serve their students by redefining open-book testing as open-phone testing, to encourage rather than quash student innovation. However, while student expectations of being entitled to access their cell phones for personal use during class have steadily risen, this causes understandable frustration from teachers, who in general regard this phenomenon as disruptive to the educational process.

This survey arose from two intriguing questions: What might happen if instead of trying to ban cell phones in class, their use was encouraged and adapted to the task of Second Language Acquisition? And, can empirical evidence be determined that supports the thesis that the online language learning strategies used in accessing online resources qualitatively differ from those used in traditional L2 learning?

## 2. The survey

In Fall 2006, 144 of the Korean college freshman students I teach at Hyejeon College in Chungnam Province responded to an online survey I set for their first assignment. The survey constitutes preliminary data-gathering to prepare for research into the use of learning strategies used by Second Language students in accessing online resources, to be later conducted, and which is elsewhere documented as a literature review [4], and a research proposal [5]. The survey serves as a complement to an earlier literature review [3], which considered the opportunities for the intentional use of cell phones in the L2 classroom together with their practical implications.

### 2.1. Instructions

An instruction sheet in English required each student to complete their assignment outside class by Internet-linked computer, by individually navigating to a web page hosted by FSCreations (refer <http://www.fscreations.com/>), and logging in using their 7-digit student ID and a password to the web-hosted multiple-choice questionnaire (refer Appendix 2). They were given 40 minutes in which to answer fifteen questions, then required to click the “Grade & Submit” button to complete the assignment, which automatically forwarded an email to me listing their responses, and forwarded the results for automatic storage by class on the FSCreations website, from where I could later download them as a spreadsheet.

I spent considerable time explaining the survey to students in class, emphasizing that grading for the assignment was strictly on their completing and submitting the survey, and not on all on their specific choice of response. Students received full marks for completing the assignment, providing only that they had actually selected responses to most questions. It became apparent that I had over-estimated the L2 ability of the students. I had to explain at length terms in the survey, some as basic as “often”, “sometimes”, “seldom”, “never”, and indeed “survey”. I also posted printouts on the survey in the classroom and outside my office to help students’ comprehension.

### 2.2. Student response

One group of seven students ingeniously submitted their assignments without selecting any responses. They were warmly encouraged to repeat the assignment by doing it properly, which they then did. As the survey was also an assignment, and a necessary

part of passing the course, I encouraged students to help one another, and while there was a tendency for some students to be more concerned with just submitting the survey and getting full marks, than with correctly answering the questions, I consider that the results given were reasonably honest, and accurate insofar as they had properly understood the question and range of possible answers (though this is open to debate). I arranged for a few students with very poor English skills to do the survey on my office computer, encouraging the assistance of their friends with better English skills, who had already completed the survey.

Although the students were given two weeks to submit their assignment, many were late in doing so (as with their other assignments). I eventually kept the survey open to the end of the semester, over a period of eleven weeks. In all, 144 students (83.2%) submitted the responses out of a possible 173. Most of the remaining 29 students never made an appearance for class or for examinations. A number of students elected to repeat the survey, and the results only record their final submission. I regard 40 minutes as ample time, as most students completed the survey in much less time (times are recorded in the database).

### 2.3. The results in general

The results of the survey are tabulated in summary in Appendix 1, and shown together with the questions and multiple-choice responses in Appendix 2. Although the FSCreations web-hosting service is designed for assignments and exams, I discovered it could be readily adapted to conduct surveys. Assignments/exams/surveys need first to be composed using their proprietary software Examview Pro, and then published to their website. In order to have the results stored on that website, it is necessary to publish the assignments/exam/survey together with class rosters. This requires text files to be produced that contain student names, IDs, and (optionally) passwords. Limitations on the number of students per hosted assignment made it necessary (and convenient) to publish separate (though identical) surveys for each class. Individual results are automatically emailed to the client (i.e. teacher or researcher) when the student completes the assignment; and their results are stored in a class list on the FSCreations website, where they can be viewed and later downloaded by the researcher as a spreadsheet (when enough students have completed their assignments). This makes obtaining and analyzing the data an efficient process, and I only

needed to refer to the emails to check that students had answered the questions (and not submitted without choosing answers; however this could have been done exclusively by visiting the website). Although I was required when preparing the assignment to select “correct” answers, which were then scored, my analysis took no note of these or student scores, as this was a survey, and I was concerned with all responses.

## 2.4. The results interpreted

As expected, most students have cell phones (84%), while a substantial number (27%) also have an electronic dictionary, 7% only have an electronic dictionary, and 9% have neither (this last figure is much higher than I expected, in that they appear to me to be near-universal). Of the 84% who do have cell phones, approximately two-thirds have a dictionary on their cell phone - this is incredible! Of those who had electronic dictionaries, either as stand-alone devices or on their cell phones, three-quarters of these included Korean-English and English-Korean dictionaries. Of the students who did have electronic dictionaries, either on their cell phones or as stand-alone devices, a little over three-quarters used them to help them learn English. Of these, 21% used them often in class, 69% used them sometimes, and 10% used them seldom.

Almost two thirds (66%) of the students often send SMS (all-too-frequently when I am trying to teach them English!); while 18% sometimes send them and 7% seldom do so. A surprising 7% claim to often send SMS in English; under a quarter (24%) sometimes do, 18% seldom do, and a half never do. A few (4%) students claim they often send or receive SMS to help their or their friends’ English, while 28% say they sometimes do, 20% seldom do, while almost half (48%) never do.

Unsurprisingly, over two-thirds (68%) often use a computer, a little over a quarter sometimes do, while 3.5% seldom do, and only 2.8% claim they never do. In other words, 93.8% of the students surveyed often or sometimes use a computer, reinforcing the importance of computing to contemporary education. One sixth of these students have their own computer, of which almost nine-tenths are desktops. 16% of students say they often use their computer to help their English; 48% sometimes do, 23% seldom do, and one eighth (12.5%) never do. Of those who do use a computer to help their English, 59% mainly use the computer to access Internet resources such as online dictionaries, 11% use the computer mainly for email to correspond in English, 8% use the computer mainly to write essays and assignments, 6.5% mainly use the

computer to keep an English diary, and over 15% mainly use a computer to visit English web sites.

While over half of the students never read an email in English, of the nearly half (47.9%) who say they do, over 10% often do, over half (54%) sometimes do and over a third (35%) seldom do. While more than half (56%) have never written an email in English, of those that have, 11% do so often, 44% do so sometimes, and 45% do so seldom. While only 2 students out of 144 claimed they didn’t know how to use a computer (staggering!), over a quarter (27%) would often use one in class to help with their English, almost 40% would sometimes do so, 11.8% would seldom do so, while 20% would not do so.

## 3. Conclusion

The survey confirms the widespread penetration among Korean college freshman students of cell phones, and of electronic dictionaries that are mainly bundled with cell phones, but also act as stand-alone devices. The social use of SMS and email is common; but these together with web-browsing also offer an exciting potential for online second language learning, imaginatively using English to network with friends to obtain information, and to access online resources.

Primary trends that are apparent in Korea are the emergence of English as the predominant second language, widespread high-speed Internet access, and the rapidly developing technological development of computer-mediated learning. Using cell phones and computers in the classroom provides a feasible means of creatively exploiting the potential of what is rapidly becoming the ubiquitous provision of computer-mediated second language learning and teaching.

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## 5. Appendices

### 5.1. Appendix 1 - Tabulated survey results

#### ALL CLASSES SURVEY RESULTS

N = 144

For Classes A-G

Number of responses in Roman

#### QUESTION

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
<b>A</b>	39	45	65	44	17	93	10	6	98	24	23	73	7	7	39	<b>A</b>
%	<i>27.1</i>	<i>31.3</i>	<i>45.1</i>	<i>30.6</i>	<i>11.8</i>	<i>64.6</i>	<i>6.9</i>	<i>4.2</i>	<i>68.1</i>	<i>16.7</i>	<i>16.0</i>	<i>50.7</i>	<i>4.9</i>	<i>4.9</i>	<i>27.1</i>	%
<b>B</b>	82	85	22	28	56	26	33	40	37	94	69	14	35	28	57	<b>B</b>
%	<i>56.9</i>	<i>59.0</i>	<i>15.3</i>	<i>19.4</i>	<i>38.9</i>	<i>18.1</i>	<i>22.9</i>	<i>27.8</i>	<i>25.7</i>	<i>65.3</i>	<i>47.9</i>	<i>9.7</i>	<i>24.3</i>	<i>19.4</i>	<i>39.6</i>	%
<b>C</b>	10	14	57	23	8	10	25	28	5	11	33	10	23	29	17	<b>C</b>
%	<i>6.9</i>	<i>9.7</i>	<i>39.6</i>	<i>16.0</i>	<i>5.6</i>	<i>6.9</i>	<i>17.4</i>	<i>19.4</i>	<i>3.5</i>	<i>7.6</i>	<i>22.9</i>	<i>6.9</i>	<i>16.0</i>	<i>20.1</i>	<i>11.8</i>	%
<b>D</b>	13			48	31	12	69	68	4	14	18	8	75	80	29	<b>D</b>
%	<i>9.0</i>			<i>33.3</i>	<i>21.5</i>	<i>8.3</i>	<i>47.9</i>	<i>47.2</i>	<i>2.8</i>	<i>9.7</i>	<i>12.5</i>	<i>5.6</i>	<i>52.1</i>	<i>55.6</i>	<i>20.1</i>	%
<b>E</b>					31	3	3	2				19	4		2	<b>E</b>
%					<i>21.5</i>	<i>2.1</i>	<i>2.1</i>	<i>1.4</i>				<i>13.2</i>	<i>2.8</i>		<i>1.4</i>	%
<b>F</b>												19				<b>F</b>
%												<i>13.2</i>				%
-	0	0	0	1	1	0	4	0	0	1	1	1	0	0	0	-
%	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.7</i>	<i>0.7</i>	<i>0.0</i>	<i>2.8</i>	<i>0.0</i>	<i>0.0</i>	<i>0.7</i>	<i>0.7</i>	<i>0.7</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	%
Σ	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	Σ
%	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	%
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	

#### QUESTION

"-" denotes no answer provided

Percentage of responses in *Italic*

Note that in the main body of the text, **Section 2.4**, frequently gives proportions and percentages of those who chose the “often”, “sometimes” or “seldom” responses, and thus exclude the “never” responses.

Consequently those proportions and percentages generally vary from these shown in the tabulated results above and below in the Appendices, which are percentages of all responses.

**5.2. Appendix 2 - Preliminary Questionnaire together with Itemized Results (refer key)**

**Multiple Choice**

Instructions: Answer ALL questions. If in doubt, ask your friends or me for help. You have 40 minutes, but it will not take that long! You need to do this assignment to pass this course. When you have finished, you need to click the “Grade & Submit” button at the bottom of the page to have completed the assignment. All information will be kept confidential, and your answers will not be marked, but you need to answer all the questions to pass!

Identify the choice that best completes the statement or answers the question.

1. Do you have a cell phone or an electronic dictionary?

39	27.1	a. I have both.
82	56.9	b. I only have a cell phone.
10	6.9	c. I only have an electronic dictionary.
13	9.0	d. I don't have either.
144	100.0	Total.*

2. Does your cell phone have a dictionary?

a. Yes my cell phone has a dictionary.	45	31.3
b. No, my cell phone doesn't have a dictionary.	85	59.0
c. I don't have a cell phone.	14	9.7
Total.	144	100.0

3. Is your electronic dictionary or cell phone dictionary only in Korean, or does it have Korean-English and English-Korean?

65	45.1	a. Korean-English and English-Korean.
22	15.3	b. Only Korean.
57	39.6	c. I don't have an electronic or cell phone dictionary.
144	100.0	Total.

**SURVEY RESULTS KEY:**

- i. Multiple choice answer 

n	%
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(n is number of occurrences out of N=144;  
% is percentage of occurrence)

Results have been combined with the survey for presentation. Results are shown boxed, and have been staggered from question to question for visual clarity. (Total.\*: Rounding errors from using just one decimal place make the totals appear to vary ±0.1% from 100% in the results shown for Q.1, Q.9 and Q.13).

4. Do you use your cell phone dictionary or electronic dictionary to help you learn English?

a. I use my electronic dictionary to help my English.	44	30.6
b. I use my cell phone dictionary to help my English.	28	19.4
c. I don't use either to help my English.	23	16.0
d. I don't have an electronic dictionary, or a cell phone with a dictionary. (No answer provided).	48	33.3
	1	0.7
Total.	144	100.0

5. How often do you use your electronic dictionary or cell phone dictionary IN CLASS to help your English?

17	11.8	a. Often.
56	38.9	b. Sometimes.
8	5.6	c. Seldom.
31	21.5	d. Never.
31	21.5	e. I don't have either. (No answer provided).
1	0.7	Total.
144	100.0	

6. How often do you send or receive text messages (SMS) on your cell phone?

a. Often.	93	64.6
b. Sometimes.	26	18.1
c. Seldom.	10	6.9
d. Never.	12	8.3
e. I don't have a cell phone.	3	2.1
Total.	144	100.0

7. Do you ever send or receive text messages (SMS) in English?

10	6.9	a. Often.
33	22.9	b. Sometimes.
25	17.4	c. Seldom.
69	47.9	d. Never.
3	2.1	e. I don't have a cell phone.
4	2.8	(No answer provided).
144	100.0	Total.

8. Do you ever send or receive text messages (SMS) on your cell phone to help you or your friends with English?

6	4.2	a. Often.
40	27.8	b. Sometimes.
28	19.4	c. Seldom.
68	47.2	d. Never.
2	1.4	e. I don't have a cell phone.
Total.	144	100.0

9. How often do you use a computer?

98	68.1	a. Often.
37	25.7	b. Sometimes.
5	3.5	c. Seldom.
4	2.8	d. Never.
144	100.0	Total.*

10. Do you have a computer, and if so, is it a laptop or a desktop?

24	16.7	a. I have a laptop and a desktop computer.
94	65.3	b. I have a desktop computer.
11	7.6	c. I have a laptop computer.
14	9.7	d. I don't have either.
1	0.7	(No answer provided).
Total.	144	100.0

11. How often do you use a computer to help your English?

23	16.0	a. Often.
69	47.9	b. Sometimes.
33	22.9	c. Seldom.
18	12.5	d. Never.
1	0.7	(No answer provided).
144	100.0	Total.

12. If you use a computer to help your English, when you do so, do you mainly:

73	50.7	a. Use Internet resources such as online dictionaries?
14	9.7	b. Use email to correspond with your friends in English?
10	6.9	c. Use the computer to write essays or assignments?
8	5.6	d. Use the computer to keep a diary in English?
19	13.2	e. Use the computer to visit English web sites?
19	13.2	f. I don't use a computer to help my English.
1	0.7	(No answer provided).
Total.	144	100.0

13. Do you ever read emails in English?

7	4.9	a. Often.
35	24.3	b. Sometimes.
23	16.0	c. Seldom.
75	52.1	d. Never.
4	2.8	e. I don't have an email account.
144	100.0	Total.*

14. Have you ever written an email in English?

7	4.9	a. Often.
28	19.4	b. Sometimes.
29	20.1	c. Seldom.
80	55.6	d. Never.
Total.	144	100.0

15. If you could, would you use a computer IN CLASS to help with your English?

39	27.1	a. Yes, I would use it often.
57	39.6	b. Yes, I would use it sometimes.
17	11.8	c. Yes, but I would seldom use it.
29	20.1	d. No, I wouldn't use it.
2	1.4	e. I don't know how to use a computer.
144	100.0	Total.