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Extending the Classroom by “Keitai” Phone

教室の枠組みを越えた英語教育－携帯電話の活用

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日米の多くの大学で，学生にラップトップのパソコンを持つことを義務づけている。確かにラップトップの個人所有は教育上多くの可能性をもたらし，望ましいことであろう。しかし，この不況下では，多くの日本人の学生にとって，ラップトップの費用は大きな経済的負担である。また，ラップトップによるインターネットへのワイヤレスのアクセスは，広範囲で使用されるにはまだ障害が残っているのが現状である。本論文では，日本人の大多数の学生が所持するインターネットにアクセスできる携帯電話のメール機能を用いた教育実践について述べる。携帯電話は，ラップトップに比較すれば，機能ははるかに制限されたものであるけれども，英語教育の現場で適切に使用することによって，授業を補完したり，学生のモチベーションを上昇させるという効果がある。携帯電話によるメールの使用は現代の若者カルチャーの一部であり，若者が頻用するコミュニケーション手段である。携帯メールの使用は，教師と学生の「コミュニティ」の感覚を生み，コミュニケーションを円滑にし，ラポールの形成に役立つ。

On one of my first visits back to the United States in 1993, after more than a decade in Japan, I remember being impressed by the number of computers all over the University of Oregon campus in Eugene, even around the student cafeteria, where students could work on class assignments.

Of course, computer facilities on U.S. college campuses continued to evolve. Furthermore, for some years now, a number of campuses have not merely encouraged but have also required students to have their own computers. In 1983, Drexel University in Philadelphia, Pennsylvania, was apparently the first to make this a

requirement for all incoming students (“Drexel,” “Colleges to Require”).

In times that now seem quaint, individual Internet access was mostly by simple dial-up via telephone lines. Later, improvements in data transmission speed came with ISDN, which gave way to DSL/ADSL and access via cable (using cable TV systems). (A)DSL and cable opened the way to high-speed broadband Internet access. More recently, wireless Internet access became available in 1999, when Apple brought out its iBook laptops with an optional “Airport” feature, Apple’s name for “Wi-Fi” (or “WiFi,” “wireless fidelity” standards —it was said— for wireless local area networks (WLAN)). Other makers quickly jumped on the bandwagon (“Brief History”).

No Tangle of Cables! The 2003 Campus Computing Project survey noted “dramatic gains over the past year regarding campus planning for and the deployment of wireless networks (WiFi).” Wireless LANS were reported to have increased from 29.6% of campuses surveyed in 2000 to 67.9% in 2002, to 77.2% in 2003, and to 81.1% in 2004. Moreover, with rapid growth of affordable WiFi among regular consumers, everyone “come[s] to campus wondering why there is no wireless service in dorms, offices, classrooms, and the campus quad if they already have WiFi at home” (2003 National Survey, 2004 National Survey). At the University of North Carolina (Chapel Hill), one early user, an English professor, was pleased to note that, in addition to the usual information available over the Internet, wireless access allowed students to collaborate on class projects and share drafts from just about anywhere on campus, without the tangle of wires (“Carolina”).

Second Thoughts. But the move toward requiring laptops has been met with caution if not resistance, and second thoughts are not uncommon. One study (by EDUCAUSE) showed that in 2002, there were computer requirements at less than 5% of colleges nationwide (“Colleges to Require”). It would be a plus, of course, for schools seeking to trim operating expenses, since —as a Massachusetts state college information technology officer points out— a laptop requirement would “end the need to replace hundreds of public computers on campus every few years.” But, as one objector reasoned, “with students footing the bill, schools will no doubt trumpet the program as a sign of educational superiority, as though forcing everyone to finance such a costly

piece of equipment is actually doing them a favor" ("Laptop Rule").

Duke Magazine reported in 2002 that although in fact 95% of the university's entering freshmen had computers, one-third of them being laptops, in the end, it had decided against making laptops a requirement for undergraduates. Moreover, the number of undergraduate courses where laptops were actually required or a necessity was insignificant.

Looking more closely at the situation, Duke had noticed that even other elite schools at its level (Harvard, Princeton, Yale, and Stanford)[1] did not necessarily have such a requirement ("Thinking Differently"). Mike Picket, a school official for academic technology, pointed out that it is more important to ask if it "fits your culture and the goal you're trying to accomplish" and not just an ornamental status symbol. He relates a telling anecdote: "I was talking to a small college in the Midwest —very literally in the middle of a cornfield— that had a laptop requirement, and they said, 'Well, we thought it would distinguish us from the other schools in the middle of cornfields.' "

One might think that business schools would be all for the use of laptops, but that is not necessarily the case. Feeling that the classroom is for face-to-face student-teacher interaction, Duke's Fuqua School of Business does not require them and restricts their use, *even forbidding their use* in some classrooms because of the disruption they can cause when students appear to be typing lecture notes but are actually doing e-mail, surfing the Internet (or playing solitaire!) instead of focusing on the instructor ("Thinking Differently"). Or, as Sara Miller writes in the Christian Science Monitor, "even if all students *could* afford a laptop, some professors say, it's more likely to be used for downloading music than [for] deconstructing Dante." An associate dean at Duke notes that some schools even resort to timers that cut off network access during classes.

Wallets Take a Hit. The more immediate concern to individual students, of course, is cost. At private schools, cost is less of a problem because students are more likely to come from affluent families. Indeed, significant differences in the ability of private school students to afford computers are pointed out in two recent surveys by Hawkins et al. (2002: 28, 2003: 33): in 2002, 20% more students at private schools had their own

computers than students at public schools; in 2003, the figure rose to 24%).

For students at public institutions, who tend to be not as well off, the $1200 - $2500 (approximately ¥127,000 - ¥265,000 in late 2004) would represent a more significant financial burden, without even considering software, peripheral devices, and ever-rising tuition and housing costs (Lamothe). "If I went to a university that told me I had to buy a mac notebook (or any notebook for that mater [sic])," one student contributor noted bitterly, "I would tell them to kiss my a**" ("College Requires").

Furthermore, even if all students could afford to get laptops —willingly— there is also the matter of whether the course work makes sufficient use of such an expensive personal outlay. Miller writes that Kenneth Green, director of *The Campus Computing Project*, has noted that "schools have been deterred, in part, by costs and challenges of creating a compelling curriculum that merits a PC requirement." Miller also cites the 2003 EDUCAUSE survey authored by Hawkins et al., which shows that only 3.2% of colleges have a computer requirement, actually down from 3.5% in the 2002 survey.

A Japanese Case. Some Japanese colleges have also taken the step of requiring students to have their own laptops. Roving writer Dipika Kohli describes an interesting case at Edogawa University in technology magazine *J@pan Inc*: From its founding (1990), Edogawa University has gone to great lengths in setting up high-tech facilities for its Department of Mass Communications and might be seen to have an edge over schools who were not as quick to realize the potential of computers and the Internet. But like any other school in Japan, Kohli points out, it still has to work hard to attract its share of the ever-shrinking population of 18-year-old high school graduates. With a total fertility rate that dropped to a post-war low of 1.29 in 2003 (*Statistical Handbook*), the pool of potential incoming students will not improve in the foreseeable future, if ever, unless, like American schools, more of an appeal is made to other age segments of the population.

To push its technological appeal, Edogawa has done more than to set up stationary computers (in computer/student ratio, it ranked only 50th in 2003 (*Daigaku Ranking*)) or to merely require students to have their own computers. In creating an "e-campus," it went so far as to actually *give* each incoming student a laptop, supported by some

1500 Internet (plug-in) access points (more than the number of students) in addition to the usual labs and other facilities. One would imagine, though, that as at American schools, the cost is at least partially embedded in school fees (Hawkins 2002, 2003).

Nor has Edogawa gotten complacent. In October of the same year as Kohli's article (Jan. 2003), it launched its wireless LAN (WiFi) system, enabling students to access the Internet at 70 "hotspots" (access points) on campus. Most "plug-in" access points were in and around classrooms, but WiFi gave students more freedom to access from just about anywhere, including the cafeteria(s) and student lounge(s) ("Musen LAN").

Computer Diffusion and WiFi. One might expect Japan, a leading maker of high-tech equipment, to be at the forefront in the diffusion of technological development as a matter of course. In mid-2003, however, a London-based Internet-access researcher, Ian Fogg, blogged after a week's travel in Japan that:

> WiFi in Japan was less widespread than I'd expected: it's in the process of being rolled out at Shinkansen stations: Tokyo had it and Kyoto is imminent, although I was at neither station long enough to log-in. Narita airport has a hotspot in terminal 2, but only in the executive lounge, and it looks very much like a trial service with little promotion. . . .
>
> In fact, the only time I accessed the Internet in Japan was on my first two nights where the Tokyo ryokan I was staying at had wired access in every room . . . For WiFi hotspots to be a success people must *want* access on the move. In Japan hotel Internet access alone met my needs.

That the actual situation in Japan did not fit his preconceived image is not a new story. Society in general was slow to take up personal computers and actually use them. Surveys by the Statistical Research and Training Institute of the Ministry of Internal Affairs and Communications (MIC) shows that in the years 1996-2002, the percentage of households possessing PCs and accessing the Internet increased slowly and picked up speed starting in 1999-2000 (Table 1):

Year	%PC Ownership	% Households Using Internet
1996	22.3	3.3
1997	28.8	6.4
1998	32.6	11.0
1999	37.7	19.1
2000	50.5	34.0
2001	58.0	60.5
2002	71.7	81.4

Table 1 (data from *IT Statistics*, Table 4)

HOTSPOT LOCATIONS (Japan)	Number		HOTSPOT LOCATIONS (Other Countries)	Number
JAPAN (all)	2876		USA (all)	11,780
TOKYO (all)	815		New York City, NY	618
OSAKA Pref. (all)	177		Los Angeles, CA	101
Osaka-Shi	34		Washington, D.C.	122
Osaka City	???		Seattle, WA	158
KANAGAWA Pref.	132		San Jose, CA	97
Yokohama-shi/City	15/47		Redmond, WA	16
CHIBA Pref.	65		UNITED KINGDOM	6093
HOKKAIDO Pref. (all)	94		ENGLAND	5434
Sapporo-shi/City	6/27		London	730
SAITAMA Pref. (all)	48		SOUTH KOREA	(see below)
Iruma City	3		FRANCE	1982
Hannou-shi	1		Paris	453
Hidaka City	0		FINLAND	2
Kawagoe City	3		SWEDEN	416
Saitama-shi	14		NORWAY	27
Sakado City	1			
Sayama City	1			
Tokorozawa City	1			

Table 2: Numbers of WiFi hotspots in various locations in Japan and other countries (all providers, both free and commercial services).[2]

"Hotspots." Given the accelerating utilization of computer technology and Internet access, Fogg would surely have had better success accessing the Internet in late 2004,

but more so in big cities like Tokyo and Osaka and along heavily-traveled routes. Be that as it may, Table 2 shows the results of an informal search of WiFi hotspots (access points) in parts of Japan using *WiFi411*, an online WiFi hotspot location directory. Shown are current figures for this local area (Saitama Prefecture) and for some other locations in Japan (left-side columns), along with a comparison with some other locations around the world (right-side columns) (results updated as of 8 Nov. 2004).

As Fogg noted, many hotels provide hotspots for guests and traveling businessmen, but “leisure spot” access points also exist in great number, presumably for working people accessing information while relaxing or meeting and for others surfing the net. Coffee shops and restaurants are especially noticeable (McDonald’s, MOS Burger; also karaoke spots and driving schools).

A curious omission in the *WiFi411* results was South Korea, which was not even listed. This is surprising since South Korea seems to be one of the most wired (or now, “wireless” societies in the world). While NTT DoCoMo came out in July 2004 with mobile phones that had credit card functions, during a current events segment a full year earlier, my students and I marveled as we read in the Japan Times about Korean young people already buying soft drinks from dispensing machines by waving their phones at the machine’s sensor and paying with e-money ("Forget Credit Cards," "KDDI Phones")

Michael Kanellos rectifies this omission in his May 2004 CNET.News.Com article: “Korea’s KT to Have Earth’s Largest Wi-Fi Network?” Kanellos reported that telecommunications provider KT would have some 23,000 hotspots up and running by the end of 2004, almost doubling the number from the previous spring. This would be unequaled anywhere else in the world. He quotes IDC research director Keith Waryas (“Entire city blocks tend to be hotspots”) and wireless analyst John Yunker, who says that by itself “KT will have more commercial hot spots than all of North America and slightly less than Europe” in a country with a population of approximately 48.3 million (“Background Note”).

Wish List. Since I use a laptop almost exclusively and occasionally take my classes “on the road” (that is, roam around outside the classroom), it would be very convenient

to have Internet access from just about anywhere on the Saitama Women's Junior College (SWJC) campus, especially via WiFi. More than once I have wished that my students and I could immediately google for information relevant to a discussion or activity, but we have been limited by a dearth of hotspots (currently two) and the availability of LAN access cables or, for that matter, telephone lines.

But attractive technology such as this, as Duke's Picket pointed out, must be appropriate to a school's situation and culture. We do have a fairly good overall computer-to-student ratio (approximately one desktop computer for every four students), enough for most normal needs. By comparison, at Edmonds Community College (EdCC), in the Seattle, Washington, suburb of Lynnwood, where we send students for study-abroad, the ratio is 1-to-7.3 (full-time and part-time students). Not far from "EdCC," at Shoreline CC, it is 1-to-22.3, while in the big city (Seattle), North Seattle CC has a favorable 1-to-3.3 ratio (*Two-Year Colleges*).

On the SWJC campus, there are probably not enough laptop users —especially those who move around a lot on campus with them— to warrant setting up more than a few hotspots. Until a year or two ago, even I did not move around that much with my laptop, except to take it home or on trips.

Saitama Women's Junior College is located in a beautiful semi-rural area, but as Table 2 shows, beyond the campus, in my own limited "roaming" area locally, Hidaka City has no hotspots listed yet; neighboring Hannou has one (a karaoke plaza); Sayama has one; and the city of my residence, Iruma, boasts all of three (*WiFi411*). For that matter, even in the vicinity of EdCC (Lynnwood), only 13 hotspot sites are currently listed, all stores, restaurants, and hotels. On the EdCC campus itself, it is only now, in the winter of 2004, that hotspot access sites are being installed at commonly used study areas ("Education Briefs").

For a long time, I wished that that students could access the Internet more frequently and from more locations— to make use of e-mail functions at least, through the e-mail accounts the school provides them, if not with Hotmail or similar services. That way, I could advise them, inform them, remind them of what is expected in the next class, or have them conduct simple information searches and gathering of

materials. There are times while working in my office after school, at night or on weekends, I get an inspiration, and wish that I could share it with them immediately (“There’s a meteor shower tonight. Go out and watch it around 9:00 p.m.” or “There was just a big earthquake in the Chuuetsu region of Niigata. Is your family OK? Call them!”)

Availability and Accessibility, At many U.S. colleges, facilities and general-use computers are accessible from early morning to well into the night (in libraries, for example, that are open from 7:00 a.m until midnight). At our college, library computers are freely accessible during “normal working hours,” 9:00 a.m. - 5:00 p.m., and students can use the computer classrooms when they are not being used for instruction, but in any case, students are expected to leave the campus by 6:40 p.m., when last bus departs and the main gate closes. Moreover, many students have part-time jobs to which they must get to.

Students who live at home can access computers when they get there, and by now, many if not a majority of families have computers. But what if home, the family home, is in another part of Japan? We attract a fair number of students from other prefectures, both near and far, as well as students from South Korea, China, and Taiwan. These students must rent apartments or dormitory rooms unless they are fortunate enough to have a relative living nearby who is willing to take them in. Renting an apartment requires an additional outlay, not only for rent but also for *shikin* (deposit) and *shikikin* (key money/gratuity), although such additional fees are in retreat under competitive pressure and government policies (“Daylight Robbery”).

For the families, sending a child to college is a high priority but also it also takes a big bite out of family budgets already under pressure from an economy that is not yet free from the hangover of the 1990s. Under such conditions, even if the family has a computer at home, forking out another ¥200,000 or so (about $1900) for a laptop and related equipment that is to be used by only one person can be quite a burden, as students and families in the United States will also attest to (Hawkins et al). Some students do indeed have laptops, but even as portable as these are, they are still too inconvenient to lug to and around campus, at least on a regular basis. It seemed that

communication and educational interaction over the Internet —with little or no restrictions of time and place— would have to wait for another day.

Tragedy Reveals an Opportunity. In the spring semester of 2001, 13 students signed up for our six-month study-abroad program at Edmonds Community College. We had vigorously promoted the "Seattle" program, and the sparkling major league baseball debut of Ichiro Suzuki with the Seattle Mariners helped in no small way to kindle students' enthusiasm for Seattle.

The students had gone through a series of orientation sessions to prepare them as much as possible for both the joys and rigors of life in a foreign country. As usual, I had stressed again and again the need for flexibility, since living in a foreign culture is fraught with all kinds of unexpected situations.

Little did we realize how much flexibility would be called for from this group. The students were scheduled to depart for Seattle on Saturday, September 15, with a final pre-departure orientation on Wednesday, September 12. Late in the evening of the 11th in Japan, the morning attacks on the World Trade Center in New York were being broadcast on Japanese TV.

With that, of course, all travel was canceled and was impossible for the next several days. No one knew yet if the attacks were over and limited to the East Coast or whether they were a prelude to attacks nationwide. At the "final" orientation meeting, it was announced that the "Seattle" study-abroad program was off, and we scrambled to find an alternative for the students.

Fortunately, that summer, we had done a short two-week tour to Australia through the Hawthorn English Language Centres in Melbourne, and immediately made arrangements for the six-month study-abroad students to study there beginning the following March (2002). Our one-year study-abroad program normally begins in March, so we also switched that destination to Melbourne.

As 2001 wound down, we had to re-do the orientation sessions for the six-month students, this time for Australia, as well as start up similar sessions for students in the one-year program. Some students had rethought their study-abroad plans. Of the original thirteen in the six-month program, three had made other plans, five stayed

with the program, and five switched to the one-year program, joining four others who had had one-year study-abroad in mind all along (but in “Seattle”).

Our orientation sessions, to familiarize students with life in their new host country, had to be redone, since, with perhaps an exception or two, they (and I!) knew precious little about Australia. For our USA programs, we had not only a wealth of knowledge and first-hand native and in-country experience, but we could also assume that even the least knowledgeable student had at least a passing familiarity with things American, given a considerable bias toward America in English language instruction in Japan, not to mention the cultural influence of Hollywood and American music and sports. A detailed, textured picture of life in Australia —how school and homestays in Melbourne compared to that of “Seattle”— would have to come with experience and feedback from our first group of extended-stay students, but in the meantime, I thought that we should not remain ignorant of general knowledge that residents take for granted, such as general geography and places to visit, names of well-known people, animals, and other items that students would likely encounter during their stay.

“Extension” Program. Another aspect of the situation, however, had points in common with a project our English (now International Communication) Department had begun some years earlier. In the late 1990s, in an effort to project a more “service-oriented,” “user-friendly” image with high schools whose students would be enrolling at our college the following April, we began what was called an “extension ” —that is, an “outreach[3]”— program. What had led to this was the fact that once college-bound students had been accepted at a college or university, high school study was, for all practical purposes, over, and it was easy for them to lose contact with English in the several months until the new school year started in April. Even a few exercises in English might help to keep them from becoming too rusty by the time they started college English classes, and our efforts, we felt, would be appreciated by the high school counselors as well.

English “Lite.” At the same time, we wanted the students to come away with a positive, “user-friendly” image of working with English and not to remind them of the drudgery of studying English for tests purposes. Thus, we strived to make exercises

light and not too onerous and, if possible, interesting and relevant.

Our Australia-bound students were in much the same boat as the high school seniors. They would be departing for Australia in March of the following year, and, at the end of 2001, the school year was winding down. Following the Christmas/New Year break, there would be a single week of classes and then final examinations. After that, they would have very limited contact with English until departure time, when they would suddenly be thrust into an English-speaking environment almost cold, if they did not take the initiative to keep "in training."

"Aussie" Mini-Research! It occurred to me that the extension program concept could be used for the Australia-bound students too: light exercises to keep the students in contact with English and prevent them from becoming too rusty during the long vacation period.

"Beans" of Knowledge: With this is mind, I initiated a project called "Aussie Mini-Research," in which I would give the Australia-bound students bite-sized assignments, asking them to find the answers to simple, basic questions, such as "How many states are there in Australia and what are their names?" These would often be the little pieces of background knowledge that native-speakers and permanent residents know "in their bones" and pretty much take for granted but which recent arrivals might not know right off (for U.S.-bound students, such "tidbit" questions might include "How many stars are there on the American flag?" "What country is America's closest neighbor to the north?" or "What city is Hollywood in?"). A Melbourne-bound student replied:

> Hi KEN! How are you doing? I'm sorry to responce your mail (>_<)
> Yesterday I went to my friend's house and came back home too late.
> ANSWER→→Australia has 6 states and 1 sub state (？) and 1 capital territory. We going to "Melbourne" is in Victoria state. Melbourne is the capital city in Victoria.

I would pretty much make up the questions on the spot as I searched my own memory, the Internet, and other sources for, if possible, tidbits of what Japanese call

mame-chishiki (literally, a bean of knowledge)[4] —interesting or curious information in the spirit of "trivia questions" and some Japanese TV variety shows. Questions (with some students' answers) have included:

> This famous place is also known as "Uluru," but most people know it by a different name. What is that name?
> => ULURU's different name is Ayers Rock.and Ayers Rock in northern territory.
> => Thank you☆I read the guidebook now, and I would like to go to Ayer's Rock and Old Melbourne Gaol.

> Queen, question, quiet, quite, quit, quick . . . As you probably know, "q" is usually followed by "u" in English. But when you fly to Australia, you will go on QANTAS Airlines. How come the spelling is NOT(!) "QUANTAS???"
> => Q=Queensland A=and N=Northern T=Territory A=Aerial S=Services. I didn't know(^^ゞ…"Q" is followed by "u" in English.
> => Good evening KEN! It's hot day yesterday and today! I working "B------" in Tokorozawa only 5 days from yesterday. That shop is so busy this week because the equinoctial week . . . Queensland And Northern Territory Aerial Services…QANTAS is abbreviation of these words! The symbol mark is kangaroo♪ I like plane! See you～(^^)/～～～

Some questions attempt to raise students' awareness of differences they will encounter between American English and Australian English:

> Which is the correct spelling, "color" or "colour?"

> Which is correct: (1) "The soccer team is very strong this year" or (2) "The soccer team are very strong this year"?

It was not really important that they get the right answers right away. In fact, it is a more interesting and productive English communication exercise if they don't and have to be led to the correct answer through several back-and-forth exchanges. As simple as this is, I feel that its interactive/communicative nature is more likely to "stick" than by

solitary and abstract study. When students name the Australian states, for example, they sometimes miss the island-state of Tasmania, so I lead them to it: "That's OK so far, but actually, there's one more state . . ." and "OK, here's another hint: Hawai'i is way out in the Pacific Ocean, far from California, but it is also one of the 50 states of the USA, isn't it? . . . "

Participation in this little project was and still is voluntary on all sides. Because of my regular work, I cannot always tell how much time and effort I can devote to it, nor when or where. I exploit moments —niches— of free time between other work, while taking a break, or as a brief change of pace. Students are also free to put off or even ignore these mini-tasks, depending on their interest in it or their available time. After all, I don't want the tasks to be onerous or to conflict with more important commitments.

The only conditions I have put on the students are that (1) our communication was to be, other than in exceptional cases, entirely in English so that it would serve to prepare them for communicating regularly in English and (2) for them to search for information and compose their answers entirely on their own —no matter how awkward or mistake-ridden— rather than simply getting the answer from someone else merely to go through the motions of completing the exercise. The point was, I explained, not so much the final answer but the *process* of tracking down the information and putting together the answer in English.

Again, Accessiblity? We started doing these exercises —mini-tasks— not in a standard classroom format but as a form of small-scale distance learning[5], by e-mail, taking advantage of the technology around us. However, there was immediately a basic technical problem: access. As the school year wound down, students would be coming to school less and less and e-mail communication via their school accounts would be difficult unless they could access from a home computer or Internet shop.

Small Wireless Tech. Fortunately, wireless technology —on a very small scale— was there to step into the breach. With the market for their product reaching saturation, Japanese manufacturers had been pressured to innovate and add "cool" features to produce "a gadget that began life as a mere phone [that] is fast evolving into a

pocket-size computer with which people can perform many of the tasks of modern life” (“It Started”).

Students might or might not have desktop or laptop computers readily available, but one thing that virtually *every* student had, literally “at hand” was a “keitai” (mobile/cell) phone with e-mail (SMS/text-messaging) capability. Overall, at the end of 2004, there were 84,483,800 cellular phone subscribers in Japan (plus 4,703,300 PHS subscribers), roughly two-thirds of the total population of 127,000,000 (“Japan Cellular”).

Not only do young people possess such phones (or is it the other way around?), it often seems to be a body part, “a wearable fashion accessory” (Tim Clark, qtd. in Hebig). Moreover, unlike computers, keitai phones are nothing if not affordable. At the low end, models that have been on the market for a year or longer go for a song —a few thousand yen (tens of dollars)— or even for free, as promotional giveaways. At the upper end, they generally run around ¥20,000 - ¥30,000 (about $200 - $300) for the models with all the latest bells and whistles. If one is too talkative, monthly fees can easily reach ¥10,000 - ¥20,000, but otherwise, text-messaging by keitai phone is inexpensive and ideal for the travel-light on-the-go lifestyle.

A Mobile Addiction? “The top possession that young Japanese women cannot stand forgetting at home,” claims *Trends in Japan*, “is neither their wallets nor their handkerchiefs, but their cell phones,” something that would leave them “feeling restless and insecure all day” (“Emerging”). “Leaving one’s phone at home or letting the battery die,” cultural anthropologist Mizuko Ito notes, “is ‘the new [social] taboo.’ ”

“The keitai has become a social necessity in Japan,” Ito points out. “To not have a keitai is to be walking blind, disconnected from just-in-time information on where and when you are in the social networks of time and place . . .” Not only did some 64.6% of the population have keitais (Nov. 2001 Mobile Communications Research Group survey), but “among twenty-somethings this number was 89.6 percent, among those enrolled in college, 97.8 percent, and among high school students, 78.8 percent. . . . among college, high school and middle school girls who own keitai, keitai e-mail use is effectively 100 percent.”

> The first sign of the next shift began to reveal themselves to me on a spring afternoon in the year 2000. That was when I began to notice people on the streets of Tokyo staring at their mobile phones instead of talking to them. The sight of this behavior, now commonplace in much of the world, triggered a sensation I had experienced a few times before —the instant recognition that a technology is going to change my life in ways I can scarcely imagine. Since then the practice of exchanging short text messages via mobile telephones has led to the eruption of subcultures in Europe and Asia. At least one government has fallen, in part because of the way people used text messaging. Adolescent mating rituals, political activism, and corporate management styles have mutated in unexpected ways (Rheingold xi).

In this connection, Ito describes an interesting phenomenon in the use of keitais that suggests that the term "tele-phone" —that is, communicating by speaking— is perhaps becoming less appropriate: that "keitai e-mail is replacing voice telephony as the dominant mode of telecommunications between teens and twenty-somethings." She describes a common situation where callers will exchange several text messages before making an actual voice call. This, she points out, serves as the equivalent of knocking before entering a room: it gives the receiver a "heads-up" and determines availability, avoiding sudden and awkward interruptions. And, let me add, whereas a regular phone call, by its very nature, can be very insistent and demanding of an immediate response, e-mail can be sent any time the sender wants to, while still allowing the receiver considerable leeway with regard to accessing the mail and responding to it. Moreover, sending text messages is far cheaper.

In an interview by Heiko Hebig, Tim Clark, editor-in-chief of *Japan Internet Report*, notes that "it is not uncommon for young girls to have long, continuous 'conversations' via e-mail that stretch out to over 100 messages per day . . . . trivial conversations about everyday events that would have been carried out over an hour or more via landline telephone in the old days."

I used to chuckle when I saw how attached teenagers were to their keitai phones and keitai mail ("I couldn't live without it!!"), but then realized that I was probably just as

addicted to e-mail on my computer. I am normally unaware of this, but it hits home on those rare days when no mail downloads: there is this slight twinge, like, “Nobody out there cares enough about me today enough to send me mail . . .!” Later, impersonal “headline” mail comes in from the Washington Post or ABC News and, no longer totally ignored by the world, I feel a little relieved.

At school, students can relay information about club activities and class cancellations, and even “wake-up calls” to friends who have trouble getting up in the morning. “The reason is simple,” says Clark. “Students have their mobile phones with them 24 hours a day.” Indeed, he notes that in Japan, accessing the Internet by “traditional” means —i.e., by computer— seems to play second-fiddle to the keitai phone, especially among those in their teens and twenties, whose income is limited[6]. “Younger students in particular,” Clark goes on to say, “tend to feel that they don’t need a PC if they have a cell phone.”

Thus, the anytime, anywhere availability of students’ keitai phones-cum-computers allows me to e-mail students with mini-research questions almost as the inspiration strikes me, and the message can reach them even when they are on a train or bus (where many people kill time doing mail or entertain themselves with online games or even music on their phones (“Emerging”)). I do, however, try to avoid mailing during class time in case their “manner mode” (vibration instead of a ring tone or “chaku-melo” (melody from a popular song)) is not on, lest it disrupt a class.

Outdistancing WiFi. For short messaging, for now at least, text-messaging by keitai phone gets around one severe limitation of accessing the Internet from laptops by WiFi: distance. WiFi, the technology page of The Economist points out, “is a short-range technology that will never be able to provide the blanket coverage of a mobile [phone] network. Worse, subscribe to one network of hotspots (in coffee-shops, say) and you may not be able to use the hotspot in the airport,” until roaming and billing issues are untangled. The keitai phone solution can partially bridge this gap until a new technology called 802.16, or WiMax, a wide-area WiFi, comes online to dramatically increase accessibility range from 50 meters to 50 kilometers (31 miles) (“Brief History”). Still, no laptop or even PDA of this age approaches the light weight and portability of a

keitai phone.

Other Messaging Opportunities. There are of course are many ways to use English in regular or keitai phone e-mail besides mini-projects like Aussie/USA Mini-Research. The timing of the Aussie/USA projects, though, shortly before departure, is optimal: students know that very soon, they will be living in what is mostly an English-speaking world. Few things galvanize people like a sink-or-swim situation. The closer it gets to departure, the more they feel the pressure to use English in any and every way possible. "Mini-research" by keitai mail is of course in no way a panacea for regular English-language education, nor is it meant to be, even though there have been cases where keitai mail has been touted as a magic wand for education (see "Sergio Ciucci: Il Miracolo del Professore," below).

The closer messaging in English comes to everyday usage —that is, the way students do it with their friends, in Japanese— the better. And occasionally, that happens: students sometimes inform me that they are sick and will be absent or have missed the train and will be late for class. Early on, such messages are just as likely to be in Japanese, but occasionally, students will take the initiative to send them in English (better for staying on the teacher's good side!). From my end, I might send them a reminder about not being late again for a study-abroad orientation session, or about what they are supposed to do or bring for class, or the URL of a useful Internet site. On a more serious level, a student might mail me about a personal problem[7].

Away from Class. More recently, students have been able to participate in internship programs, one of which begins in December, during the last month of classes. In lieu of a couple of missed classes, I have asked students to send me short messages in English about how their internship is going.

> Hi, KEN! I working as housekeeper at Hotel . . .　.I pick up gest's laundry and turndown service and chocolate service etc…….I learning a lot of new things everyday. It is difficult to learn many things. It most difficult to listen to English. I thought gesture and smile is very important!

"**Reach out and Touch Someone**," ran a memorable "feel good" slogan in an American Telephone and Telegraph (AT&T) ad campaign beginning in 1979, designed to soften the overbearing corporate image of "Ma Bell," then a communications monopoly. The idea was to tap into the natural human desire to communicate with and to be communicated to by others (Massey).

That same idea underlies e-mail communication with students, especially by keitai mail. We are not after great composition skills here —that can come later— but rather, simple, frequent, easy-to-do communication. Such mail, as digital culture journalist Justin Hall writes, is just as likely to be for letting friends know "where to get their boogie on." There is also another aspect to this kind of mail besides the particular content of any given message, namely, the very fact that someone has cared enough to send a message —any message— what cyberspace and digital culture guru Howard Rheingold (5) calls "thinking of you" mail[8].

"Forget-Us-Not!" As part of our recruiting efforts every year, we have several "Open Campus" days, often with demonstration classes. After my classes, I tell prospective students that if they would like to do some keitai mail with me in English over the summer, they can send me their mail addresses with a blank message to my address[9]. Hoping that Saitama Women's Junior College will stay in their minds and that they will think of us from time to time, I let them know that we're thinking of them too. Since I leave for my home country soon after Open Campus, some of these exchanges take place back and forth across the Pacific, taking advantage of the fact that time and location are irrelevant.

> Hi, Y----! Thanks for coming to visit us at the SWJC Open Campus today. It was nice having you in the class, and I hope you had a good time! Have a nice summer, and I hope to see you again someday! KEN
>
> => Thank you for your kindness. I'm glad to keep in touch with you. When I send mails to you, I should send it to your e-mail, shouldn't I ? It's OK. 時々メール交換してくれたら嬉しいデス! Bye-Bye Good night.（o^-^o）See you!!
>
> => ThanK you（⌒∀⌒）Today I enjoyed in your class. I hope to speak in

EngIish someday!! o(*°▽~*) . . . Please take care of yourself and say hello to Reina and Ai. Good night! (-.-)zzZ

=> Hi,Ken! What's up? I was enjoyed today! Thanks a million. I'm glad to have your lesson. I learened the most thing about study abroad. I have interest more English. In future, . . . I want to be a 『ツア-コンダクタ-』←Please teach me! in English. I hope to see you again someday! See you later! (^∀^)

Prospective students decide on SWJC for any number of reasons and it is impossible to say whether these exchanges have had any decisive effect, but some of these former high school visitors are now in fact enrolled here.

Granted, messaging by keitai phone is not a medium for fostering great writing skills, given the tedious nature of thumbing in text, but the convenience and immediate accessibility of such technology helps to create and/or maintain, as Miller notes, "a global village on campus, . . . a small-town atmosphere." In the same article, Professor David Brown of Wake Forest University, points out that "Everybody in the community talks with each other more frequently . . . Students run into trouble, they e-mail one another, e-mail the faculty. The whole culture changes."

Keitai Limitations: Thumbs Down on All Thumbs? Students usually receive messages from me on their keitai phones, which is convenient because they are so often on the move, but for me, composing messages is far more convenient on my laptop. One reason, of course, is that I work mostly from my office. When I am on the road, I will message from my keitai phone, and after a while I getter better at it, but for me, it is still not anywhere as convenient as using my laptop keyboard. Thumbing in messages on a keitai keypad is a bit of a pain, and at least one of my students agreed when she added at the end of one of her messages: "It's hard to write the mail in English by mobile phone. I like computer mail. Because that have a keyboard　f^_^;　See you tommorrow!"

For the generation that has grown up with Gameboy and Playstation, this is less of a problem. The expression "all thumbs" usually indicates clumsiness, but when messaging from a keitai, being able to use both thumbs is a distinct advantage on the small keypad. One estimate has it that there are at least 1.5 million Japanese who can

compose messages with both thumbs —and even touch-type— at speeds equivalent to typing on a standard keyboard at 100 characters a minute. There are even speed competitions of this type (“Emerging”). After watching some students thumb messages, I find this quite believable and, in the end, it follows naturally from the digital dexterity and blinding speeds achieved by Japanese in the use of the abacus. For many in my generation, however, such speeds are rather difficult to achieve.

As with a regular push-button phone panel, the basic keitai keypad consists of twelve keys (numbers 1-0 and the “star/asterisk” key (*) and the “pound” key (#)), plus a few buttons for shifting and other functions. Alphabetic letters are distributed 3-4 to each number key, each of which is also for three to five “kana” symbols from the Japanese syllabary.

While “A” required only one push of the “2” key on my older model Vodafone, three pushes were needed to get to “C.” Back then, upper-case letters were the default setting for some reason, so in order to access the more frequent lower-case “a,” one had to thumb the “2” key four times to get to it (A-B-C-a) and six times to get to “C” (A-B-C-a-b-c). It was even more troublesome for four-letter keys: accessing lower-case “s” on the “7” key required going through P-Q-R-S-p-q-r-s. For Japanese “kana” characters, five and sometimes six pushes are required, plus one or more pushes on the conversion/selection key to get the desired Chinese “kanji” character.

The situation is better now (with Vodafone, in any case): you can set the phone to use either upper-case or lower-case letters or type the letter and convert it to the other case.

Capacity. Another limitation has been the amount of text that can be sent. Vodafone has long had a large capacity: my first Vodafone keitai, acquired (free) about three years ago, could handle 5920 alphabetic letters, enough to handle, for example, copies of newspaper articles sent from my computer.

Until 2003, however, most of my students’ phones could handle only 500 alphabetic letters. Forgetting this, I would send longer messages from my computer or Vodafone keitai to their keitais, only to have students reply that the message had been cut off and could I please re-send the remainder. Since 2003, other companies have increased

their capacities to the 5000- or even 10,000- to 12,000-letter level, but in late 2004, I was surprised to see a number of recently-bought phones that were still at the 500-letter level. Manufacturers might be choosing to limit capacity for text-messaging, which, among young users, is rarely very long anyway, and devoting memory to more visually appealing Internet functions.

Since most of my messaging with students is of a very short nature, this is usually not a problem, but there are a few students who tolerate lengthy messages well. In these cases, a large capacity is convenient[10].

Greater text-messaging capacity is also convenient when students send me longer texts for correcting or explaining. These are often self-introduction messages to their host families, messages from and replies to former host families, and various other communications with the outside world. If they are at school, I can send replies back to their school or other (e.g., Hotmail) e-mail accounts, but if they need replies when school or home computers are not accessible, I reply to their keitai phones. If their phones are of limited capacity, I have to break up the reply into several installments.

Sergio Ciucci: Il Miracolo del Professore

How have attempts at extending class work through the use of mobile phone e-mail fared elsewhere? In 2003[11], a Nippon TV show, *Nazo o Toke! Masaka no Misuterii* (*Solve the Riddle! Incredible Mysteries*) featured a miraculous turn-around in the performance of a class of underachieving students in a chemistry class at a technical high school in Foligno in central Italy. Most of the following is from the account as related in the NTV program, supplemented by details from Italian and other media sources.

Chemistry teacher Sergio Ciucci's students rarely paid attention and would usually just play around in class, often thumbing in messages to friends on their mobile phones under their desks. They were, in fact, the worst-performing class in the school. Says Ciucci, "Young people have changed, they do not read very much, they no longer

consider school as a source of learning and are interested in other things like sport” (“SMS”).

But not long after, Ciucci’s class achieved the highest test scores in that grade level. Cheating was suspected, but the exam proctor said that he had been especially careful in looking out for it. After the test, in-class behavior did not change at all: the students were as rowdy as ever. Yet the class retained its top ranking in the next test.

There were also suspicions that Ciucci had been tutoring the students privately, but Ciucci pointed out that this was not feasible, in terms of both time and money. He did admit, however, to spending the equivalent of about 300 yen. Finally, he let the others in on his secret. Once revealed, the method was used throughout the school, with similar results.

What Ciucci had done was to take advantage of contemporary youth culture by employing the students’ mobile phones. As in Japan, use of mobile phones is extremely widespread in Italy and every student in the class had one, so Ciucci had been sending short assignments to the students’ phones. The uniqueness and novelty of this method had gotten the students’ attention and had caught their fancy. In fact, they could hardly wait to get their assignments. Current mobile phone messaging technology also matched well with shorter attention spans and less tolerance for long, demanding, and complex work. In Ciucci’s case, technological factors limited homework questions to a maximum of 140 characters (Miliani).

This astounding turnaround attracted media attention all over Italy and soon, schools nationwide were taking up the method.

Presenters on the NTV show wondered whether the method would work here in Japan, so the production staff was sent out to Ogawa Prefectural High School in Saitama Prefecture (埼玉県立小川高等学校), where they tried out Ciucci’s method with two second-year classes totaling seventy students.

The teachers, Yoko Tanaka and Takashi Wakabayashi, said that it was difficult to get students to do their homework and that usually, less than half of them would turn it in. Without letting the students know what was about to happen, the teachers then e-mailed a simple homework task to the students’ keitai phones. The assignment was

“For tomorrow, write down some four-kanji idioms/proverbs five times each . . . ” (「明日四字熟語を５回ずつ書いて・・・」).

As with the high school in Italy, the teachers had tapped into exactly the right point of contemporary youth culture, with surprising results: Tanaka Sensei was delighted: “My goodness, . . they ALL turned in the assignment! . . . I’m amazed . . . ! Every one of them did!” (「何と・・・全員！全員提出です・・・驚きました～～！全員提出♥」) Not only that, but on a follow-up quiz based on the homework, ninety percent of the students got perfect scores.

Some of the students shared their reactions: “It’s, like, fresh, and it’s neat!” (「何か新鮮でいいよね」); “It makes me feel like doing it, unlike directly being told to do it” (「直接言われるより　やる気が出る」); “A feeling of closeness and familiarity comes right out” (「親近感が湧きますね」); “It’s friendly, yeah?” (「フレンドリーだよね」); and “Besides, the fact that the teacher used e-moji[12] was neat too!” (しかも先生が絵文字を使ってくるというのが また よかったです！」).

Although it might not speak well for face-to-face communication, host Shinsuke Shimada noted in closing how what teachers *said* to the students had no immediate reality for them, but that keitai e-mail reached them where they “lived,” that, for them, mail was impossible to ignore (「先生の言葉っていうのは生徒にとって遠い言葉 . . . メールっていう物は彼らにとって近い言葉 . . . 送られたら無視できない . . . メール無視できないでしょ？」).

Novelty Effect? In both the Italian and Japanese cases, the novelty of using keitai phone mail for assigning and receiving homework assignments definitely caused excitement and drew students’ attention. The question is whether this method would continue to be effective on this scale (entire classes) when the novelty wears off.

Modest Goals. My own use of keitai phone e-mail had more modest goals and was on a smaller scale, mostly extra-curricular and mostly with groups of students in special programs: study-abroad or work/study internships. In either case, the mini-assignments were more in the nature of tasks outside or beyond the classroom. For study-abroad students, responding to mini-research questions was strongly recommended but optional, and getting students to learn a little bit about their

soon-to-be host country on their own and getting them used to communicating about it in English was only part of the endeavor. The other part was to get them in the habit of corresponding with me and other members of the study-abroad team at the pre-departure stage in hopes that they would continue to do so to some extent while abroad. This would, we hoped, help us to stay on top of their situations and to keep channels of communication open and functional in case of problems or emergencies.

It is tempting to extrapolate the results in Italy and in Ogawa-machi into a revolutionary new teaching method, but I have my doubts about this, especially when the novelty subsides. My own expectations are of a more sober nature: I see the use of keitai phone e-mail as one more useful tool in a teacher’s bag of tricks, one that “reaches out and touches” students where they live so much of their lives.

I do not see keitai mail as replacing regular classroom work of greater volume and intensity — the physical limits of the medium and the technology work against that. Rather, I see it as *supplementing* classroom work and helping in yet another way to bring students and teachers a little closer together in that “small town atmosphere” and “global village” (Miller) in cyberspace. If students are increasingly “allergic” to reading and writing copiously, then mini-assignments by keitai phone e-mail, while no replacement for regular educational nourishment, can at least provide them with some healthy “snacks.”

Kaizen. As we are seeing in contemporary society, a parent-child or teacher-student relationship does not exist merely because the people happen to find themselves in those roles. A true, functional relationship is something that is nurtured, nourished, and “tweaked” on a regular if not daily basis, both within and beyond officially defined boundaries, i.e., the classroom, a *kaizen* (改善) mindset that was pioneered by Japanese manufacturers and now employed in many countries). Keitai phone e-mail offers one way to expand teaching opportunities and student-teacher interaction far beyond the four walls of the traditional classroom.

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1 The 2005 edition of U.S. News and World Report’s *America’s Best Colleges* ranked Duke fifth among “Best National Universities,” along with MIT and Stanford. Tying for first were Harvard and Princeton, with Yale third and the University of Pennsylvania fourth (“Ranking”).

2 Some of the *WiFi411* data shown in Table 2 is confusing —and is not clarified— why a distinction is made between “shi” (市) and “City,” which are usually taken to mean the same thing. Yet different figures are given, for example, for “Yokohama-shi” (15) and “Yokohama City” (47), separated in the table by a slash. Elsewhere, Japanese “shi” is used at times and at other times “City.”

3 A program “designed to extend services to those not usually accommodated by an organization” (Webster’s New World Dictionary).

4 Such “mame-chishiki” (豆知識) tidbits of background information in Japanese texts are often curiosities of the “Did you know…...?” type, and can actually be quite interesting. I first came across “mame-chishiki” in the margins of a comic (“manga”) version of a historical biography and found them as interesting as the main story.

5 I was first directly exposed to distance learning earlier in the spring of 2001, when I tutored a student who had returned from six months at Edmonds Community College and who was taking an online composition course from “EdCC.” After we broke for the summer, I continued to critique her compositions from the USA by e-mail and phone. We continue to “study” by keitai and computer e-mail for TOEIC and other tests.

6 With the growing number of people in this age group who sidestep full-time employment for the “freeter” lifestyle, this phenomenon is not likely to disappear soon. (“Freeter,” (free) + German “(Ar)beiter,” (worker), in Japanese, indicating a freelancing part-timer.)

7 The most serious personal problem I have been consulted about by e-mail involved a series of fairly long exchanges, all in English. Typically —although I did not realize it at the time— the nature and scope of the problem was laid out over more than half a dozen late-night exchanges

before verbally discussing it more fully on the phone.

8 Short messaging to maintain contact by "thinking of you" mail is a long-established tradition in Japanese society: every New Year season, people send out dozens if not hundreds of "nenga-jou" (年賀状) post cards to friends and associates. The messages usually include set standard greetings ("Greetings upon the dawn of the New Year. I hope I may enjoy your favor in the coming year."), with perhaps a bit of a personal note, but the underlying purpose is to maintain ties by letting the recipient know "I'm thinking of you/haven't forgotten you" and to confirm or update contact information.

9 This is also to avoid errors in manually copying long and complicated addresses that students use to express a bit of individuality and to foil spamming. A typical address might look like: <winnie.-.-7.7love-forever-true.btfsplk8@docomo.ne.jp>. (Any resemblance to an actual address is purely coincidental.)

10 One recent lengthy exchange with a graduate had to do with factors behind the results of the 2004 U.S. presidential election and an explanation of why I thought her idol, Britney Spears, had supported the Bush campaign.

11 I programmed my VCR to record this show as a generally interesting one, without knowing what topics would be featured, and only watched the tape somewhat later. Since the videotape deck I used does not record the time and date, I have no specific information for when this particular program was broadcast.

12 E-moji, pioneered by NTT Docomo, number in the hundreds (♥ is a primitive, basic one but there are hundreds of truly picture-like ones). Other emoticons ("kao-moji") used by young people can be created right on the keypad and make for a close user-friendly atmosphere. Japanese "kao-moji" emoticons are quite clever and much more picture-like than what one usually sees among Western users. Among Western emoticons, >:-< for "angry, livid" comes close to being graphically obvious, but :-) for "happy, smiling" or :'-(for "crying and really sad" (*Smileys*) require the reader to at least mentally rotate the emoticon 90°. Common Japanese emoticons, on the other hand, do not need to be rotated and are usually quite obvious, requiring little or no explanation or interpretation: ＼(^o^)／ (>_<) (T T) (-_-)zzz (^_-) and m(_ _)m ("I'm sorry" (bowing in apology)). (For an interesting and entertaining private collection, access Yuki's *Kao-moji (Japanese Emoticons)* at < http://www2.tokai.or.jp/yuki/kaomoji/>).