



Youth and Cell Phones: Observations and Explorations

Franz Prichard
Adjunct Research Associate
Clarity Innovations, Inc.

February 5, 2004

© 2004 Franz Prichard and Clarity Innovations, Inc. This white paper may be distributed for noncommercial use without specific written permission so long as reproductions are made in whole, with attribution but without modification, and in accordance with current fair use guidelines.

The Mobile Present in the Education Environment

The present condition for cell phones in the education environment is not a pretty one. Schools have come to grips with the fact that the majority of their students use cell phones on a daily basis. Yet the standing policy, usually based on an out-dated association with pagers and drug dealing, ignores a changed reality where young people and families rely upon phones to connect in new ways. Advanced phone technologies also increasingly challenge the methods of preventing students from cheating. Instant text can share answers, camera equipped phones can provide visuals on complicated problems, and detailed voice messages can be exchanged between successive periods. In addition to these threats, disruptive uses are often cited as problems with phones in classrooms; forgotten ringers, buzzing silent modes, or out-right chat sessions offer the disruptive student many potential new ways to bring disorder to class. But these problems are not going to be resolved through a cell phone ban. These devices and the way kids of all ages use them should be better understood in order to develop new educational policies that reflect the new reality young people live in.

Ways of Using a Phone

I would like to introduce some ways to think about how cell phone use differs from other existing devices and technologies. A simple cell phone incorporated into a young person's life can alone create a new way of looking at the world. Suddenly parents and new friends are a button away, choices are made more quickly and new sets of relationships emerge. Many other electronic devices children use provide entertaining and occasionally educational content. The consumption of these usually branded goods and music provide young people the materials that define their identities. More importantly, interactions, both in person or virtually, then mold and shape their use of these materials into distinctive combinations based upon these relational exchanges. The attraction of peer-to-peer game play has always been based upon this idea. In peer-to-peer gaming and chat uses of home computers, the users are sharing a virtual landscape from their fixed locations. In this virtual space, geographic and cultural distances are transcended as users relate and interact within its determined codes of conduct and structures.

Beyond this computer use, instant messaging and conversing through phones expands young people's connectedness to others while at the same time loosening them from the fixed terminal interactions. Locations, lived experiences, and observations take on new depth as they are exchanged in real time from a user's mobile environment to others. Mobile connectedness opens the world around young people no longer experienced passively to a new perspective. All of their lives can be exchanged with others in new ways.

In its mobility, the device has its own set of advantages and disadvantages that mark it with unique user experiences. Though technologies may improve how much content a device can provide, the way people use them ultimately determines the impact of the user experience. The phone that opens the world to new ways of connecting must not be conceived as a mobile computer but as a unique space with its own implications and transformations. Young people, in their insatiable quest to embrace the new, have quickly adopted these devices into their lives in ways that emphasize the unique experience of the phone. Their uses and experiences are the key to understanding the changed world of mobile connectedness. This has many implications for society at large but in particular for the ways we think about education. Educators must embrace this drastic change and explore new ways to engage young people's new found relationship with their world, or continue missing the opportunity before us.

Observations from Japan

This perspective is based on observations of advanced cell phone use in Japan. The Japanese and American cellular markets are two very different environments, yet the impact upon young people has been almost identical. And as technologies progress, any differences that exist between them now will evaporate as U.S. usage reaches the level of other countries. The following are observations made during my residence as an assistant language teacher at a suburban Japanese High School from 2000 to 2001.

- On their way to school, while slowly riding their bike, students composed text on their phones with one hand. The commute to school takes on new meaning as usable communicating time rather than simple transportation down time.
- While phones were "forbidden" at school, every student used their phones to check text or e-mail messages in-between class times. This allowed them to connect to friends in other

classes that were outside their immediate class “group” that the education system is based upon.

- Students were regularly communicating with classmates from former and supplemental cram schools. Though most prefer social life through club activities, phones now extend students’ relations to former middle school friends and even to people from other schools. Thus, the available social space beyond that provided by school is much greater and easier to maintain through mobile connectedness.
- Students could remain in touch during holidays and their club activities continued without the school. The institutional social space has now been expanded and appropriated by the students themselves. This encouraged deeper ties and responsibilities for the organizers of such extra-institutional activity.
- As teachers began using cell phones, the teacher-student relationship and teacher-teacher relationship expanded rapidly. There were no policies in place to regulate messaging activities between teachers and students, but informal ways of communicating seemed to increase. One clear positive example is that on school trips, coordinating and tracking down students was much easier.
- Students regularly using the text input method on phones displayed dramatic language change in both the use of English slang and new Japanese slang. Many new terms have evolved from cell usage, and the rate at which the language changes has increased dramatically. I will discuss this more below. Teachers also began remarking on the “degradation” of Kanji learning ability as the phones automatically convert phonetic spellings into characters.

Between my earlier residency as an exchange student in 1996 and as a teacher in 2000, every element of Japanese society had been affected by the use of cell phones. Every age group now uses phones regularly. This alone has caused an entirely new form of change far less understood than previous transformations under rapid economic growth. I will attempt to highlight a few of the larger observable changes in society.

The emergence of new channels of information that aid the negotiation processes of everyday life. By negotiation I am referring to both physical transportation and the use of information to form ideas and responses to the world around us. For young people this has meant greater independence in their ability to negotiate their world. For example, there is MapQuest-like portal that tells you when and how to take the elaborate train system to get somewhere by a certain time. There are new channels of entertainment independent from the mass communication firms who tend to control and dominate the available content. Young people in Japan have a very strong interest in trends, bands and fashion, but access is limited to consolidated media who highlight what they want people to consume. Traditional media, especially print media, are losing much of their audiences to cell phone usage. For young people interested in a certain band, for example, visiting unofficial band sites, fan sites and boards all contribute to a new relation between young people and their interests. This is even more significant to the majority of young people that do not have home Internet access. In fact, cell phones have until recently been the first experience of the Internet for the vast majority of Japanese people. These abilities to negotiate their worlds will become increasingly significant as the social structures strain under the dramatic change ongoing in daily life for young and old.

In order to understand the rapid changes in the Japanese language we must consider the input method used on cell phones. The Japanese language consists of two phonetic scripts and over 1500 Chinese characters called kanji. To input a phrase on a cell phone, you use the phonetic script assigned to the number keys and insert kanji by scrolling through a short list of characters with the corresponding phonetic spelling. The word "internationalization" is made of four phonetic characters. In this case, it is about ten button pushes to bring up the corresponding characters. This is much more efficient than many other languages and more economical than writing by hand. The vast majority of these Kanji consist of two phonetic characters, making the time to input long and complicated levels of language about the same as everyday script. Young people have employed the additional picto-graphic types to even further enjoy messaging. The play of reduced language found wherever thumb based messaging exists is a universal change that comes with mobile phones. In Japan however, the extremely easy to input language has undergone much faster change as new language is quickly exchanged across relatively small regional differences. In print media now, these phone derived words appear whenever appealing to young people. Often these words forego the use of kanji altogether and use the script for loan words, for emphasis and an image of newness. This change in young people's use of language has considerable impact on the entrance exam based education system. While the institutions seek to test students' ability to use a standardized language,

the student's own use of language challenges the idea of standardization. This will increasingly bring pressure upon the increasingly out-dated education policies as well as upon the students themselves. The young people who started using phones when they were four will be very different students than those of today.

Conclusions and Potentials

A typical child experiences a home and school dichotomy, each with a distinct set of relations and behaviors. The goals of progressive use of educational technology seek to find new ways to bridge these two and extend learning towards an unfixed, continuous process that children can engage in wherever they happen to be. With this in mind, the proprietary nature of mobile networks presents considerable challenge to integrating these new technologies into educational uses. Unlike computer based Internet usage, each data transfer and use of the cellular network corresponds to a rate that the wireless networks charge their users. While users have embraced broadband wireless wherever available, the rates charged for this increased data transfer have also increased. Though these technologies are improving, the rates users must pay will not necessarily follow the same trends as other technologies. That is, the mobile phone market is of a competitive nature unlike computer technologies where increases in performance and efficiency stabilize prices in a manner educator and user can benefit from. Proprietary mobile networks are indifferent to distinctions between educational or entertainment usage and by definition present many challenges to the goals of educational technology implementation. Mobile phone use obviously has incredible potential in engaging students and preparing them for an already mobile equipped world. Further research will be needed to understand exactly how young people's relationships to each other and the world around them are changing through phone use. But right now we can begin incorporating their experiences into education by attempting to extend current uses of educational technology towards the level of mobile connectedness of young people.

About the Author

Franz Prichard is an adjunct research associate for Clarity. His research focus is the nexus of culture and emerging technologies. In addition to his research work, Franz is an accomplished musician and writer. Presently, he is seeking a Masters in East Asian studies from UCLA.

About Clarity Innovations, Inc.

Clarity Innovations, Inc. provides strategic program planning, policy analysis, and educational resource development for educational institutions, foundations, and Fortune 500 companies worldwide seeking to affect change in educational systems through the effective application of technology. If you are interested in learning more about this topic or our services, please feel free to contact us via our website, www.clarity-innovations.com.