
RESEARCH ABSTRACT | POWER USERS

PURPOSE & METHODOLOGY

In June 2005 Certiport conducted a baseline survey involving its network of over 9,000 authorized test delivery centers worldwide comprised primarily of high schools and post-secondary academic institutions. The purpose of the survey was to identify best practices of *Power Users* and design solutions to support the development of *Power Users* around the world.

Within a seven-day period, 382 centers responded. Certiport center responses were not normalized with respect to non-Certiport centers or non-power users; however, the results were cross referenced with the International Educational Advisory Board (IEAB). IEAB membership is comprised of teachers responsible for multiple subject areas, curriculum specialists, and schools administrators.

Survey participants were instructed to read a descriptive summary on Power Users before responding to survey questions in order to ensure they had a correct understanding of the Power Users profile (see Exhibit 1 for the descriptive summary used).

FINDINGS & INFERENCES

The respondents were teachers and instructors. The question framework focused on obtaining their views on *Power User* behaviors, attitudes and learning choices.

The research focused on three key areas:

1. Learning style preferences of *Powers Users*
2. *Powers Users*' influence on how teachers teach
3. *Powers Users*' impact on peers and teachers

The majority of the teachers indicated that *Power Users* prefer to use troubleshooting, peer consulting, and online resources to learn. They also expressed that *Power Users* select college/university as the least likely route to prepare for careers/jobs. This preference will need to be explored in future phases of research in order to ascertain if this trend holds true. If such a trend exists, then we must establish how to modify traditional career preparation pathways and/or foster the development of new post-secondary career development pathways.

Over 69% of teachers indicated that *Powers Users* influence what they teach, and over 66% stated that *Power Users* influence how they teach. When cross referencing this response with the IEAB, board members offered the following insights:

- Teachers avail themselves to teach to all learning modalities, and thus more enriched, engaging learning experiences occur.

- Leveraging technology in the classroom provides latitude for more comprehensive and flexible roles when doing group work. Technology enables students to extend beyond the resources at hand to broaden their understanding of concepts. Traditionally, only specific individuals tend to assume leadership on group tasks while others are either assigned or assume other roles such as researcher or other support functions. With the use of technology, roles are interchanged providing individuals with experience and perspective from all roles.
- Positioning technology as a tool to support core curriculum outcomes versus the traditional tendency to teach technology as a course enhances leadership, teamwork, problem solving, time management, self management, adaptability, analytical thinking and global consciousness.

Students become more engaged when technology is leveraged to empower individuals to learn more about specific global issues, thereby enabling them to gain perspective on such issues from similarly affected peers. This concept was illustrated in the experience of one of the IEAB members who was awarded the 2004 Best Practice Award from the United Nations. As a teacher in a rural high school, she implemented technology in her classroom, and as a result her students gained global consciousness that affected their peers in other countries. The students took the initiative to raise funds to hire a teacher so that Afghanistan female teenagers could have access to education. They also raised funds to provide orphan teenagers in rural Africa with transportation to health clinics for the treatment and prevention of HIV/AIDS.

When inquiring how *Power Users* impacted the learning of their peers and their teachers, 48% of survey respondents noted that *Power Users* exhibit helping behaviors. Over 55% stated that *Power Users* facilitate the learning of other students.

Refreshingly, over 84% of teachers stated that *Power Users* have positively influenced their learning/knowledge of ICT.

If these trends hold true, it is clear that developing and supporting *Power Users* has a direct impact on the quality of learning for both students and teachers, and thus, a critical contribution to the overall quality of education. It follows that *Power Users* may play an important role in diminishing the rapidly growing digital divide.

More importantly, it is plausible to infer that *Power Users* can assist with achieving the United Nation millennium goals, which address the removal of poverty and illness as well as the promotion of education for all citizens of the world.

ONGOING & FUTURE RESEARCH

In phase two of this research effort, Certiport will evolve the baseline survey into a comprehensive research project that normalizes the results of *Power Users* in the Certiport channel to other *Power Users* and non *Power Users*.

Certiport is in the process of cross referencing the teacher respondents to students in their classrooms that have been identified as *Power Users*. Certiport intends to expand upon the original key areas to study:

- Social-human behavior and Impact
- Performance and roles in the workplace
- Ideal learning environments and solutions
- Sustainability of the *Power User* characteristics through life changes
- Impact of learning outcomes across the core curriculum

Certiport aspires to work with the United Nations *Power Users* initiative to further refine the definition of a *Power User*. One question that keeps surfacing is this: Should a *Power User* be defined only by the level of skill (s)he has in the area of ICT, or should (s)he be defined according to their level of skill *and* how (s)he uses technology to address global issues?

Exhibit 1

What are Power Users?

As defined by EDC, a Boston-based organization that has conducted preliminary research on this group, “**Power Users of Information and Communications Technology**” (or “Power Users of ICT”) **are tech savvy youth with an affinity for computers, the Internet, and gadgets that allow them to “stay connected,” whose technical acumen is unmatched by that of any prior generation.** These are individuals, **generally born after 1982**, brought up in households with personal computers, Internet access, wireless phones, video recorders and other technical devices. They are **true “natives” to information and communications technology**—for they never experienced life before the advent of these things—unlike the rest of us, who, at best, are immigrants. What’s more, they are several times more likely than their parents of being able to explain how various technologies work.

When Power Users are learning a different aspect of technology for the first time, they **catch on quickly.** They are **early adopters of new gadgets, certain kinds of software, and Web activities and services.** They create their own personal websites (replete with audio, video, and interactive elements), write their own software programs, participate in instant messaging, blog with their peers, play video games with distant companions, keep an online journal, and build or overhaul their own PCs—among a host of other high-tech activities. They seem to be energized by the salvo of digital stimuli well after the point where most of us “immigrants” experience sensory overload.

Power Users are most characterized by their ability to **leverage the Internet to the highest degree conceivable.** They can perform pretty much any task capable of being performed via the Internet. The Web is among their most utilized places for learning. In addition, they “seek information, learn what they want to know, when they want to learn it, at a depth that satisfies their immediate quest for knowledge—on a just-in-time, as needed basis” (Malyn-Smith, Joyce. “*How Power Users of Technology Are Shaping Our World.*” Article published by Education Development Center, 2003). **Adjectives that describe their preferred learning style include, “self-initiating,” “self-directed,” and “self-paced.”**

Power Users are not necessarily geniuses per se, but **have been profoundly influenced by their prolonged exposure to technology** during their “formative years.” As a result, they **operate under a different paradigm.** They are different in the ways that they think, process information, access and use information, solve problems, and interact with their peers.

For more information on Power Users and the research initiative, please visit <http://powerusers.edc.org/>.