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THE DIGITAL DIVIDE:
DIFFERENCES IN COMPUTER USE BETWEEN HOME AND
SCHOOL IN LOW SOCIO-ECONOMIC HOUSEHOLDS

ABSTRACT. This article examines information and communication technologies (ICTs) practices in the home and school settings of four disadvantaged families. It reports the findings of a year-long study that investigated the nexus between computer-mediated literacy practices at home and at school and whether this inter-connectivity could make a difference in school success. The findings indicate that there was disjunction between home and school use. The “digital divide” exists for the families of this study, not in terms of access but in the gap between ICT practices at home and school. Schools in this study did not integrate ICT skills learned and demonstrated in the home environment into ICT practices at school. The study concludes that constructing pedagogical connections between home and school ICT practices may begin to bridge the “digital divide”.

KEY WORDS: cultural capital, digital divide, disadvantage, family attitudes, home ICT use, ICTs, school ICT use, symbolic capital, teacher attitudes

“The digital divide is real, and the financial have-nots are also the informational have-nots.”

– Bolt and Crawford (2000: 124)

1. INTRODUCTION

There has been considerable discussion in Australia and elsewhere about the growing gap, often referred to as the “digital divide”, between the information-rich and information-poor (Negroponte, 1996; Haywood, 1998; Bolt & Crawford, 2000; Compaine, 2001; Castells, 2001; Gordon, 2001; Nixon, 2001, Warschauer, 2003). Because access to the new technologies is unequally distributed, there is said to be a growing divide, the “digital divide”, between individuals and families who have access to information and communication technologies (ICTs), and particularly to the Internet. As ICT literacies are becoming literacies of power, then, equity issues flow from lack of access to the technologies: “acquisition of ICT access is a matter not only of education, but also of power” (Warschauer, 2003: 24). Many schools have incorporated computers and



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Internet access into classrooms in an attempt to provide equal use of information technologies to all members of their student populations. In addition, many families have invested in computer systems at home in order to assist children access the growing body of information available through technology. Similarly, in an attempt to “redress the balance between the information rich and poor” by providing “equal access to the World Wide Web” (Virtual Communities, 2002), in late 1999 the Australian Council of Trade Unions (ACTU), Virtual Communities (a computer/software distributor) and Primus (an Internet provider) formed an alliance to offer relatively inexpensive computer and Internet access to union members in order to make “technology affordable for all Australians” (Virtual Communities, 2002).

Drawing on the findings of a year-long, Australian Research Council supported study, this article examines the attitudes to ICTs and schooling of the members of four families who accepted the Virtual Communities offer and acquired relatively low-cost computers for use in their homes. In addition, the research team elicited the teachers’ attitudes to the use of ICTs in the schools that the participating children attended. Our aim was to find out how the technologies were used formally and informally in both school and home settings. We further wished to examine the nexus between Students’ use of ICTs in the home, referred to by Sefton-Green as “the digital bedroom” (2001: 164) and school literacy practices. We wish to contribute to broad discussion about whether information technology can be used to “empower the information disadvantaged” (Companie, 2001: 11) and thereby make a difference to “the digital underclass” (Bell, 2001: 13. See Angus et al., 2002, for a discussion of ICTs and educational policy implications and Snyder et al., 2002, for discussion of literacy practices and disadvantage).

2. METHODOLOGY

The four families that took part in the year-long study were participants in the ACTU/Virtual Communities computer scheme. Members of the research team visited each of the participating families a minimum of six times in their homes between mid-2000 and mid-2001. Members of families were interviewed individually and together, and were observed using ICTs. The schools the children attended were also visited at least three times and the children were observed in various classes using computers. The research team also interviewed their teachers, the principal or assistant principal of the school, computer co-ordinators, English teachers and curriculum co-ordinators. Policy documents and school

charters were viewed, where possible, to help understand the mission statements of the schools in providing computer technology in the classroom. Two primary and two secondary schools were included in the study.

3. DATA COLLECTION AND ANALYSIS

The research methodology was qualitative. Each researcher worked with one family and the school attended by the child(ren) of that family. The researchers acted as participant-observers and took field notes in both school and home settings. Interviews with family members and teaching staff were audio-taped and transcribed. Some of the interviews with family members were conducted around the computer as one or more people worked with the technology. The tape recorder was placed as inconspicuously as possible in an attempt to have a relatively informal discussion.

4. THE PARTICIPATING FAMILIES AND SCHOOLS

The perspectives of the family members of computer-mediated communication are presented below.

The Rodriguez Family

Fernando and Luisa Rodriguez are political refugees from Chile. They came to Australia in 1988 and now live in a new housing estate in the outer-eastern Melbourne suburb of Blue Hills. Fernando is a metal worker in a factory and his wife, Luisa, is a childcare worker in a creche. They have two children, Carmen, aged 11, who attends St. Cecilia's Catholic Primary school in a suburb 15 kilometres from Blue Hills, and Lydia, 5, who goes to the childcare centre where her mother works and is in the pre-kindergarten group. Both children are bilingual, Spanish being the language used at home. Fernando did not complete secondary schooling in Chile and has not attempted any study in Australia. Nonetheless, he badly wants his daughters to succeed in their education. He bought the home computer through the Amalgamated Metal Workers Union for his daughters to use primarily for educational purposes. "Computer is everything now", he says. He sees technology as an important part of the future of the working world.

Luisa studied French at school and completed her secondary education in Chile. Since arriving in Australia, she has taken Migrant English classes and completed TAFE studies in childcare. She was enrolled in a Bachelor

of Education (Primary) course by Distance Education for a semester but did not complete the degree because of pressure of family and work. She is also very keen for her children to progress in Australia and sees education as the way to do it. She and Fernando seek excellence in education, which is why they send Carmen to a Catholic girls' school so far away from home. Both parents are willing to pay the fees at St. Cecilia's because they believe it is better than any of their local schools. Carmen is interested in becoming a veterinary surgeon and both parents are keen that she pursues this goal. Luisa believes that sacrificing holidays and driving one car to save enough money to send Carmen to a private school is worth it because, says Luisa, "it offers the best program and standards".

The Brown Family

Jenny Brown is a single mother surviving on a pension and raising her two children, Brad, aged 14 (in 2000) in year 9 and Lizzie, aged 12 in year 7. They live in a modest council house in Greenacres, a suburb in northwestern Melbourne about 12 kilometres from the CBD. Both children attend Greenacres Secondary College. Jenny, who turned 33 in 2000, is unemployed and in fact has not worked since having Brad at the age of 16. She did not complete secondary school and, apart from a short stint as a sales assistant before Brad was born, has never had a job. She has completed a typing course as part of Centrelink training requirements. Her father, who retired from the Vehicle Builders Union in 1999, took advantage of the Virtual Communities offer and leased a computer package for himself and also for Jenny and her children.

Jenny says the computer has "changed our life" and is "great for the kids with learning and stuff like that". It became apparent, however, that the computer in the home was used primarily for accessing social networks in the form of chatrooms. Jenny spends up to 20 hours at a time chatting in various "rooms". The virtual world of chat has become the social focus of this still-young, housebound single mother and she relishes the friendships and relationships that have developed from it. She says: "I feel like I've got friends on the computer. There's friends I can talk to, have a laugh with . . . people that you wouldn't normally talk to." Jenny does not use the computer to access information, however, because "it takes me so long . . . you end up going backwards and forwards and an hour later you end up getting the information you wanted."

Lizzie Brown, aged 12, wants to be a clothes designer. Her teachers describe her as quite skilled with technology, but a rather quiet and shy student. Various teachers describe her as "a nice kid", "quiet", "probably below average", and "a pleasant student who needs to be helped". Lizzie

thinks the computer classes at school are “OK” but she would like teachers to “make them more exciting”. She wishes teachers in her other subjects would “just to stop tellin me off”. At home, Lizzie uses the computer for email. She plays on Internet sites such as Virtual Dog and Barbie.com and uses chatrooms. She is very competent in the chatroom environment and has created images of herself (avatars) to represent herself physically in the virtual world. She says: “I’ve taught lots of people things. Once I sat there for half an hour trying to share with someone how to get to a different room by using hot spots.” Brad Brown “hates school”. He says: “I hate wakin up for it. I hate goin to it. I hate comin home and havin work for it. Getting detentions . . . just everyfin about it. I just hate everyfin about school The only reason I go is to see my friends basically.”

Although not successful at school and perceived as “a loser” and as a serious discipline problem by teachers, Brad is highly competent with the computer. One of the research team observed that he was the one relied upon by Jenny and Lizzie to troubleshoot for problems when the computer breaks down. He says: “When somefin happens, I know straight away basically.” He adds: “I know how to make new folders, how to download stuff and I know how to run the program and to save it to disk.” Brad says he uses the computer for everything: “I just go on it, muck around, talk to my friends, get car pictures, download songs – I do everyfin on it.” He also accesses sites for job searches and uses email and chatroom functions. In contrast to his home use of the computer, Brad asserts: “I didn’t learn nufin at school from the computer.” Then reconsidering: “I had infotech classes and I gotta admit I learnt somefin but I’ve never used it – mailmerge!” Brad cannot see the purpose or practical application for the skills taught in ICT classes at school. He selected information technology classes as an optional subject in order to access the Internet but then was not permitted to do so. His frustration when presented with classroom sessions that did not match his competency or skill level as demonstrated in the home ICT arena was evident. Clearly, to effectively integrate computer technology at school requires greater communication between teachers and students about home and school computer practices.

The Lawford Family

The Lawfords are separated. Brendan is a communications manager for a union body and Helen is a corporate assessor for a multinational power and resources company. Both have been actively involved in union activities since university days and Helen was employed as a senior bureaucrat (at Senior Executive level) in public sector administration under John Cain’s Labor government. With the change in political power in Victoria in 1992,

she moved easily to a higher-paid position in the private sector. Brendan hints that the strain in the relationship may be at least partly attributed to Helen's change in political values. The couple have a six-year-old daughter, Angela, who is in grade one at the inner-city Rosewood Primary School. Angela lives with Helen in the family home (which houses the computer), and her father has a flat nearby where she stays two nights a week. Brendan purchased the computer through his union to use primarily for work at home. Now Angela has almost exclusive use of it. Helen brings her laptop home for work purposes.

Brendan and Helen regard the computer as a necessary part of the education of a literate member of society. Both are computer users; both have jobs that demand a high degree of computer competency. Both regard the computer as an integral part of Angela's education. In fact, they bought her first computer program when she was four years old because it was "the best little program around and it was all about mouse skills". It is apparent that Angela is highly computer literate and competent. She observes: "The fun things are where you go somewhere and you see all these addresses . . . on the train, in the car, and I put them in my head and when I come home I go to the computer and I search them." Helen says: "I know she's learning; when she thinks she's playing (on the computer) I know she's learning." At the same time, both parents emphasise the importance of books. Helen insists that Angela "is a very, very good reader and reads at above average levels".

The Lake Family

The Lake family live in the inner-city suburb of Kilvington and the two girls, Felicity, aged 15 in year 11 and Sally aged 13 in year 9 attend City High School. Sara and Ray Lake both have postgraduate degrees and hold trade union official positions. They bought the computer primarily so they could work at home and for the girls' schoolwork. The family members see the computer as a tool for work or research and little else – they are very clear about stressing the superiority of books and their love of the world of paper-text. For instance, during family discussions around the dining table, at which family members linger after meals, someone will often reach for the Britannica to settle a dispute or look up information relevant to dinner-table conversation.

Whilst actively downplaying the importance of the computer and their ICT skills in general, Ray claiming: "I'm never sure where to put the petrol in", nevertheless all members of the family are exceptionally competent technology users. Sara uses the computer for webpage construction and "time consuming fiddly work and email" and Ray "to type things, format

a letter . . . use the Internet and email". Ray regards home access as "a double-edged sword" and says he would "probably protest" if external log-in work was introduced.

One activity the family enjoys is a computer game called "Civilisation", in which the aim is to build up a civilisation over different historical periods, such as the Iron Age. The family consider this game feeds their love of history and culture. They jointly espouse the notion that paper-text literacy in the form of books is superior to computer literacy forms, but they are aware that, as Felicity says, "Unfortunately, the computer is necessary."

5. COMPUTERS: VIEWPOINTS FROM THE PARTICIPATING SCHOOLS

The research team acknowledges that all schools are required to adhere to the computer technology aims as set by the Board of Studies Curriculum Standards Framework (CSF) (Board of Studies, 2000) documentation in Victoria. Our purpose was to examine the degree of computer access given to students from our participating families at school, the kinds of activities set to achieve the set competencies and whether there was a link between computer use at school and computer use at home.

St. Cecilia's Catholic Primary School, which Carmen Rodriguez attends, has a population of 327 students from 58 different ethnic backgrounds. The school takes a highly active role in promoting information technology (IT). According to the Deputy-Principal, Mrs Stern, a major concern was that "our teachers didn't have the necessary IT skills for the kind of teaching we wanted to have done. We want people to be competent in Web use". The driving force behind the rapid and extensive changes in IT policy over the past seven years has been the Principal, Tom Bortoli. He is, according to Mrs Stern, "particularly IT-oriented and wanted quality IT education". He negotiated the construction of a school computer laboratory with 20 computers. He also implemented increased computer access for students by setting up shared banks of six to eight computers outside pairs of classrooms. He insisted that "the whole school [had] to be completely computer literate". He introduced school policy whereby all notices, classroom reports, excursion handouts and student data had to be computer generated. He also employed a consultant, Anton Hourigan, to come into the school one full day each week to teach information technology skills to each class from prep to grade 6.

Mr Hourigan works with teachers at each grade level to develop a curriculum for information technology skills to be taught within the CSF level framework. For example, Carmen's class is undertaking a project on

drug abuse, so Mr Hourigan has arranged for the project to be presented as a brochure. Carmen and her classmates are expected to employ skills of using Frontpage, changing layout, downloading graphics from the Internet and scanning photos. Staff members are required to attend “upskilling” sessions with Mr Hourigan before school. New staff are not employed at the school unless they can demonstrate a degree of computer competency. It is evident that computers are now an integral part of the school, not only in the academic program, but also for staff professional development. There is no expectation that students have computers at home. The school opens its computer laboratory at lunchtimes and expects that students will access the Internet at local libraries for homework tasks, or will access the school website where documents can be downloaded from home by staff and students.

Helen Lawford feels that Rosewood Primary school’s computer program is “a bit more basic and more keyboard skills rather than computer skills”. Helen feels the school doesn’t fully capitalise on the fact that Angela has computer access at home. She considers Angela could be given Internet and web resources that could be accessed outside school hours. Helen says: “[Angela] doesn’t bring home a website from some book she’s done at school”. The Assistant-Principal of the school, David Grey, estimates that perhaps 60 per cent of families have computer access at home. He says that staff are aware that some families do not possess Internet access at home and this is a consideration in homework demands. He says: “it reminds us not to get too smart for those who haven’t got it [computer access at home]”.

Mr Grey would like the school to focus more on professional development in IT for teachers. Currently, an “in-house teach-the-teacher type of thing is provided” but it is optional for staff to attend. He states that “of the 260 kids we’ve got, 145 are involved in an extra sort of music program, choir, music and I suppose if we went out on a marketing arm, I suppose that’s what we’d say is far greater than technology is for us . . . We highlight our music.” The students in Angela’s grade one class do not use the computer in class-time, except, as Angela says, “in free time but we’re not allowed to go on the Internet”. The computer teacher, Mr Ross, takes a theme per week to teach the students basic click and drag skills and to access “kidpics”. Angela likes the space theme where “we go to a CD-Rom and we draw a picture of the solar system or our favourite fairy tale and take it home”. Angela enjoys using the computers at school and says information technology is one of her favourite subjects. The school has classrooms that are networked and email facilities for students, but Mr Grey insists that information technology “is more a tool rather than a

stand-alone subject". This view stands in stark contrast to the attitude of Tom Bortoli, whose strong emphasis on computers permeates every facet of administration and is even crucial in staff selection at St Cecelia's.

Greenacres Secondary College, which Brad and Lizzie Brown attend, has 620 students and, according to the Deputy Principal, Lyn Wagner, "technology comes number one". She says: "It's used as a kind of marketing technique because we give our year 7s a really intensive computer program . . . we make a big thing of the fact that we have four operational computer rooms." Teachers have very little sense of which or how many students have computers at home; indeed teachers' estimates vary from "perhaps up to 25 per cent" to "at least 75 per cent". Although the percentage of computers per student within the school is quite high, Greenacres is regarded by the Principal, Rob Earlwood, as "disadvantaged" because, he claims, 60 per cent of families exist on some kind of government welfare or grant assistance. Mr Earlwood sees computer technology in his school as "a spiralling aspect. It's something you can't afford not to do." He believes that schools "have a corporate responsibility to our kids" and must train students for jobs not yet in existence, particularly "the acquisition of knowledge and technology". Mr Earlwood says the problem for Greenacres is lack of overall funding and extensive social problems in the area. He clearly sees a wide role for the school in the students' lives and indicates that disadvantage for the student population encompasses more than just economic factors. He says: "for a lot of our kids, the only stable person in their lives who has a values system is their teachers". In addition, he has broad notions of the school's duty to enable its students to access the workforce, asserting that: "to be successful learners kids must have a position in society where they're going to be able to access an income and lifestyle that's relevant to them". He believes that information technology plays a key role in this enabling process.

Mr Earlwood is highly supportive of the need to provide computer access and training to students. The school opens its computer laboratories before and after school, as well as during lunchtimes, to all students. While this initiative partially reduces the access problem, there are still difficulties in getting the 620 students to fit into four computer laboratories. The difficulty in implementing meaningful computer programs throughout the school is explained by the school's Computer Co-ordinator, Ray Peters, who says: "We get a new timetable every eight weeks . . . so if I want to be in the computer room I have to swap my class with another class." Timetabling issues, in conjunction with a lack of interest by students like Brad Brown, can make school initiatives difficult to implement. Unlike St. Cecelia's, where teacher professional development programs

are compulsory, or Rosewood Primary School, where they are optional, Greenacres Secondary College does not have IT professional development for its staff. And due to the economic situation of many of the families, there is no expectation that students have access to computers at home.

City High School, which the Lake girls attend, has an excellent academic reputation. It has one computer lab in the library with about 20 computers and about 10 classrooms with computers around the walls. The students are never required to complete work at home on computers as the school is sensitive to the fact that at least 33 per cent of the school population lives in Housing Commission homes located close to the school. The principal believes that many of these do not own computers. Both Felicity and Sally use computers at school in a number of ways – for Internet searches, word processing and presentation. Although Felicity says she has used computers since she was just two-years-old, and recalls a favourite primary school teacher who showed the students something new to do with computers each Friday, she admits that she prefers using books for research. Felicity says that at times she’s “afraid of breaking the computer, of making it crash”. Sally enjoys games, emailing friends, searching the Internet for projects but also considers the book version of Britannica more reliable and easier to use than trying to isolate the appropriate key word for an effective search.

6. DISCUSSION: SYMBOLIC CAPITAL AND COMPUTER TECHNOLOGY

In examining the attitudes of the participating families and schools to the use of computer technology at home and school, the research team found it useful to consider the concepts of cultural access and deprivation. We applied the notion of symbolic capital (Bourdieu, 1990) to help us understand the social, political and cultural relationship between the families and their school environments.

Pierre Bourdieu (1990) considers that “capital”, the kinds of resources that can give one social and economic advantage, can be of different forms. He argues that individual actions are shaped (but never totally moulded) within social, political and economic contexts that mediate power relationships between people. According to Bourdieu (1990), there are tangible forms of durable capital, such as money and quantifiable assets, which he terms “economic capital”. These are directly transposable. They are, Bourdieu (1990) claims, the most efficient forms of capital because they can be readily transferred or exchanged. In addition, Bourdieu (1990) conceives notions of non-material forms of capital, called “symbolic capital”. These

forms of capital enable individuals who possess them to open or close doors to power.

One form of symbolic capital is social capital, which Bourdieu defines as “a network of kinship (or other) relations capable of being mobilized or at least manifested” (1990: 35). For example, Jenny Brown says her life has been “changed by the computer” as her social network, which confers upon her greater confidence and self-esteem than she has felt for many years, is now that of Internet chatrooms where she feels she is a valued member.

The final type of symbolic capital, and the focus of this paper, is Bourdieu’s (1990) notion of “cultural capital”. Cultural capital includes all the credentials, including education, literacy, and social graces, with which an individual member of a favoured culture or class is endowed. An example of cultural capital is the desire of some of the parents (the Lakes, Lawfords and Rodriguez) for their children to attain excellence in education. In the case of the Lakes and the Lawfords this is a realistic desire, the realisation of which is made more probable because of their networks and “insider” knowledge of “what counts” as education, knowledge and culture. This enhances their cultural capital way above that of the Rodriguez family, which is in turn way ahead of the Browns. Cultural capital provides the families with differentiated resources and options in the pursuit of educational opportunities. As all four families assert that they bought the Virtual Communities computer package for work or educational use, some of the forms cultural capital assumes may be glimpsed in the families’ engagement with computers.

Although, as mentioned above, Jenny Brown’s use of Internet chat has enhanced her personal symbolic capital, and enabled her as a once socially isolated and housebound woman to engage with other people and feel pretty good about herself, it has not so far enhanced her social power. Although competent in computer skills, Jenny does not utilize these skills to access Internet sites for information. Rather than accessing sites such as training courses offered by her local Centrelink office, she prefers to walk to the offices. She says: “It’s just easier. Instead of tryin to think, ‘Now what do I click on’ . . . I know I can just walk into the building and I’m at the desk.”

Jenny uses the computer to chat with and email her new friends “in the computer”. The virtual world of chat and email has become her social capital. Unlike Luisa Rodriguez, Jenny does not insist that her children attain higher levels of education than she did, and thereby increase their cultural capital and opportunities for greater economic capital. She is happy to allow Brad to leave school at 15 and take a spray painting

apprenticeship, insisting: “Well it’s his choice. I mean, whatever makes him happy.” Of course, from Brad’s point of view, the apprenticeship is an excellent outcome. This boy who was a “discipline problem” at school has been able to use his limited capital – including a rev-head network, an uncle in the automotive trade and Jenny’s ex-de facto who is a motor-bike fanatic – to make contacts in the business in which he scored the kind of apprenticeship he always wanted.

Luisa and Fernando Rodriguez regard a high level of education, and integration of computer technology into that education, as vital for successful penetration of cultural and economic power stakes. They explain: “We want our children to be better than we are.” They are adamant that Carmen and Lydia will obtain better, higher-paid jobs than they, themselves, have and are fully supportive of Carmen’s dream of becoming a veterinary surgeon. Luisa, in particular, regards using knowledge and credentials as vital to improving the life chances of her children.

Brendan and Helen Lawford value both computer and traditional forms of literacy highly as part of the cultural capital they wish their daughter to absorb. The fact that Angela Lawford was using her first educational software package at the age of four indicates that her parents are keen for her to become a competent computer user. Brendan has the necessary insider knowledge. He says: “I knew that the school she was at had computer studies and having some sort of basic click and drag search ability to start with means she’s at a level that means she’s not going to be behind as soon as they sit down at the screen.” Helen Lawford is equally keen that Angela access paper-text literacy skills. Angela, aged 6, has read all the Harry Potter books.

The Lawfords articulate the view that playing on the computer is akin to learning computer competence, and are happy about Angela’s computer play. Both parents are comfortable with Angela accessing different sites such as Barbie.com. Helen surmises, “I know that typing out the invitations [for her Barbie.com party] she’s learning. As long as I know which sites she’s going to, I’m very relaxed about playing.” In contrast, Carmen Rodriguez is permitted to play on the computer only at weekends when all homework has been completed. In the Rodriguez house, the computer is for education not play.

All four families acknowledge that the computer is a tool for accessing information that can be processed into knowledge. Such access to knowledge is a form of cultural capital as defined by Bourdieu (1990). All families agree that using computers in the home is of educational benefit to their children. The Lake family, however, prefers the hard copy of *Encyclopedia Britannica* as a source of information but admits that “unfor-

tunately, the computer is necessary". The Rodriguez and Lawford families consider computer skills and technology as one means of opening doors to future higher education and economic sectors. The extensive computer use of both Helen and Brendan Lawford in their work attests to their understanding that increased computer competence is advantageous in the cultural and economic capital stakes. Although Luisa and Fernando Rodriguez are not highly skilled users of computer technology, they are determined that their daughters will be.

Jenny Brown supports the view that a computer at home is important for her children, "to help them look things up". The reality is, however, that little schoolwork is done on the computer. It is generally used by Brad and Lizzie for downloading songs, email and chatroom activities. Although Jenny conceives of computers as "the future and they're gonna take over everywhere", she does not insist the computer at home be used for school work, as does Luisa Rodriguez.

All four schools in our case studies support Victorian government policy to increase technical literacy through information technology classes. The most active proponent, St. Cecelia's, embraces technology and takes great pains to integrate it in all eight mandated Key Learning Areas. Information technology is highly visible in the curriculum, and computer competency is deemed essential for students and staff. Rosewood Primary School staff acknowledge the importance of information technology, but do not give it as high a profile as music. Rosewood does not infuse computer skills into teacher professional development, as does St. Cecelia's, but provides optional "upskilling" sessions for staff. Greenacres Secondary College staff consider the promotion of information technology skills as the school's most important marketing angle, and the most important part of their students' education, but do not have the necessary socio-economic environment to support the enhancement of the programs the school offers. Teachers do not expect students to have computer access at home and therefore do not set work which requires students to access Internet facilities outside school hours.

7. CONCLUSION

Our research indicates that although the four families have computers at home, there is no active, formal connection being made between information technology use at home and school. The schools are generally unaware that the families have purchased computers for home use and there is certainly no attempt by any of the schools to integrate information technology skills learned at home into information technology teaching

at school. The students from all participating families demonstrate a high degree of competence in computer technology skills at home. Additionally, their parents regard the acquisition of information technology skills as essential for educational advancement and the literacies of power. This, we would argue, confirms that information technology skills are recognised as part of the cultural capital necessary for educational success. Brad Brown's situation is particularly disconcerting. Even though highly skilled in information technology skills in the home environment, prior to leaving school he actively disengaged from information technology classes, deeming the skills taught as irrelevant. Although the "digital divide" usually refers to the gap between information-rich and information-poor, in our research it is equally apt to describe the disjunction between information technology use at home and school. A start to bridging this digital divide must be an examination of the ways in which pedagogical connections can be made between school and home information and communication technology practices. These issues are important for both trainee and experienced teachers in the twenty-first century.

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