Cell phones in New Zealand secondary schools: boon, banned or biased

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Introduction

- Cell phone use in NZ secondary schools
- Policy formation – learning, staff pd, curriculum development, management, registration
- Participants - principals, deans, HODs, teachers, prior students
- Main findings
  - limited use for learning, training & management
  - many levels of digital “savvy’
  - at least one champion of mobile learning technology within a school for inclusion into formal learning & management
- Qualitative research project
## Prensky’s Metaphor Extended

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alien</td>
<td>Totally against IT – feared, never uses</td>
</tr>
<tr>
<td>Immigrant - 1</td>
<td>Learned to adapt, will only use IT if there is no other alternative</td>
</tr>
<tr>
<td>Immigrant - 2</td>
<td>Learned to adapt and will use IT - as a ‘second language’</td>
</tr>
<tr>
<td>Permanent Resident</td>
<td>Grew up with old IT (eg land lines phones) will use new IT – but prefers old IT</td>
</tr>
<tr>
<td>As If Native</td>
<td>Not born with or grew up with IT. Relates well to natives – on the same wavelength</td>
</tr>
<tr>
<td>Native</td>
<td>Grew up with IT, can parallel process and multi-task. Views “IT as friend”</td>
</tr>
</tbody>
</table>
## 4-way/6-point Interpretive Model

<table>
<thead>
<tr>
<th>Role</th>
<th>Power</th>
<th>C/Phone Knowledge</th>
<th>Tech Acceptance</th>
<th>Social Acceptance</th>
<th>Impact Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal</td>
<td>5-6</td>
<td>1-3</td>
<td>1-3</td>
<td>1-3</td>
<td>1-5</td>
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<tr>
<td>Head IT</td>
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<td>4-5</td>
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<td>1-4</td>
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<tr>
<td>Tech</td>
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<td>4-5</td>
<td>4-5</td>
<td>3-4</td>
<td>3</td>
</tr>
<tr>
<td>Admin</td>
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<td>1-3</td>
<td>1-4</td>
<td>1-3</td>
</tr>
<tr>
<td>Students</td>
<td>1</td>
<td>4-6</td>
<td>4-5</td>
<td>4-6</td>
<td>1-2</td>
</tr>
</tbody>
</table>

(1 lowest - 6 highest) (alien = 1, immigrant = 2-3, permanent resident = 4, ‘as if’ native = 5, native = 6)
Research Scope

- Cell phone ownership >80% (NZ Internet Safety Group, 2005)
- Schools forming closer community ties (Alexander (2004); Eadie (2004); Farmer (2003); Maddison & Lorincz (2003))
- To ban or embrace (Kamibeppu & Sugiura, (2005); Roos, (2001))
- Aggression (anon, (2002))
- Safety (Fox, (2001); Haddon, (2000); Henderson, Taylor, & Thomson, (2002); Hope, (2002); Kamibeppu & Sugiura, (2005))
Literature Gaps

- Use of technology by young people not aligned with policy makers in schools for cell phones
- NZ Internet Safety Group (anon, 2005) has guidelines for school policies regarding use of internet
- Limited research conducted in this field
- One Principal reported her school had adopted internet safety policy for use of the internet - not specifically referred to cell phone usage
Establishing an Interpretive Model

- Students grown up with cell phones (Prensky, (2001))
- “Digital natives” (p1)
- “Digital immigrants” (p3) (Us)
Research Questions – Step 4 (tech acceptance)

β What +ve factors influence technical acceptance of cell phones for principals, IT heads, HODs / deans, guidance counsellors, teachers, technical support staff, administrative support staff and students?

β What -ve factors influence technical acceptance of cell phones for principals, IT heads, HODs / deans, guidance counsellors, teachers, technical support staff, administrative support staff and students?
Research Questions – social acceptance

- What +ve factors influence social acceptance of cell phones for principals, IT heads, HODs / deans, guidance counsellors, teachers, technical support staff, administrative support staff and students?

- What -ve factors influence social acceptance of cell phones for principals, IT heads, HODs / deans, guidance counsellors, teachers, technical support staff, administrative support staff and students?
Research Questions – school culture

- What +ve factors influence the impact of cell phones on school culture for principals, IT heads, HODs / deans, guidance counsellors, teachers, technical support staff, administrative support staff and students?

- What -ve factors influence the impact of cell phones on school culture for principals, IT heads, HODs / deans, guidance counsellors, teachers, technical support staff, administrative support staff and students?
Emergent Issues

- Power relationships
- School principals - power about cell phone usage & policy making
- Power relationships closely following school’s organisational structure
- Students have least power
- Students have greatest knowledge of cell phones
- A school needs at least one Permanent Resident or “As-If-Native” for social acceptance of cell phones within schools
<table>
<thead>
<tr>
<th>School</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>J</th>
<th>K</th>
<th>L</th>
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<tbody>
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</tr>
</tbody>
</table>
Reflections

- Clustered constructs
  - positional power
  - impact knowledge
  - social acceptance ...AND...
  - attitude

- Digital citizenship & decile ranking not included
- - - BUT - - -

- Decile 10 & 3 schools scored highest
- Importance of attitude – negative affects score
Discussion - constructs

- ve attitude & low scores
  - policy rigorously applied
  - widens divide between students & school
+ ve attitude, social & technical acceptance, impact knowledge
  - - -OUTWEIGH - - -
technical knowledge & digital citizenship
Discussion - student views

- Students agreed
  - cell phones should not be distracters
- 6/10 students would like to be consulted on cell phone usage policy making
Discussion – top schools

- Use any mobile advances - to improve learning
- Well equipped (PDAs in class)
- 95 - 99% cell phone ownership – communication advantage
- Closer contact with friends – motivation & support
- Importance of staff training
- Policies in place
Future Directions

- Feedback to education sector
- Extend Netsafe guide
- More research on maximizing learning opportunities
  - students & staff