

DEVELOPING IN DIGITAL WORLDS

We set out to describe the development and teaching of three groups of '21st Century skills' in Digital Environments (DE)

COGNITIVE, INTRAPERSONAL & INTERPERSONAL



Teachers we asked generally reported DE increased opportunities for teaching the skills and they did this daily or weekly

Reported not deliberately teaching these skills and some thought the DE reduced opportunities, however most were willing to deliberately teach with access to PLD

THE INTERPERSONAL SKILLS



1/4 to 1/2 of the time these interactions occurred (peer help, showing concern), but little obvious activities or instruction



Perspective taking & collaboration - small developmental increases; Empathy (cognitive & emotional) - no age differences



Strong classroom interpersonal interactions; students aware of challenge in DE; limited DE classroom activities and instruction

THE INTRAPERSONAL SKILLS



About 1/2 the time there was obvious teaching of these, particularly for academic purposes



Self-regulation of attention & inhibitory control - students increasingly rated difficulty applying in a DE



Lower reported levels of self-control than NDE; but high levels of awareness of DE challenges; limited DE classroom activities & instruction

COGNITIVE (CT & CL)



Teaching occurred less than a 1/4 of the time and often presented as general prompts (3 teachers with strong instruction)



Very low overall test scores generally (though some quite high); students scored highest in English and lowest in science



Lower levels generally in classroom and NDE measures; higher levels (CT) occurring in discussion board activity

COGNITIVE (ARGUMENTATION)



Obvious teaching about 1/4 of the time. Forms included: consensus building; persuasion; considered position; element teaching



Keen interest by teachers; engagement at all year levels from Year 3 ; Key areas affording promise: warranting; selection bias; corroboration



Suggests strong persuasion influences as very high levels of single perspectives; emerging integrated perspectives as young as lower primary

PROMOTION

- Develop shared understanding of forms & purposes of the sets of skills
- Leverage dialogic argumentation to concurrently build other aligned skills
- Increase frequency of dialogic use of digital tools in teacher & student-peer formats