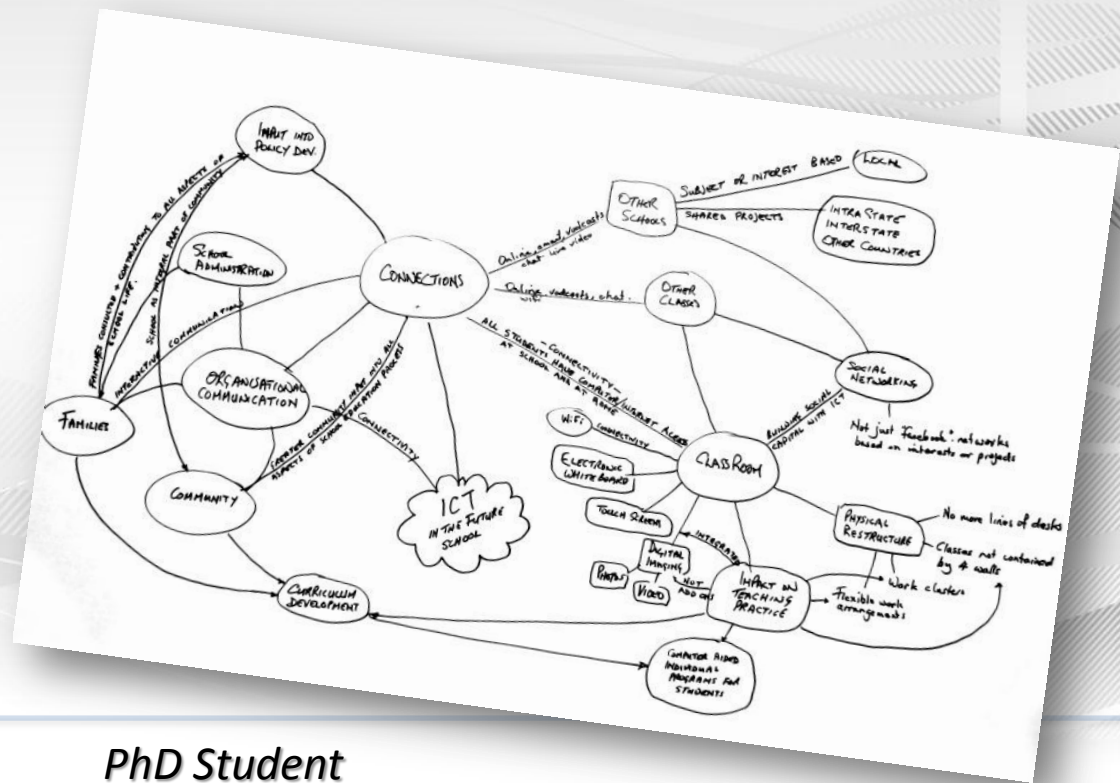


# Using concept mapping for eliciting the perspectives of the stakeholders within school communities



Jacque Tinkler

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Charles Sturt University  
Wagga Wagga, Australia

PhD Student  
Melbourne University  
Melbourne, Australia

# Levels of Australian Education Policy:



Victoria

New South Wales

## Australian ICT policy:

*“a driver of productivity and growth across all sectors of the economy”*

*“a world class education system”*

*“improve student learning outcomes”*

*“jobs of tomorrow”*

## The Main Study - Aims:

**In depth**, the ideas, visions, feelings and experiences of ICT in two school communities

**The climate** of thinking on current & future use of ICT

**What** do the groups in a school community think about the ICT-led “revolution”

**How** has the idea of the ICT led revolution been conceptualized by those who are expected to interpret and implement these policies



## The Main Study

**Case studies** in two like schools in different states

**All groups** of school community stakeholders will be represented

**Data collection** will involve concept maps, interviews, focus groups and document collection.

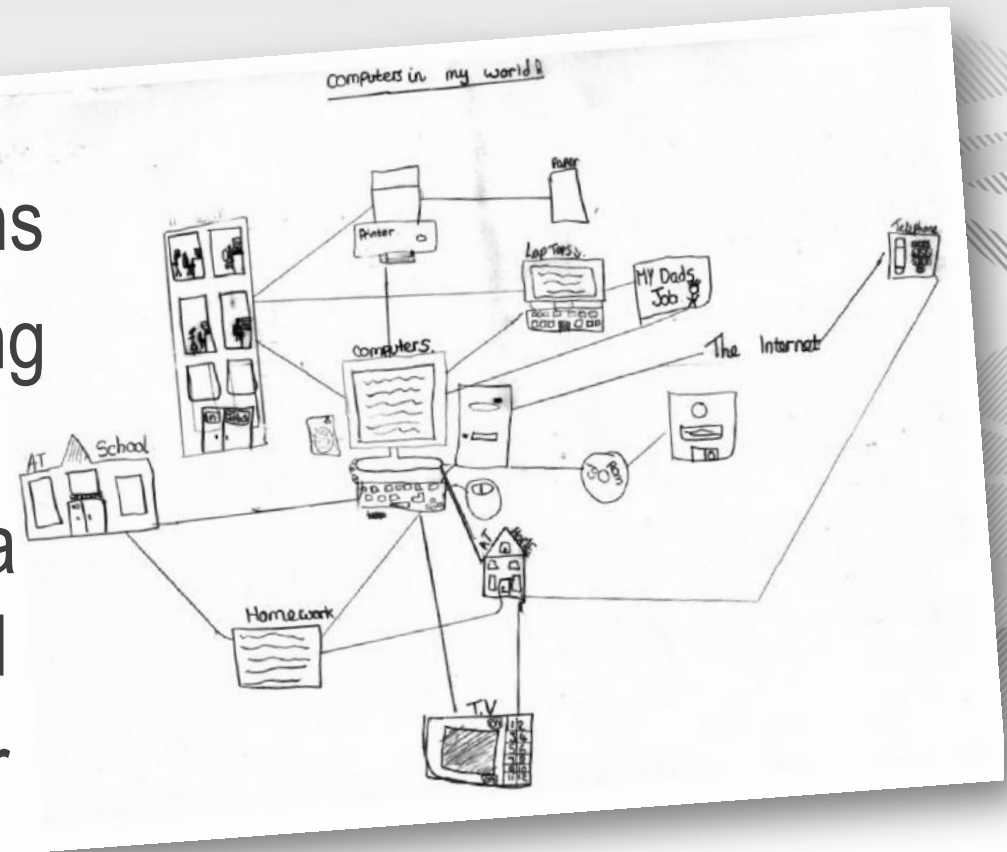
# Concept Maps

Inspired by Project  
REPRESENTATION

A number of definitions

Often used for teaching  
and learning but also  
becoming popular as a  
data collection method

May be hand drawn or  
digital

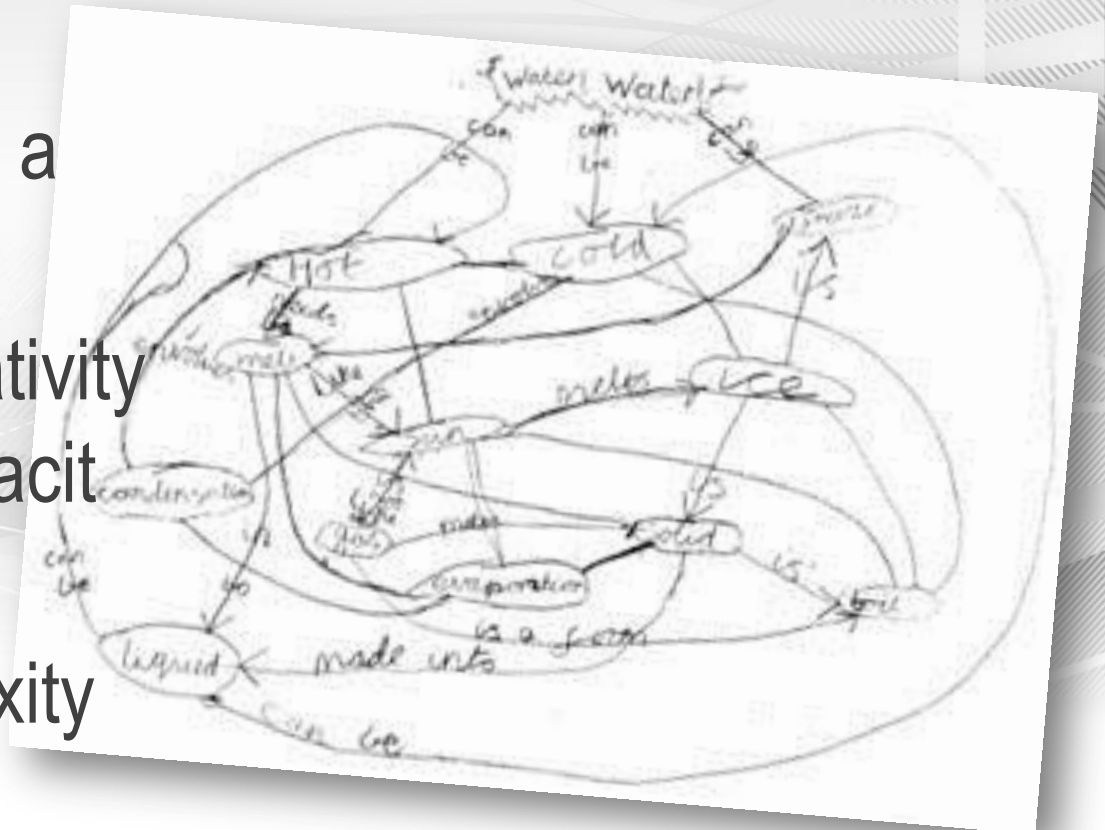


# Why Concept Maps?

**To encourage** exploration of relationships and interrelationships in a non-linear way

**To encourage** creativity and expression of tacit knowledge

**To explore** complexity



## The Pilot Study

Designed to test the concept mapping component of the method

Could participants manage the task?

Would it allow the production of quality and relevant data?

What sort of analysis will be appropriate?



## Method

**Purposeful** sampling using a snowballing sampling method

**11 Participants** (5 female and 6 male)

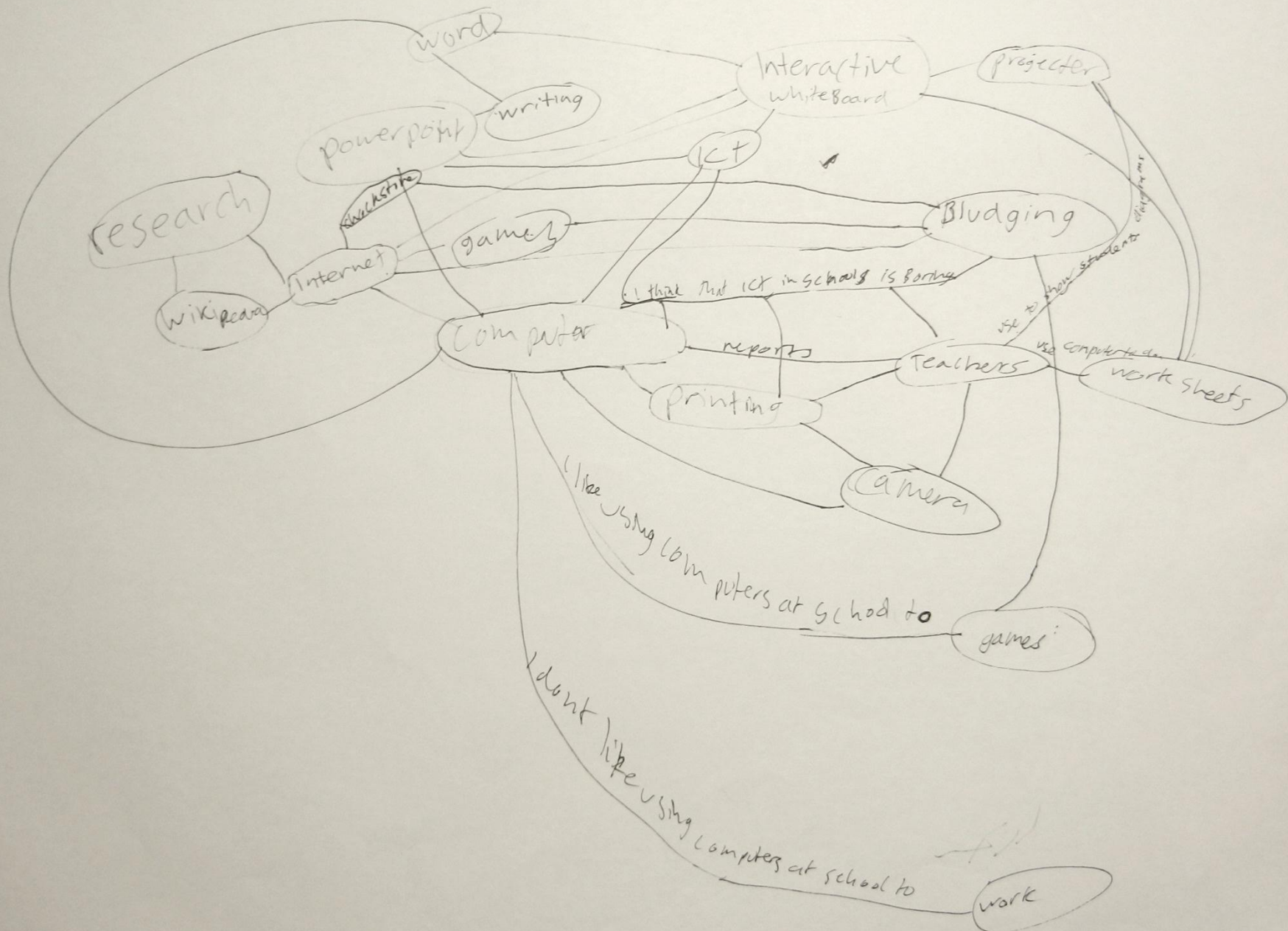
**2 maps** were created by each participant – of their current thoughts and ideas of ICT, and of what they saw of ICT in the future

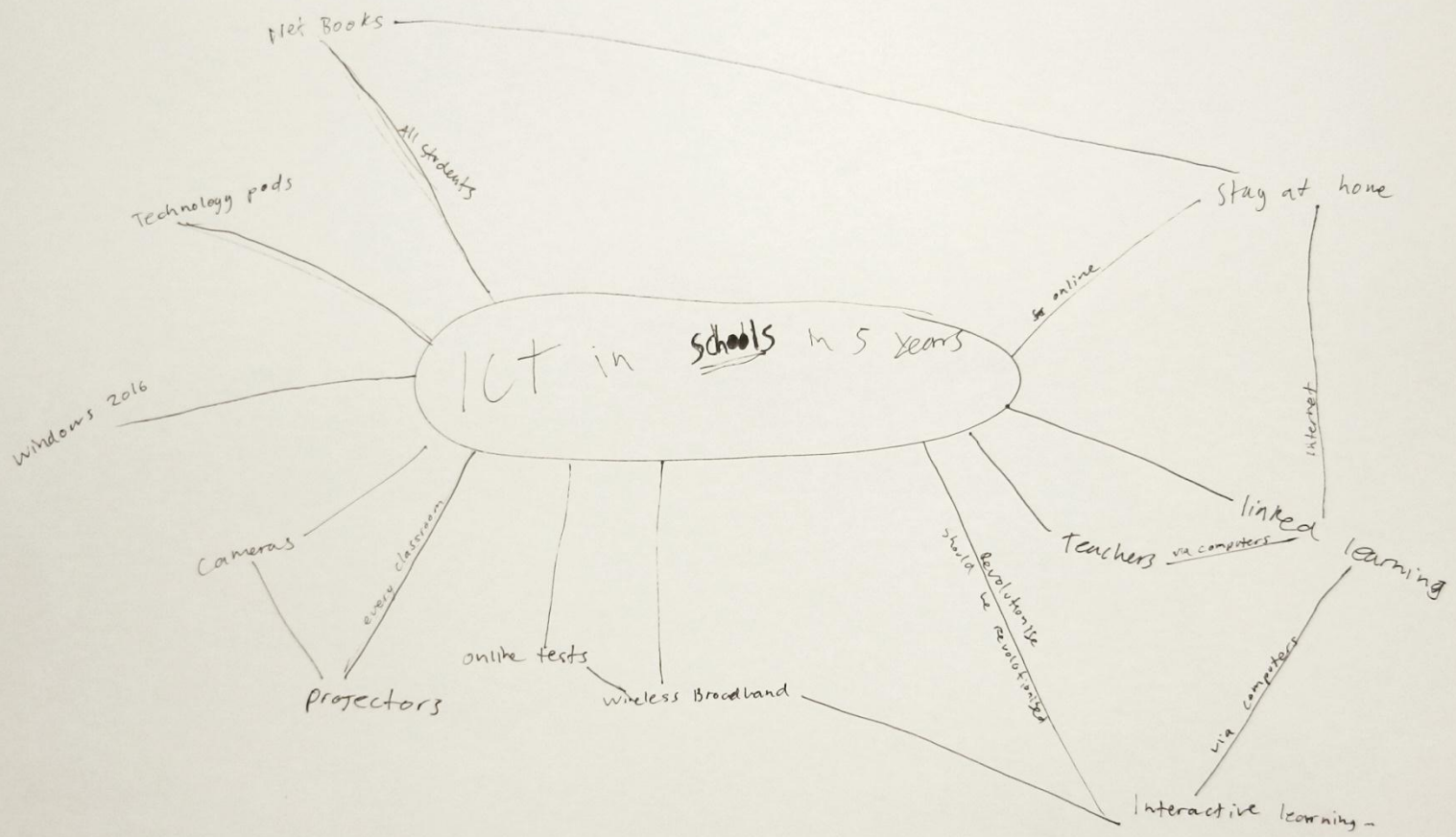
**Maps** were created on A2 sized paper

**A creative** approach was encouraged

**The task** You are drawing a concept map of:

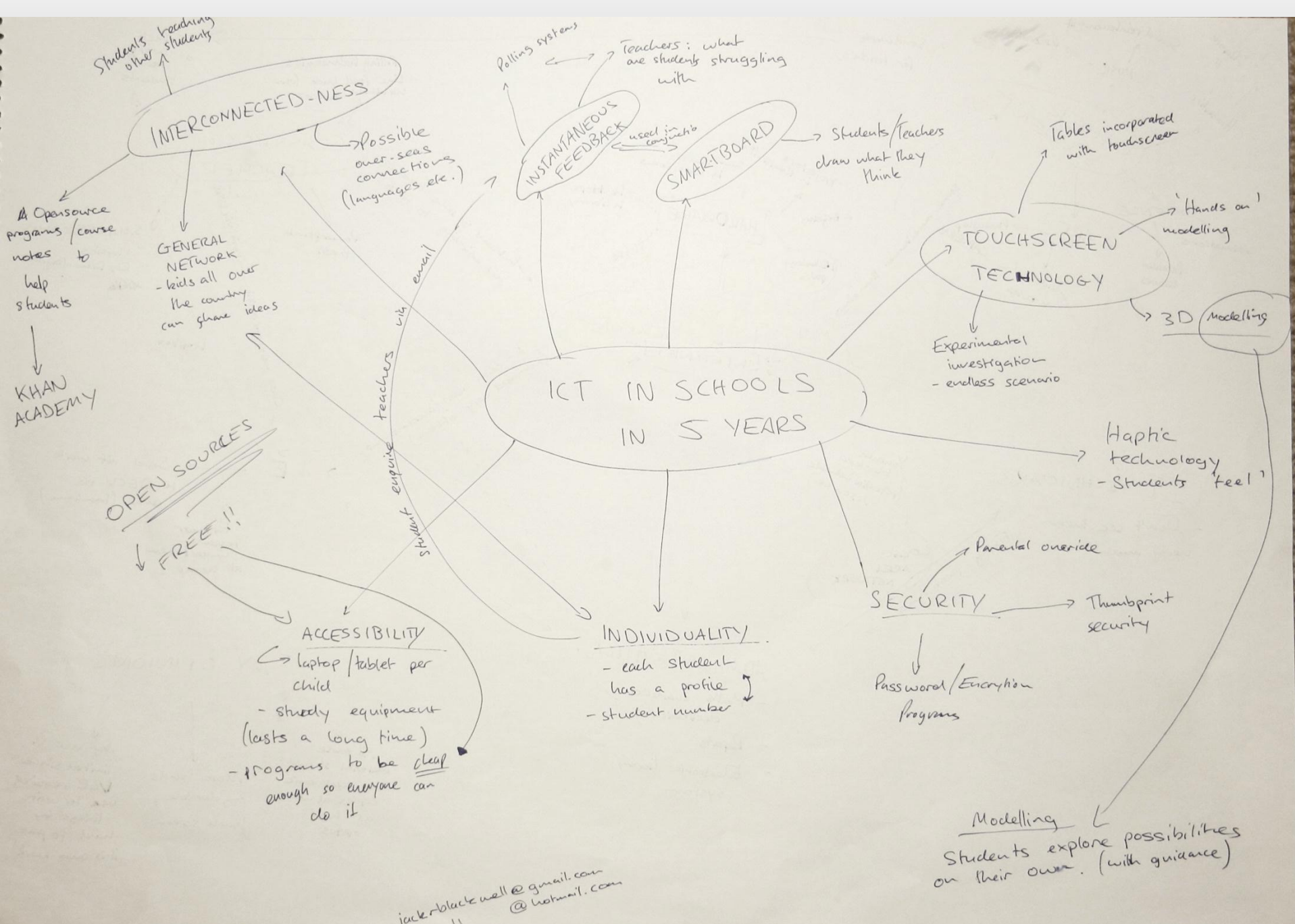
- how you (or your child) uses ICTs at your school
- what sorts of ICTs you (or your child) uses at school
- how you (or your child) uses ICTs for learning
- what you think about using ICTs for learning and teaching at school
- where you get your ideas from – who or what gives you ideas about ICT for learning and teaching? Who helps you?







MALE 17 years old



MALE 17 years

jack.blackwell@gmail.com  
 @hotmail.com

Modelling  
 Students explore possibilities on their own. (with guidance)

Introduction

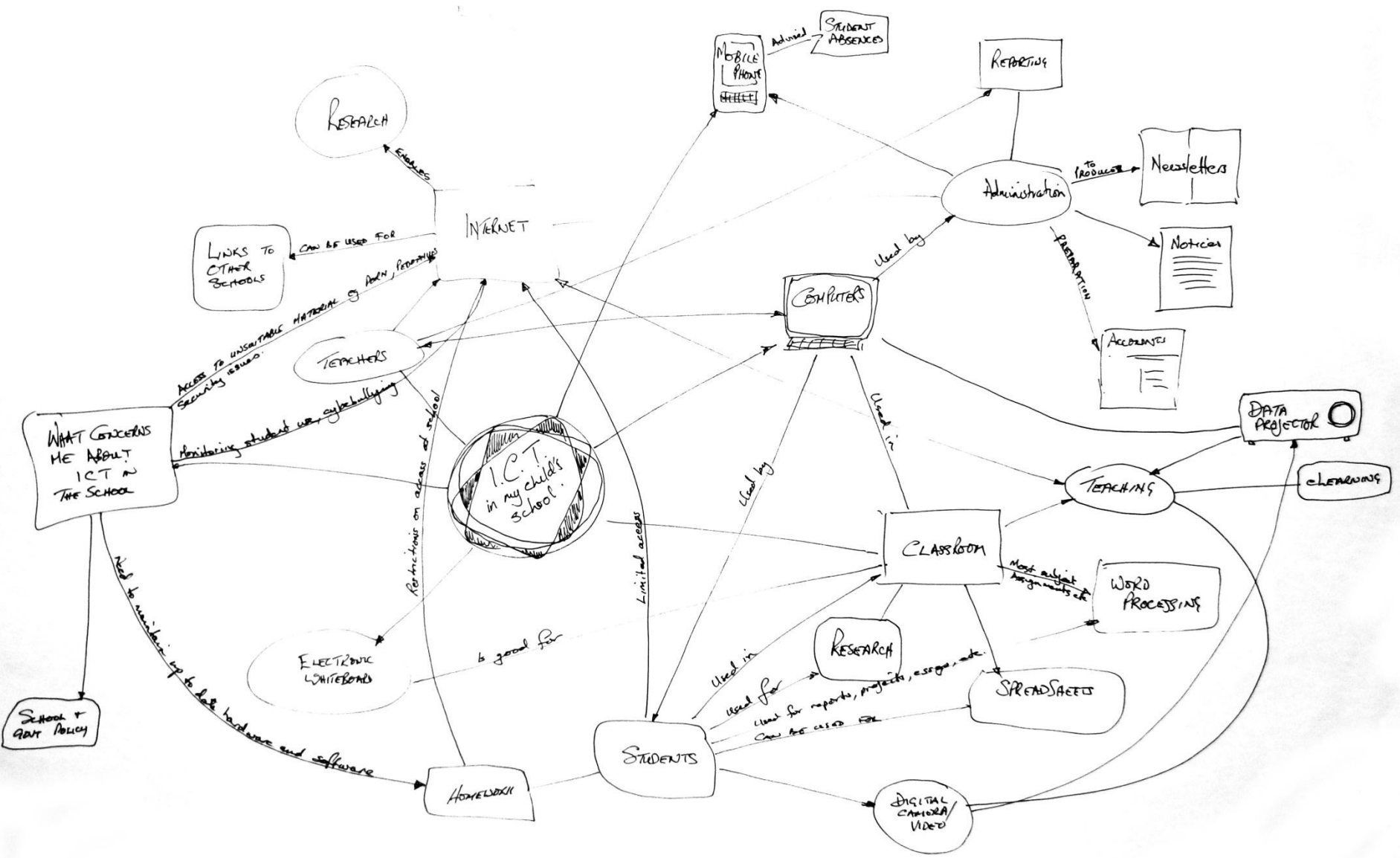
Background

The study

Concept Maps

Method

Findings



I.C.T. in my child's school.

STUDENTS

TEACHERS

ADMINISTRATION

CLASSROOM

RESEARCH

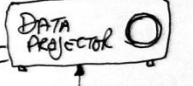
HOMELINK

LINKS TO OTHER SCHOOLS

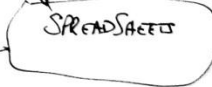
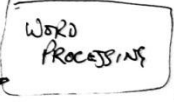
INTERNET



REPORTING



TEACHING



WHAT CONCERNS ME ABOUT ICT IN THE SCHOOL

SCHOOL + GOVT POLICY

RESEARCH

STUDENT ABSENCES

ACCESS TO UNSUITABLE MATERIAL & PORN, PORNOGRAPHY.

Monitoring student use, cyberbullying

Restrictions on access at school

Limited access

is good for

Need to maintain up to date hardware and software

Used in

Used for reports, projects, essays, etc.

Can be used for

Used by

Used in

To produce

Production

Most subject assignments etc

Enables

can be used for

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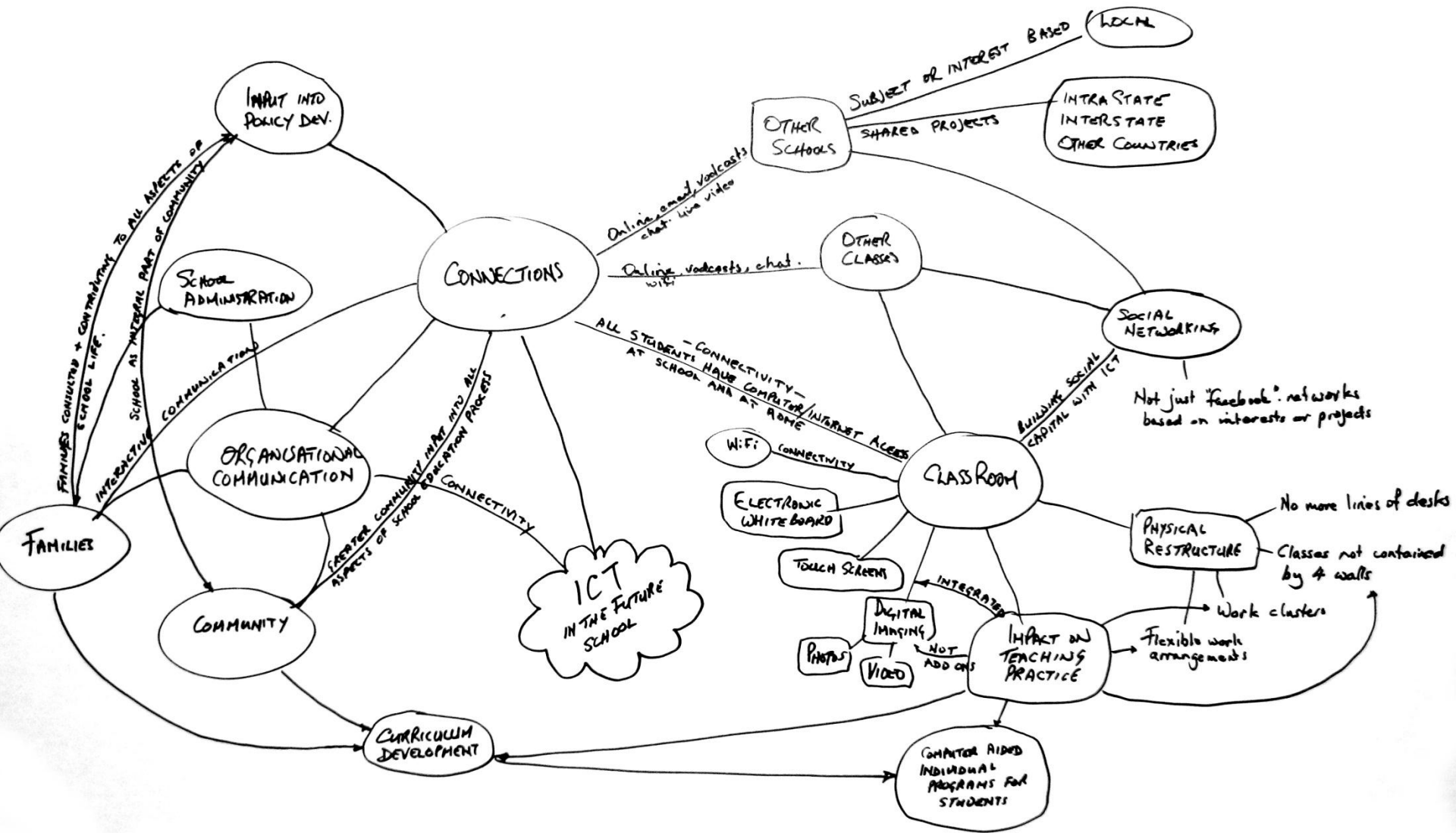
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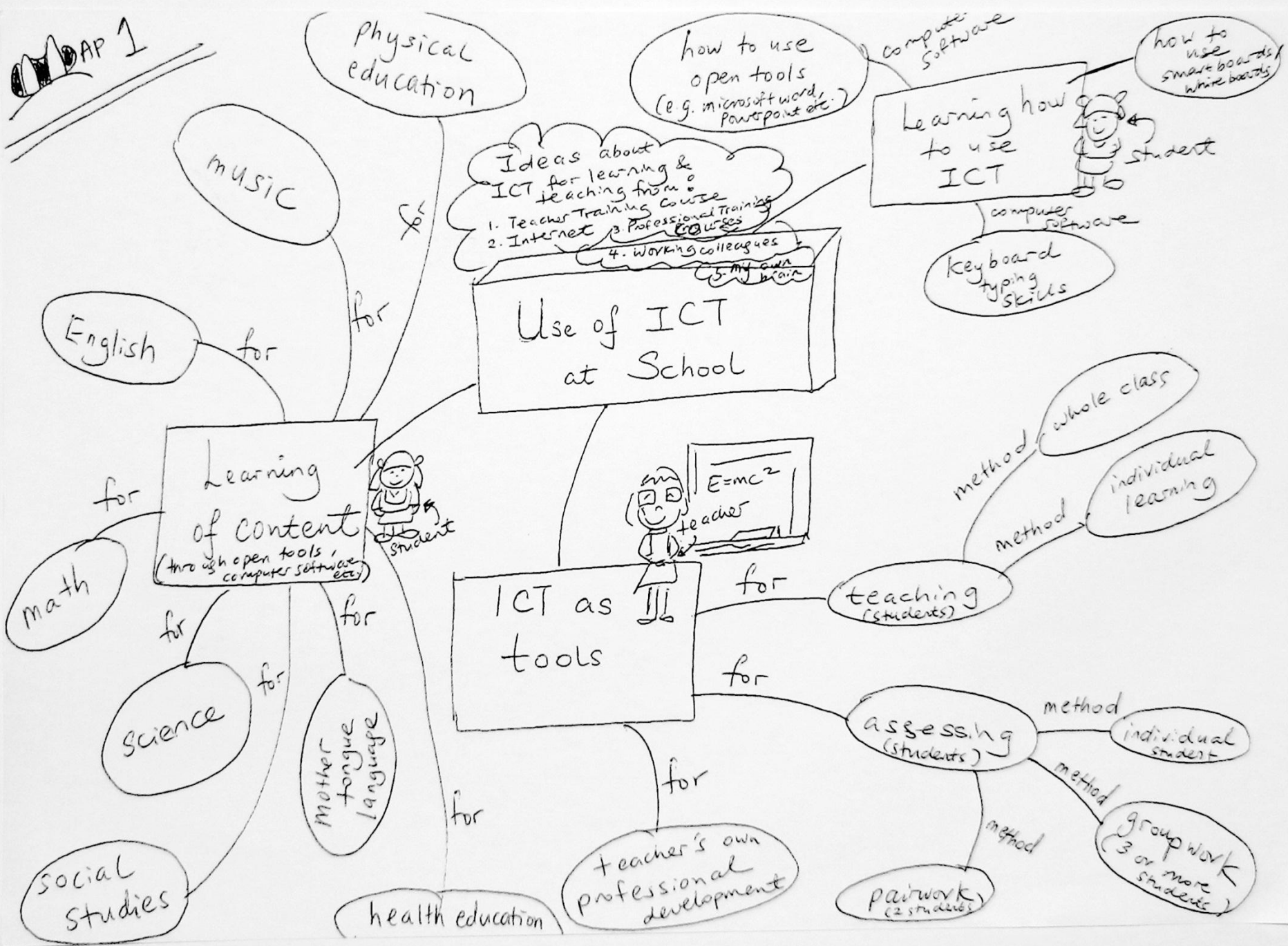
To produce

Production

Most subject assignments etc







Links to homes (planning at home)

Links to different schools at same area/country

Links to overseas classrooms

require (password, eye scan for security purposes)

Change the setup & appearance of classrooms

Classroom of The Future

Links to public transport systems, museums, eating places etc. (for learning purposes)

touch screens boards  
placed around entire classrooms. may be on the floors.

iPads for students at desks

Links to different classrooms at same building

Ideas from:  
1. Watching movies  
2. Previous work place

How ICTs might change/revolutionise schools

require  
Knowledge of pros & cons & 'dangers' of using ICT  
knowledge of etiquette of using ICT

require  
Change in mindset about uses of ICT

require  
willingness to try new teaching ideas about ICT

require  
Enthusiasm & perseverance to try new ICT ideas, even if it means hardware failures  
Principals (for work purposes communication with teachers & parents)

Users of ICT at schools

Students (for learning)

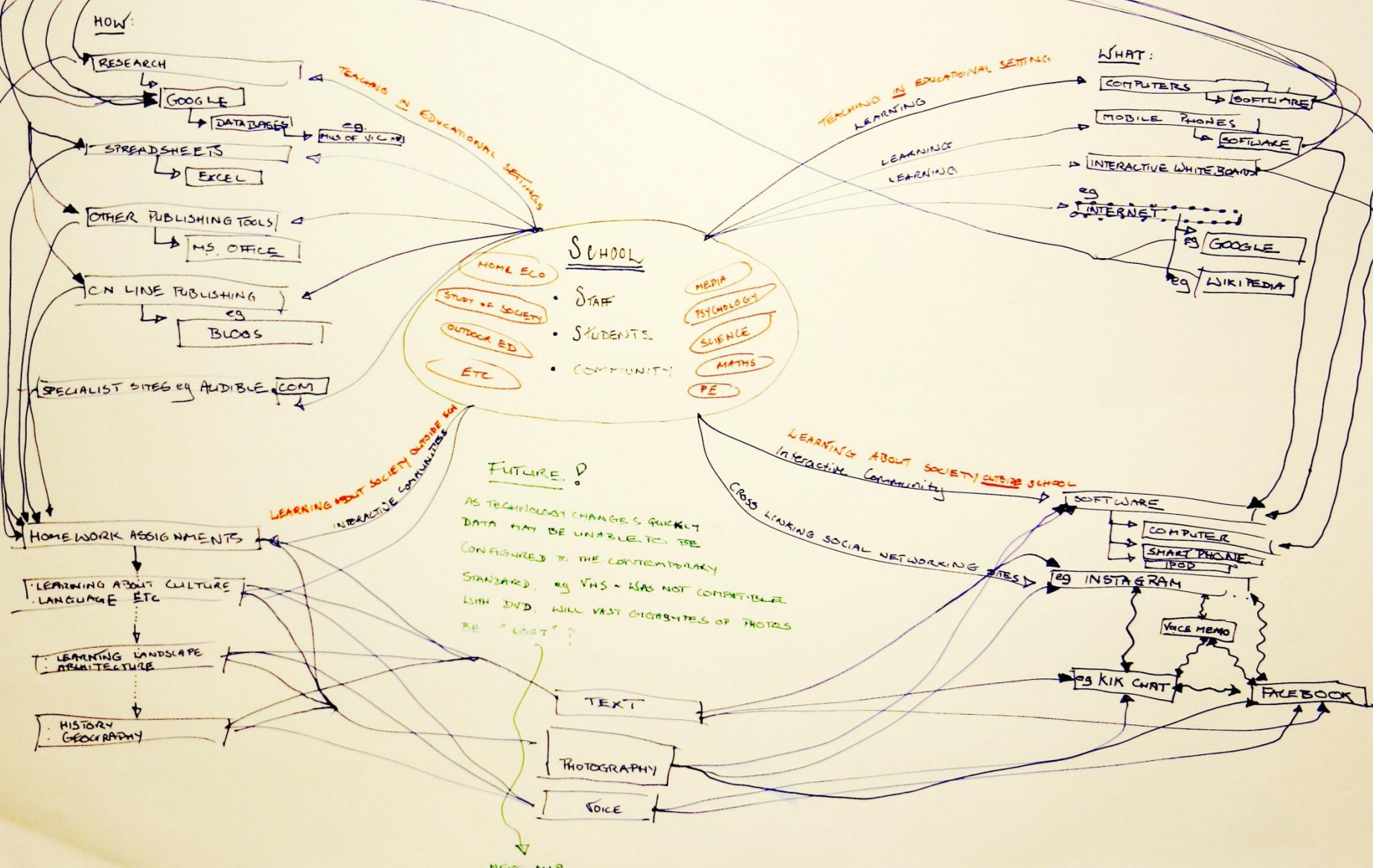
Teachers (for teaching, assessing, professional learning)  
School administrators (for work purposes)  
Communication with students & parents

# ICT IN SCHOOLS

## MAP 1

### CRITIQUE:

- NEEDED A CLEARER IDEA OF THE GOAL
- DIVIDING MAP INTO "HOW" & "WHAT" WAS CLUMSY
- LINES & MEANINGS OF CONNECTEDNESS BECAME INDISTINCT.



# ICT REVOLUTION

2061

EDUCATION  
BEGINS AT AGE 3

MOORE'S  
LAW.  
MASSIVE COMP POWER  
CHEAP COMP POWER

**STUDENT**  
Computer will access brain activity and determine level of understanding.

Edi directly accesses brain activity.

**STUDENT**  
Brain activity determines links to the most suitable teacher.

SCHOOLS NO LONGER EXIST

**STUDENT**  
Nanobots ingested to aid memory.

HOLOGRAPHIC  
VIRTUAL MEETING  
PLACES

**STUDENT**  
The education gap will lessen.

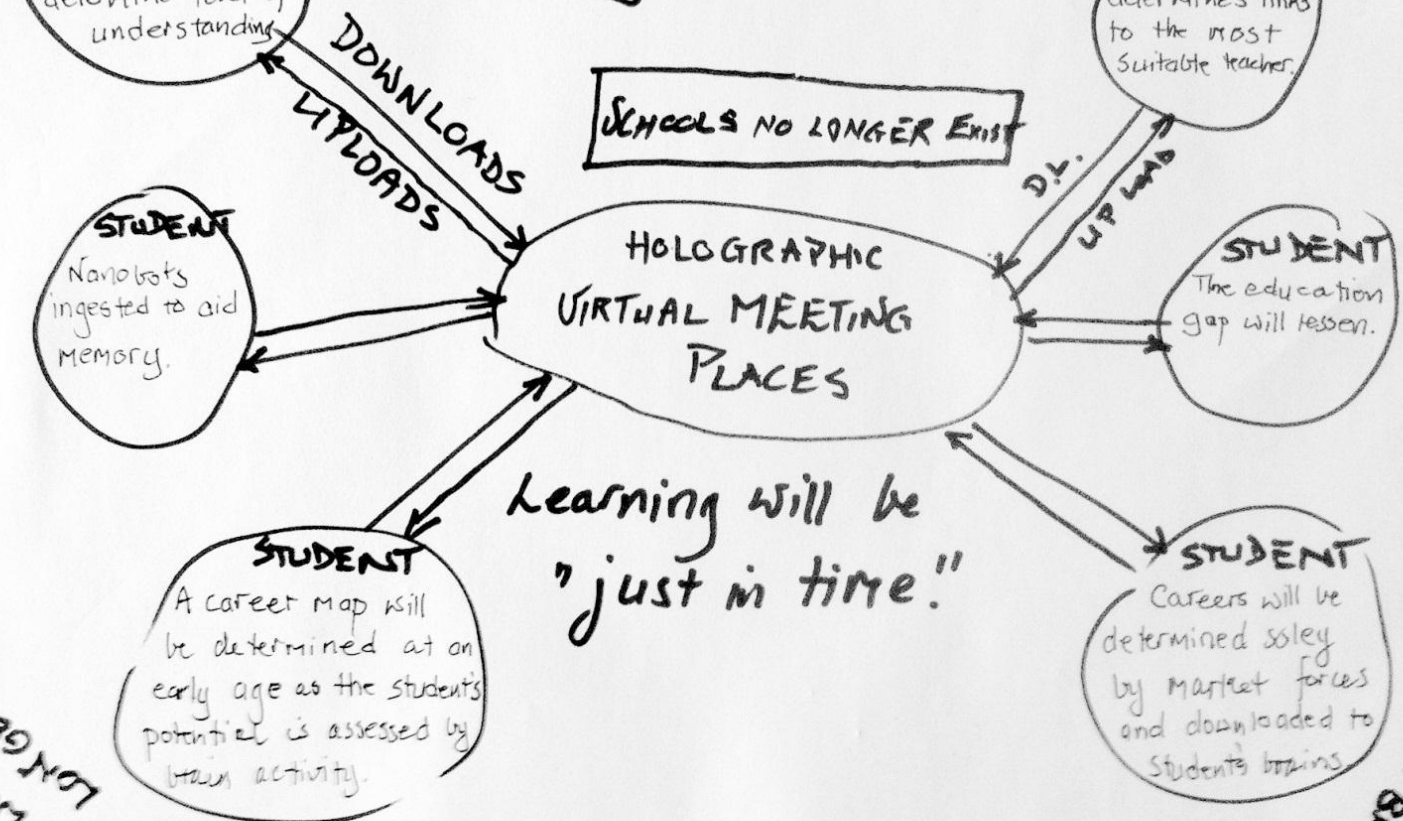
Learning will be  
"just in time!"

**STUDENT**  
A career map will be determined at an early age as the student's potential is assessed by brain activity.

**STUDENT**  
Careers will be determined solely by market forces and downloaded to student's brains.

GRADING NO  
LONGER APPROPRIATE

VIA NANOBOTS IN BRAIN  
DIRECTLY RECEIVES  
Wi-Fi  
HUMAN BRAINS



## Thoughts on the task

Some introduction to concept maps was needed for some - hesitation about the task if unfamiliar

Images and colours not used often

Large paper was good

Questions need to be simplified

The amount of time was right

The “future” question was difficult

# Thoughts on Analysis

Semiotics

Representation

Content

(Zones of Use, Spheres of Thinking?)

Quantitative method?

Approaches?

AP 2

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Users of ICT at schools

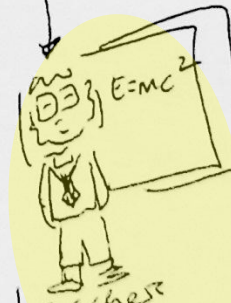


Principals (for work purposes communication with teachers & parents)



School administrators (for work purposes)

Students (for learning)



teachers (for teaching, assessing, professional learning)

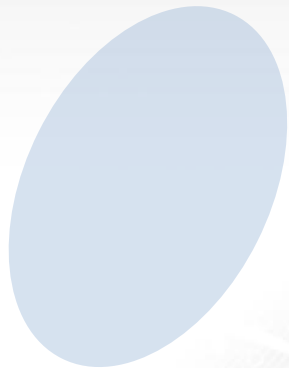
Communication with students & parents



Physical/  
hardware



Students/  
learning



Links/  
connectedness



Teachers/  
Teaching

? Policy links, professional concerns,  
pedagogical shifts, creativity



Introduction

Background

The study

Concept Maps

Method

Findings



# Questions?