




Introduction

O&M

Children's service – educational approach

Because I can't present a paper on thinking without trying to you thinking so I am going to ask you to do a few activities that will involve talking with the person next to you so - sit next to someone you like!


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Would you rather:

Be very rich and have a few friends

OR

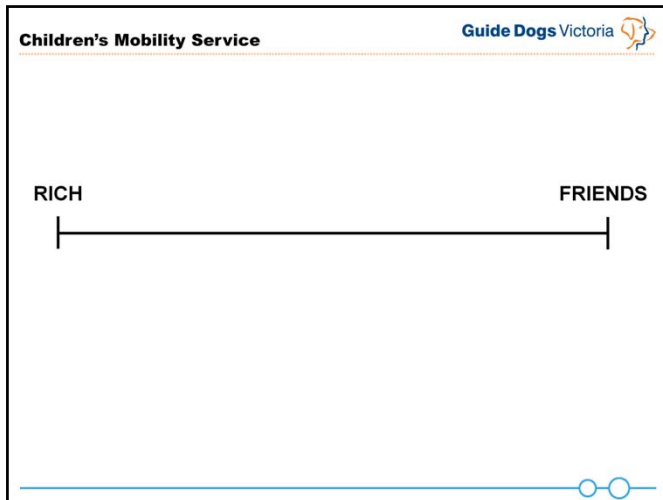
Be poor and have hundreds of friends



First thinking activity is a concept game called ‘would you rather...’

First - would you rather be *rich and have few friends* or be *poor with lots of friends*

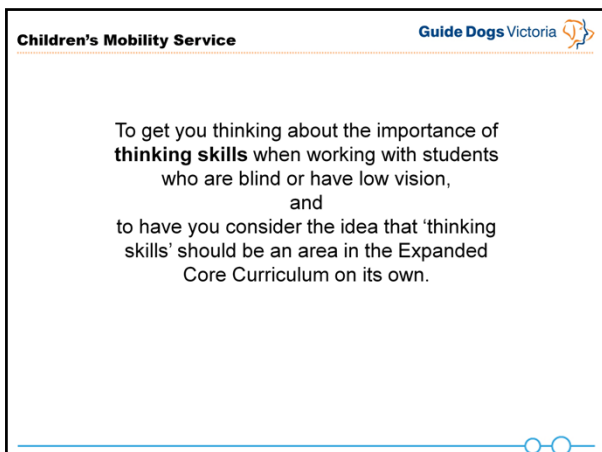
You must make a choice for one or the other – briefly tell the person next to you the reasons for your choice.



But because we know that not all concepts are black and white – so now I want you to consider your choice again and think where on this concept line you would put it.

(get a show of hands to show where you might be on that concept line)

Thinking is complex and very individual in nature.



The purpose of this presentation is:

To get you thinking about the importance of thinking skills when working with students who are blind or have low vision

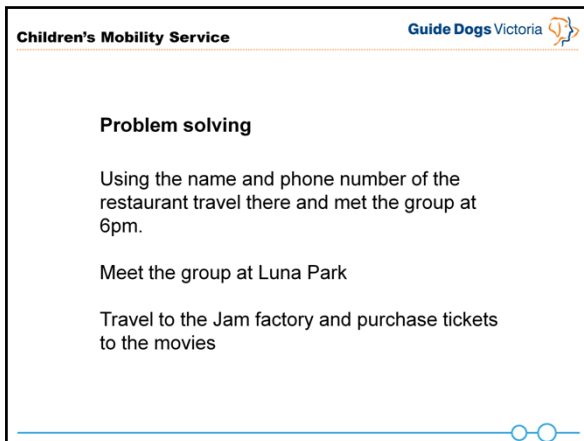
and to have you consider the idea that 'thinking skills' should be an area in the ECC on its own.

I have felt for a long time that the many of the students I work with have a tendency to show quite concrete or rigid thinking skills – or a black and white approach to the world around them.

Because of this I started to investigate how to extend the thinking of a student during our O&M session.

Thinking skills are integral to the core curriculum in all schools and students learn many strategies to support and develop their thinking during their schooling

but I feel that students who are blind or have low vision are still struggling to develop the thinking skills required to be able to solve every day problems



Last week we ran a camp program with the focus on problem solving skills

During the week we gave the students a series of problem solving task

Dinner example

Luna Park example

Jam factory example

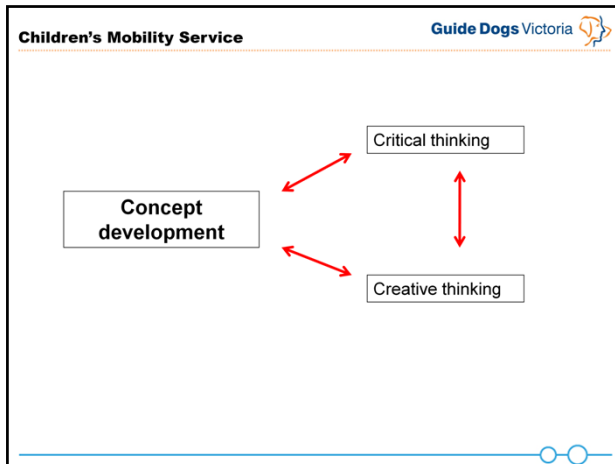
These are everyday tasks that we are required to do but the students **needed assistance to solve these problems:**

- to determine what information they needed,
- where to go to get that information,
- what questions to ask
- and then how to use this information to get to their destination

And also the confidence to believe in their ability to solve this problem

The more I investigated the more I started to see that good problem solving skills requires the ability to think creatively and critically (to enquire and to reason)

And most importantly requires good concept knowledge.



I also started to see how intertwined all these skills are:

That good concept knowledge requires the ability to think critically and creatively and in turn, being able to think creatively and critically is essential for extending concept development.

so I feel that these thinking skills need to be explicitly taught to a visually impaired student

And that thinking that the skill of thinking should be seen as a separate area in the ECC.

Expanded Core Area	Points of Interest	Examples
Assistive Technology/Technology	Technology enhances communication and learning and expands the world of persons who are blind or visually impaired in many ways. It makes information that is typically inaccessible readily available.	Selection of appropriate assistive devices, alternate media needs and accessibility to information such as screen readers, braille note-takers, keyboarding.
Career Education	Career education is vital because here, too, general instruction assumes a basic knowledge of the world of work based on prior visual experiences. Transition activities are included under career education.	Explore interests, areas of strength, job awareness, planning, preparation, placement, work ethic
Compensatory Access Skills	These skills that students who are blind and visually impaired need to successfully access all areas of the general education. Mastery of compensatory skills usually means that students have access to learning in a manner equal to that of sighted peers.	Concept development, communication modes (Braille, print, calendar systems & other), organizational skills.
Independent Living Skills	This area, often referred to as daily living skills or ADL, consists of all the tasks and functions people perform, according to their abilities, in order to live as independently as possible.	Hygiene, food preparation/retrieval, money management, time monitoring, dressing.
Orientation & Mobility	Emphasizes the fundamental need and basic right of people who are visually impaired to travel as independently as possible.	Body image, travel, spatial awareness, safety, directionality
Recreation & Leisure	These skills must be deliberately planned and taught to students who are blind and visually impaired and should focus on the development of life-long skills.	Hobbies, sports, games, orientation, physical fitness.
Self Determination	A combination of skills, knowledge, and beliefs that enable a person to engage in goal-directed, self-regulated, autonomous behavior. An understanding of one's strengths and limitations together with a belief in oneself as capable and effective are essential to self-determination. When acting on the basis of these skills and attitudes, individuals have greater ability to take control of their lives and assume the role of successful adults in society.	Decision Making, problem solving, goal setting, personal advocacy, self efficacy
Sensory Efficiency Skills	Teach and enhance functional vision skills, auditory, and tactile skills in order to access information and learn.	Usage of optical devices, visual cues, visual awareness, tactual awareness/discrimination & auditory awareness/discrimination
Social Interaction Skills	Individuals who are blind/visually impaired cannot learn skills of social interaction in a casual and incidental fashion. They learn them through sequential teaching.	Parallel play, group play, turn taking in conversation, assertiveness skills, social concepts, physical skills, social integration.

www.outreach.psu.edu/~expanded_core_curriculum_overview.doc

We know that the core curriculum is the knowledge and skills related to academic subjects in schools.

And the expanded core curriculum is the additional areas of learning that a visually impaired child may need explicit teaching in to support their learning of the core curriculum.

The areas are:

Compensatory/functional academic skills (concept dev)

O&M skills

Social interaction skills

Independent living skills/ADL skills

Recreation & leisure skills


Career education skills

Assistive technology skills

Sensory efficiency skills

Self determination skills (right to decide, make decisions, problem solving etc)

Concept development and problem solving are in there under Compensatory/functional academic skills & self determination skills but I don't believe this adequately reflects the importance these thinking skill have in a students development.

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Likelihood of the Expanded Core Curriculum being taught:		
Assistive technology skills	22 %	
Social interaction skills	12 %	
O&M skills	11 %	
Compensatory/functional academic skills	8 %	
Independent living skills	7 %	
Career education skills	6 %	
Sensory efficiency skills	2 %	
Recreation & leisure skills	1 %	
Self determination skills	1 %	
<i>(Sapp & Hatlen, 2010)</i>		

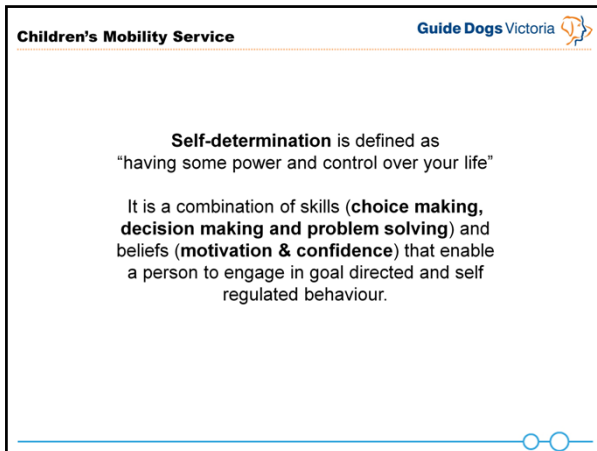
And adding to my concern that we are not fully addressing thinking skills are the results of research conducted in 2010 by Sapp & Hatlen which surveyed specialist teachers of the blind. They found that even with a knowledge of the importance of the ECC some areas were still not being addressed.

Likelihood of the ECC are being taught:

Assistive technology skills	22 %
Social interaction skills	12 %
O&M skills	11 %
Compensatory/functional academic skills	8 %
Independent living skills/ADL skills	7 %
Career education skills	6 %
Visual efficiency skills	2 %
Recreation & leisure skills	1 %
Self determination skills	1 %

So the areas that include thinking skills problem solving and concept development are the least likely to be addressed.

It is not good to see self determination skills at the bottom of the list.



Self-determination is defined as “having some power and control over your life”

It is a combination of skills (choice making, decision making and problem solving) and beliefs (motivation & confidence) that enable a person to engage in goal directed and self regulated behaviour

It is a product of *opportunity* and *capacity*.

This survey was small but if it is any indication of what is occurring in education for children who are blind or have low vision there is very limited opportunity to develop these skill.



Importance of thinking skills

No two individuals think the same – we each individually construct and deconstruct our own thoughts in unique ways

but for each of us, thinking allows us to further establish existing knowledge and to create new knowledge, ideas by making connections.

We build our knowledge through both real and perceived experiences. It is the knowledge gained from our experiences that forms the basis for constructing new knowledge.

We learn by attaching the new to the old, always building on what has gone before.

Critical and creative thinking are two types of thinking that involve skills such as questioning, reasoning together, analysing and evaluating information.

The Melbourne Declaration (December 2008) is a document outlining the direction of Australian schooling for the next 10 years – the goals were developed by the state education ministers in collaboration with schools and public consultation.

The Melbourne Declaration on Educational Goals for Young Australians (MCEETYA 2008) recognizes that critical and creative thinking are fundamental to becoming successful learners and the challenges of the future require young people to be creative, innovative, enterprising and adaptable, with the motivation, confidence and skills to use critical and creative thinking purposefully (AusVELS, 2012).

This highlights critical & creative thinking as extremely important skills

students need to learn.

"if we teach children to read & write, provide them with factual information, but do not equip them with the cognitive skills to understand, appreciate and transfer or connect ideas, then the information they have may be meaningless in future."

(Dewey)

This quote from Dewey also reinforce this point

"if we teach children to read & write, provide them with factual information, but do not equip them with the cognitive skills to understand, appreciate and transfer or connect ideas, then the information they have may be meaningless in future." (Dewey)

We need to make sure that students who are blind or have low vision are able to fully develop their thinking skills.

Our goal is to assist children to move from concrete to more abstract thinking

Concrete thinking

- Having a preference for first hand, kinaesthetic (doing) or visual ways of receiving information
- Using physical, concrete examples of ideas and patterns help with understanding of concepts
- Tendency to like questions that have an answer, rather than questions that are purely speculative
- Beginning to learn about sequencing & able to look for simple patterns

I will quickly go through some of the characteristics of concrete thinkers and abstract thinkers:

- Having a preference for first hand, kinaesthetic (doing) or visual ways of receiving information and beginning to develop simple explanations for the what they observe
- Using physical, concrete examples of ideas and patterns help with understanding of concepts - hence the need for first hand experiences
- Tendency to like questions that have an answer, rather than questions that are purely speculative
- Beginning to learn about sequencing & able to look for simple patterns in their observations – such as colours and shapes

And as such...

Concrete thinking

- Beginning to classify concepts, objects and ideas using given criteria, look for similarities & differences, make classifications and comparisons
- Starting to generate their own questions (asking 'how do you know' & 'why') and seek
- Integrating information from own observations and information from others

- Beginning to classify concepts, objects and ideas using given criteria, look for similarities & differences, make classifications and comparisons
- Start to generate their own questions (asking 'how do you know' & 'why') and seek answers – this can be a sign that they are moving towards abstract thinking as they are drawing on existing knowledge to seek new information
- Integrating information from own observations and information from others - this can also be a sign that they are moving towards abstract thinking as they are drawing on existing knowledge to do new tasks

Abstract thinking

- Being able to make connections between existing, prior knowledge and new information, and transfer this knowledge to new ideas
- Being able to speculate about possibilities & draw conclusions
- Being able to deliberately use thinking skills
- Becoming more capable at seeing patterns and making new connections

Abstract thinking is characterised by:

- Being able to make connections between existing, prior knowledge and new information, and transfer this knowledge to new ideas
- Being able to speculate about possibilities and draw conclusions, and begin to develop beliefs on the basis of this
- Being able to deliberately use thinking skills such as comparing, classifying, deducting, analysing, detecting errors, constructing, problem solving, experimenting, inventing, investigating, applying and transferring knowledge
- Becoming more capable at seeing patterns and making new connections

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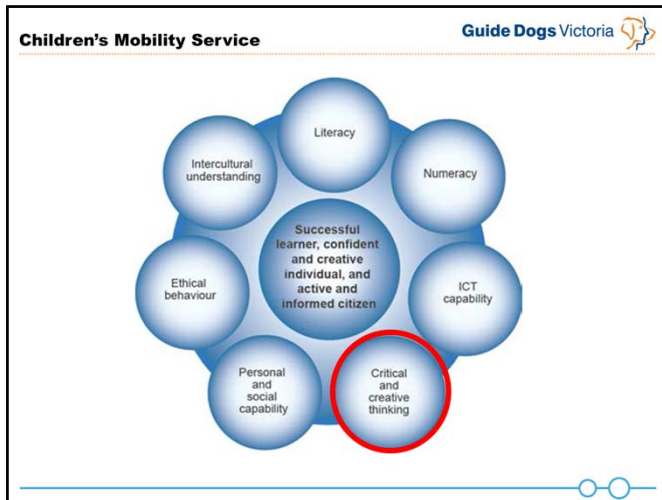
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Abstract thinking

- Able to see that there may be more than one answer to a question, or sometimes there is no answer
- Developing self determination skills
- Able to reflect on own thinking and able to express preferences for particular styles of thinking & learning
- Able to engage in extended cognitive processes involving critical and creative thinking - to deconstruct ideas, concepts, events and objects

- Able to see that there may be more than one answer to a question, or sometimes there is no answer
- Developing self determination skills – planning, organising, making decisions and choices, problem solving and looking at the future roles
- Able to reflect on own thinking and able to express preferences for particular styles of thinking & learning
- Able to engage in extended cognitive processes involving critical and creative thinking - to deconstruct ideas, concepts, events and objects

In Australia we are in the process of implementing a new Australian curriculum – it has core learning areas of Math, English, Science and History along with seven interlinked ‘general capacities’ (diagram) – Literacy, Numeracy, ICT, Critical & creative thinking, Personal & social learning, Ethical behaviour and Intercultural understanding.




These general capabilities are the knowledge and skills that are needed for successful learning and are designed to assist students to live and work successfully in the twenty-first century and

So, again critical and creative thinking skills are core elements of these curriculum documents.

STOP HERE – I have provided a lot to think about so I want to give you some thinking time.


Tell your neighbour about something that you have found different or interesting or that you can relate to so far.

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Critical thinking
the ability to interpret, compare, question, infer, hypothesize, appraise, test, generalize, analyse and evaluate - often described as the higher order thinking skills.

Creative thinking
the ability to seek alternatives & use imagination to generate possibilities. Involves taking risks with thinking, making new connections, generating ideas by seeing existing situations in new ways and making new links.



What is critical thinking?

Critical thinking is at the core of most intellectual activity.

It involves being able to interpret, compare, question, infer, hypothesize, appraise, test, generalize, analyse and evaluate

The important skills here are to question and then evaluate.

The critical thinking skills are often described as the higher order thinking skills.

What is creative thinking?

Creative thinking includes the ability to seek alternatives and use imagination to generate possibilities.

This involves the ability to take risks with thinking and make new connections

It also is the ability to generate ideas by seeing existing situations in new ways, looking for alternatives or making new links.

The ability to think both creatively, and critically, is central for being able to solve problems, and to support the development of concepts.

They involve being able to transform existing information and use it for new purposes.

Problem solving

1. A **problem** that is hard to understand, to accomplish or to deal with – often open ended and unstructured situations that don't have predictable outcomes or answers.
2. A **difficult question** that requires an answer or solution.
3. A **question** to be resolved by calculation or by following a well defined route or formula to seek the answer.

What is problem solving?

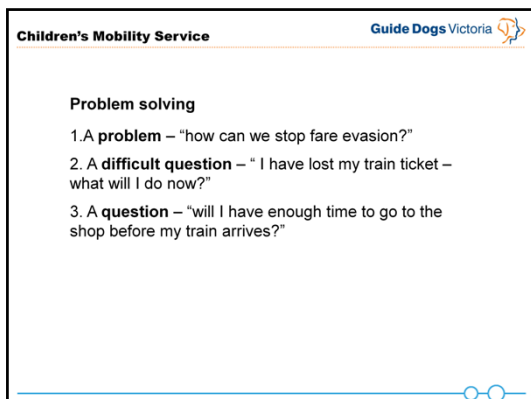
We can view problems in a number of ways:

1. A problem that is hard to understand, to accomplish or to deal with – often open ended and unstructured situations that don't have predictable outcomes or answers

2. A difficult question that requires an answer or solution.

1. A question to be resolved by calculation or by following a well defined route or formula to seek the answer.

Some examples of these problems are here:



A problem that doesn't have a predictable outcome or answer:
How can we stop fare evasion as it is making travel by train more expensive?

A difficult question that requires an answer or solution
I have lost my train ticket – what will I do now?

A question to be resolved by calculation or by following a well defined route or formula to seek the answer
Will I have enough time to go to the shop before my train arrives?

We want students to be able to solve, or attempt to solve, all these types of problems.

And this involves being able to reason and question (critical thinking), generate possibilities, make new connections (creative thinking).

I often have problem solving as one of the main goals for an O&M program. I tend to focus on the 'difficult question' problems

And one of my favourite strategies is to give the student a 'difficult question' that will focus on the O&M skills I also want to develop but also require the use of critical and creative thinking skills (problem solving skills).

An example is of a student who was developing her orientation skills around the school – at the start of the session I would give

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Concepts
mental groupings about the regularities or patterns in events/objects surrounding our worlds.

Common something that is familiar

Contestable something that doesn't have a set answer

Central a building block to further understanding

Concepts are constructed by the learner - they are what the learner knows & understands.

Involves being able to compare, contrast, classify, define, distinguishing differences and give reasons support views.

What is concept development?

There are many definitions of what a concept is - I tend to describe concepts as mental representations or mental groupings about the regularities or patterns in events/objects surrounding our worlds.

Concepts are groups of facts that are organised in a way that we can make sense of them.

A concept is something that is

Common - meaning something that is familiar

Contestable - something that doesn't have a set answer, and

Central – a building block to further understanding

It is important to understand that concepts need to be constructed by the learner, as they are what the learner knows and understands about a concept.

It is this knowledge that helps learners form their own way of viewing the world.

Developing concept knowledge involves being able to compare, contrast and classify ideas, objects and events, as well as being able to define, classify, distinguishing differences and give reasons or evidence to support views.

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Is a road

Isn't a road

road gutter street court curb ramp
driveway footpath highway bitumen
concrete sign post fire hydrant overpass
traffic lights fence trees speed humps
line markings lane cobblestones drain

I want to get you to do another thinking activity now – a concept game called ‘sitting on the fence’ with the topic of roads

Roads is a concept that is:

Common – everyday object,

Contestable - not the same everywhere and

Central – good knowledge of road concept central to being able to travel safely, cross road, read maps, follow directions etc

Your task is to put these words into one of the boxes – there is no sitting on the fence about any word!

road, gutter, street, court, curb, ramp, driveway, footpath, highway, bitumen, concrete, sign post, fire hydrant, overpass, traffic lights, fence, trees, speed humps, line markings, lane, cobblestone, drain,

Discuss these with your neighbor.

You can see that teaching a student about concepts is not a simple, straightforward task.

In this case you can see that in order to travel independently and to cross roads a student needs to have this concept knowledge.

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Developing concept knowledge:

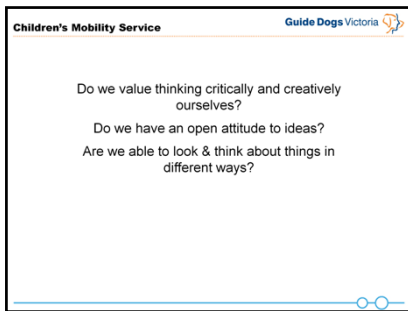
- An increased use of abstract concepts
- Ability to make more connections between multiple concepts
- Ability to apply & transfer understanding of one concept to that of another
- Ability to decisions based on new information

In order to assess concept development the types of skills & behaviours we can look for are – this slide shows them.

E.G public transport use

- *An increased use of abstract concepts* – travel, transport, cost, fairness, sharing, respect, space, time etc
- *Ability to make more connections between multiple concepts* – space on trains v trams, cost train v taxi v car, time taken to use car v bus etc
- *Ability to apply & transfer understanding of one concept to that of another* – travel on train v tram v taxi v bus etc
- *Ability to decisions based on new information* – choosing to travel on transport appropriate to them, able to share space appropriately with others on transport, arriving at destinations on time etc

This area of concept knowledge is an area that I believe is very important to my O&M teaching.



When it comes to what we do, as teachers we need to be thinkers as well - we need value thinking critically and creatively ourselves, we need to have an open attitude and be able to look and think about things in different ways.

It is important to look at the environment we set up within our programs asking is it open to new thinking, is there respect for the thinking of the student and time to think, do you listen carefully to what is said by your students, paying attention to things that might be tested or that puzzle you?

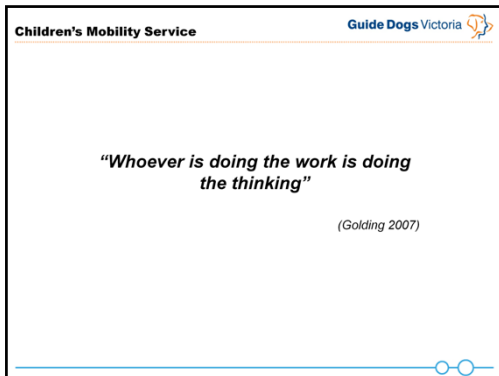
I really enjoy this part of the job, being able to listen to students and working out how they are thinking and how I can assist in developing the critical and creative thinking skills.

An example of this was last year when working with a blind student who was learning how to get from her classroom to the courtyard to meet her friends. It was something that she should have been able to do quite easily but it seemed to be taking a long time for her to become confident walking the route. Over a number of sessions we had worked on different aspects that I thought were effecting her travel - confidence, further exploring the environment, what to do if lost etc but something was still not working.

One day after watching her walk the route but not looking too confident I commented that I had been sitting in the courtyard watching her travel the whole way – she responded with ‘could you see me from the courtyard?’ I replied yes and could have left the discussion there, but it puzzled me why she asked that question. So I questioned her more and it turned out she thought that she was not visible to others from such a distance and that the playground she walked past meant that no one could see her coming.

This told me a lot about her concept knowledge – the concepts of vision & distance, of being visible and what objects are see-through.

We then spent time exploring how far away I could see her from (using walkie talkies and getting her to do different actions)

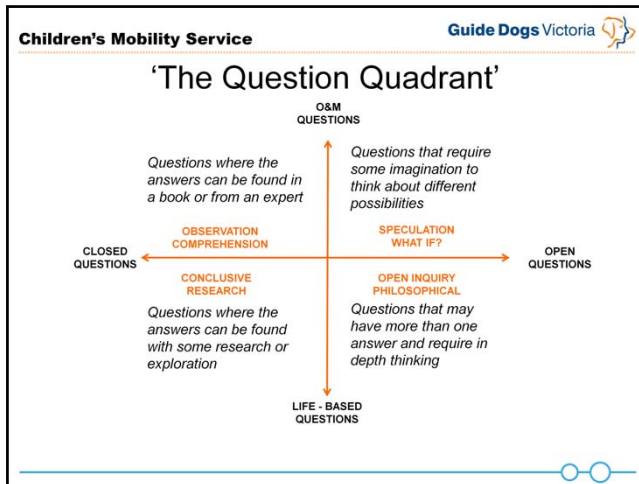


We want students to develop appropriate questioning skills of there own

It can be hard as sometimes it is easier to just answer the question or some times we feel obliged to answer a students questions – but we shouldn't because:

"Whoever is doing the work is doing the thinking" (Golding 2007).

I have found the **Question Quadrant** a very useful tool for developing critical questioning skills in students as well as for planning my teaching.



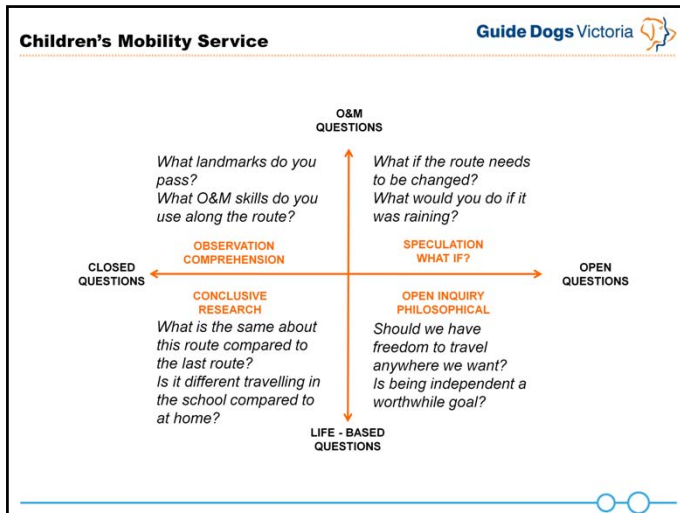
The Question Quadrant is a tool that has been designed (by Phil Cam, ????) to support the explicit teaching of questioning skills, focusing on four different types of questions:

Observation/Comprehension – questions where the answers can be found in a book or from an expert. Closed question – look and find the answer.

Conclusive Research – questions where the answers can be found with some research or exploration. Closed question – one right answer.

Speculation/What if? – questions that require some imagination to think about the different possibilities. Open question – use your imagination.

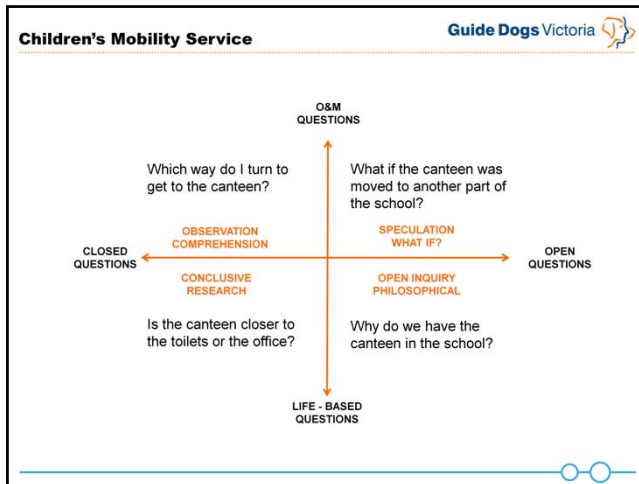
Open Inquiry/Philosophical – questions that may have more than one answer and require in depth thinking. Open question – many different possibilities.



I use the Question Quadrant in two ways:

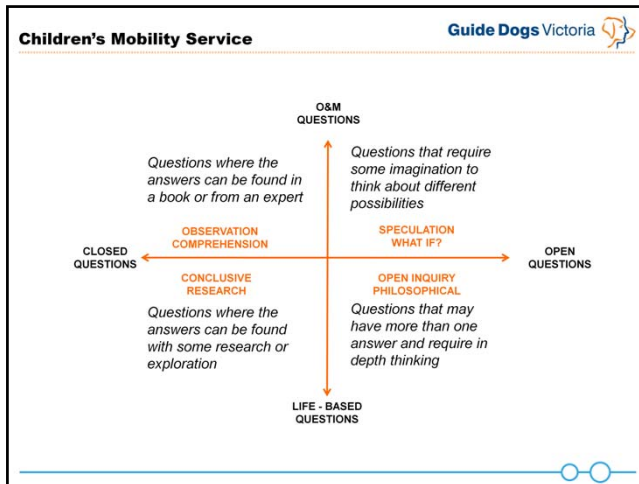
The **first** is in my planning – what type of questions am I asking of students and how can I extend their thinking within the sessions.

Danijela's example



The **second** use is to encourage students to ask questions and to understand the type of questions they are asking and the thinking that is required to answer them. I spend time in sessions actually asking the questions, talking about what type of question it is and getting the students to develop their own questions for each type.

Student based questions from Danijela



Activity - Show slides of question quadrant – and have them design one question for each area after thinking of a topic –

traveling to school if can't think of one.

Concept development strategies:

- Providing opportunities to think about a concept in a different way
- Revisiting the concept again and again in new environments
- Setting up collaboration and discussion about concepts with peers and other adults
- Allowing time to explore concepts

Concept development is closely connected to language development so I like to use strategies that encourage discussion in developing the critical and creative thinking skills needed. Thinking is a social activity and a talk is a really good way to see how someone is thinking (since we can't read minds!)

We want a range of activities that get students to think about concepts in a variety of ways
and that promote a new way of thinking of tension between ideas.

This could include:

- Providing opportunities to think about a concept in a different way
- Revisiting the concept again and again in new environments
- Setting up collaboration and discussion about concepts with peers and other adults
- Allowing time to explore concepts

A fun way of doing this is using a concept games and thinkers keys.

The Reverse Places words such as 'cannot', 'never' and 'would not' in sentences – commonly displayed in a listing format – e.g. list things you would never...	The What if? Asking virtually any 'what if' question – record thinking using a graphic organiser	The Disadvantages Choose an object or practice and list its disadvantages – then list some ways of connecting or eliminating these disadvantages	The Combination Students list the attributes of two unmatched objects, then combine the attributes to create a new and better product	The Alphabet Compile a list of words from A to Z which have relevance to the area of study
The Bar An acronym used to improve on the design of everyday objects – B = Bigger, A = Add and R = Remove or Replace	The Variations Students find many ways to overcome an obstacle or solve a problem	The Picture A simple picture with no relevance to subject – students try to work out ways it could be linked	The Prediction Students think critically as they predict possible outcomes to a set of given circumstances or a particular situation	The Different Uses Students use imagination to make a list of different uses for a chosen object
The Ridiculous Make a ridiculous statement that would be virtually impossible to implement and have students substantiate it	The Commonality Select two objects with little to do with each other and ask students to find points of commonality	The Question Start with the answer and try to list 5 questions which could be linked with that answer only	The Brainstorming State a problem which needs to be solved and have students brainstorm a list of solutions	The Inventions Students are encouraged to develop inventions which are constructed in an unusual manner of using unusual materials
The Interpretation Describe an unusual situation and then ask students to think of some different explanations for the existence of that situation	The Brick Wall Make a statement that would not generally be questioned or disputed – then try to break down the wall by finding other ways to deal with the situation	The Construction A problem solving task that requires the creative use of limited quantities of everyday materials	The Forced Relationship Students develop a solution to a problem by considering the attributes to create a new or better product or situation	The Alternative Students list the ways in which to complete a task without using the normal tools or implements

Thinkers Keys are a series of questions that focus on both critical and creative thinking and are great for further exploration of concept (looking at a concept in a different way and encouraging discussion).

Critical – The reverse, **the what if**, **the ridiculous**, the commonality, the question, *the brainstorming*, the interpretation, *the brick wall*, **the alternative**

Creative – The disadvantages, the combination, the alphabet, the BAR, **the variations**, the picture, **the prediction**, the different uses, *the brainstorming*, the inventions, *the brick wall*, the forced relationship, the construction, *the alternative*

Critical - blue

Creative - green

Both - white


The Reverse List 10 things you would never do when walking from your classroom to the new meeting point	The What if? What would you do if you forgot to bring your cane to school one day?	The Disadvantages What are the disadvantages of using a long cane?	The Combination	The Alphabet Compile a list of words from A to Z which relate to travelling from your classroom to the new meeting point
The Bar	The Variations The exit door from your building is locked and you cannot get out of the building – list as many things as possible that you could do in this situation	The Picture	The Predicament Your new classroom has been flooded by a burst water pipe – what might happen is you have to change classrooms for a couple of days?	The Different Uses Think of as many different uses as possible for the common area that is outside rooms 18, 19 & 20
The Ridiculous Walking has been banned in the playground so you must run everywhere – give as many reasons as possible to say why this would be a good idea at school	The Commonality What does your old classroom and your new classroom have in common? List as many different ideas as possible.	The Question The answer is 'long cane'. Think of at least 5 questions that would have this answer.	The Brainstorming The footpath is broken and you can't get to the new meeting point – how will you get to meet your mum at the end of the day?	The Inventions
The Interpretation You are walking in the playground and you find a football – what might be the reason for this football being in your path of travel?	The Brick Wall	The Construction	The Forced Relationship	The Alternative How could you carry everything to school if you didn't have a school bag? List as many different alternatives as possible.

An example of **thinkers keys** used for a client related to long cane use and orientation at school.

The Reverse	The What if? What if you get accepted into your preferred university course? Brainstorm all the questions you have.	The Disadvantages What are the disadvantages of having to get public transport to university? How can these be changed?	The Combination	The Alphabet List your top 10 places that you want to be able to get to when at university.
The Bar	The Variations List as many ways as possible to overcome these two problems: 1. Missing your train 2. Going to the wrong lecture theatre	The Picture	The Prediction What would happen if you had to start university tomorrow?	The Different Uses List five different use for the Disability Liaison Unit
The Ridiculous	The Commonality What do lecture theatres and school classrooms have in common – list as many things as possible	The Question <i>University</i> is the answer – write 3 questions for this answer. <i>Orientation</i> is the answer – write 3 questions for this answer.	The Brainstorming Brainstorm how you think you will get to university on your first day	The Inventions Invent and describe your ideal university environment
The Interpretation	The Brick Wall Debate against this statement – ‘universities are unstructured and complex environments’	The Construction	The Forced Relationship Combine your current mobility skills with moving around a university – what do you see?	The Alternative Without orientation list all the ways that you could get around a university

Also, one example from a group program for students leaving secondary school.


Children's Mobility Service

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Philosophy for Children

Aim is to support the development of *critical* and *creative* thinking through discussions or a 'community of inquiry'

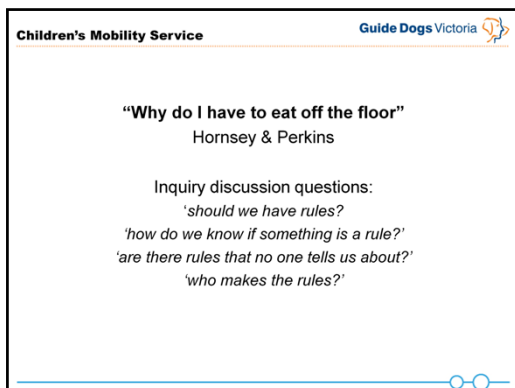
A community of inquiry is a group of people sharing and discussing philosophical ideas and concepts.



P4C

Last year I completed a course in providing Philosophy for Children programs. The idea behind Philosophy for Children is to support the development of critical and creative thinking through discussions or a 'community of inquiry' (a group of people sharing and discussing philosophical ideas and concepts).

The following is an example of a topic for a community of inquiry about the concept of 'rules'



Stimulus – why do I have to eat off the floor (Horney & Perkins)

The dog in this story asks a lot of questions about the rules – he thinks that some of the rules are fair and some are not. It provides a stimulus for thinking about the rules and reasons for rules – school rules, road rules and rules at home.

Inquiry discussion focuses on the questions of:

‘should we have rules?’

‘how do we know if something is a rule?’

‘are there rules that no one tells us about?’

‘who makes the rules?’

I used this inquiry as the basis for a group program I ran with about 5 young children. We made a list of all the rules we could think of and then discussed whether they were ‘written’ or ‘unwritten’ rules.

This was used to start an exploration of road rules, looking at the rules that are laws (such as stop at the stop sign) and those that are unwritten (such as stop, look, listen and think).

This encouraged the students to think critically about the road rules they encounter every day.

Whilst many of us work one to one with students, making a community of inquiry difficult, I found that the ideas and rationale for this type of thinking program impacted on the discussion and activities I include in my programs.

'insocratic'

*not being able to engage in thinking and
discussion of ideas*

(Cam, 2006)


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Concept Games		
Brainstorm Searches	brainstorming ideas about a particular concept <i>'list as many things about a road'</i>	
Would you rather?	This is a good activity to explore the student's ability to apply conceptual knowledge <i>'would you rather cross the road at the corner or mid block?'</i>	
Concept line	Ranking a number of examples on a concept line <i>'scary v fun'</i>	

Concept Games

Brainstorm Searches – brainstorming ideas about a particular concept and then going in search of the items on the list – really good for concrete concept. E.G. what is a road?


Would you rather? - (did this at the start – friends) giving a few scenarios relating to a concept and asking students which one they would rather be and be able to give a reason why. This is a good activity to explore the student's ability to apply conceptual knowledge. E.G. (understanding of the layout of the classroom) would you rather be leave your classroom via the main door through the corridor, through the back door via the oval, or through the window?

Concept line – where students are asked to rank a number of examples on a concept line –generally good for showing that concepts are not black or white. E.G being scared to try new things – scary-----fun. We did this earlier too when I asked you to put your thoughts about being 'rich' or 'having friends'.

Children's Mobility Service		Guide Dogs Victoria 
Sitting on the fence	Students are asked to categorise ideas about a concept into yes/no type answers <i>'part of a road or not'</i>	
Eye swap	Being able to see something from another person's perspective <i>'what would a driver be thinking at seeing someone run across the road?'</i>	

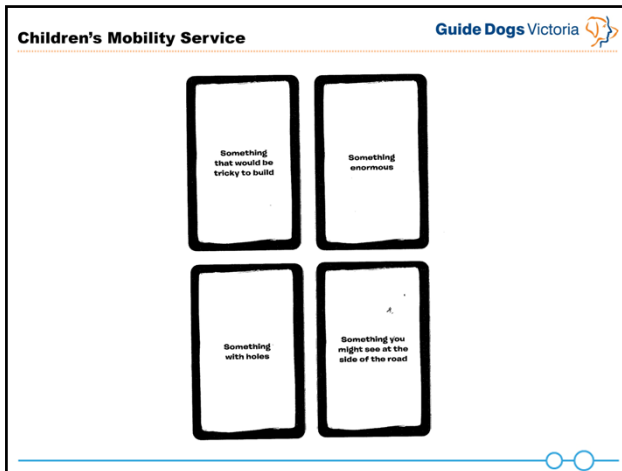
Sitting on the fence – students are asked to categories ideas about a concept into yes/no type boxes so they can't sit on the fence. Also a good way to show that concepts are not black or white. E.G. the road activity we did earlier.

Eye Swap – being able to see something from another person's perspective. This is really good for social concepts as well. E.G. what does a car driver think when they see a student standing at the traffic lights? What would be there thoughts to seeing someone run across the road?

Children's Mobility Service		Guide Dogs Victoria 
Same but different	Using closely related words but asking for reasons as to why they are different <i>'hill v mountain; road v street; door v doorway; roof v ceiling; top v above'</i>	
Cranium	A fun way to develop creative thinking, in particularly developing fluency of ideas	

Same but different – using closely related words but asking for reasons as to why they are different. This is a really good activity for exploring student depth of knowledge about a concept and looking for misconceptions. E.G. hill & mountain, road & street, table & bench, door & doorway, roof & ceiling, top & above, jump & leap

Cranium – a fun way to develop creative thinking, in particularly developing fluency of ideas about concepts. Choose a card and discuss.



E.G.

something that would be tricky to build,

something enormous,

something with holes,

something you might see at the side of the road,

Also,

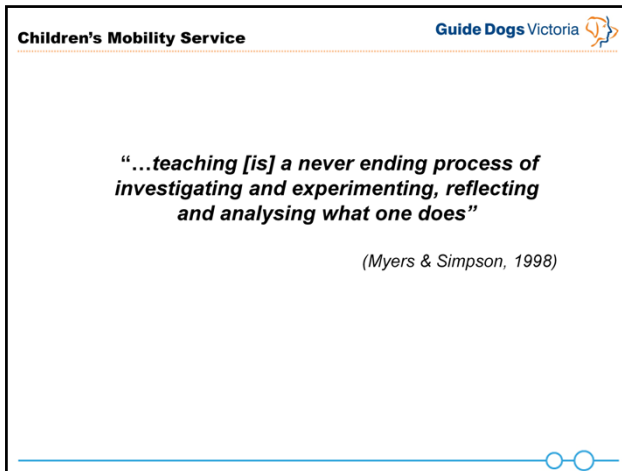
something that is much taller than the average person,

something smaller than your big toe,

something kids do better than adults,

something you can do in less than one minute,

something you couldn't possibly lift off the ground,



In closing, I said at the start that the purpose of this session is to get you thinking about the importance of thinking skills when working with students who are blind or have low vision - I really hope that I have made you think about how to include critical and creative thinking skills in your teaching as well as how to develop the related problem solving skills and concept knowledge.

And I also hope that you will consider the idea that 'thinking skills' should be an area in the ECC on its own and that you will think about this when you are planning sessions or programs with students.

"...teaching [is] a never ending process of investigating and experimenting, reflecting and analysing what one does" (Myers & Simpson, 1998 cited in Loughran, 2010, p. 58).



Thanks