

## POSSIBLE FUTURE PROBLEM SOLVING SELECTION PROCEDURE SESSION ONE:

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This is not a test and students should be encouraged to see it as a fun activity. Most of the activities don't need to be timed and for some of the later ones you may like to get them to chat to a partner about it before they respond. It's really important to tell them that you are looking for creative, 'off the wall' responses and that there are no right answers. Their work will not be marked as such but will give you an insight to how they think about things. Don't necessarily do all of the activities but at least aim to do the first seven.

This makes a great 'pretest/post-test' – if you give it again after a year in FPS you should see a big difference in their responses.

Activity	What to look for:
1. List all of the things which you can think of which are red	Fluency is a basic creative skill. Look for the number of ideas which the students come up with rather than the quality. You may also spot some original thinkers if their ideas are uncommon
2. List as many different ways of getting from Auckland to Wellington as you can.	Flexibility – the ability to generate a range of different ideas and/or categorise them is another basic creativity skill. Look for students who come up with different categories of ideas rather than just common forms of transportation.
3. List all the uses of a brick.	This is an "old chestnut" but focuses on the next creativity skill, originality. More creative students will use the brick in unusual ways – breaking it up rather than just thinking of it as a brick is deemed to be more creative.
4. Draw or describe an invention you could make using a mirror and a pillow.	Creativity is being able to combine disparate objects and ideas into something new or being able to make connections between them. Look for originality – the objects used in ways that are not just the common uses.
5. Problem – How might we conserve water? Solutions – bad taste and smell, rationing. Write a couple of sentences to explain how these solutions would actually work.	Elaboration is the last of the four 'basic' creativity skills (and there are many more) – can the students clearly explain how the solutions would be put into place.
6. A black cylinder is standing on a table in a sealed room with no windows. No-one is in the room. No-one goes into the room. After twenty minutes the cylinder falls over. What reason(s) can you think of for this occurring? (adapted from Edward de Bono, "The Black Cylinder Experiment")	This looks at the student's tolerance of ambiguity. There is no right answer – some answers are obviously better than others. Students who can't tolerate ambiguity will find this a frustrating exercise and will want to know the 'right answer'.

7. You live in the year 3001. You get into a time machine and go back into the past. List the things that you see.	This will really sort out the very clever thinkers. Most students will talk about things like dinosaurs; the really clever ones will realize that you will actually see the future and maybe the present and the past as well.
8. List three advantages and three disadvantages of all schools having the same uniform.	Look for students who can attack a situation by considering differing viewpoints.
9. You are studying the topic of weather. List all of the places where you could get information.	FPS relies heavily on research skills. This gives an idea of whether or not the student is able to source a range of research.
10. The year 2050AD. Schools have been declared too expensive and have been abolished. All students will work from home, at on-line schools. They can choose the school they wish to enroll with and may be studying with students from all over the world. List the problems you can think of which may be associated with this.	Look at whether or not the student is able to identify a range of problems within a scenario.
11. List jobs that may exist in the future which don't exist now.	Look at their futuristic thinking. It's a tough one which they find very easy after a year in/fps
12. In two minutes, memorise as many of these as you can: Auckland, Whangarei, Cape Reinga, Wellington, Christchurch, Hamilton, Mt Taranaki, Waikato River, Queenstown, Mt Ruapehu, Dunedin, Bay of Islands, Cook strait, Hauraki Gulf, Waiheke Island, Rotorua, Milford Sound, Lake Taupo, Nelson, Te Kuiti.	FPS students benefit from a good retentive memory. Also look at their ability to cope under pressure. It's useful to get them to tell you the technique they employed to try to memorise these.

*Based on "The Activity Book" Anne Crabbe, Future Problem Solving 1989.*

*....and just for fun to finish off .....*

You go into a room and the light is on but you cannot see it. Why could this be?

### **Session Two:**

Put the students into groups and give them some group activities such as brainstorming, taking a simple scenario and brainstorming challenges or taking an underlying problem and coming up with creative solutions.

Mix the groups around so that all of the students get to work with each other. Watch for the students' group working abilities but also ask the students to complete a peer assessment.

- e.g. Who gave the most ideas to the group?
- Whose ideas were the most creative?
- Who was it easy to work with?
- Who was it difficult to work with?
- Who was a leader in the group?
- Who was the best organized?