

Help Me Peel

Approach: Station

Level: Year 4 and year 8

Focus: Designing equipment for a person with a physical disability.

Resources: photograph, instruction card, recording sheet.



Help Me Peel

The photo shows a person who's wanting to peel a potato.
It is very hard because the person can only use one hand.
The other hand is in plaster.
This person needs to have a way for making it easier to peel a potato.

1. Draw a plan of your idea for something to make it easier to peel a potato.
2. On your plan, write how your idea makes it easier to peel a potato.

Questions/instructions:

Read the instruction card and draw your plan here.

		% responses	
		y4	y8
does plan need second person:	no	74	94
	yes, to help	15	4
	yes, to peel potato	11	2
does plan seem workable:	yes, clearly	26	23
	probably	21	42
	possibly	31	27
	no	22	8
quality of plan/diagram			
<i>as a drawing, not judging workability</i>			
	quite detailed	24	55
	rudimentary	67	42
	none	9	3

quality of explanation

		% responses	
		y4	y8
	quite detailed	29	60
	rudimentary	56	34
	none	15	6
nature of solution			
	way of holding potato still	39	71
	way of holding peeler still	2	4
machine that can be operated with one hand		15	12
	getting someone else to peel potato	9	2
	getting someone else to help	13	4
	no workable solution	22	7

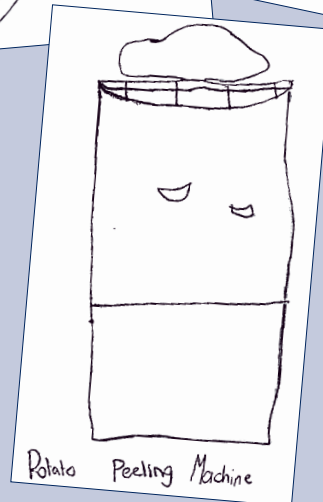
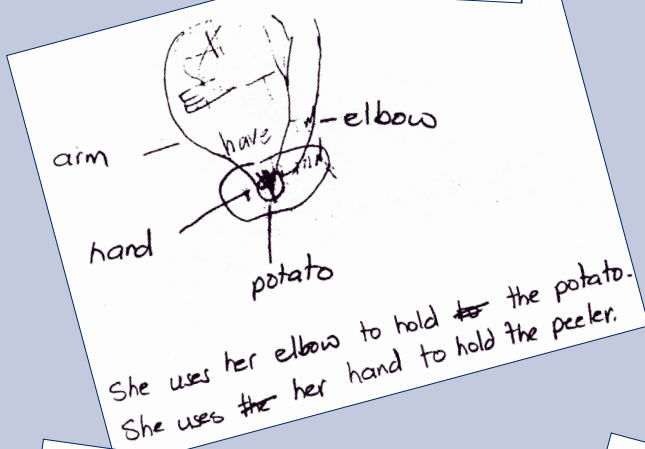
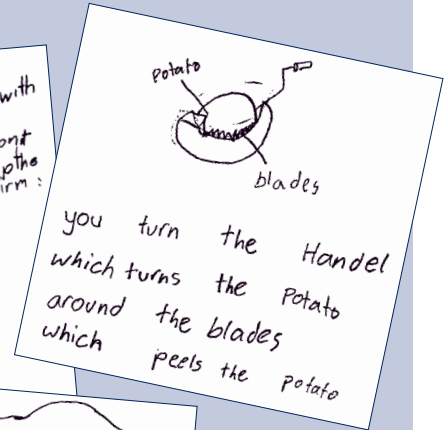
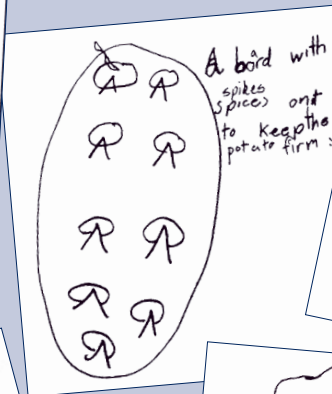
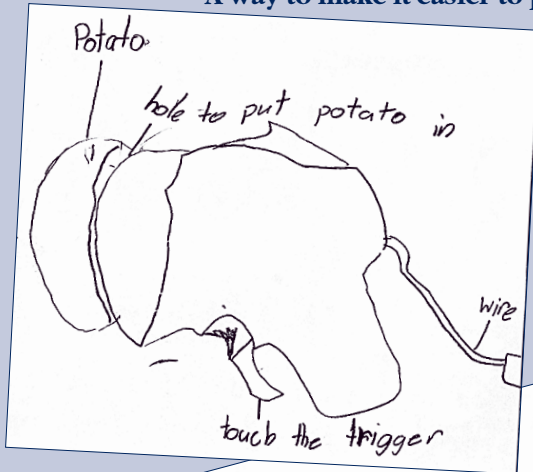
Commentary:

This task would have been better if the instructions had ruled out help from another person with the task of peeling the potato. About one quarter of the year 4 students used that option, which accounts for slightly higher workability that they achieved. Otherwise, 20 to 30 percent more year 8 than year 4 students succeeded with the main elements of this task.

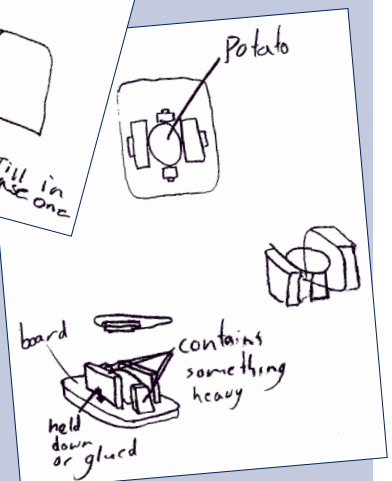
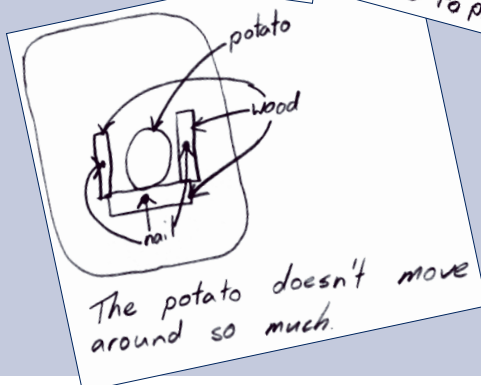
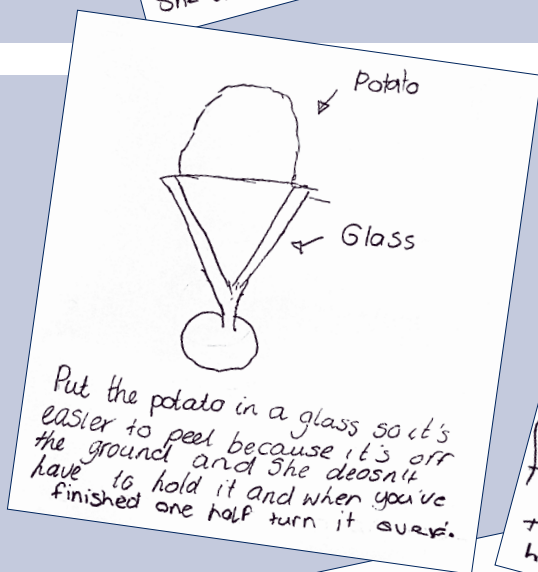
My Plan

A way to make it easier to peel a potato using only one hand.

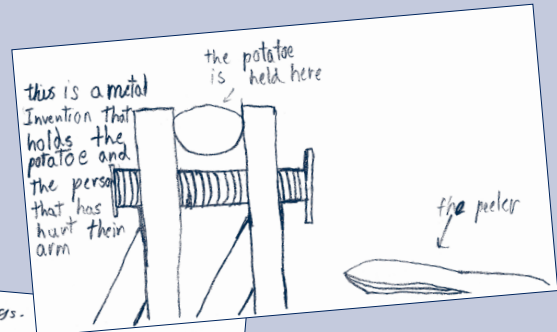
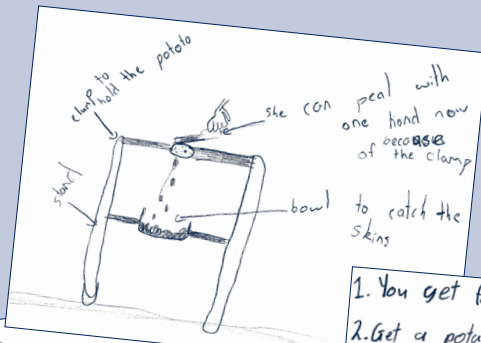
YEAR 4 MID



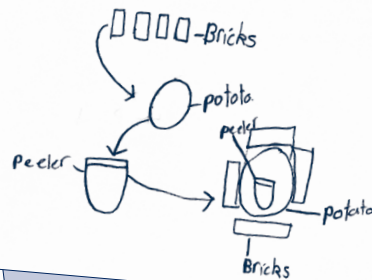
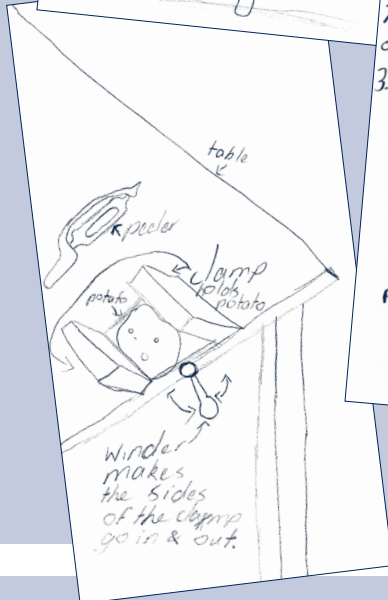
YEAR 8 MID



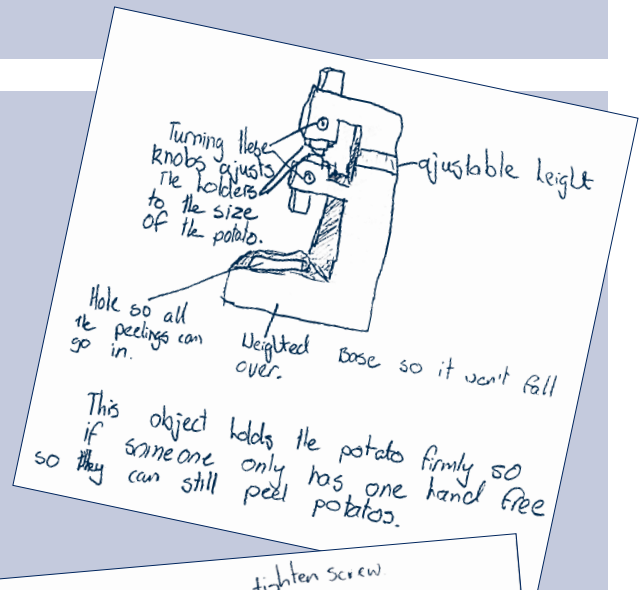
YEAR 4 HIGH



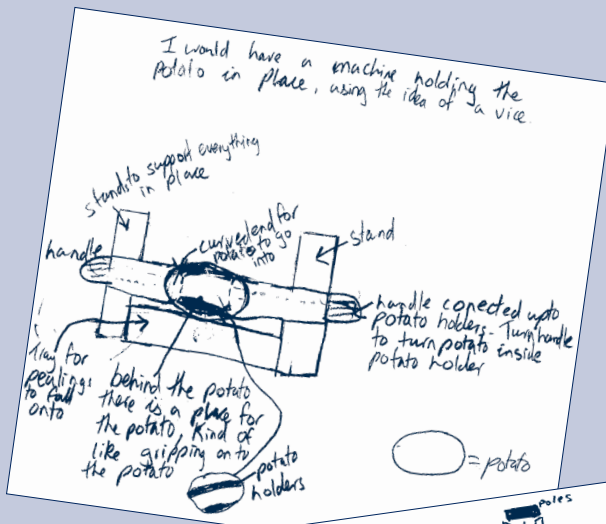
1. You get four heavy things.
2. Get a potato and put the heavy things on each side of the potato
3. Get a potato peeler and start to peel



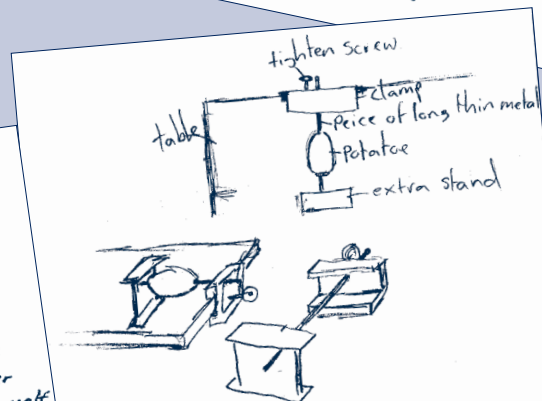
My idea makes it easier to peel it by getting a wooden board. Then in the middle of it put some double sided sellertape (two pieces) then on each side of the seller tape put some wood shaped like a cup. Then stick the potato on the double sided and start peeling. Then once you have peeled the top and sided then turn it over start peeling the bottom.



This object holds the potato firmly so if someone only has one hand free so they can still peel potatoes.



My invention / Idea works like a clasp. It has sharp spikes which poke into the potato. The poles which have the spike can be moved along the board. You can turn the potato around if you want to peel the other side. My idea is safe because you cannot cut yourself with the peeler. You only need one hand to use my peeler



my plan is a bit like a second hand only a bit more complicated, it holds the potato in place well you peel it.

YEAR 8 HIGH