



Willow Park School



Neighbourhood Engineers Awards

2010



To develop an unused area of our school that will benefit everyone.



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Our team



From left to right...

- Rod Hare (Futureintech Facilitator)
- Grace Du (Year 6 Rm 2)
- Sam Bedford (Year 6 Rm 3)
- Grace Colebourn (Year 6 Rm 1)
- Shaun Kay (Engineer)
- Callum Irvine (Year 6 Rm 1)
- Hao Jia (Year 6 Rm 2)
- Edwin Tang (Year 6 Rm 3)
- Mr Johnstone (Principal) ~ took the photo



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Deciding on a problem...

- As a team, we had a think about what could be the 'problem' for our project.
- After much discussion and looking at previous projects we decided to have a look at the unused areas of land around our school that could be developed.
- We took photos of these unused areas of land.
- We wanted to pick the best location that would be good for all the children, teachers, parents and visitors to our school.
- We also wanted to have some ideas about what could be developed on the unused area of land.
- We decided to get some ideas from all the Year 6 students.
- We made up some feedback sheets, printed off the photos, put them up in the classrooms and asked the children to fill them out during the week.

Areas of unused land at our school that could be developed...





Finding a good solution to the problem...

- From all the feedback from the Year 6 children we had a lot of different ideas. Some were good ideas but some just weren't going to work.
- After talking with Shaun and Rod we realised we needed a criteria both to help children write down some sensible ideas and to help us decide what would be some good possible projects.
- We came up with the following:
 - Useful to as many people as possible
 - Safe
 - Serve more than one function
 - Financially viable
 - Fits in with the environment
- We made up a criteria spreadsheet, listed the Year 6 ideas down and checked them off.
- We all felt though that we didn't have enough feedback to make a good decision so we visited all the Year 4 classes but this time with the criteria...



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Plan

- We were happy with all the ideas we had got from the Year 4 and 6 classes.
- We had some good ideas of what we could do and where however we had paper everywhere and we weren't sure what to do next.
- Rod and Shaun helped us out. They explained that we had to start planning.
- Shaun told us about a Gantt graph. He uses it when working on a project. It helps him to plan ahead and make sure things that need to get done are done on time.
- We made up our own Gantt graph and put in the things that we had done or needed to be done by the end of term 1. We also listed all the things we needed to do and highlighted the dates when they would be completed.
- We took photos of the classroom consultation sheets and started to put everything in to a clear file folder.

Putting ideas from classes through our criteria...





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Design and evaluation

Exploring best ideas...

- We put the ideas from classes through our criteria.
- From the ideas that passed the criteria, we eliminated 'tables and chairs' and 'map' as they didn't seem worthwhile to pursue.
- The best ideas remaining included a hot wheels track, playhouse, table tennis tables and an outdoor stage.
- In pairs or individually, we researched the best ideas.
- We measured and sketched the area of land so that we could 'place' the best ideas in the space.
- To gather information we searched on-line and interviewed people.
- The playhouse and table tennis ideas fizzled because not enough people would benefit from them.
- Through research we found that the hot wheels track could be made to fold-up for easy storage. We also thought other areas of the school would suit it better.
- Through a process of elimination, as well as enthusiasm from the people we interviewed, we started to design in detail our final idea – an outdoor stage!

Measuring and sketching the area of land...





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Design and evaluation

Final idea...

- To be able to draw an accurate scale drawing of our final idea we completed a 1:100 scale map of the area.
- We then started to firm up our ideas. Initially we thought the stage would be located best at the corner of the area. However, this would be a long way from the slope we wanted our audience to sit.
- We approached our caretaker, Mr Appleton to provide us with an estimate of the cost for the materials for the stage we thought we wanted.
- He told us that by providing the labour for free, we could build a stage for \$1503.60 (this was the cost of the materials).
- This sounded quite good to us. We decided to measure out the stage on the site to see how big it really would be. We were disappointed to find it would be too small for what we wanted.
- After some discussion and by measuring out the site again, we decided to almost double the size of the stage (which unfortunately would also increase the cost!).





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Design and evaluation

Final design...

After all these months of consultation, planning, discussion, debate and meetings, we finally agreed on our final design.

We were happy with it because it fitted our original criteria:

- *Useful to as many people as possible* - It is big enough to accommodate a whole class on stage and a whole syndicate and parents as an audience.
- *Safe* - The low wooden decking is safe with the possibility of outdoor carpet being laid later for better comfort and safety.
- *Serve more than one function* - The size of the stage works well for people for a play, musicians in a band or dancers for a performance.
- *Financially viable* - The estimated cost of up to \$3000 for materials (and with our own caretakers building it) makes it a viable project for the school at some stage.
- *Fits in with the environment* - The location of the stage close to the slope works well with the audience being elevated and close to the action. Murals will adorn the back sides of the panels with blackboards inside.

- Shaun, our engineer, was kind enough to draw our stage on a proper plan using CAD.
- Once we had our final design we decided to share it with students, teachers and parents to see what they thought of it.
- First we followed through on Rod's suggestion and visited Room 26 whose view out their back window would be affected by the stage.
- We also shared the design with our teachers and students in our class.
- Next, we asked Mr Johnstone, our principal, to share the final design at the next PTA meeting. The parents at the meeting thought the outdoor stage was a great idea. After seeing all the work we had done they agreed to fund the project and pay the \$3000 for the materials we needed!!!
- Finally we shared the outdoor stage plan with the caretakers, Mr Appleton and Mr Paul. They also were excited by the idea of having an outdoor stage in the school and were impressed by all the work we had done. They agreed to build the stage for us!!!
- We went off for our September holidays hoping that Mr Appleton and Mr Paul might make a start on the stage. When we got back to school the stage had been built!!!

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Project complete!

