How to make drums for next to nothing!

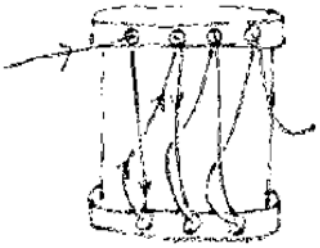
We have been experimenting with making affordable Okedo style drums. Here's how we did it!

What you will need to make 1 drum:

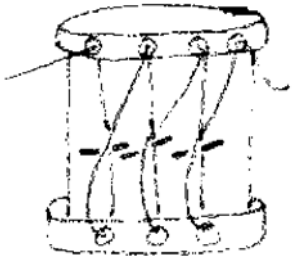
- plastic cylindrical tube, approximately 48cm in length and 48cm in diameter. This can be obtained from building sites, free! The tubing is about 1in thick.
- Tarpaulin: We used off-cuts of the plastic sheeting used to make lorry sidings, again free from a company that makes it. You'll need enough tarpaulin to make 2 circles of 60cm in diameter.
- Eyelets; for a drum of this size, you'll need 28, with the holes being 1cm in diameter. You will also need an eyelet maker, a hammer and strong muscles!
- Rope:12m of nylon rope, this will need to be the correct thickness to go through the eyelets. This comes in different colours so rope can be matched to the tarpaulin or a contrast colour used.
- Dowling, 1.5m of 8mm doweling to make 14 tightening rods of 10cm each.

How to make the drum:

1. Draw a circle on the tarpaulin, radius 24cm (diameter of the tube you're using)
2. Draw another circle around this one, radius 30cm, then another around this one with radius of 36cm. You'll need these marked out as the eyelets need to go through double thickness tarpaulin to ensure it does not rip when the tarpaulin is stretched over the drum body.
3. Spacing the eyelet holes; To ensure the eyelets are in equal spaces measure the circumference of the middle circle and divide by 14. This will be the spacing for the eyelet holes.
4. Make the eyelet holes: Fold the outer circle under the middle one to provide double thickness tarpaulin. Use the eyelet cutter to make the holes. Do not put the eyelets in yet as this piece of tarpaulin can now be used as a template to make and mark the other skin of the drum.
5. Fix the eyelets; ensuring the outer circle is folded in and the eyelets fixed through double thickness tarpaulin.
6. Roping the tarpaulin skins to the drum body; Place one tarpaulin skin on the bottom of the drum body and one on the top. Ensure that the eyelet holes on the bottom correspond with the spaces between the holes of the top piece. Begin to rope the top skin of the drum to the bottom– thread the rope through the front of an eyelet at the top and then take the rope down and through the front of the corresponding eyelet at the bottom. This will make a diagonal line from top to bottom. Now thread the rope under the diagonal and up to go underneath and through the next eyelet at the top. This should now look like a triangle with the rope making the sides and the top of the drum the base. Continue this all the way round the drum. Then take up any slack to ensure the rope is tight and then tie the rope off at the end.



7. Tighten the rope around the drum body, using the doweling rods. Put a piece of doweling through the cross over the rope. Twist dowel round anti-clockwise to tighten the rope (this is a Spanish Windlass). The dowel will then sit against the drum body and hold the twisted rope under tension. Do this all around the drum body to ensure the tension is the same all around the drum.



Now play it!

We're still experimenting with pitching the drums. Ideas so far:

- Once tarpaulin is stretched, heat it with a hair-dryer and stretch again.
- Using more eyelet holes to see if more tension can be added to create a higher pitched drum.

HOW ARE YOU MAKING YOURS?

Find out next time about other ways of drum making.

DIVERSE DRUM DISCUSSIONS!

Taiko clubs need drums. In the last edition of the newsletter we showed you how to make a drum for next to nothing using plastic cylinders and tarpaulin. Pupils and teachers from the partner schools have been busy over the summer months creating their versions.

Dale Wood, technology teacher and Taiko trainee from **Callington,** came up with the brilliant idea of using **sailcloth** as a drum skin. Instead of eyelets he used loops of **strong nylon tape,** stitched around the diameter. Before roping the two skins over the drum body he threaded a length of rope through the loops around the perimeter of each skin. A skin went on each "end" of the drum and the joining rope was threaded through the perimeter ropes. This method take the pressure off the loops and is intended to prolong the life of the skin. Callington Taiko players spent a day roping the drums together ending with a club session. All players felt a great sense of achievement being able to play the drums they had just help make!

Woodroffe in Lyme Regis has been experimenting and have used a keyboard stand to support a water-butt—see picture on right!

Each member of the Taiko group in **St Peter's High School** in Exeter took part in two drum-making workshops, choosing their own piping and brightly coloured tarpaulin.

Stoke Climsland Primary School is hoping to involve their technology teacher in creating drums out of metal cylinders.

In the next edition we shall bring news of how the schools in Phase Two are developing their drums.

DRUM DEVELOPMENTS

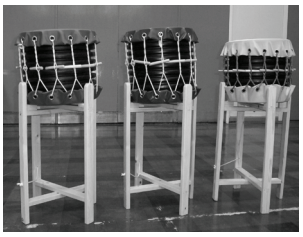
Since the last edition schools have been busy designing and creating drums for the clubs.

Some have been using club time to build drums with the support of Taiko South West Staff, together with technicians and parents. Drum-building sessions have taken place at Charmouth Primary School, Queen Elizabeths Community College, Crediton, South Petherwin Primary School and Huish Episcopi.School. Most schools are following the model suggested in the first newsletter, using plastic tubing with tarpaulin stretched over each end and roped in an "okedo" style. Two schools in particular deserve mention for their collection of drums.

Cheriton Bishop is a tiny primary school on the edge of Dartmoor. The school's Taiko group—*Cheriton Sakura (Cherry Blossom)* is fortunate to have had the support of Bob Jones, partner of teacher Liz Watkins, in building their drums. Not only has Bob made the drums, he has also designed and made downstands and an upstand. The drums underwent the ultimate test when the school was visited by PJ and Roy Hirabayashi from San Jose Taiko, who played the world- renowned Taiko piece *Hachi Jo* to an entranced group of pupils and staff. The group is looking forward to using the drums in forth-coming concerts in the Spring and Summer.

A member of Cheriton Sakura showing her enthusiasm for playing and one of Cheriton's drums on their upstand.

Meanwhile in **Exmouth Community College,** music teacher David Turner has enlisted the help of his father to make a set of 15 drums and stands for use in the school's Taiko ensemble. The drums look fantastic, having been made using four different colours of tarpaulin – red, green, yellow and blue. They were played in the school's Christmas Concert and were much admired.



Exmouth's drums

****

"Gomi-daiko"

The world taiko community shares its knowledge –and thanks to the internet we have discovered another form of drum which schools and individuals could make at very little cost. This is a "gomi– daiko" - garbage drum. A student taiko group in the USA has pointed us in the direction of these drums as being a good solution for practise . They might not look very beautiful, but they make a good sound and are better than having nothing to play. Basically , packing tape is stretched across a cylinder (eg dustbin). The tape is put across horizontally, vertically and diagonally, forming a surprisingly strong "skin". Other groups use packing tape across tyres and rest the tyres on chairs**. Charmouth Primary School** has experimented with this kind of "drumskin" on lots of containers and reports success—in fact one class has daily rhythm practice on their "gomi daikos". So, if you're short of time and resources it might be worth trying to make a few. If you want to see what gomi-daiko can look like check this website:

studorgs.bowdoin.edu/taiko/bowdointaiko.htm.