

## Federation Bells Workshops and performance 'Ringing in the Galaxy' PHS August - September 2022

**'The performance was SO amazing! What an experience for all the students. Not just in music and sound but science, the environment, the land they live in - this is exactly the way the bells work the best.'** Bidy Conner, curator for the Federation Handbells at Museums Victoria.

### Background/Inspiration for the project

For years I have had the dream of bringing the Federation Handbells to PHS. Having gigged with them, and carted tons of them to Estonia for performances, I know the magic of the bells and how they can inspire, refresh and uplift through their sound and vibration. Susan Bamford, former curator of the Federation Bells for Museums Victoria has been speaking with me for years about the schools' bell hiring program, and I know Neil McGlachlan, the physicist who designed the bells, more than two thousand of them, for a project commemorating Federation. To bring them to PHS though, was all about finding, or perhaps waiting, for the right combination of elements to fall into place.

Returning to school at the start of our 2022 school year, somewhat cautiously as we were still in pandemic times, I was mindful of the impacts of singing in relation to COVID safe practices, and decided to program other musical activities for the students. Boomwhackers, ukuleles and percussion seemed the way to go. The other big fortuitous catalyst that tweaked my bell dream to surface was that the percussionist Peter Neville, who had been the head of Percussion at Melbourne University, had just retired. Pete and I have a 30yr performance history, and he has done multiple projects with the Fed Bells. With Pete's availability secured, and the successful invitation of Elissa Goodrich, a composer, sound artist and musician who has created many pieces with the Fed Bells, it felt like the right time to 'go for it'.

The provocation as to what sound world we would create with the bells was sparked by the stunning song by the Icelandic musician Björk, 'Cosmogony'. It is a song of wonder in which each verse tells the creation story/myth from different cultures across the world. In an interview, Björk said that her choice of instrumentation for this song was intentionally for instruments made of brass, instruments created from metals pulled out of the earth. I had one other long standing personal dream, and that was to, one day, hear Prep children singing 'Twinkle, Twinkle Little Star' accompanied by a harp. Luckily, the very lovely Genevieve Fry was available to join us for our performance day. So, with the stunning brass Fed Bells, the theme of the Galaxy to explore, two wonderful musicians/percussionists, a harpist and our children's imaginations, we were in for a special experience.

### The Federation Handbells



*The Federation Handbells as displayed in the Melbourne Museum.*

Commissioned by Arts Victoria, the Federation Hand Bells were designed by Anton Hasell, a multi-disciplinary artist and sculptor, and Neil McLachlan, a researcher in neuroscience and auditory music. As well as creating a magnificent instrument to commemorate Federation, Anton and Neil's dream was to make a set of bells with perfect tuning that could be used with any musical context, be it an orchestral performance or community sound installation. However, in their heart, and perhaps most of all, they wanted to design

something that was immediately playable, in any environment, which would inspire sound exploration and bring communities of people together. The Bells are cast in silicon Bronze and are unique in their design and pitch. With the use of computer software, they found the perfect shape for resonance and just tuning which turned out to be the shape of a 'take-away' cup. The bells are played using a mallet, rather than having an internal clapper to ring the bell, and they were cast with a stalk/handle so that they could be held without touching the resonating metal. Although one set of bells comprises of 24 bells from 2 chromatic octaves, Anton and Neil cast more than 2000 bells which are curated by Museums Victoria and are available for community use.

### The Workshops at PHPS: Weeks 1 & 2



The Bells Workshop ran over 6 weeks and culminated with a whole school performance in the final week. During our first two sessions with Peter and Elissa, we reflected on the role of the bell in culture and society, and explored a variety of techniques for playing the bells which created different sounds.

In addition to the use of bells in music, students identified that bells have had a multitude of functions. Big bells in bell towers were rung to tell people the time and to bring them together for meetings or worship, whilst smaller bells were sounded to elevate moments in meditation and ritual. They have been used to warn us of danger and for safety, such as fire truck bells and sleigh bells. Bells are rung, or tolled slowly, to mark special solemn occasions, or peal out with many different pitches in celebration. Herdsmen have hung bells on their flocks to help keep track of their animals, and students thought of how bells were used domestically: the front door bell, the telephone, ringing a bell for a servant, or hanging a bell around your pet cat's neck. We reflected on how our modern technical age has replaced the role of the bell, and yet, there is still the tradition of casting a new bell, or indeed a set of bells, to commemorate a significant event.

Pete, Elissa and I brought in a vast array of bells for the students to interact with, the biggest was my Mum's ceremonial Swiss cow bell which one could hear in the next valley, and the tiniest was a delicate bell from a traditional dancer's anklet from India.

The students were guided in a series of activities focused on listening and describing the different kinds of sounds which the Fed Bells could produce. A mallet, made from a thick wooden dowel covered in dense plastic, was supplied with the bells. The bell, when struck with this kind of mallet, will ring with its purest sound. In addition to using the mallets in multiple ways, the students delighted in discovering other 'agitators' such as their hands, fingernails, fine metal chains, coins or

marbles, sticks and leaves. Indeed, the sky was the limit. Students worked individually and collaboratively, and gradually, Home Groups entered into the imaginary sound world of the Galaxy.

Here is an extract from Talking Point 4/8/22 describing the students' exploration.

*When Miles from Prep first heard the sound of the Federation Handbells, he said that they sounded like 'stars singing in the sky'. This wondrous observation, along with the idea that we are all made of star dust, as the Preps have been remarking all week, are just two of many magical moments that have made the start to our percussion workshops delightfully inspiring. We have welcomed percussionists Peter Neville and Elissa Goodrich to introduce the Federation Handbells and share with us all their 'trade secrets' about how to make really cool sounds with percussion instruments. Peter and Elissa were concerned that they should do stacks of planning leading up to the workshops, but I assured them that once the students engage with the instruments and their chosen part of the Galaxy, our planning pathway would be revealed.*

*Elissa and Peter introduced the vast sound-world of the bells with an improvisation that explored a variety of bell techniques. The students expressed their observations of how the bells were played and what the improvisation made them think about.*

*273 bells in 7 sets arrive at school. Our dream of 1 bell for every student for a 'whole school clang' was challenged by storage logistics. We achieved a happy compromise though...*



*Pete and Elissa perform an Improvisation on the bells, and 'Passing the Sound' around the circle.*

*Peter and Elissa were 'tapping different angles and different sides of the bells to make different sounds' Harriet Prep*

*The stars were playing' Arlo Prep*

*It sounded like 'Magical stuff going around the sky' Franek Yr 2 'The world was spinning' Arlo Yr 1*

*As we learned the different ways to play the bells through tapping, rubbing, ringing or dampening the sounds, the Year 1s imagined space dust, star mud, space dancing chickens and squeaky space mice. The static hiss of a Black Hole could be made with our voices combined with rubbing bells. When Peter played the bell crates with a double bass bow it reminded us of meteorites, and a glissando on the bells was a shooting star. Tapping the bell crates with chopsticks was the sound of stars forming a rainbow.*

*All the Neighbourhoods have chosen a 'whatever is out there' part of the Galaxy to inspire their sound music. Whilst the Federation Bells will form a connecting sound theme for all these explorations, we will be expanding our sound pallet to include any instrument or object we can sound to express our ideas.*

*Our Year 2 Neighbourhood has been relating many aspects of this year's learning to indigenous story and culture. We have begun understanding how Indigenous Astronomy shows us that Country is mirrored in the starry skies above, and that the starry skies are, in turn, reflected in Country. By knowing how to 'read' the subtle changes in the night sky, our First Nations' People knew when to*

*gather emu eggs and the best times to fish or plant crops. Certain constellations could serve as memory aids to assist with navigation across Country. Perhaps we can find ways that our contemporary environment is mirrored in the night sky?*

*Year 3/4 Ngh 1 and 2 have voted to describe the potential sound worlds of the Black Hole and Aliens. We wonder whether to be optimistic: if the Aliens get sucked into the Black Hole, is there an exit out the other side? If we could capture the radio waves of the Black Hole and amplify them, might we hear celestial music? After-all, we are only limited by our imaginations and technology!*

*Luckily, there is a chance that the Year 5/6s might also find the answers as they too will explore the region of space where nothing can escape.*



*Peter and Elissa demonstrate different bell techniques and the students 'ring in' their own star orbits*

## **Workshop Weeks 3 & 4**

During weeks 3 and 4 of the workshops the students researched with their Home Group teachers about their chosen area of the galaxy and continued to work with me to find ways of illustrating their ideas through sound. We wanted to have a clear idea of our sound scapes and what they were expressing so that when Elissa and Pete returned in week 5 we could call on their expertise to 'fine tune' our presentations. It was during this time that the students embraced the idea that any object can become an instrument, and they delighted in testing out numerous 'found objects' for their sound potential by using various techniques learnt from Pete and Elissa. We also began learning the Cosmogony song with each year level having their own creation myth verse to learn.

When Pete and Elissa returned we had the shape of a performance emerging, and it was clear that we would use the whole gym area as a stage which would be framed by Bells. One bell activity we had enjoyed for its sheer exuberance of movement and sound was the 'Bell Run'. Crates of bells were set across the front of the stage which provided the perfect height for children running past to strike the bells with a chopstick. The resulting sound was cascades of bells and giggles as the students jogged by in a continuous loop. We decided that as we didn't have enough bells for each student to participate in a 'whole school clang', we would open our performance by 'ringing in the Galaxy' with the whole school participating in a bell run set up around the perimeter of the performance area. Needless to say, the perfect 'bookend' to our performance was to invite our audience to interact with the bells at the end of the show. We also decided that the audience should be seated along the west wall of the gym so that they would have a stereophonic experience of the sound worlds and great visibility. The students would be seated around the gym behind the bells. *The Preps delighting in the 'Bell Run'. This became the fun way to end each workshop for everyone.*

**Cosmogony: Bjork**  
Fed Bells/Perc Workshops 2022

**Chorus** Tutti  
F  
Heaven C  
Heaven's bodies Dm  
Whirl a-round me Am  
Make me wonder

**Verse 1** Prep (American Native)  
Bflat  
And they say back then our universe Dm Bflat  
Was an empty sea, until a silver fox Dm Bflat  
And her cunning mate began to sing Dm Bflat  
A song that be-came the world we know

**Chorus**

**Verse 2** Yr 3/4 (Sanskrit creation myth)  
Bflat  
And they say back then our universe Dm Bflat  
was a cold black egg, until the God inside Dm Bflat  
Burst out and from it's shattered shell Dm Bflat  
He made what be-came the world we know

**Chorus**

**Verse 3** Yrs 1&2 (Indigenous Australian)  
Bflat  
And they say back then our universe Dm Bflat  
Was an endless land, until our ancestors Dm Bflat  
Woke up and be-fore they went back to sleep Dm Bflat  
They carved it up into the world we know

**Chorus**

**Verse 4** Yr 5/6 (Big Bang Theory 'Modern Myth')  
Bflat  
And they say back then the universe Dm Bflat  
Wasn't even there, until a sudden bang Dm Bflat  
And then there was light, was sound, was matter Dm Bflat  
And it all be-came the world we know

**Chorus**

**Chorus and mash with Twinkle**

F  
Heaven, Heaven's  
Twinkle, twinkle  
Twin - kle  
C  
bodies Whirl a-  
little star  
Twin - kle  
Dm  
round me Make me  
How I wonder  
Lit - tle...  
Am  
wonder  
What you are?  
Star -

(repeat 2 more times to fit all of Twinkle verse)

