



UPCYCLING MUSIC BAND WORKSHOPS TOOLKIT

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Who is this Toolkit intended for?

This Toolkit is addressed to musicians, music teachers, general education teachers and non-formal music educators working with children from disadvantaged socioeconomic backgrounds and children with a migrant background. Our belief is that this project can have a large multiplier effect and that students facing similar hardships can benefit from participating in these workshops.

The Project

This toolkit has been developed under the project “M.U.S.E.: Music Unites through Social Equity”, funded by the Preparatory Action ‘Music Moves Europe’ by the European Union. The project offers students with less opportunities the experience to engage with learning music, participate in a choir and perform together with a symphony orchestra. Moreover, toolkits on five different approaches of using non-formal methodologies for music education were produced, offering a valuable resource for professional development to teachers working with students with less opportunities, and especially students of migrant and refugee background. The toolkits were produced by music educators specialized in non-formal music education and who are experienced in working with students who have less opportunities. The educators who created the toolkits delivered workshops that reached hundreds of students at schools with migrant, refugee and disadvantaged student populations.

Introducing the Project's Toolkits

The result of our project is five individual Toolkits available as single units or as part of a complete volume that includes them all. The toolkits are available to download from our website: www.sistemacyprus.com/resources/.

- M.U.S.E.: Community Music Workshops Toolkit
- M.U.S.E.: Upcycling Music Band Workshops Toolkit
- M.U.S.E.: Songwriting Workshops Toolkit
- M.U.S.E.: Creative Music Technology Workshops Toolkit
- M.U.S.E.: World Music Choir Workshops Toolkit

M.U.S.E.: Community Music Workshops Toolkit

Community music is a powerful tool for promoting the inclusion and integration of migrants and refugees. The activities presented in this toolkit are focused on Songs in circle activities, songs with movement, body percussion activities, and music with movement activities fostering creativity. The aim of this toolkit is to present activities on creating a safe environment, encouragement of creativity which is important for a solid self-development of every child.

M.U.S.E.: Upcycling Music Band Workshops Toolkit

Upcycling is the reuse of objects (such as: buckets, barrels, shakers, plastic pipes (tuned), fire extinguishers, plastic bottles, and tins) in order to create musical instruments and empower the idea that music can be everywhere without the worries about the technical and theoretical level you may reach prior to joining a band. The aim of this toolkit is to present various upcycled musical instruments and activities that form an upcycling music band.

M.U.S.E.: Songwriting Workshops Toolkit

Songwriting is a fun and creative activity that can develop the personal development of a child. The first aim of the songwriting approach, presented in this toolkit, is to create a fun, inclusive, equal, safe, and non-judgmental environment. Furthermore, the process of songwriting entails the element of creativity. The topic of the song can be funny for younger ages and more serious for older ages. This toolkit follows a 'step by step' method in songwriting.

M.U.S.E.: Creative Music Technology Workshops Toolkit

The Creative Music Technology Workshops Toolkit is designed for children of ages 6-14. This toolkit presents an introduction into Music Technology tools (free & online applications) and uses notions of beatboxing, looping and sampling. The aim of this toolkit is to utilise free and online tools in order to experiment with rhythmic composition techniques. The methodology is based on a series of exercises (i.e. imitation, call-and-response, developments of rhythmic motives) always working in tandem with technology and ICT tools.

M.U.S.E.: World Music Choir Workshops Toolkit

The choir lesson in many schools usually offers small-scale goals, whereas the inspiration and the sense of creativity of working with others towards a grand concert, is minimal. The choir approach presented in this toolkit is based on the foundation of El Sistema's principles. This toolkit focuses on the children's experience of singing songs from a variety of cultures while giving the space to interact, relate and learn from each other.

Upcycling Music Band: An Introduction



Playing music can be a fun activity for students and combined with upcycling musical instruments it can also promote environmental ethics supporting our efforts towards a sustainable future. In contrast with recycling that usually refers to a material that is transformed to an object with lesser quality, upcycling is referred to an object with greater value than the original¹. For example, a water bottle can be either transformed to a maraca or a small drum and take an important role in the music making. Ordinary objects and junks can become musical instruments and empower the idea that music can be everywhere! Students can also decorate their instruments in order to enhance the feeling of using an upcycled instrument that it is in higher value than the prior object and they will also have the task to maintain and repair any broken instruments - when this is possible.

It is important to transform the class to a band and keep this throughout the activities. Performing together and acting as a team can help them to identify their role and importance within the group. The band-leader, or the facilitator/conductor, will have to keep verbal instructions to minimum and encourage players to follow signals in order to keep the flow of the music. The signals can be a movement or a specific sound that can be made by the leader in order to show when to start, how to stop and what you have to play. The leader will have to decide and adapt the music based on the abilities of each player - thus fast learners will have the opportunity to play more complicated parts and less experienced players can play the supporting roles that are equally important for the balance of the band. However, experience various roles by playing different instruments can give them a greater understanding of the importance of each member of the band. At the same time, the band

¹ Flowers, J., & Gorski, A. (2017). Upcycle!. *Technology and Engineering Teacher*, 76(6), 8-12

should be a safe place for everyone in order to feel confident to take the lead and/or improvise at certain times. With an instrument that you can make a sound from day one, you have the opportunity to experience the music and enjoy its benefits without the worries about the technical and theoretical level you may reach prior of joining a band.

Through playing and performing, students can enhance their musical knowledge with core music skills such as listening, keeping a steady tempo and following instructions. The increase of their creativity is also an important aim as inside the band they will also have the opportunity to firstly create their instrument, secondly find their desired sound and thirdly improvise within the safety of the band. Also, the Upcycling Music Band aims to development essential social skills for the participants, such as teamwork, problem solving, collaboration and communication. As in any professional music band, everyone has a specific role, usually different from each other, but they are all equally needed for the harmonious creation of the music.

“Drum ensemble gives music teachers a powerful tool to build teamwork, discipline and excitement in their students”².

Upcycling Musical Instruments

The instruments can be listed under five main categories: tuned instruments, high, middle and low pitched sound instruments, and shakers. For the balance of the upcycling music band, the five categories are needed, with the exception of tuned instruments in cases that it is difficult to create. Also, the volume balance is a factor to consider, for example a paper xylophone will not be able to be heard over the buckets. For small instruments it is also recommended to create the drumsticks as well with elastic band at the tip for smoother sound.



² Solomon, J. (1998). DRUM: Discipline, Respect, and Unity Through Music Elementary/middle School Percussion Ensembles. Belwin-Mills, p.4.

Tuned instruments

Melodic notes on C, D, E, G, A

One instrument can include any number of the above the notes.

The use of pentatonic scale is essential, as it can reassure the harmonic sound throughout the activities. Whenever one note is difficult to be obtained could be missed and/or doubled by another note of the above list.

In the case that you use only one material (for example pipes) you can find the C and then tuned them based on its length and width to create the harmonic notes above. To do this, follow the calculations below³:

C	C
G	$(C/3) * 2$
D	$(G/3) * 2$
A	$(D/3) * 2$
E	$(A/3) * 2$

EXAMPLE OF INSTRUMENTS	<ul style="list-style-type: none"> • Tuned pipes • Glass bottles • Blowing straws
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³ Sarris, D. (2015). Ανακυκλωμένη Μουσική: Μουσικά όργανα από Μικρές Συσκευασίες [Recycled Music musical instruments from little packages]. Athens: Fagottobooks

Shakers

The shakers are easy to make, and they can provide a continuous and rhythmical sound in the band.

EXAMPLE OF INSTRUMENTS	<ul style="list-style-type: none"> • Plastic bottle with beans • Bottle lid shakers • Hanging
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High-pitched sound

The instruments with high pitched sound, such as instruments made from metal, can be used to create distinguished rhythmical lines.

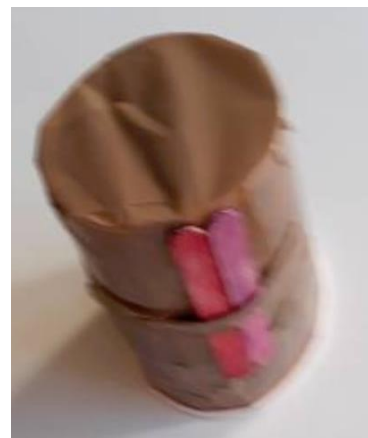
EXAMPLE OF INSTRUMENTS	<ul style="list-style-type: none"> • Metal cans • Small pans • Castanets
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Middle-pitched sound

The middle-pitched instruments, such as plastic cups and containers, can play the main rhythm and follow repetitive rhythmical motives.

EXAMPLE OF INSTRUMENTS	<ul style="list-style-type: none"> • Plastic cups • Plastic bottles • Small tubes with balloons on top
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Low-pitched sound

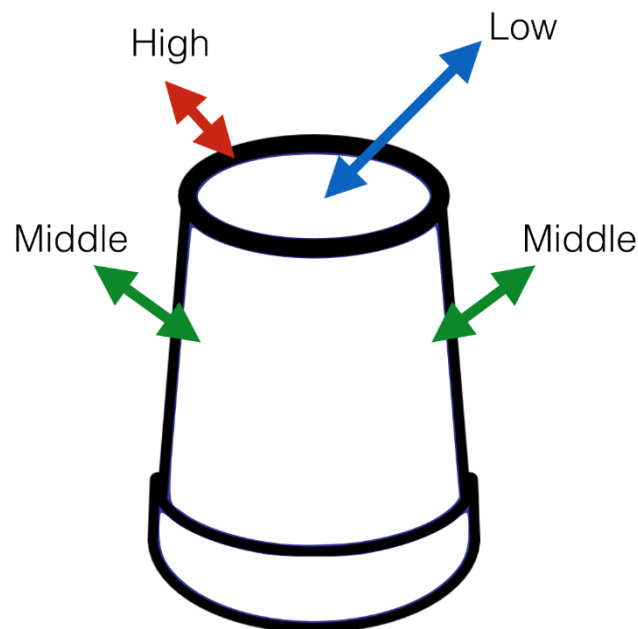
The low-pitched instruments are very important for the keeping the tempo of the band and join all the sounds of the band together.

<p>EXAMPLE OF INSTRUMENTS</p>	<ul style="list-style-type: none"> • Large barrels • Larger tubes with balloons or a plastic glove
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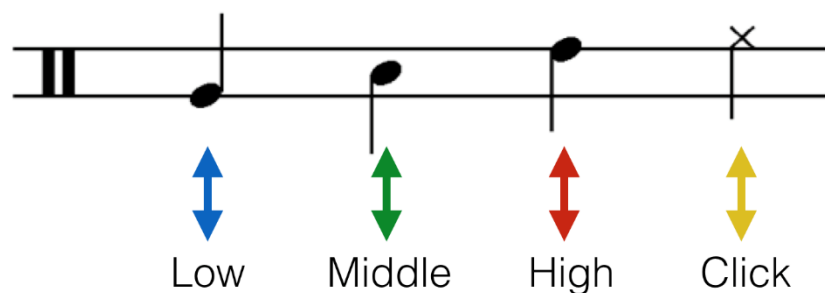
Bucket

The bucket is an instrument on itself. There are many benefits for creating an orchestra with buckets in the classroom. First of all, it is very easy for the students to produce sound immediately. For the very beginners it can be used to simply follow the beat and for the advanced students to create more complicate rhythmical patterns. Also, the bucket has at least 3 different sounds that can be produced and if we add the possibilities of the sticks, then the sounds will be many. In the chart below you can see the different sounds that can be produced on the bucket by using drumsticks.






Bucket score

The two-line stave illustrates the place that the note should be played on bucket. Click illustrated by the 'x-note' requires the player to hit the two sticks together.






Upcycling Music Band Activities

Icon meaning




	Number of participants
	Duration of the Activity
	Materials

Activity 1: Meet the junk!

	6+		5-8'		Various upcycling instruments
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TYPE	Active observation and clapping activity.
GOAL	<ul style="list-style-type: none"> Introduction and motivation for the upcycling music.
DESCRIPTION	<ol style="list-style-type: none"> Place the instruments in a way that students can see everything at any time but at the same time make sure that they will be easily accessible by you. Play a rhythm of the high-pitched instrument and ask from the students to clap it. After few rhythms, play crotches on the high-pitched instrument and ask them to continue clapping the same rhythm. While they clap in crotches start improvising on the rest of the instrument. Make sure you play all the instruments in front of you and you clearly display the way you produce sound with each one. You can change the clapping rhythm and/or the tempo at any time by playing on the high-pitched instrument. Try to make it as interesting as possible and change the instrument according to the reaction of the students. Make sure you all close together at the same time.
NOTES FOR TEACHERS	<p>The main goal for the students is to get inspired and motivated by the upcycling music. This activity is a showcase of ideas on how unused objects can be used in a completely unorthodox and musical way. Structure it as a performance and build it upon the group's abilities.</p>

Activity 2: What's that sound?

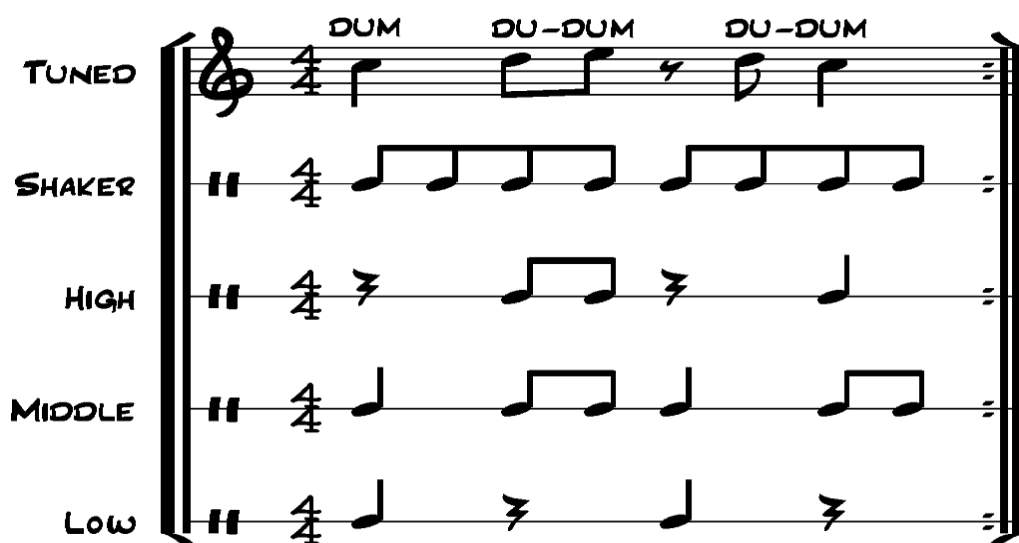
	6+		8-10'		Various upcycling instruments
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TYPE	Body percussion/singing call and response activity.
GOAL	<ul style="list-style-type: none"> Learn about the instruments and explore the different sounds.
DESCRIPTION	<ol style="list-style-type: none"> Place the instruments in a way that students can see everything at any time but at the same time make sure that they will be easily accessible by you. Demonstrate each instrument, describe how it was made, show different ways of playing it and categorize it under a sound category. Use the method call and response for each instrument sound and linked it with one body movement. Then asked them if they can suggest any sound (with their body, objects around them or imaginary) and in which category should be placed. Now, tell them to choose an instrument and imitate the sound of it with their body without saying it to anyone. Be the conductor: count them in, give them enough time to start playing and creating and then close them. Ask them to repeat it but this time to check what the others play and try to guess their instruments; if they understand they shouldn't say it, they should imitate the person playing it.
NOTES FOR TEACHERS	<p>Sound categories and examples of body movements:</p> <ul style="list-style-type: none"> Low-pitched sound - Stomping feet Middle-pitched sound - Slapping knees High-pitched sound - Clapping hands together Shakers - Rubbing hands together Tuned instruments – Voice <p>The goal is to understand the differences of the sounds and the materials that they have been used for the creation of each instrument. Also it is important to compare them with the instruments that their body can make but also with other sounds in their environment. The main goal is to understand that although each sound is different they are equally important in the orchestra.</p>

Activity 3: Follow the conductor




	10+		5-7'		Various upcycling instruments
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TYPE	Body percussion piece
GOAL	<ul style="list-style-type: none"> Play together as an orchestra and follow the conductor.
DESCRIPTION	<ol style="list-style-type: none"> Place the instruments in a way that students can see everything at any time but at the same time make sure that they will be easily accessible by you. Based on the previous activity, start introducing the rhythm of each category (see the score below) and ask from the students to perform them on their body. Beginning from the low team, introduce each team while the rest continue to play. You can mute some of the teams or even move the teams along the way.
NOTES FOR TEACHERS	<p>Make sure you keep playing at all times in a safe environment, in where mistakes are given a second chance and are not judged. It is important to understand that all the rhythms are equally important in the piece. The main goal is to perform together with rhythms that derived from the upcycled instruments. Enjoyment is key to the success of this activity.</p>






The musical score is written for five percussion parts: Tuned, Shaker, High, Middle, and Low. The time signature is 4/4. The Tuned part uses a treble clef and a key signature of one flat. The other parts use a double bar line as a clef. The score consists of four measures. The Tuned part has a treble clef and a key signature of one flat. The other parts use a double bar line as a clef. Rhythms are indicated by notes and rests, with some measures containing 'DUM' or 'DU-DUM' labels.

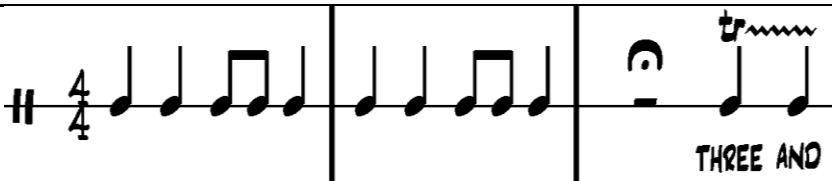
Activity 4: Building my instrument

 2+  20-30' 	Art and Craft materials, including glue, scissors and colours). Extra recycled materials for students that may not bring, such as plastic bottles, empty metal or plastic containers, rice and/or beans and balloons.
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TYPE	Arts and sound engineering.
GOAL	<ul style="list-style-type: none"> To create at least one upcycled musical instrument
DESCRIPTION	<ol style="list-style-type: none"> Ask in advance students to bring their own items and together build their instruments. Encourage them to be creative and support them throughout the production of their instruments. Make sure they are trying to make the best possible sound and let them decorate it according to their taste. Check their final sound and together decide the category it belongs.
NOTES FOR TEACHERS	<p>Quickly made upcycling instruments:</p> <ul style="list-style-type: none"> An empty container with a balloon on top. An empty container used as a drum. A bottle with rice or beans or pasta or little rocks or a combination. <p>The goal of this activity is to be creative and try to reassure at least a good sounding instrument for each student. It is highly recommended to have extra instruments with good sound in order to give them to students that they may not succeed on the making of their instruments. The “quickly made upcycling instruments” can also work as an alternative for students that may need a little help. They can still decorate it and make it unique based on their creativity.</p>

Activity 5: My first rehearsal

	10+		8-10'		An upcycling shaker and students' instruments
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TYPE	Group and solo playing
GOAL	<ul style="list-style-type: none"> Feel the experience of playing together and solo
DESCRIPTION	 <ol style="list-style-type: none"> Introduce the rhythm above together with the words: <i>"Look my instrument, hear my instrument"</i>. At the corona sign each instrument should be heard playing solo. When a solo finishes, count them back in the rhythm while performing a tremolo on the shaker. Repeat as many times as needed in order for everyone to play solo. Try to present the activity as a performance.
NOTES FOR TEACHERS	<p>The main goal of the activity is to recognize the power of playing together but at the same time present their upcycling musical instruments to the others. Encourage all types of solo, including the ones that may be only one hit on the instrument and start with the tutti tremolo in a sense of an applause towards the solo performance.</p>

Activity 6: The junk in the Jungle?

	10+		12-15'		Upcycling musical instruments
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TYPE	Group playing
GOAL	<ul style="list-style-type: none"> Playing together, follow the beat and be creative
DESCRIPTION	<ol style="list-style-type: none"> Demonstrate the jungle and the speed of each animal separately. <ul style="list-style-type: none"> Elephant: Minim Lion: Crochet Deer: Quavers Tiger: Semiquavers Snake: Quietly watching the other animals Monkey: The animal that is free to improvise Then play all together all the animals one by one. Split the group in teams and assign them different animals. While they keep playing, change the teams so every team will pass from every animal. Finally, asked them to choose their preferred animal and play it when the conductor (teacher or a kid) open his/her hands and stop when his/her hands are closed.
NOTES FOR TEACHERS	<p>The main goal of the activity is to meet the basic rhythms, play together and recognize what you play in relation to the other team. Also, with the final step, they have the opportunity to be creative and choose their prefer animal to perform. Even if they choose snake, and they do not play anything, they will still be included in the jungle – thus in the music band.</p>


Activity 7: Our first rehearsal!

	10+		8-10'		Upcycling musical instruments
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TYPE	Group playing
GOAL	<ul style="list-style-type: none"> Playing together
DESCRIPTION	<ol style="list-style-type: none"> 1. Firstly, start with the tuned percussion and ask them to improvise following the same rhythmical pattern (see score below). 2. Secondly, add the low part and describe that they should play on the first note of their rhythmical pattern. 3. Thirdly, add the high part and explain that together with the low team they complete the rhythm of the tuned instruments. 4. Fourthly, add the shaker in order to have a constant tempo that will connect the music band. 5. Lastly, add the middle part with semiquavers and ask them to play “piano” with small accents on beats one and three (connect it with the low-pitched instruments)
NOTES FOR TEACHERS	<p>The main goal of the activity is to realize what everyone contributes to the musical sound of the band. The aim is to experience the importance of playing with others and focus not only on their part, but also everyone else’s part. Repeat the activity as many times as it is joyful and creative and try to minimize the verbal instructions.</p>

TUNED - RHYTHM

EXAMPLE



TUNED

SHAKER

HIGH

MIDDLE

LOW

Activity 8: Upcycling Sampa

	15+		12-15'		Upcycling musical instruments
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TYPE	Group and solo playing
GOAL	<ul style="list-style-type: none"> Playing together and forming a music band
DESCRIPTION	<ol style="list-style-type: none"> 1. Teach the basic samba rhythms of middle and then high team. 2. Then slowly add the rest of the teams, while you keep repeating the first bar. 3. Once the teams are ready play it three times followed by a bar of rest. 4. Repeat the same pattern and then ask from a team to continue and play during the rests. 5. After all the teams have play, ask from each participant to play solo in this bar. 6. Make sure you the tempo is constant, as this is the connecting factor of the music band.
NOTES FOR TEACHERS	<p>The main goal of the activity is to enjoy playing together and have fun while they play a more challenging rhythm. You can also make introduction to the piece with big 'tremolo' starting from pianissimo heading to fortissimo before you count the group in to start performing. You also pre-agree a movement that when you will do it, it will mean that it is the last time so everyone should play on the bar and close on the next and final beat.</p>



Activity 9: Bucket breaks

	10+		5-7'		Buckets and sticks
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TYPE	Call and response activity
GOAL	<ul style="list-style-type: none"> Listening and answering to rhythmical motives
DESCRIPTION	<ol style="list-style-type: none"> Start by practicing the last bar of the first break (see scores below). Then go to the beginning and show clearly where and what they should play. Repeat for the second break. Ask them to guess which break you are playing by playing the correct answer
NOTES FOR TEACHERS	<p>The main goal of the activity is to understand the rhythms and be aware on where they should play. Breaks are powerful tool in drumming as it needs high level of concentration, and it can be challenging for fast learners but at the same time easy for beginners.</p>


Break 1:

Leader 

Group 

Break 2:

Leader 

Group 

Activity 10: Upcycling Samba with buckets

	10+		8-10'		Buckets and sticks
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TYPE	Group and solo playing
GOAL	<ul style="list-style-type: none"> Playing together and forming a music band
DESCRIPTION	<ol style="list-style-type: none"> 1. Play and practice with the whole group the rhythmical patterns. 2. Then split them and repeat until they feel confident enough to switch teams. 3. After they feel safe with the piece, they can switch teams every time after the semiquavers
NOTES FOR TEACHERS	<p>The main goal of the activity is to enjoy playing together and have fun. Make sure they are all feeling safe and familiar with the rhythms before changing the teams.</p>



Bucket 1

Bucket 2

References

- Flowers, J., & Gorski, A. (2017). Upcycle!. *Technology and Engineering Teacher*, 76(6), 8-12
- Sarris, D. (2015). Ανακυκλωμένη Μουσική: Μουσικά όργανα από Μικρές Συσκευασίες [Recycled Music musical instruments from little packages]. Athens: Fagottobooks.
- Solomon, J. (1998). DRUM: Discipline, Respect, and Unity Through Music Elementary/middle School Percussion Ensembles. Belwin-Mills.

Suggested Books for percussion ensemble

- Betts, C. and Webster, J. (2021). Teacher Resources. [online] Available at: <https://www.kaboompercussion.com/teacher-resources>
- Birrow, D. (2014). The Bucket Book: A Junkyard Percussion Manual. USA: Alfred Music.
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- Makropoulou, E. (2019). Bucket Drumming. Athens: Fagottobooks.



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