The classroom gamelan

by Deirdre Dean

The inclusion of Indonesian music and language into the mainstream of Australian education is becoming increasingly noticable. The difficulty many teachers find with including Indonesian music into their classroom programs is twofold. Firstly, a lack of familiarity with the subject means that many teachers lack the confidence to teach the subject to their students. Secondly, many teachers are unaware of the variety and types of resources available to them and, as a result, are unable to create their own individual programs.

The focus of this article is to provide teachers with a basic format that has been used in secondary schools (but is easily adapted to primary situations) for over six years. The subject is based on Indonesian music, but has been adapted for Australian students, and is thus more accessible for them. The list of resources at the end of the notes, particularly the bibliography, is not meant to be a definitive guide. It is indicative of the types of resources and materials that can be found in any school library, and in the wider community. The best resources are the other teachers in your school — music, languages and art, and the other teachers in your network.

Indonesia

The Republic of Indonesia is our nearest Asian neighbour. An archipelago stretching south east of the Malaysian mainland, Indonesia is made up of over three thousand islands, many of which are uninhabited. The main islands of Indonesia are Java, Bali, Sumatra, Sulawesi (Celebes), and Lombok. Kalimantan takes up the southern two-thirds of Borneo (Malaysia and Brunei share the northern third), and Irian Jaya is west of Papua New Guinea.

Each island has its own language and culture, although the official language of Indonesia is Bahasa Indonesian. The music and culture of Kalimantan is shared with Malaysian Sarawak, as many of the local tribes such as the Iban and the Dayak are found on both sides of the border.

The Indonesian cultures best known in Australia are those of Bali and Java, perhaps best known for the gamelan, or orchestra, the wayang kulit, shadow puppet plays, and the kecak (pronounced ke-chuck), monkey dance from Bali.

Javanese music traditions tend to lean more towards the court traditions of the Middle Ages, fostered in the courts of the sultans at Jogjakarta and Solo (Surakarta). Villages may even have their own gamelan, and some villages have their own dalang, a resident dancer, singer and puppeteer who teaches music and dance to the children of the village.

In Hindu Bali there was also a court tradition, but these were fostered by radjas. A stately style of music, known as gamelan gong, was common prior to the turn of the century, but disappeared soon after 1906 following the massacre of the radjas and their courts by the Dutch. In 1915 gamelan gong kebyar appeared, with its dynamic rhythms. This is the style for which Bali is best known.

The Gamelan

A gamelan is an Indonesian orchestra. The three most well known types of gamelan found in Indonesia are: the Balinese gamelan (or gamelan gong kebyar), the Javanese gamelan from Central Java, and the Sundanese gamelan from West Java. Gamelan takes its name from the Malay word gamel, a hammer. The majority of the instruments in the gamelan are percussion instruments, particularly bronze metallophones and gongs. Others are made from wood or bamboo, and a few wind and stringed instruments are also used.

The gamelan is frequently used by itself in concerts, but it is also used to accompany dances, such as the barong and legong dances from Bali, wayang kulit, shadow puppet plays, and other puppet plays, and is used in street festivals and for other ceremonies.

Place Rutherford Park ad

Place Bushfire Press ad

The Instruments of the Gamelan

The gamelan is made up of a series of bronze gongs and metallophones. Each instrument can be classified by the part it plays in the overall musical performance. The melody is carried by the saron family of instruments, and the slentem. Melodic variations are played on the gender (pronounced gend-air) and the gambang, and an interlocking pattern is played by the two bonang. The two drums, the kendang and the ketipung regulate tempo and dynamics. The gongs and kenong are used to mark the end of musical phrases. Other melodic ornamentations can be added by the suling, a bamboo flute, and the rebab, a two-string spiked fiddle. A full gamelan consists of two full sets of instruments, one set tuned in sléndro and the other set tuned in pélog.

The Saron Family

Saron are bronze metallophones. They consist of a solid wooden base with bronze keys resting above a small cavity in the top of the base. A sléndro saron will have at least 6 keys (1, 2, 3, 5, 6, 1), and a pélog saron will have at least 8 keys (1, 2, 3, 4, 5, 6, 7, 1). Saron instruments play the melodic lines.

Saron come in three sizes, each tuned the equivalent of an octave apart from each other. The largest, and lowest in pitch, is the saron demung. Tuned an octave higher is the saron barung. There are usually two saron barung in each gamelan. Tuned an octave higher again is the saron panerus. The saron panerus generally plays at twice the speed of the other saron, or else plays an interlocking pattern based on the melody.

All saron are played with mallets. These are usually made of wood, although the head of the saron panerus mallet may be made from a buffalo horn. The players use the mallet in one hand, while damping the previously struck key with their free hand.

The Slentem

The slentem is a bronze metallophone. It has the same pitch as the saron demung, but is a much softer sounding instrument. The bronze bars are suspended by strings over bamboo tube resonators in a wooden frame. The slentem is played with a wooden disc, the edge of which is covered with padding. The slentem plays the melody.

The Gender

The gender is a bronze metallophone, similar in structure to the slentem. The gender is made up of between two and three octaves of keys, suspended over bamboo resonators. The gender is a two-handed instrument. The beaters are small padded wooden discs. The gender plays its own part, consisting of improvised patterns based upon the mode of the melody.

The Gambang

The gambang is a multi-octave xylophone. Its wooden keys are suspended over a wooden box frame. A two-handed instrument, its beaters are similar to those of the gender, but with long handles. The gambang plays its own improvised patterns, similar to the gender.

The Bonang

The bonang are small suspended gongs. There are two in each tuning. The bonang panerus is smaller in size and an octave higher pitched than the bonang barung. The bonang are two handed instruments, played with wooden beaters, the heads of which are wound with string. The bonang consists of at least twelve bronze bossed pots, suspended horizontally on strings in two parallel lines in a wooden frame. The bonang play interlocking patterns with each other. The bonang generally plays the buka.

The Kendang and Ketipung

The kendang and the ketipung are double-headed drums. The kendang is the larger of the two, and sits on a frame. The drummer sits cross-legged in front of the frame, with the ketiping on the ground at the base of the frame. The drums are used to control the tempo and dynamics of the performance, with the drummer following set patterns for each piece of music. The drums are played with the fingers of both hands.

The Kenong

The kenong is the smaller of the two sets of gongs. It consists of a series of large bossed pots, suspended horizontally on strings in a wooden box frame. Musically, it is used to mark off sections in the musical phrase. It sounds approximately two to three times more frequently than the gong. Kenong beaters are shaped like bonang beaters, but are

approximately twice the size and weight. There are two smaller bronze gongs which play with the kenong. These are called the kethuk (pronounced ke-took) and the kempyang. They alternate with the kenong, playing a percussive onomatopeic part in the music.

The Gongs

Gongs are bronze bossed flattened pots, suspended vertically from a wooden frame. Gongs are pitched, and mark the end of musical phrases. The largest gong, the gong ageng, sounds only once or twice during each cycle, generally at the very end of the piece of music. Gongs are played with two padded beaters of different size and weight. The larger beater is only used for the gong ageng.

The Suling

The suling is a six-holed bamboo flute. It is held and played a little like a recorder. It is often used as as a solo instrument.

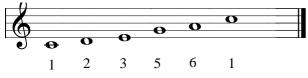
The Rebab

The rebab is a spiked fiddle. It has two strings, one of which acts as a drone. It is held vertically and bowed. Rebab music is generally based on patterns or improvised. It generally plays an improvised melody.

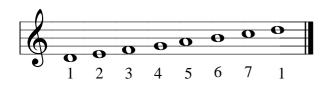
Gamelan Music

Javanese gamelan music is written in either of two scales, sléndro, a five note scale roughly equivalent to a pentatonic scale, and pélog, a seven note scale. The pitches of these scales are numbered using Javanese cipher notation. Sléndro is notated 1, 2, 3, 5, 6 and pélog is notated 1, 2, 3, 4, 5, 6, 7.

Sléndro



Pélog



Each tuning features its own series of modes, called patet. Sléndro has three patet; patet nem, patet sanga, and patet manjura. Pélog has four patet; patet lima, patet nem, patet barang, and patet manjura. Each patet denotes a hierarchy of five pitches, which determines melodic movement. Patet are also associated with particular times of the day.

Gamelan music is cyclical. Once a piece of music has been played through, it is then repeated a number of times. The tempo varies considerably throughout the performance, but generally the music slows to a stop for the final note. The large gong sounds its final note before the rest of the gamelan play their final note in unison.

The structure of each piece of music can be either of two types. All music features an introduction, or buka, and the pitches are grouped in fours. Each group of four is called a gatra. The form ladrang features a four gatra introduction, followed by two gatra per line of music. The second form lancaran usually features a three or four gatra buka followed by lines of four gatra. The overall length of a composition does not change the form. Hence, a lancaran piece may have just one line of actual melody.

Gamelan in the classroom

The best instruments to use instead of a real gamelan are Orff instruments. Most schools have them, and they don't need to be modified in any way. Simply write the numbers onto the keys using a whiteboard marker, or else teach the students using Western notation or pitch names. Angklung can also be used.

Divide the instruments into groups. The glockenspiels can share the saron panerus part and the saron barung part. Smaller xylophones can play the saron barung part, and the larger xylophones and metallophones can play the gong and kenong parts, with cymbals added for extra effect. Add a tambour or snare drum to keep the tempo steady.

Alternatively, use recorders and/or keyboards for the melody, cymbals for the gong part, and add extra percussion based upon the melodic rhythm, or create your own.

Jangkrik Genggong (sléndro)

Cipher notation

Intro 1 65 6 1 65 35 23 5

A

 Melody 1
 3
 2
 3
 5
 6
 1
 6
 5

 Melody 2
 33
 22
 33
 55
 66
 11
 66
 55

B

 Melody 1
 6
 1
 6
 5
 3
 2
 3
 5

 Melody 2
 66
 11
 66
 55
 33
 22
 33
 55

Pitch notation

Intro c AG A c AG EG DE G

A

Melody 1 E D E G A c A G
Melody 2 EE DD EE GG AA cc AA GG

B

Melody 1 A c A G E D E G
Melody 2 AA cc AA GG EE DD EE GG

Key

lower case AG note is played an octave higher notes underneath are quavers

kenong part gong part gong ageng

Western notation



Section A





Section B





References

General

Crean, David. 1979, *Indonesia Being and Becoming*, Rigby Ltd. Draine, Cathie and Barbara Hall. 1991, *Culture Shock! Indonesia*, Times Books International, Singapore.

Fairclough, Chris. 1985, *We Live in Indonesia*, Wayland Publishers Ltd, England.

Gerathy, A. J. 1975, *Indonesia: A Nation's Struggle*, Cassell Australia Ltd, NSW.Houghton, Graham and Julia Wakefield. 1986, *Indonesia*, McMillan Company of Australia.

McDonald, Hamish. 1980, *Suharto's Indonesia*, Fontana Books. Spruyt, J. 1979, *Indonesia: An Alternative History of the Timeless Isles* (3rd Edition), McMillan Company of Australia.

Zainu'ddin, Ailsa. 1975, *Indonesia*, Longman Australia.

Apel, Willi. 1983, *Harvard Dictionary of Music* (Second edition), Heinemann, London.

Dorricott, I. J. and B. C. Allan. 1985, *In Tune With Music*, McGraw-Hill.

Dunbar-Hall, Peter and Glenda Hodge. 1992, *A Guide to Music Around the World*, Science Press.

Dunbar-Hall, P. and G. Hodge. 1988, *More Aspects of Music*, Science Press.

Jackson, Andy. 1988, *Instruments Around the World*, Longman Group.

May, Elizabeth. 1983, *Musics of Many Cultures*, University of California Press.

Information and Advice

Mr. Glenn Davidson, Drama Department, Billanook College Dr. Catherine Falk, Faculty of Music, University of Melbourne Prof. Margaret Kartomi, Department of Music, Monash University Mr. Poedijono, Wantirna South

American Gamelan Institute, Box A-36, Hanover, NH 03755, USA Australian Gamelan Society, Box 5, Holme Building, University of Sydney, NSW, 2006 Nusantara Indonesian Bookshop Mr. Bede Harradine, Croydon, 3136

Deirdre Dean is a former secondary music teacher and is now a free lance consultant operating Dean Educational Services.

What they said

The following comments made by Berlioz when reviewing a performance of Chinese music at the 1851 Great Exhibition in Chrystal Palace, London indicates the extreme Westernisation of his 'cultural template'

"... The most excruciating part of it all was the young woman, in order to enhance the charm of this strange concert and paying no attention to the notes her learned master was emitting, kept scratching with her fingernails the open strings of another instrument of the same kind during the whole duration of the piece . . . nothing so strange had ever struck my ear.'

As reported in the supplement to Gramophone April 1996 'World Music: An introduction to classical traditions from around the world' p.10.

Place St. Michaels' Ad