

Pitch and Rhythm patterns, Sing Song 1/48/O, Year 4

Description:

In Sing Song, a pitch pattern is present when one of the following is met:

- The pitch of the melody is sung accurately
- It is at a wrong tessitura (flat or sharp)
- Some notes are wrong while a recognisable contour is present. Examples of this are -
 - (1) the melodic contour is contracted, i.e. lower notes are sharpened and higher notes flattened
 - (2) misspelled note(s) put out subsequent pitch accuracy
 - (3) individual notes are misspelled
 - (4) difficulties with the rhythm or words lead to a loss of concentration on pitch, usually in the latter part of the melody
 - (5) the tune is improvised, or part-improvised but nevertheless has a musical melodic contour.

Rhythm pattern is present when one of the following is met:

- The rhythm is sung accurately
- It is generally correct, but with some inaccuracy
- It is wrong, but there is a consistent pattern, as, for example in task 5 where a (wrong) rhythm pattern in bar 1 is repeated in bar 2.
- A rhythm is improvised. This occurred in a number of cases where the child had difficulty reading the words, so just made something up.

Table 1 - Sing Song 1/48/O Year 4 Patterns n = 100

	Didn't try	Pitch Pattern	No pitch pattern	Rhythm pattern	No Rhythm pattern
Task 1	12	59	29	76	12
Task 2	12	63	25	77	11
Task 3	12	42	46	61	27
Task 4	17	23	60	47	36
Task 5	15	19	66	64	21
Task 6	17	61	22	73	10
Task 7	18	28	54	68	24

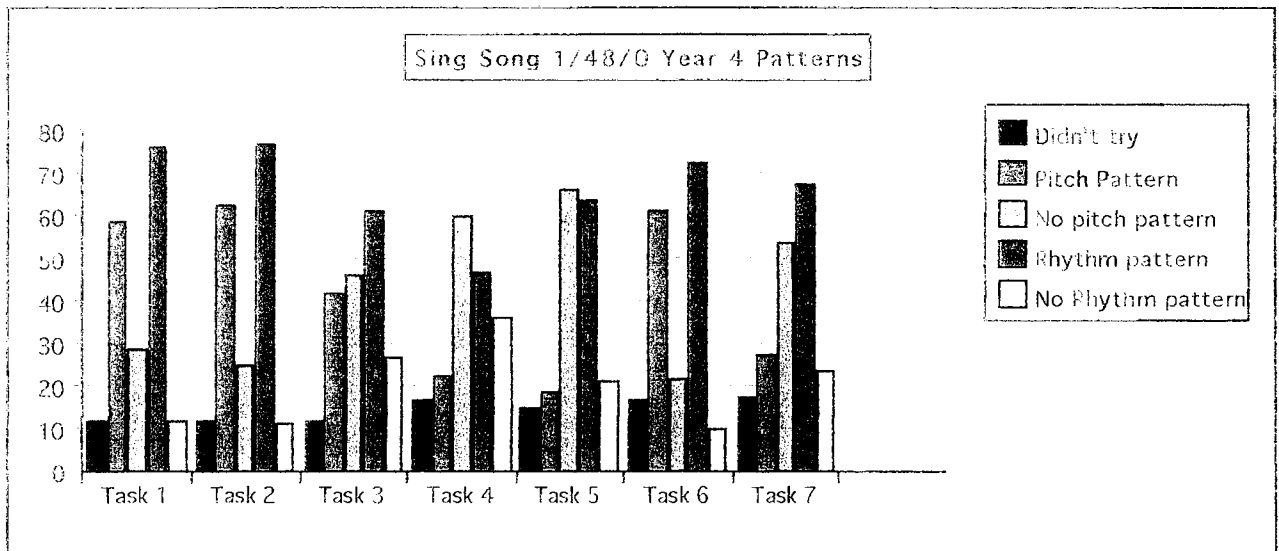
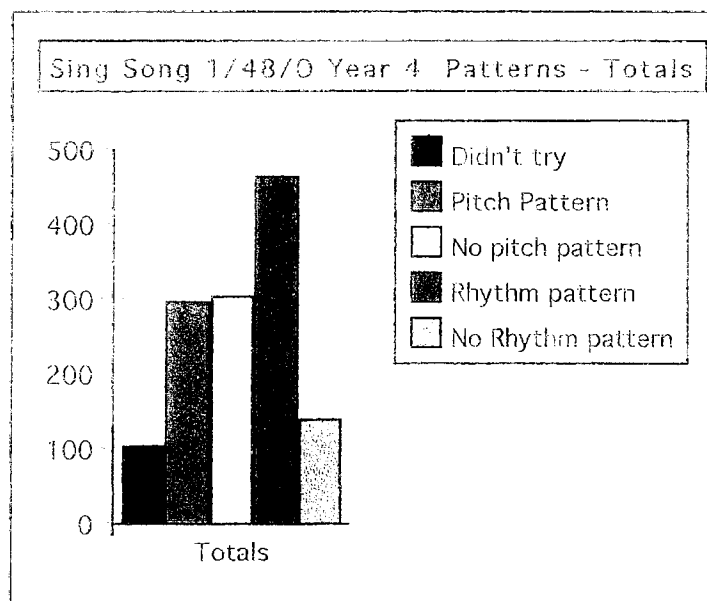


Table 2 - Sing Song 1/48/O Year 4 Patterns Totals n = 100

	Didn't try	Pitch Pattern	No pitch pattern	Rhythm pattern	No Rhythm pattern
Total	102	295	302	466	141



Comments:

The purpose of the Sing Song tasks was to discover whether or not the child could sing in tune and/or in rhythm. Those who did not succeed in either of these according to the criteria set by NEMP nevertheless in many cases demonstrated that they had a sense of pitch and/or rhythmic patterning.

The most striking feature is the strong presence of both pitch and rhythmic patterns in all seven tasks, with the emphasis on rhythmic patterning.

Comparison of Pitch Pattern and Rhythm Pattern percentages with NEMP percentages - Year 4

Description:

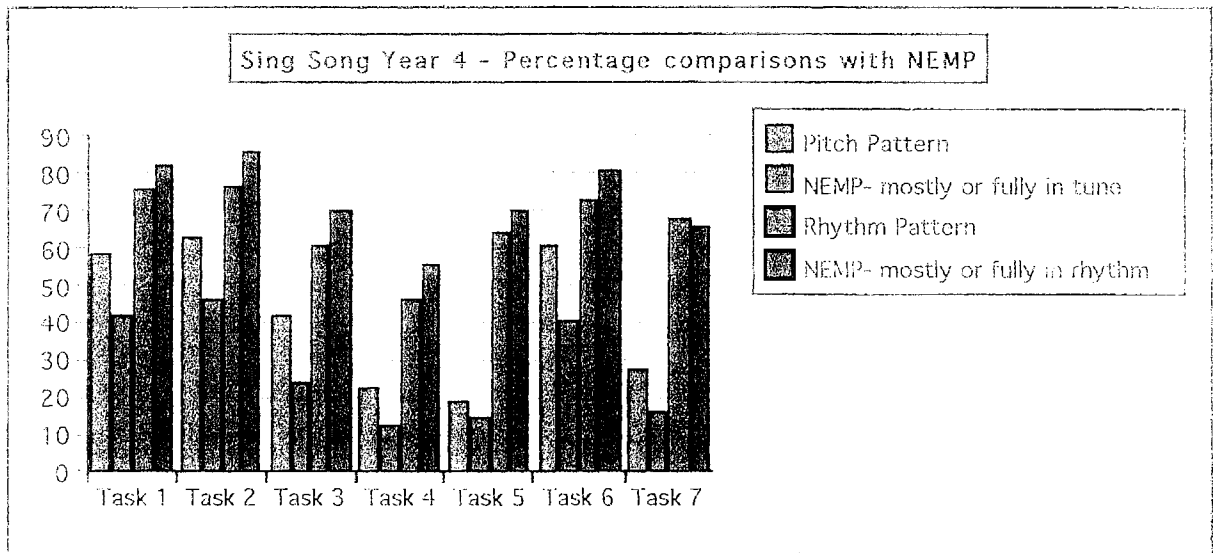
The proportions of success and failure in the individual tasks are similar to those revealed in the NEMP Report (20)¹ in which the outcomes are given simply as "mostly or fully in tune", "mostly or fully in rhythm" or "not attempted".

By translating the above data into percentages of "n", and putting these against percentages extracted from the NEMP results categories, a comparison can be made of data obtained in this study with regard to pitch and rhythm patterning, and the "mostly or fully in tune" and "mostly or fully in rhythm" categories of the NEMP results. Data of this comparison is given in Table 3 below.

Table 3 - Sing Song 1/48/O Year 4 Comparison of Pitch Pattern and Rhythm Pattern percentages with NEMP percentages

	Pitch Pattern	NEMP- mostly or fully in tune	Rhythm Pattern	NEMP- mostly or fully in rhythm
Task 1	59	42	76	82
Task 2	63	46	77	86
Task 3	42	24	61	70
Task 4	23	13	47	56
Task 5	19	15	64	70
Task 6	61	41	73	81
Task 7	28	16	68	66

¹ Numbers in brackets after "NEMP Report" refer to the appropriate page number in *Music Assessment Results 1996*



Comment:

It would appear that children are more adept at singing pitch patterns than at singing in tune (or mostly in tune). The situation is slightly reversed, however, with respect to singing in rhythm (or mostly in rhythm). It could be assumed that those who scored in the NEMP assessment, but who did not sing rhythm patterns must have been in the NEMP "mostly" category, though there is no break-down of data to allow for firm evidence of this. This table should be compared with that for the year 8 sample, Table 7.

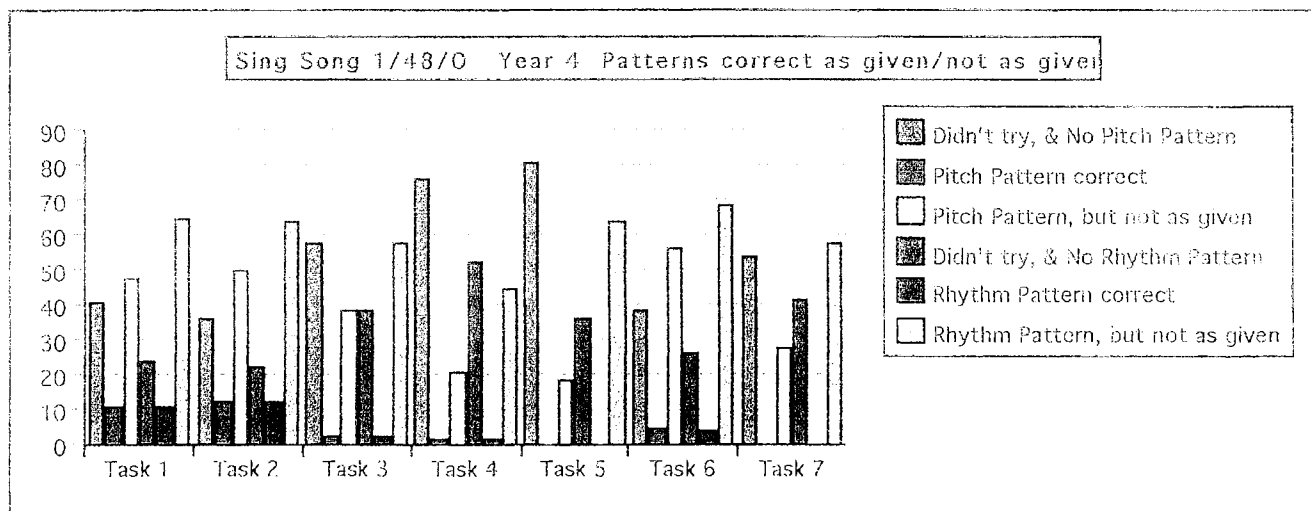
Patterns as given/not as given, Sing Song 1/48/O, Year 4

Description:

It would also be assumed that some children who did not sing "mostly or fully in tune" or "mostly or fully in rhythm" might nevertheless have sung pitch and/or rhythm patterns that were not the correct ones. Table 4 has refined the broad categories of Pitch Pattern and Rhythm Pattern given in Table 1 to show the numbers of those who sang the patterns as in the set tasks, and those who sang patterns, but which were different from those set.

Table 4 - Sing Song 1/48/O Year 4 Patterns as given/not as given n = 100

	Didn't try, & No Pitch Pattern	Pitch Pattern correct	Pitch Pattern, but not as given	Didn't try, & No Rhythm Pattern	Rhythm Pattern correct	Rhythm Pattern, but not as given
Task 1	41	11	48	24	11	65
Task 2	37	13	50	23	13	64
Task 3	58	3	39	39	3	58
Task 4	77	2	21	53	2	45
Task 5	81	0	19	36	0	64
Task 6	39	5	56	27	4	69
Task 7	54	0	28	42	0	58



Comment:

Table 4 shows clearly that a large proportion of the children who sang pitch and/or rhythm patterns did not sing the patterns that were set in the tasks, but rather patterns either of their own inventions, but more commonly that they perceived as generated by the accompanying words. The issue of the effect of the words is discussed in the Supplementary section of this study. A similar breakdown of pitch and rhythm patterns into "as given" and "not as given" is given for Year 8 Sing Song in Tables 5 and 9, and for Year 8 Keyboard Patterns in Table 18.

Pitch and Rhythm patterns, Sing Song 1/48/0, Year 8

Description:

Tables 5, 6, 7 and 8 which give the patterning data for year 8, are based on the same criteria as for the year 4 data.

[DS1] Table 5 - Sing Song 1/48/0 Year 8 Patterns n = 85

	Didn't try	Pitch Pattern	No Pitch Pattern	Rhythm Pattern	No Rhythm Pattern
Task 1	6	65	14	76	3
Task 2	9	67	11	75	1
Task 3	8	54	23	72	5
Task 4	10	42	33	64	11
Task 5	9	50	26	71	5
Task 6	11	58	16	72	2
Task 7	12	52	21	69	4

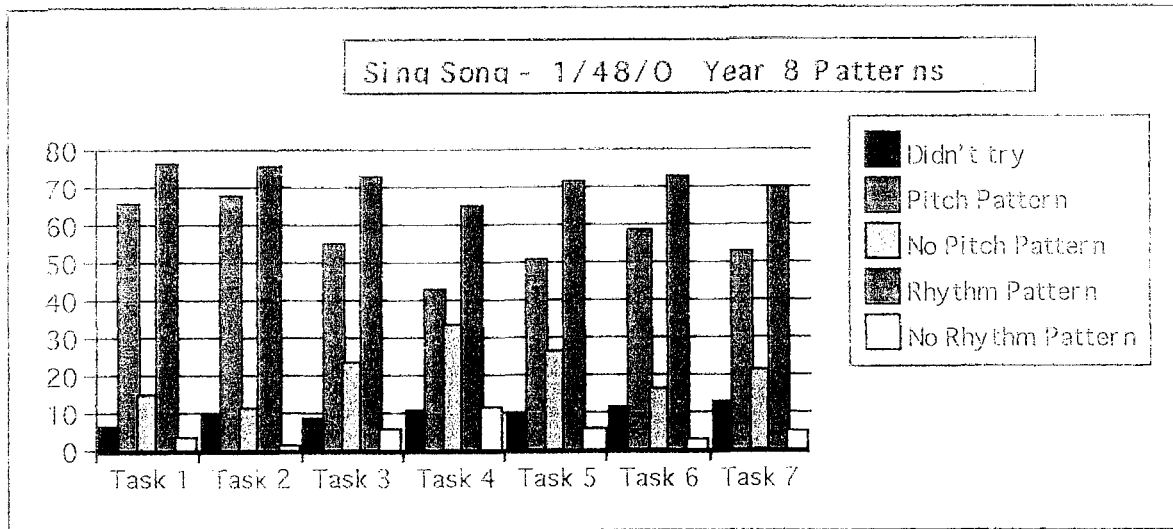
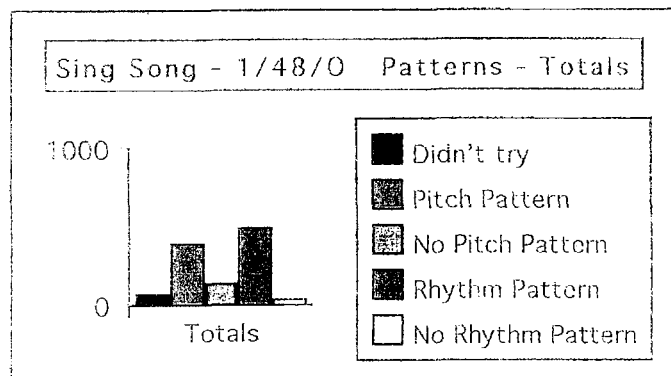


Table 6 - Sing Song 1/48/0 Year 8 Patterns Totals n = 85

	Didn't try	Pitch Pattern	No Pitch Pattern	Rhythm Pattern	No Rhythm Pattern
Total	65	388	144	499	31



Comments:

A smaller number of "didn't try" is apparent in all tasks than was the case with year 4, and again "Rhythm pattern" was distinctly superior to "Pitch pattern".

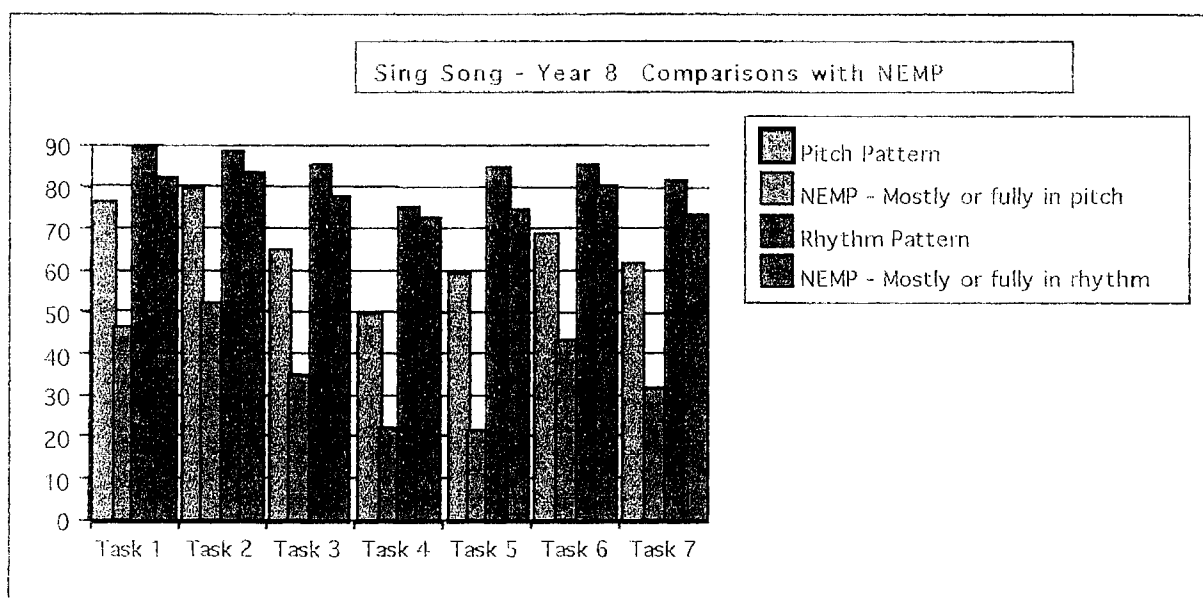
Comparison of Pitch Pattern and Rhythm Pattern percentages with NEMP percentages, Year 8

Description:

The basis of Table 7 is the same as that of the equivalent comparison of year 4 data in Table 3.

Table 7 - Sing Song 1/48/O Year 8 Comparison of Pitch Pattern and Rhythm Pattern percentages with NEMP percentages n = 85

	Pitch Pattern	NEMP - Mostly or fully in tune	Rhythm Pattern	NEMP - Mostly or fully in rhythm
Task 1	76	46	89	82
Task 2	79	52	88	83
Task 3	64	34	85	77
Task 4	49	22	75	72
Task 5	59	21	84	74
Task 6	68	43	85	80
Task 7	61	31	81	73



Comments:

It is interesting that, compared with the year 4 sample, Table 3, in year 8 the difference between the more "difficult tasks 3, 4 and 5 is less apparent. Also, the performance with respect to rhythm patterns is now superior to the NEMP "Mostly or fully in rhythm" category. Pitch patterns results are even more strikingly better than the NEMP "Mostly or fully in pitch" category.

Patterns correct as given/not as given, Sing Song 1/48/O Year 8

Description:

Table 8 is constructed on the same basis as the equivalent Table 4 for year 4. To give a broader picture, the totals for year 8 are also given in Table 9.

Table 8 - Sing Song 1/48/O Year 8 Patterns correct as given/not as given n = 85

	Didn't try	Pitch pattern as given	Pitch pattern, but not as given	No pitch pattern	Rhythm pattern as given	Rhythm pattern, but not as given
Task 1	6	44	21	14	35	41
Task 2	9	51	16	11	43	32
Task 3	8	10	44	23	8	64
Task 4	10	4	38	33	4	60
Task 5	9	2	48	26	2	69
Task 6	11	18	40	16	18	54
Task 7	12	19	33	21	19	50

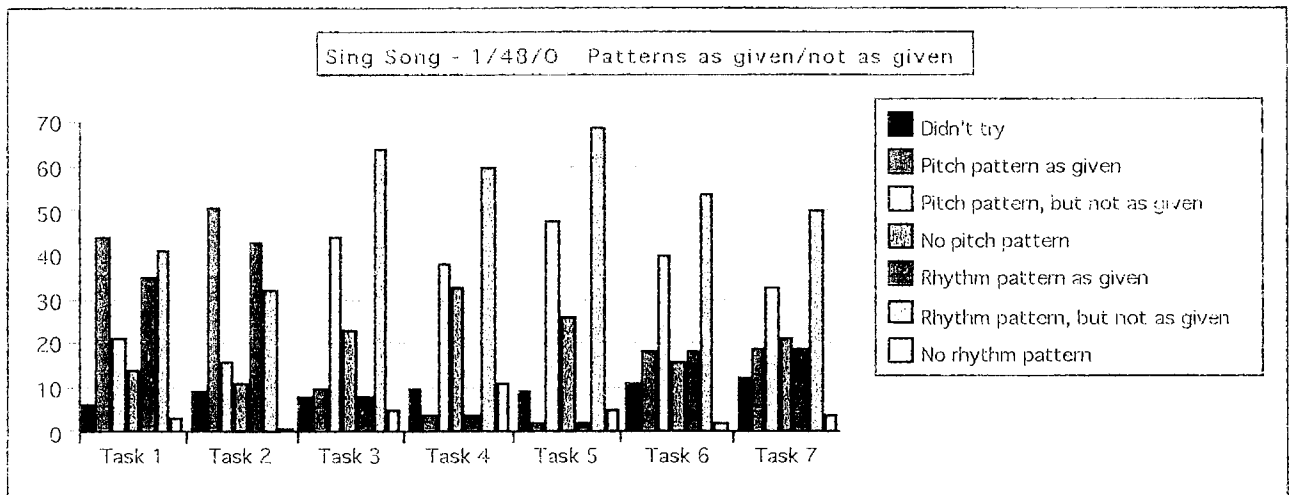
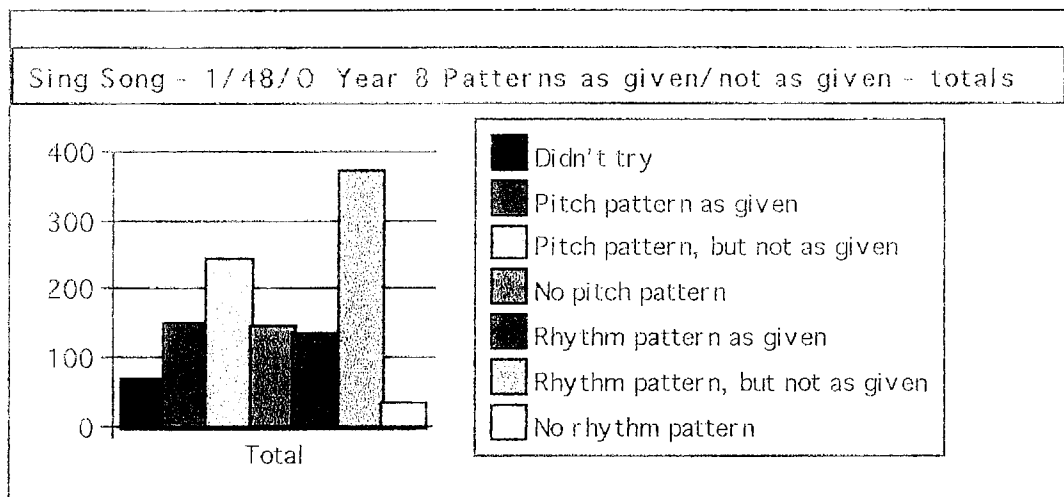


Table 9 - Sing Song 1/48/O Year 8 Patterns correct as given/not as given - totals n = 85

	Didn't try	Pitch pattern as given	Pitch pattern, but not as given	No pitch pattern	Rhythm pattern as given	Rhythm pattern, but not as given	No rhythm pattern
Total	65	148	240	144	129	370	31



Comments:

It is interesting to observe that numbers of pitch and rhythm patterns as given were mostly the same. Possibly accuracy in the one generates accuracy in the other or, to put it negatively, a mistake in the one generates a mistake in the other. This is borne out by the fact that it was nearly always the same children who were accurate in both. The same feature was observed in Keyboard Rhythm Year 4, both Imitation and Improvisation tasks, Tables 15, 16 and 17, Keyboard Patterns Year 8, both Imitation and Improvisation tasks, Tables 18 and 19, Vocal Sizzle Year 4, Tables 20 and 21, and Vocal Sizzle Year 8, Table 22.

The superior performance in rhythm patterning is obvious, this being nearly double those who demonstrated ability in pitch patterning.

Tasks 3, 4 and 5 in particular presented great difficulties to both year 4 and year 8 children.

Task 4 is particularly interesting because each of bars 1, 2 and 3 has the same pitch pattern; yet only four year 8 children got it right, and the number who failed to get any pitch pattern was the highest of any of the tasks. Rhythm-wise, all notes except the last were of equal duration, yet this task scored highest in the "No rhythm pattern" category. The degree of problem with the words is one likely explanation (See Supplement, Tables 24 & 25).

Because of the "mostly or fully" categorising in the NEMP results, it is not possible to compare these with the NEMP results.

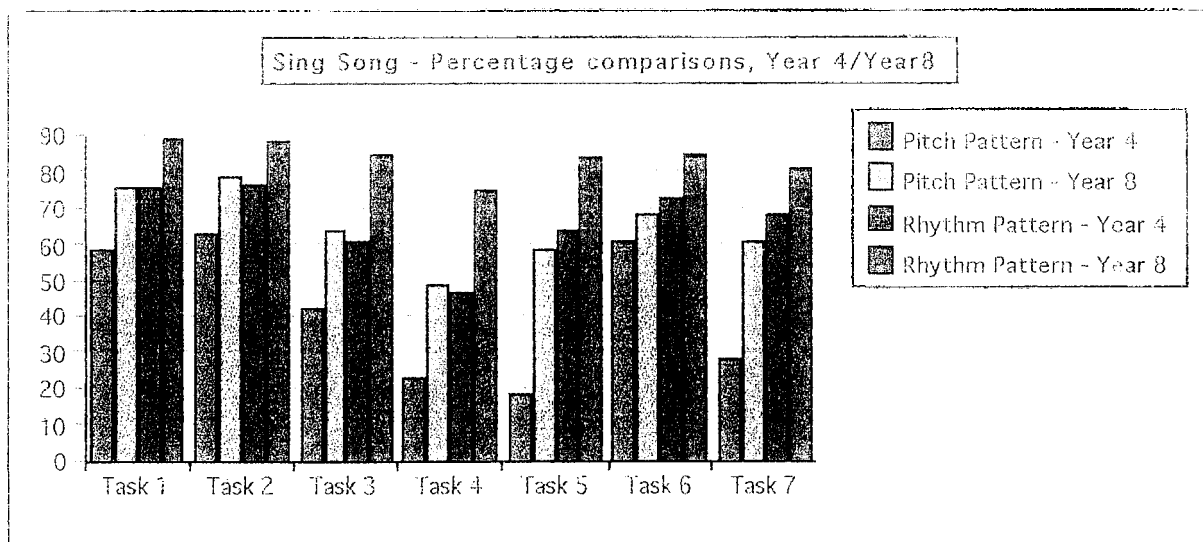
Comparisons of Sing Song 1/48/O results, Year 4/Year 8

Description:

The Sing Song tasks administered to year 4 and year 8 were identical. The pitch and rhythm patterns respectively are based on tables 1 and 5 above; that is, both patterns as given, and patterns, but not as given are included each category.

Table 10 - Sing Song 1/48/O Year 4 & Year 8 Percentage comparisons of results in Rhythm Pattern and Pitch Pattern

	Pitch Pattern - Year 4	Pitch Pattern - Year 8	Rhythm Pattern - Year 4	Rhythm Pattern - Year 8
Task 1	59	76	76	89
Task 2	63	79	77	88
Task 3	42	64	61	85
Task 4	23	49	47	75
Task 5	19	59	64	84
Task 6	61	68	73	85
Task 7	28	61	68	81



Comments:

One would expect that, as with the NEMP results, year 8 results would be superior to those of year 4. This was indeed the case. The "difficult" tunes 3, 4, 5 and 7, however, show a proportionately more striking improvement at year 8.