

STUDYING THE IMPROVING AND DEVELOPING THE ABILITIES OF RHYTHM AT HAMBURG GERMANY PRIMARY SCHOOL MUSIC TEACHING FOR COMPILING A RHYTHMIC PRACTICE

Zhang Yingshu¹, Panya Roongruang
Bangkokthonburi University,
Thailand

E-mail: yingshui.zhang@gmx.de¹

Received: June 14, 2022; **Revised:** October 5, 2022; **Accepted:** December 1, 2022

Abstract

This mixed method research aims 1) to study the Improving and Developing the Abilities of Rhythm at Hamburg Germany Primary School Music Teaching for Compiling a Rhythmic Practicing Guidebook for Teachers, 2) to develop the guidebook for teachers, 3) to use the guidebook to teach students, 4) to know efficiency of teaching by using the guidebook, and 5) to know the satisfaction of teachers and students. This research collected data by working in the field, observing and interviewing key information providers at Goldbek primary school in Hamburg, Germany. The efficiency of the guidebook were tested by 25 students aged 8 to 9 years old.

The result shows that students without significant skills and knowledge in rhythmic competence learned together with students who may already be considered advanced due to their talent or additional support (extracurricular instrumental lessons or similar). Rhythmic competence at the differentiating level can only be learned through instruction and imitation. Secondly, up to 28 students cannot implement different musical activities in one classroom simultaneously.

Keywords: Rhythmic study; teaching rhythmic; rhythmic practice

Introduction

Dealing with musical notation in primary school music lessons is characterized by ambivalence on many levels: teaching practice, curriculum, and subject didactics. Reading music notation cannot be taught or taught through demonstration and imitation. This distinguishes the subject of musical notation significantly from others, such as songs, play-along sentences, or dances. Notation is a system of symbols that can help reproduce notated music or fix invented music graphically. This requires a different methodological approach than practical music-making activities.

In contrast to songs, musical works, and dances, this learning object does not affect our aesthetic sensations. It only serves the cognitive understanding of notable parameters of music. This obstructs access to this subject in a subject that is supposed to be characterized by enjoying one's musical expression, discovering the sound environment, and developing basic musical skills.

Most curricula introduce musical notation, primarily rhythm notation, for the third grade. While handling rhythm modules in Hamburg is required, most other curricula list concrete lesson contents: quarter and eighth notes, half and full notes, and the corresponding break values. Methodical references to traditional means of exercise and thinking such as the rhythm language according to Kodály, are only given in the curriculum of the 15 federal states and otherwise seem to belong to the scrap heap (Gies, 2001).

Research Objectives

1. To study the improving and developing the abilities of rhythm at Hamburg Germany primary school music teaching for compiling a rhythmic practicing guidebook for teachers.

2. To develop the guidebook for teacher, to use guidebook to teach students.

3. To know efficiency of teaching by using the guidebook, to know the satisfaction of teachers and students.

Literature Review

Theory of rhythmic teaching

Rhythmics is a music-pedagogical method whose special working method is based on the lively and close relationship between music, movement, and language. The rhythm promotes musicality in every person through a teaching style that is always based on the individual's abilities. The individual experience of musical contexts is in the foreground of our work with children and adults. Every kind of music can be felt and shaped through movement. Conversely, music promotes and shapes the body's feelings and thus one's expression. An important element is always the focus on perception, namely the perception of all human senses.

Rhythm recognizes music, dance, movement, play, and language as equal expression elements. The interaction of music and movement, playing with voice and instruments, language and dance lay the foundation for expanding and deepening experiences with art, the body, the group, and oneself.

- Learning and experiencing music
- Training the movement
- Differentiation and sensitization of perception
- Acquiring social skills and strengthening your personality

The connection of music and movement is the most original form of human expression, and the rhythm uses a positive effect to enable holistic education.

Rhythm lessons take place in manageable groups. In addition to music and movement, various instruments and materials are included. This way, the participants can discover, strengthen and develop their design options.

According to Jank and Gallus, rhythmic competence forms one of several dimensions of musical competence in advanced music lessons (Jank, 2013).

Gordon's concept was adopted in various ways. The large-scale sequence of the teaching steps is illustrated in a pyramid and named with the letters A to F (see figure1). The image of the pyramid symbolizes the achievement of higher and thus more complex levels.

The level A body coordination, the experience of meter, and pulse are added as the basis. The aim is to bring your own body into harmony with the movement of the music being played or produced and to feel and display both

the meter and the pulse / basic beat. Gordon integrates this stage into the Partial Synthesis stage, in which he offers rhythms in the odd meter after a large group of rhythms in an even meter (Gordon, 2001).

Levels B hearing and imitating rhythms and C learning rhythm language correspond to the Aural / Oral and Verbal Association levels in Gordon. A repertoire of patterns (rhythm building blocks) is acquired in connection with the simultaneous learning of the rhythm language (according to Gordon). These patterns are conveyed using the call-response principle.

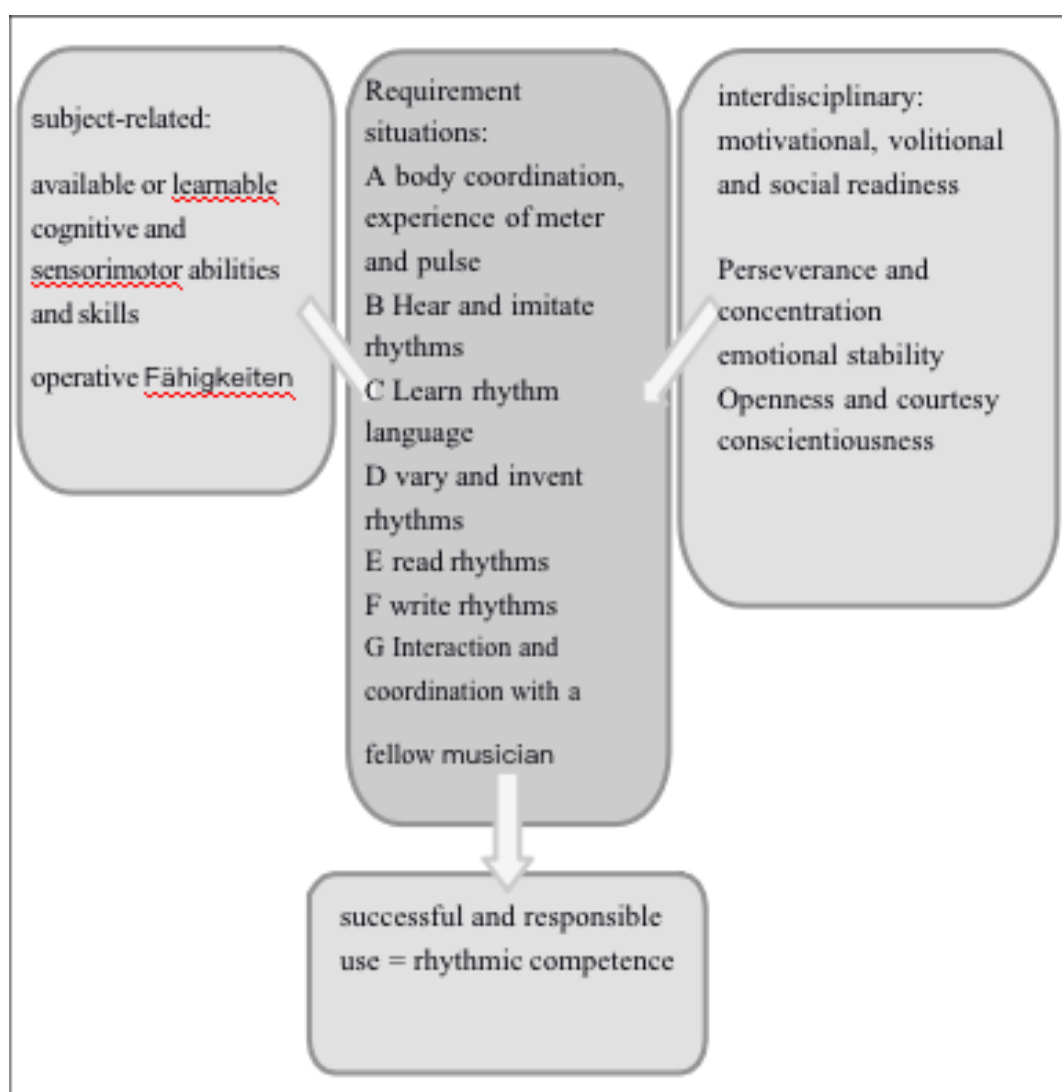


Fig 1. Extended concept of competence in relation to rhythmic competence

The D-level rhythms vary, and invent the authors add in addition. It has no direct equivalent in Gordon. The Partial Synthesis level corresponding to this position encompasses Gordon's ability to "determine the meter of a series of familiar patterns (which sound in a familiar or unfamiliar order) and to give syntactic meaning to what is heard. Auditing of the macrobeats plays a significant role here". With Gordon, there is content on varying rhythms in the skill creativity / improvisation-verbal level, which belongs to the distinctive learning. In the course booklet *Jump Right In*, an exercise is integrated into rhythm unit 7 in which only one student responds to the teacher's call that is not the same as the teacher's call. This exercise corresponds to the idea of level D.

The positions of the levels "E" reading and "F" writing rhythms (in the pyramid) correspond to Symbolic Association reading-writing levels and Composite Synthesis reading-writing in Gordon. This suggests that writing rhythms are a skill to be learned after reading or are more difficult to learn. With Gordon, too, the sequence in the *Jump Right In* course booklet follows first with reading (Rhythm Unit 10), then with writing (Rhythm Unit 13).

Considering both models together, the commonalities predominate, which are based on acquiring a rhythm repertoire (pattern), integrating the learning of a rhythm language, and, based on this, dealing with the notation through reading and writing access. In this respect, the deviations in the presentation by Jank and Gallus represent an implementation of the practical suggestions for action from Gordon's course booklet *Jump Right In*. Levels A to F corresponds to the requirement situations in the construct of rhythmic competence.

In addition to these six levels, the author also considers the interplay with second or more other musicians to be an important component of rhythmic competence. This corresponds to a frequently encountered application situation in music lessons in elementary school, z. B. when implementing a play-along sentence. It requires the player to concentrate on his rhythmic playing as well as on the other musicians.

The common rhythm game is added to the abilities already mentioned about rhythmic competence as level G (see Fig.1). Only making music in an ensemble (social aspect) reveals the necessity of building up skills about rhythmic competence in the levels mentioned above, A to F. The requirement

situations about rhythmic competence thus comprise a total of seven different tasks.

Based on Weinert's concept of competence, the term rhythmic competence can be summarized for this study as the available or learnable cognitive and sensorimotor skills. It can be observed as operational skills when making music, as well as motivational, volitional, and social readiness, which is mainly expressed in perseverance and Concentration, and the joy of making music can be described. To successfully cope with the requirement situation, the positively pronounced general skills of emotional stability, openness, accommodating, and conscientiousness (as three of the five dimensions of the Big Five) are considered advantageous (see Fig.1). The requirement situations result from the individual levels of the pyramid of building rhythmic abilities, according to Jank (2013), which are closely linked to the levels of distinctive learning according to Gordon (2012). In addition, the interaction of the individual with other musicians is seen as a requirement in music lessons.

Didactical analysis of the subject of rhythm notation

The treatment used to develop and promote rhythmic competence should correspond to the findings presented so far

- concerning aspects of music learning is sufficient,
- follow the didactic principles of Klafki,
- Possibility of differentiation and triple presentation of knowledge,
- enable the acquisition of a large repertoire of patterns,
- secure the learning of a rhythmic language as well as
- Music reading and music writing prompt included.

Measuring rhythmic skills

The observation interest is directed towards a competence with concrete operational skills in handling musical notation. These are based on the levels for building rhythmic skills. It, therefore, makes sense to consider exclusively reception-oriented and music-related tests from the outset as only conditionally suitable.

"We hardly have any generally applicable norms or goals for musical development. A certain exception is musicality tests, which test acoustic-sensory hearing abilities in different age groups and then compare them with certain

expected values. However, musicality tests are practically not in Germany and probably in other European countries except in the research use. Apart from that, musicality tests only relate to limited, receptive aspects of musical abilities and do not take productive or creative abilities into account" (Gembris, 2013).

Criterion-oriented performance tests or musical performance tests correspond most closely to the character of the study. "There are different types of music-related test procedures: Aptitude and musicality tests aim to measure the innate potential of musical abilities (aptitude), which is independent of learning experiences. Musical achievement tests refer to the testing of musical skills that have been learned through teaching (achievement). There are also tests that measure vocal and instrumental performance. Finally, test procedures should be mentioned that measure musical test attitudes, judgments, and preferences" (Gembris, 2013). A suitable test should be operationalize the six levels of "building rhythmic skills" (Jank, 2013) and sufficiently satisfy the concept of classical test theory with the test quality criteria of objectivity, reliability, and validity (Bortz & Döring, 2006).

Research Methodology

The mixed-method research was used and collect data by working in the field, observing, and interviewing key information providers.

A two-group pretest-posttest research design is chosen for the study. It is intended to measure the development status of rhythmic competence in pupils of grade 3 at two points in time, as well as differences in the acquisition of rhythmic competence in an examination group that receives treatment and a control group that only receives regular music lessons. The study period should extend to 20 teaching weeks. A duration of 20 teaching weeks (half a teaching year) appears to be an appropriate period to determine changes and developments that can be traced back to specific didactic measures.

The teaching is weeks after the start of the school year in grade 3 until shortly after the autumn vacation is set. The tests should first take place in the study group classes so that the data's initial evaluation can be used to compile the learning groups in the rhythm course. The rhythm course will be given in the teaching weeks after the autumn break through to the Easter break. This period corresponds to 20 teaching weeks. The follow-up test should then take place to

keep the periods between the term test persons equally, including male and female participants. The pre-test and post-test were relatively stable. Three events will take place with the teachers involved in the study group: two further training courses on treatment and a final event. In addition, the lessons in the study group classes should be observed twice to assess the rhythm course's implementation.

Results

The pre-test and post-test: The gap between the individual points achieved in the overall score in the pre-test is serious: 25 test subjects cannot achieve a point in the pre-test (see Fig.2). In contrast, one test person from the study group and one from the control group achieved 20 and 19 out of 24 points, respectively.

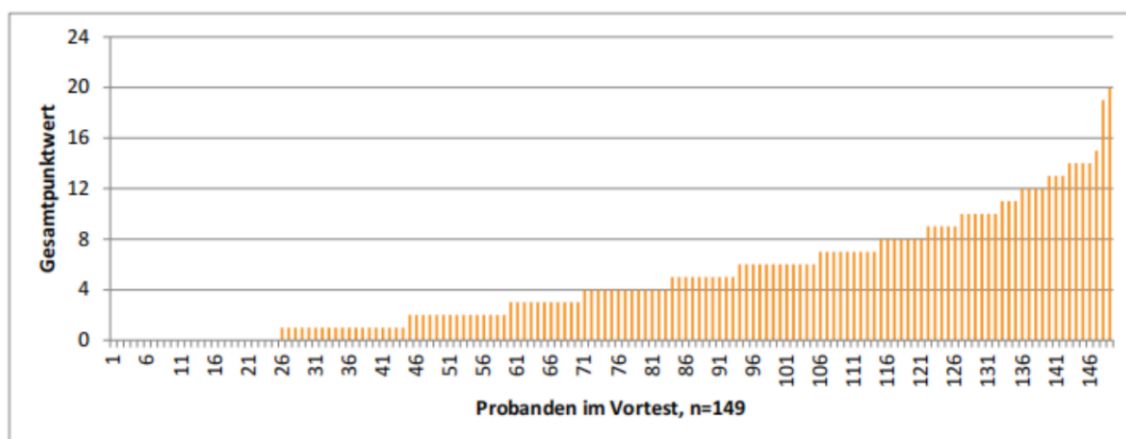


Fig.2.: Results in the total score of all subjects in the VT

The mean value of the total score is around 4 out of 24 points in the pre-test. All achievable point values are represented relatively evenly. In the sub-tests A and B, as well as D and E, recognizable proportions of correct solutions per item can be recorded (see Fig.3). This does not apply to subtests C and F; very few correct solutions are obtained here.

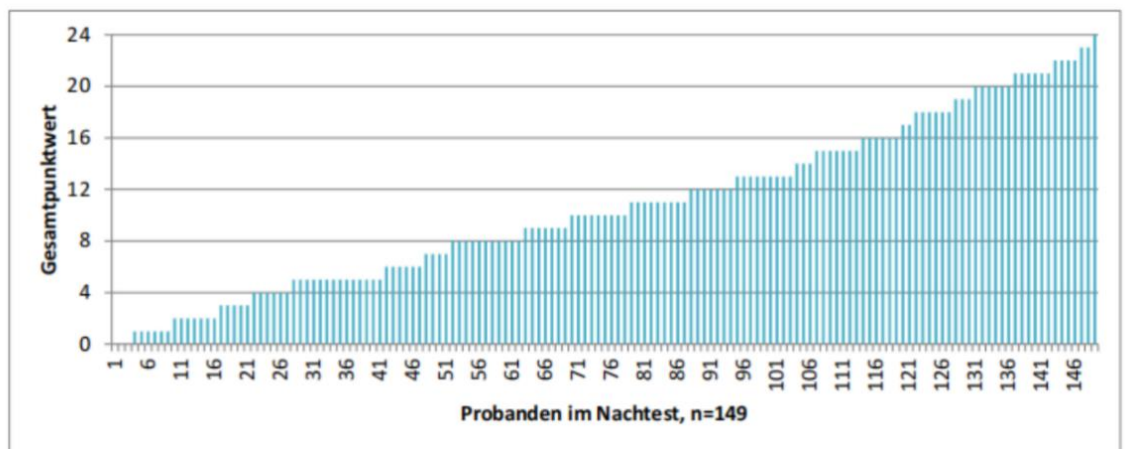


Fig.3.: Results in the total score of all test subjects in the NT

Differentiation in rhythmic learning

The pre-test shows that related to this study, students without significant skills and knowledge in rhythmic competence learn together with students who may already be considered advanced due to their talent or additional support (extracurricular instrumental lessons or similar). Differentiation is, therefore, a characteristic of today's teaching Gordon's theory of a learning process with increasing levels states to start learning on the next higher level only after mastering one level This would not be feasible in-class instruction characterized by performance heterogeneity since the class unit cannot be broken up. All class students would have to stay together on the first level for weeks. This would allow the less musically inclined students to quietly build a good foundation in listening and feeling for meter and basic beats. Students at advanced levels would be forced into learning with no prospect of developing their skills. This would greatly reduce motivation. "Learning cannot be initiated arbitrarily but must start above the current developmental niveau at the level at which the individual can just manage a musical task with the help of social partners"

To address this contradiction, the concept of natural differentiation is adapted for the rhythm curriculum In this concept, all students receive the same learning opportunity. A superordinate problem question characterizes the learning offer in the concept of natural differentiation, an appropriate

complexity, and a question pose of different degrees of difficulty. In this concept, the level to be worked on is not determined by the teacher, but the child makes this choice.

In the rhythmic course, this means that in (almost) every learning sequence, the different students of the pyramid model are offered (see Fig. 4). Each student can use this learning offer according to their performance level. Special attention is paid to realizing a threefold knowledge presentation for rhythm notation according to Bruner's E I S principle.

Stages of building rhythmic competence	Learning sequence				
	1	2	3	4	5
F Make music and write down rhythms	x/-	x/x	-	x/x	x/x
E Reading rhythms and making music	x/-	x/x	-	x/x	x/x
D Consciously vary rhythms	-	x	-	-	x
C Using rhythmic language	x	x	x	x	x
B Playing rhythms	x	x	x	x	x
A Presenting basic beat and metre	x	x	x	x	x
x = offered, - = not offered, x/- = offered iconically but not symbolically, x/x = offered in both forms					

Fig.4: Implementation of the levels of rhythmic competence in the five learning sequences

Differentiation in a music lesson that is supposed to be characterized by shared music-making practice requires special ways. While in subjects where the learning process can be set in motion by what has to be written. It is possible to solve differentiated tasks in writing and individual work; this is not the case in rhythm lessons for two reasons. Firstly, rhythmic competence at the differentiating level can only be learned through instruction and imitation.

Secondly, up to 28 students cannot implement different musical activities in one classroom simultaneously. It is only possible to make music that is the same or similar but tonally, rhythmically, or harmonically matching. The approach to differentiation is to be involved in a common musical action and yet to participate according to one's abilities.

For this reason, work is done in small groups. The rhythmical pieces are designed for four voices. In each group of four, the pupils can choose one voice. In the development phase, it is a good idea to group the same voice and group pupils in so-called expert groups. In the consolidation phase, pupils can return to their home group. Here, each pupil is responsible for making music in their voice. This form of guided group work in parent and expert groups. A high level of activity for each pupil is enabled and required. In this way, the core group members should experience a positive interdependence. Working in groups of four, which are designed to last, should also make it possible to practice and make music together in a self-responsible manner. The teacher acts as the ensemble leader.

The formation of groups of four, which is necessary for group work, is deliberately planned and brought about after the evaluation of the pre-test. Since not all classes have several pupils divisible by four, sometimes a group of five or several groups of three are formed.

In addition, each pupil has a special task in the home group. The pupils take on the role of boss, dispute mediator, scribe, or clearer. This task is determined at the beginning of the rhythm course and maintained throughout the 20 weeks of lessons.

Discussion

It can be said that about rhythmic competence and measurable abilities are already present at the beginning of grade 3, especially in the reproduction of rhythms, the representation of the basic beat and meter, and the modification of rhythms. Many test persons are already able to make music according to iconic notation and write down rhythms with signs they have made up themselves in the figural type. The figural type seems typical for this age group when notating rhythms. Pupils mainly possess skills in reading and writing rhythms with notes

with extracurricular instrumental lessons. Skills in rhythmic language are almost exclusively found in pupils with additional music lessons.

For further work, some thoughts should be pointed out. For the subtest F Making music and writing down rhythms with notes, a 2nd survey documented in this paper was conducted with more than 500 participating students from grades 3 and 4. More findings were obtained than were presented in this study. In subtest E, Reading Rhythms and Making music, the question of the extent to which speaking rhythm syllables aloud helps to align the tempos of the four items and avoid larger tempo increases between correctly played rhythms could be pursued in more detail.

Other observations in various subtests could also not be considered in more depth. These include the phenomenon of resonance and whether the incorrect playing of the basic beat and meter follows an early or a late pattern (Andreas, 2002). It would also be interesting to take a closer look at the learning success of the two groups of music students and other students, as they were formed in the known group's method. Since, according to the curricula, the use of musical notation is extended to the total area in grade 4, analogous surveys would be desirable for this area.

Conclusion

The Research show that students without significant skills and knowledge in rhythmic competence learned together with students who may already be considered advanced due to their talent or additional support (extracurricular instrumental lessons or similar). Rhythmic competence at the differentiating level can only be learned through instruction and imitation. Secondly, up to 28 students cannot implement different musical activities in one classroom simultaneously. A high level of activity for each pupil is enabled and required. the author also considers the interplay with second or more other musicians to be an important component of rhythmic competence. This corresponds to a frequently encountered application situation in music lessons in elementary school, z. B. when implementing a play-along sentence.

References

- Andreas, R. (2002). **Improvisation. Music psychology: A manual.** (4th ed.), Rowohlt's encyclopedia. Rowohlt.
- Bortz, J. & Döring, N. (2006). **Research Methods and Evaluation: For Human and Social Scientists** (4th ed.). Springer.
- Gembris, H. (2013). **Fundamentals of Musical Aptitude and Development,** (4th ed.). *Forum music education*, (20). Augsburg: Wissner.
- Gies, S. (2001). **Old iron of music pedagogy, From Curwen to Gordon: on the news historical conceptions.** *Music & Education* (3), 1-8.
- Gordon, E. (2001). **Reference handbook for using learning sequence activities,** (4th ed). Jump right in. The music curriculum. Chicago: Gia Publications.
- Gordon, E. (2012). **Learning Sequences in Music: A Contemporary Music Learning Theory,** (8th ed.). Chicago: Gia Publications.
- Jank, W. (2013). **Music didactics: practical handbook for secondary level I and II** (5th ed.). Berlin: Cornelsen Scriptor.