

Rhythmic-musical Education – a basic instrument to support development in educational work

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During my work as a teacher of children and young people in school groups with different cognitive and physical handicaps and as rhythmic teacher I practised rhythmic musical Education as a principal procedure in the daily work with my school groups. By these experiences I find increasingly, that we must find out the common principle qualities of developmental orientated educational systems in their entire, inclusive approach. (die Gemeinsamkeiten von ganzheitlichen entwicklungs dynamisch orientierten Systemen in der Pädagogik).

In general, educational work nowadays seems to me as too specialized, we work too much in single sectors without taking in account the integral view of social, ethical, administrative, political consequences (we could begin thinking with the prenatal diagnostics and its consequences for education and for the society anyway) This specialisation causes decisions where partial recognitions are set up for the entire complex of developmental and educational challenges and this does not support the prosperous development of our children.

Looking for common basic principle qualities is a work in progress, which already had been started by our own great Rhythmic teachers and shining examples like Dalcroze himself, Feudel, Erdmann, Höllering, Frohne – today we try to do a step in this direction again.

My concern is, that there is only one legitimate educational aim: the support of the individual and common development of the person, young, adult, with and without any handicaps. From this basic position can grow beneficial educational situations, methods, procedures.

So, on the one hand we have to look for and to improve practical ways to find situations, frame conditions and materials to offer such educational impulses.

And on the other hand we have to look for the theoretical background to reflect the educational process also in an integral way – not selective but inclusive – complying with all functions a person is activating in educational processes, the complete person, not partial aspects, has to be the center of reflection.

I believe that for the practical access the most effective and basic instrument to support the development of a person in a balanced and inclusive way is rhythmic-musical Education.

For the theoretical reflection we can apply now in Vienna a system for observation, analysis and statistical documentation, which bases on the theory of psychical functions (TPO) and offers a detailed step by step survey over the essential developmental steps a person activates in a situation.

Today I want to offer two themes:

- 1.- A specific view on the term rhythm and its different qualities
2. The connexion of rhythm with developmental, educational processes

It may be that I am repeating a lot of facts we all know already, but it seems a good thing to put them in new connections and to have so the chance to find new conclusions.

Rhythm: what are we really talking about?

Rhythm indicates the base of the procedure Rhythmic-musical Education. Until now I encountered this term in our practise and in the literature as a unified one (einheitlicher Begriff). But it is not like this!

Rhythm is a complex term (ein emergenter Begriff).

That means: rhythm results from a number of different qualities and conditions which are not represented by each of the single qualities for itself alone. Only the combined effect of all of them generates rhythm. E.g.: water is liquid. But each component of water – oxygen and hydrogen are gases. Only the specific combination of these elements generates the quality of liquid of water.

And so appears to me what we understand by rhythm, here I refer to rhythm in the general meaning of the rhythm of processes in living structures, not only the musical rhythm of a sequence of notes in the bars of a music piece, because rhythmic-musical Education supports and helps to balance the development of a person as a whole in its active, living processes.

Until now I am thinking about 13 qualities that represent the term rhythm. The idea is really fascinating. If one of these qualities lacks, there will be no rhythmical process. Let us see:

In the first part I want to show the general meaning of these qualities in living processes in general.

<<<<<< erste Liste der Eigenschaften

<<<<<Rhythm generates by **synchronisation**.

Each living structure consists of a quite numerous amount of elements which need for their activities different periods of time, of space and of dynamic. To generate a rhythmical process all the elements of this organism have to be synchronized. If they do not work together the process is not harmonizing, the organism cannot develop in a positive, healthy, future orientated way. This concerns the structure of each tiniest cell as well as e.g. extensive rhythmical phases as there are the seasons with their influence on the growth of all the plants in a region – certain butterflies for example synchronize their fertile rhythm to the blooming time of certain plants.

<<<<<<<Rhythm is activated by the **integral combination** (Ganzheitlichkeit) of all elements of the structure .

That means that all elements which constitute this particular organism are included, are affected. If my sleeping rhythm is balanced, the starting position in the morning is fine, I have my full energies at my disposal and many other psychophysical systems benefit and cause my feeling well. The activity and the influence of all these constitutional elements are of different intensity, but they all are integrally involved.

<<<<<<<Rhythm depends on **continuity**.

Without the continuous flow of the integral elements of a structure cannot surge rhythm. I mention only one aspect: all our inner pictures, each structure would have to be reorganized in the moment that the outside conditions change, and they really change continuously. But the organism has to stabilize its functions, each living being needs stabile patterns to manage the

continuous process of renovation, of recreation. This is only possible by continuity of the main elements of the structure.

<<<<<<<<Rhythm results by **repetition** of the essential substance of a form (Gestalt)

E.g.: The diagram of single systole-diastole rhythm of my heart for the cardiologist has no evidence. He needs a certain number of continuously repeated results to find out if the heart rhythm is fine. Only by repeated values the essential of the rhythmical structure can be pointed out.

<<<<<<<<Rhythm has as a main quality **polarity**.

Each organic movement has a certain amplitude between the two extreme points of the possible movement to its disposal. Within this field it organizes changes, that means it is able to cause development. E.g.: A baby learns how far it can shift the balance forward by try and error over hundreds of times. We know the amplitude of our steps and can adapt the rhythm of our walking steps to the required speed and we can balance the extreme points in the numerous bipolar processes in the different parts of the body that a single step consists of.

That means, rhythm is in accordance to the homöostatic principle, a principle that causes continuously the equilibration process between two poles which are in a mutual dependency. This is one of the qualities we have to adapt during our whole life – the equilibration between a great number of bipolar processes that keep our lives going on

<<<<<<<Rhythm is **organized**.

Rhythm consists by structured time, structured space and structured dynamic. The resulting forms (Gestalten) generated by rhythm are seizable and understandable by its structure (fassbar), so they are comparable with the passed rhythms and planable for the following sequences. This organization is one of the most important facts for the development of living structures.

<<<<<<<Rhythm can only be produced by **activity**.

It is always a dynamic process. Without activity there is no rhythm. We do not realize lots of different rhythms we are bound in, they are too small or too vast, but they affect us by their activity.

<<<<<<<<Rhythm is **interdependent**.

Each sequence is determined by the previous sequence and determines the following sequence. So they are in an interdependent relation and provide the continuous flow of developmental processes .

<<<<<<<Rhythm depends on **variation**.

It actually does not mean the repetition of always the same, but the repetition of the essential elements and the slight deviations which are due to living processes. The quality of variation is the basic one by which the changes to new processes can take place. The slight differences open the possibility to experience new ways without losing the well known structure. This happens in each developmental process. This concerns again microcosmical processes in our brain as well as macrocosmical processes even in the galactic systems or the growth of new species of animals, of plants. Each new phenomenon has a long process of development, of a lot of varied experiences to absolve until there appears a new creation.

Before we start to experience by our own, I have to declare, that each task includes generally all qualities. But I looked for examples that emphasize the one or the other quality in particular.

1.

Let us stand up and shift the balance from one leg to the other, straddle the legs a bit more. The movement is going on and the accompaniment by a bassxylophon starts. Automatically or by indication the direction of the movement of all persons conforms. Then we start humming a tone, the xylophone stops, everybody puts his arms on the shoulders of the left and right neighbour, xylophone joints again and increases the volume, but not the velocity to the maximum and then the process fades out.

Which quality appeared as the main one for you?

Concerning my intention it was the synchronisation. Each of us started with the individual time structure and ended in a common time structure. We achieved an accorded energy field between us all. Improvisative accompaniment, humming, singing, touching each other harmonized the different time structures to a joint time structure of the group.

This experience of joint tension and joint relaxation in the community is very supportive and satisfying and stabilizing. Specially in groups with children which show their problems through their difficult behaviour it is possible to change the activities, if they frequently and over a longer period can live such situations. They learn feeling as an equally estimated and constructive acting member within the group, giving their positive part to the solution. The acceptance happens by doing, experiencing and not only by words. Here I refer to the studies of Bastian concerning the effect of music. I emphasized only one aspect concerning the educational meaning of the quality synchronisation.

2.

Let us move again a little

Imitation task – each phrase I show, is imitated by the auditory.

We clap a simple rhythm (- - - - , - - -) several times, now we stand up and we do the same on the back of the seat in front of us – which are the differences we notice? We go on again, but we try to become very soft without changing the velocity and this intensity we transfer by marking the rhythm with our feet on the floor dropping the quick notes, we clap it again somewhere on our body and put the quick notes at the end of the phrase

(- - - - , - - - -), we notice the changed character, enforce it each time with a crescendo and clap the new rhythm in our hands. We repeat this course several time, increasing the velocity and slowing down again.

We emphasized now the quality of **variation**: The main element was kept up, but we varied the bodyparts, the dynamic, the speed, the sensorical input by touching our hands, the seat, the floor, and we changed to a new dynamic expression by using the same elements in a different way, choosing one of many possibilities to do this. So the main elements of the clapping rhythm – the relation of double speed - kept on and could be stabilized and deepened once more.

What happens concerning the learning process by variation: It is the slight difference that keeps in our neuronal system the concentration and the curiosity going on. You can read about this aspect in the books of the neurobiologists Gerald Hüther and Manfred Spitzer. Repeating always the same makes tired, our neuronal system stops the codification process. But if the changes are too different, as well we would not be able to store information. There are no rails to make appropriate associations.

This happens very often to cognitively handicapped persons. They have lots of detailed information at their disposal, often they could form a good figure-ground selection with clear first informations. But to store the process is not given enough chance by the learning accompanying, to stabilize the information by differencing it with sufficient variations until there could grow a generalized inner picture. This is an important fact for many children, because a frightening high rate of them nowadays appears with minimal cerebral disorders or disfunctions. So I mentioned only one of the learning- psychological aspects of variation.

<<<<<<< list of qualities - developmental connexion

We experienced now only two single aspects. There is not time enough to show more examples. Now let us advance the reflection for one more step and find out the meaning of these qualities concerning the connections to the developmental processes and the active learning process.

synchronisation....accordance within individual structures and their accordance with common structures **_empowerment**
the acceptance of the person, of the way to express herself in the community is one of the basic human needs.

entirety multifunctional activation of capacities **_ combined storing of data**
the activation of various functions at the same time causes more intensive networking between the different cerebral centers, a broad representation of the information

continuity.....stabilizing in sensitive learning periods **_ tuning of the networking process**
the representation processes increase their speed, the neuronal rails become stronger, the capacity to reactivize knowledges increases concerning duration and quantity

repetition ...refinement, of the essential of a figure, **_base for backfeeding and anticipation**
gives the chance to point out better ways to perform something, to express something and to perceive more details

polarity.....equilibration of tension **_ condition for developmental effective learning**
acting in good emotional conditions, in balanced feelings means, that our neuronal systems produce positive transmitters, acting in stress causes that there are produced transmitters that block the neuronal activity, the flow of the networking process is cut down.

structure..... necessary for safety, selfcompetences **_ condition for selforganized learning**
if there is sufficient survey of the main elements of a structure one can organize the energies and one can decide the steps to achieve a proper solution, a more effective solution. Self organized learning needs the the commitment of one's own competences

activity...active dealing with inner impulses and impulses from outside **_ learning by doing**
(PET Studies), the most effective learning happens by committing the proper capacities, by try and error

interdependency....logical connection of contents **_ mutual dependency of data**
Georg Feuser explains very clear that each individuum has its own developmental logical structure, that means not only the didactical structure of our lessons has to follow to the

principle of interdependency, also our whole developmental support in our educational work has to respect the individual developmental logical steps

variation..... collecting and amplifying new experiences _ **condition for generalisation**
by keeping the basic structure there can happen the important process of differentiation, of finding out the essential of a information, at last there is a big, complex package of information at the same time to our disposal

subject tie-in.. individual dealing with information _ **increasing autonomy, self competences**
to solve problems with own ideas, with proper competences should be the final aim of our educational work, but this can be learned only by self determined decision processes, fading out more and more the supporting accompaniment.

intention alignment...individual approach to solutions _ **focus on capacities, not on deficits**
the interest lies in the process, how solutions are approached, which steps and capacities are activated, and which elements of a task have importance for the child in this specific situation. Nobody works with his deficits, but everybody with his capacities.

irreversibility.....respecting each act as the best possible for the moment _ **future orientation**
Georg Feuser explains that each act has to be understood as a future orientated act, even regression, even self destroying acts have this future orientated meaning and have to be respected as the momental base for the best strategie. Only from this positive view result developmental sensful options.

periodicity..... maturation of complex patterns _ **developmental loops**
we should meet after a while and reflect which changes took place by combining these knowledgements with our practical work, with our personal life

Each of these qualities has meaning for learning and developmental structures.

In rhythmic-musical tasks each person reacts with the whole palette of capacities which are in this situation, in this very moment at his disposal. And it is free to his choice which effect is coming out –consciously or unconsciously. Here I find a very important difference between therapeutic intentions and the intention of rhythmic-musical tasks. Therapeutical intentions have to base on a specific diagnosis, have to elaborate defined methods and have to achieve preconceived results.

So we see, that the basic qualities of rhythm have a very direct and intensive connection and influence on developmental orientated learning. Therefore we should bother to establish rhythmic music education as a basic element in all educational trainings, because well offered this procedure bases on the main qualities that needs developmental supporting learning.

The pretention of rhythmic-musical Education since the beginning in the last century is the support of the development of the personal capacities in an integral way. The qualities of this procedure are most effective for inclusive educational situations.

Inclusive concerning the work in heterogene groups of handicapped and not handicapped children as well as inclusive concerning the development of the different capacities and functions of the single person, that means inclusive in personal aspect as well as in a social aspect.

So it is one of my deepest desires to give my contribute to realize finally the participative, common learning of handicapped and not handicapped children in hereogene groups. Rhythmic –musical Education is the most indicated procedure to support this challenge.

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Annex:

Many rhythmic authors refer on the multifunctional aspect which the tasks have to include such as moving, sensoring, thinking, intending, intuiting, social-emotional acting, remembering, speaking. These are in fact the eight functions by which we are able to interact with ourselves and the world outside.

But until now these eight functions were not differenciated into single developmental steps. But how can we find out, which are the specific steps a person is activating here and now in a learning situation? Which operations are activated, how can we express this in a common educational language?

Karl Garnitschnig, teaching in the Institute od Educational Sciences of the University of Vienna has worked out the theory of psychical functions (TPO) and has elaborated a raster screen for general observation of learning activities based on the knowledges of Jean Piaget, Luc Ciompi, Robert Keagan and others. In the last two years in common work we adapted the screen in that way, that rhythmic-musical actions can be analized due to the specific developmental steps a person is activating in a task.

By this system also rhythmic - musial activities can be observed, analized an documented statistically with the common scientificl methods which are used in educational sciences.

It consists of three ordering systems:

Horizontally : The already mentioned eight functions.

Vertically: the specific step by step indication of the essential acting patterns

Vertically: The development stages are: the sensoric, the symbolic, the concrete and the formal phase.

Here we find another fascinating correlation between rhythmic-musical education and development psychology. The sequency sensoring – recognizing – designating not only means a didactical instruction how to proceed in rhythmical tasks. It means also developmental stages. We have to be aware, that during performing each person has the choice to change between these three developmental stages, due to the momental disposition. That means, that we can activate all operations and functions we developed during our life which we require in this moment, in this very situation and put emphasis to the level we find important for us now. This is an important aspect for persons, that could not develop or stabilize certain capacity in time. So they have the chance to reorganize the learning structure and work out patterns lateron by this proceeding. To my concern this aspect is yet not documented in literature. You can find the raster screen by following address:

The raster screen is yet not finished – if it ever might be – but it is very useful already to consider the pedagogic process regarding the child and regarding the content. Contents can be exchanged and are all over the world variable. Development is not changeable. Development is unique and in-dividual. So it is an important thing to analyze the capacities as exact as possible in order to offer corresponding tasks. Specially for children with handicaps the exact accordance between capacities and contents is very important.

The data of the observations can be used in different ways now.

Developmental clearing

First the teacher gets the real facts by analyzing the video or the memory report which operations the child is activating. If he sums up several observations within some weeks he can find a good range of the level of operations the child works with. The actions are not objectified by any standardized tests, but the child keeps being subject, the individual person. The main interest is to find out the strengths, developmental sensitive phases as well as the blockades by the integral view of all eight functions.

Didactical support

Didactically it is very interesting to compare the main operations a person must be able to activate for completing the task sensfully with those operations. Additionally one can point out the main aims of the task and compare if they correlate with the main intentions of the child in this situation.

So the teacher can take conclusions which do not origin by his emotional remembrances, by the assessment of the content of the task and other categories, which influence the picture of what had happened in this rhythmic lesson. He/she refers only to what were the really activated operations.

Scientifical approach to rhythmic-music Education bound into educational sciences

Scientifically we work out a series of observations, assess the activated operations comparing with the start positions in a list of variables. There we get a transparent resume if the learning conditions are balanced, according to the possibilities of the child.

But also the correlations between a lot of variables give information about the significance of the values. Significant and not significant values have come out by the statistical work employing the Statistical Program of Social Sciences SPSS.

It seems to me very important to emphasize the educational –developmental meaning of rhythmic-musical Education by searching and networking, because it is the very procedure that assumes the basic values which good developmental educational support needs. To document this recognition it is not necessary to create new Theories of Rhythmic, but it is urgent to connect Rhythmic scientifcly with the knowledges of bordering disziplins in the educational field.

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