

Dance Math for Upper Comprehensive School

Publication: Pamphlet and dvd:

Helena Fridström, Bengt Björklund and Ninnie Andersson: Dansmatte för högstadiet: att dansa matematik. Sörmland: Institutet Dans i skolan og Västmanlandsmusiken, 2010–2011.

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A publication on teaching materials in dance mathematics is a reason to rejoice. There is an urgent need for ideas that support new ways of learning in which students can study and solve problems through a variety of approaches. Howard Gardner's theory of multiple intelligences has without doubt demonstrated the importance of diversity in teaching methods (Kjartansdóttir et al. 2001). Schools are a cross section of society in which students vary. Thus it is necessary to meet them with various ways of teaching in order for them to gain access to a selection of knowledge, solutions and competencies and thus participate in life in fruitful ways.

In 2011, the Swedish institution *Dans i skolan* published new teaching materials for learning mathematics through dance in upper comprehensive school. Dance teacher Ninnie Andersson applied for and received a subsidy to explore teaching mathematics through dance. She taught 180 students in the seventh grade at Johan Skytte school dance classes that aimed at learning mathematics. Her work with the students led to a publication with audio-video and written material that introduce teaching

materials and descriptions of “math dances”.

The aims of the Swedish institution *Dans i skolan* are:

- 1 That all students have access to attend dance classes, as a way of acquiring necessary abilities in other areas.
- 2 Strengthening dance classes in schools through the development of methods and research in dance pedagogy.

The publication that is authored by Helena Fridström, Bengt Björklund and Ninnie Andersson is a response to these objectives. Teaching materials in dance math, the pamphlet and DVD, are clear and simple. The goals of both the school curriculum and the subject itself are stated. The materials contain exercises for multiplication, geometry, equations, to calculation of weight, etc. Each exercise includes a description of a complementary exercise for further use in the teaching of dance math.

The authors succeed in explaining the dance exercises in writing, which often is a challenge. Nonetheless, the DVD as a good form of disseminating dance practice, is essential for the adjoining illustrations and offers video clips on actual teaching practice in class. Ninnie

Andersson, explains the goals of the teaching, as well as the exercises, carefully to her students. She supports her students with questions, which is a very good way for fostering increased understanding. Such an approach can also be an eye-opener for new ways of dance teaching. Pedagogical advice is given to encourage the students to demonstrate and explain each other various solutions to the given tasks.

The authors' initiative is admirable, and teaching materials of this kind are worthwhile examples for diverse pedagogical projects. They clearly demonstrate how easily dance can make interpretations on math problems in an entertaining way. I dare to assert that some comprehensive school teachers are limited in their views on the connection between dancing and other subjects. *Dansmatte för högstadiet* shows, without any doubt, that a connection between dance and mathematics can be a reality and that it can easily be adapted to the school system.

My opinion is that *Dansmatte för högstadiet* is a good contribution and can add to dance teaching in schools. Dance math does not necessarily need to be a distinct subject that is taught once a week. It is an excellent alternative to traditional teaching approaches by which students can learn and experience solutions differently than they are used to. As a point of critique or further development, in the DVD, the teacher could have required more from the students and motivated them to search for increased variety in their movements. Some movements from one exercise could have been transferred to the next. Students who train their bodies to create different solutions become experienced in utilizing and inventing diverse movements. For this to happen, it is important that the teacher stimulates them not to get stuck

in only a few familiar routines.

I now anticipate dance teaching materials in other subjects, for example, in the natural sciences and languages. Nonetheless, diversity in teaching materials should not be superfluous, the school community needs knowledgeable and functional solutions. With all this said, it continues to be the duty of dance teachers to make arguments for dance as a distinct subject in schools. We have to defend that point of view. Dancing is just as important as other fixed subjects of the curriculum.

References:

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