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Psychomotricity in School

Development, implementation and evaluation of psychomotor learning and teaching methods in primary school and in the New Secondary School (Neue Mittelschule)

The potential, but also the possible improvements of psychomotor learning and teaching methods have been demonstrated, as stated, by the project manager Otmar Weiß.

Project duration
1 October 2014 until 31 December 2018

Project staff
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Sparkling Science
Science linking with school
School linking with science

*Every child is an artist.
The problem is how to remain
an artist once we grow up.*
Pablo Picasso

The current educational system focuses predominantly on extrinsic motivational factors. Nevertheless, it has been scientifically proven that extrinsic motivational factors – meaning those which rely on a system of external rewards and punishments – are less effective and less conducive to the students' character-building and self-esteem compared to intrinsic motivational factors. Good learning outcomes are primarily to be expected when the students' motivation is based on **autonomy** rather than heteronomy.

Psychomotor learning and teaching methods intend to strengthen **intrinsic motivation.** This is the inner motivation and curiosity of the students, leading them to create their own ideas and to make their own, autonomous decisions on what to do, based on what they like and enjoy, and what they find meaningful. A learning culture based on intrinsic motivation builds upon improved social relationships between teachers and students, meaning that the needs and interests of the students are respected. Above all, the need to move has to be taken into account in the classroom. Movement is the engine for the students' mental and physical development. Things learned while moving or in connection with movement will be memorised more easily and for a longer period of time.
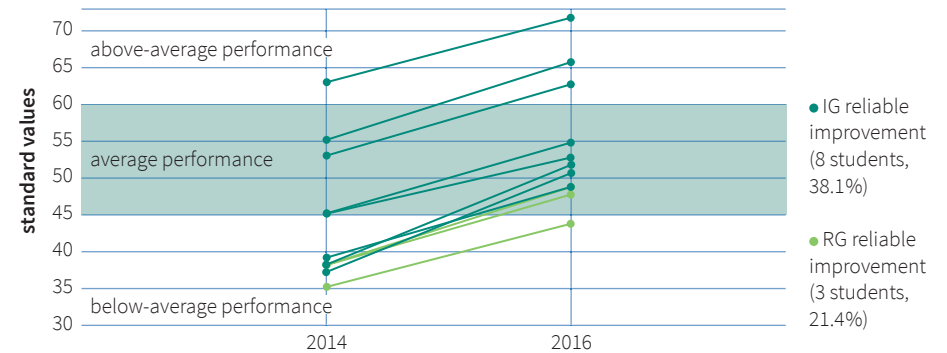
Method

For the **research project 'Psychomotorik in der Schule' (psychomotricity in school)**, students were divided into two groups: an intervention group (IG) and a reference group (RG). Within the scope of the IG the students' need to move and their interests were integrated in the learning process. The evaluation of this psychomotor intervention was carried out based on a comparison to the RG as well as to a representative reference sample, which underlay the respective questionnaire or testing method. The project examined the students' reading skills, their (basic) mathematical competences, as well as their emotional and social school experiences (primary school) and their self-esteem, respectively (New Secondary School).

Results

Compared to the norm sample, primary school students of the IG and RG showed significantly greater individual improvements in some aspects of the emotional and social school experiences examined **(social integration, atmosphere in the classroom, self-concept, the feeling of being accepted by others)**. In view of the **spatial-visual functions**, the IG had the highest share of students who achieved a reliable improvement:

Individual changes of spatial-visual functions

In the New Secondary School, it was shown that the application of psychomotor learning and teaching methods in the IG entailed a significantly higher share of students showing reliable improvements in **self-esteem at school,** compared to the RG.

List of statements concerning the self-esteem of children and adolescents		n	Reliable improvement	p
Self-esteem school	IG	12	8 (66.7%)	0.006
	RG	23	3 (13%)	

The test results of the primary school and the New Secondary School regarding **reading skills** and **(basic) mathematical competences** are situated in the average range of the norm sample.

The project's focus on **relationship building** and **social aspects** was received very positively by the involved parties (teaching staff, students, parents and project staff).