Education researchers at the University of Graz studied body language in the classroom and uncovered the stress fields in schools. Credit: wavebreakmedia/shutterstock.com

An encouraging smile, a sceptical frown, a negating shake of the head: body language is very diverse and effective. With the discovery of mirror neurons, brain researchers corroborated its impact by demonstrating how these nerve cells translate the expressions of another person, such as a smile, into one's own experience.

In a classroom, there is constant interaction between teachers and students. Elements such as gestures, facial or corporal expressions that do not, as a rule, attract much attention are of great importance in the process. Education scientists from the University of Graz investigated this aspect for the first time in a project supported by the Austrian Science Fund FWF. Bernd Hackl, head of the Institute for Teacher Education, and his team explored the significance of teachers' nonverbal communication, or, more precisely, corporal expressions and physical communication, during classroom interaction. Videos of classes recorded over a period of three years were subsequently interpreted and presented as case studies. "The physical presence of the teachers in the classroom is of enormous importance", says Bernd Hackl summing up the results of his investigations. "It is teachers' body language which gives them credibility and determines whether learning processes will be fostered, or not, as the case may be", Hackl adds. In a nutshell, successful teaching hinges on the physical presence of the teachers and the learning context they create in the classroom.

A convincing performance on the classroom stage

Principal investigator Hackl compares teaching to a theatre performance. Even though different in several aspects, both the classroom and the stage revolve around a credible presentation of content, he explains. Just like actors, teachers need to fulfil their tasks by being physically present and interacting and by winning over an audience that is hard to predict – all of this within a limited time frame. A challenge which requires teachers to have conviction, a professional understanding of their role and an appreciative attitude towards their students. In order to capture the whole diversity of corporal communications, Hackl and his research team started by identifying four teaching tasks on the basis of video analyses: providing a relaxed setting for learning, integrating the learners in a collaborative school environment, challenging pre-existing knowledge and skills, and, finally, being able to demonstrate such knowledge and skills to the students and thereby make the mastering of them easier.

Contradictions

The education scientist explains that these tasks are based on an ideal standard of successful teaching. In everyday practice they are often hard to reconcile with the formal and social requirements the school system has to meet. "Exposure to such
contradictory aspects produces a variety of reactions from the teachers and, in the worst case, stagnation", Hackl notes. In concrete terms, the scholars from Graz identified several typical teaching strategies in this basic research project. Teachers alternate between these strategies in order to fulfil requirements that are impossible to meet simultaneously. This will also become manifest in physical expressions, when teachers, for instance, play down certain things in order to balance the situation. "In such cases, the teachers' words and their body language will drift apart, and the students notice that", Hackl emphasises. As a consequence, both sides are annoyed or frustrated and end up creating distance.

**Behavioural patterns**

If teachers fulfil the four functions of teaching listed above, they support adolescents in developing autonomy. This is what the researchers call pedagogical engagement, meaning teachers are authentic, convincing and motivated and seek to create an open learning environment – in other words, successful classroom teaching. "This, however, is the exception", Hackl notes when reporting the team's observations. "Today we increasingly find that teachers are inclined to choose opportunistic, administrative or economic strategies." This means that they avoid confrontation, use grades to reward or punish in a kind of barter trade system or stage classroom teaching increasingly in the form of edutainment under the motto: "Don't hurt me, and I won't hurt you". In these cases, precise analysis of the videos often reveals a lack of authenticity in the teachers' corporal communications. Although the students will not be aware of this fact, let alone be able to verbalise it, they can nevertheless sense it and thus withdraw from learning activities in what seems to be a demotivated manner.

**More information:** Die standardisierte kompetenzorientierte Reifeprüfung. Zur Rationalität und strukturellen Dynamik der österreichischen Schulreform. [DOI: 10.1007/978-3-658-06090-9_3]