

ON MICE AND CHILDREN

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If you want children to succeed then have faith in their abilities.

We wear many caps and carry multiple identities - those of our religion, caste, class, region etc. As teachers our behavior towards our students is influenced by our biases and prejudices.

In the late 1960's two amazing books *Pygmalion in the Classroom* and *Letter to a Teacher* both based on real life experiences shaped the sensibilities of an entire generation.

Letter to a Teacher was written by a group of Italian peasant children from the school of Barbiana. The school was not an Italian state school, nor was it an elite school for the rich. It was founded by a young radical priest Father Don Lorenzo Milani and was named after a community of about twenty farmhouses that lay in the region of Tuscany. Originally intended as a night school for working people it soon became evident that the children of the region were being let down by the state schools, they often failed exams and were discouraged by the nature of authoritarian education.

Don Milani gathered together a small group of children and over many long hours they devised a method of schooling that was more relevant to the needs of the poor. The older children actually began teaching the younger children and many 'failures' became successful. Don Milani died in 1967 and the school died with him. But the book that the children wrote became a world wide best seller (can be downloaded from <http://arvindguptatoys.com>)

The school boys of Barbiana lucidly examined the class bias of public schools. Using clear (and often angry language) challenging ideas, armed with data and examples the children exposed the variety of overt and covert mechanisms used by schools to discriminate against poor students.

The angry and eloquent tone of the first paragraph set the tone for the remaining text.

Dear Miss,

You don't remember me or my name. You have flunked so many of us. On the other hand I have often had thoughts about you, and the other teachers, and about the institution which you call "school" and about the kids that you flunk. You flunk us right out into the fields and factories and there you forget us.

The children of Barbiana felt that “school is a war against the poor.” The school system often makes the children of the poor feel worthless, lazy or stupid.

Pygmalion in the Classroom

Another brilliant book of the 1960's which shook the world of education like a bombshell was *Pygmalion in the Classroom* by Robert Rosenthal. This stupefying experience shows that there are rarely any dunces in classrooms.

An American professor of psychology, Robert Rosenthal, once had the apparently preposterous idea of calling together twelve of his students, giving each of them five grey mice and giving them a few weeks to teach the mice to find their way through a maze. There was, however, one important detail: he whispered to six of the students that their mice had been especially picked for their particularly well-developed sense of orientation, and told the other six that, for genetic reasons, no great success could be expected from their mice.

In reality, these differences existed only in the minds of the students, since the sixty mice were identical in every respect. When the training period was over, Robert Rosenthal found that the 'overrated' mice had performed surprisingly well, while the 'underestimated' ones had hardly moved from the starting-point.

Buoyed by this result, Rosenthal wanted to try the same experiment in a training area of a different kind — a school. This was a strange adventure, the results of which have just been published in the United States (1), causing great embarrassment to teachers...

Drawing of lots

In May of 1961, Robert Rosenthal and his team arrived at an elementary school in South San Francisco, a poor area offering low wages, the home of many Mexicans, Puerto Ricans and families on welfare. In short, an area in which it is generally recognized that the performance of children at school suffers as a consequence of the fact that they are 'disadvantaged' by the milieu.

The intruders said that they were taking part in a 'vast study' undertaken by Harvard, financed by the National Science Foundation, on 'late developers'. Impressed by such grand-sounding credentials, the teachers opened wide the doors of their classrooms. The poor unfortunates were certain that they themselves and not their pupils were the subject of the investigation.

The contribution required of them nevertheless appeared to be eminently 'neutral'. They were merely asked to set, at the end of the school year, a 'new kind' of test for the pupils in order to detect those who were capable of a spectacular spurt during the subsequent school year.

In reality, this was all faked. The test — a standard IQ test — was merely a pretext; the ‘interesting’ cases were chosen at random, twenty per cent per class, and their names were given in a deliberately offhand manner to the teachers: “Anyway, in case you are interested in the results of the tests we carried out for Harvard”... Having thus conditioned the teachers without their realizing it, the research team merely had to wait and see what transpired. A further test was given four months after the beginning of the new school year, another at the end of the year and the last one a year later.

The results exceeded all expectations, leaving Robert Rosenthal and his ‘accomplices’ gaping. The pupils who had been artificially selected as promising better results a Mexican child, had an IQ of 61 before he became a ‘star’ in the eyes of his teachers. One year later, his IQ was 106. A ‘backward pupil’ the year before, he had become, merely by a drawing of lots, a ‘gifted’ pupil. The same amazing change occurred in the case of Maria, another Mexican, whose IQ rose from 88 to 128. Asked to describe the behavior of these interesting cases, the teachers emphasized their ‘gaiety’, ‘curiosity’, ‘originality’ and ‘adaptability.’

The also-rans

One point, however, should be noted: the progress of these pupils who had turned into ‘stars’ was not uniform throughout the investigation. The most appreciable gains in the first year were made by the youngest children and those in the second year by the older ones. Why this difference? The young ones, strongly influenced by the teacher witnessing their spurt, progressed more slowly when they changed teachers; the older children, on the other were less easily influenced at the beginning but more likely to sustain their performance by themselves without the support of a teacher.

Another revealing feature of the survey was the fate of the ‘also-rans’ whose names were not ‘whispered’ to the teachers. As we have seen, their results were far less brilliant than those of their classmates. But more serious still is the fact that if one of them did stand out from the rest. He was automatically marked down by the teachers to the level at which he *ought* to have been. In other words, the more progress he made, the more he was inappropriately ranked. Since it was not *expected*, his performance was considered undesirable. It merely upset the teacher's forecasts.

The investigation thus proved that, as in the case of the mice, the educator's artificial prejudices have a decisive influence on the behavior of the pupil. In other words, good and bad pupils are creations of the teacher. The members of Professor Rosenthal’s team thought for a time that the pupils whose names had been ‘pinned’ on the teachers had benefited from more intense verbal communication with their teachers, which would have explained their progress. But they had to abandon this hypothesis. A study of the various successive tests showed that these children had progressed, not in verbal intelligence but reasoned intelligence. It was an artificial designation alone that had transformed these potential ‘dunces’ into brilliant students.

In brief, the essential prerequisite for the success of a pupil or of a class is the teacher's belief in success. This would be the most economical reform of all. But it is also the most difficult political reform to put into effect.