Education study finds in favour of traditional teaching styles

Report from Sutton Trust and Durham University says way that pupils learn 'remains a mysterious subject'

• What makes great teaching? - expert views

Schools need to put more effort into evaluating what makes effective teaching, and ensure that discredited practices are rooted out from classrooms, according to a new study published by the Sutton Trust and Durham University.

The study suggests that some schools and teachers continue using methods that cause little or no improvement in student progress, and instead rely on anecdotal evidence to back fashionable techniques such as "discovery learning," where pupils are meant to uncover key ideas for themselves, or "learning styles," which claims children can be divided into those who learn best through sight, sound or movement.

Instead, more traditional styles that reward effort, use class time efficiently and insist on clear rules to manage pupil behaviour, are more likely to succeed, according to the report – touching on a raw nerve within the British teaching profession, which has seen vigorous debates between "progressive" and "traditional" best practice.

Professor Robert Coe of Durham University, one of the authors, said assessing effective teaching was difficult, because exactly how pupils learn remains a mysterious subject.

"It is surprisingly difficult for anyone watching a teacher to judge how effectively students are learning. We all think we can do it, but the research evidence shows that we can't. Anyone who wants to judge the quality of teaching needs to be very cautious," Coe said.

The evidence collected by Coe also rejects the use of streaming or setting, where pupils are grouped by ability within classes or yeargroups. It remains popular in many schools despite being supported by little evidence that it improves achievement. Ability groups can result in teachers "going too fast with the high-ability groups and too slow with the low," according to the research, and so cancels the advantages of tailoring lessons to the different sets of pupils. Instead, the best research suggests that teachers with a command of their subject, allied with high-quality instruction techniques such as effective questioning and assessment, are the most likely to impart the best learning to their pupils.

Daisy Christodoulou, a former teacher and author of Seven Myths About Education, a book that highlighted classroom orthodoxies, said: "This is a brilliant and helpful report, full of very practical advice and recommendations. I think it really moves the debate forward and has the potential to spark genuine improvements.

"It is upfront about the problem we face: we do not have as clear an idea of what good teaching is as we might think. So before we can actually discuss how to improve teaching practice, we need to clarify what good practice looks like. Otherwise we risk promoting practices that are not actually very effective."

Michael Tidd, deputy head teacher at a Nottinghamshire primary school, said the findings should come as no surprise. "What remains to be seen is whether this report will reach the wider teaching community and have an impact in classrooms," Tidd said.

"Until teachers, school leaders – and perhaps vitally, Ofsted inspectors – are brought up to speed with the latest developments, the impact will be limited."

Christine Blower, general secretary of the National Union of Teachers, said: "Successive governments have ignored the importance of investing in teachers, including teacher education, continuous professional development and teacher retention. Instead, policy has erred on the side of believing that changing the status of a school will somehow raise the quality of teaching within it."