

Education Research Project:

Which teaching styles and activities help students to learn best?

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Introduction:

There is often debate as to the different teaching styles and activities which teachers incorporate into their lessons. This often tends to be dependent upon the strengths of individual teachers, although this is by no means the ideal style for their students. As a result, a student's ability and progress within a subject is likely to be hindered, as there is no way for the student to become truly engaged and immersed within their learning experience. Of course however, different students do learn things in different ways, and it is therefore imperative that teachers adopt a wide range of teaching styles in order to accommodate for all three types of learning: auditory, visual and kinaesthetic.

A reason why we chose this question to explore is because there is often a gap between what a teacher deems as an appropriate teaching style and activity and what students view to be the best methods of learning. Learning is something which doesn't simply exist within the classroom, it is something which must be retained and willingly revisited out of school. This is why a teacher may view certain methods of teaching as effective within the classroom, but there is no incentive for students to actually retain such knowledge as they go about the rest of their studies. The needs of the student are imperative, and therefore must be the sole concern of the teachers in order to maximise their potential throughout their school career. In exploring this question, we hope to emphasise the voice of the student which may otherwise go unnoticed by teachers, as well as potentially exposing the variance in what is deemed to be a worthwhile activity by both parties.

Method:

The samples required were based purely on different year groups for the student findings. Samples of four people per year were selected from Year 8 and Year 10. An equal number of boys and girls were included within these samples. By using these samples we get a large range of ideas and it means we can see the difference across the years to see what students prefer in Key Stages 3 and 4. To adequately see what they viewed we decided that the best way to do this was to give them the knowledge tree to fill out. The leaves would represent what they liked in terms of activities and teaching styles. The trunk would represent what atmospheres they enjoyed. Finally, the roots would be representative of what they really did not think let helped them to learn best. To establish what the teachers viewed as learning best we gave them a simple task with simply one question on it; 'Which teaching styles and activities help your students to learn best?'. We then put all the ideas we received into a computer programme named *Wordle* that made them into a more intriguing sight and helped us to decide which words were most influential and linked best to the student responses.

Data:

Students:

Year 8:

<Year 8 Tree Pictures Here>

Year 10:

<Year 10 Tree Pictures Here>

Teachers:

<Wordle Picture Here>

<N.B. If the raw data below isn't necessary due to the use of Wordle, feel free to delete it>

- Students have different preferred learning styles
- Variety of lessons
- Teachers will play to their strengths
- Teachers must be confident
- No straitjacketing teachers
- Presentation, Practice and then Production.
- Engage pupils
- Pairwork
- Games
- Competitions
- Random questioning
- Positive reinforcement
- Visual learning- Video links
- Compare and Share activities
- Practical tasks
- Model exam answers
- Lots of repetition (languages)
- Regular testing of vocabulary
- Going over the same work but using different exercises
- Using exit cards
- Each student must give a phrase as they leave the room
- Hinge questions to assess knowledge so far
- Lotto
- Fly swat
- Giving students points for using certain words in their work
- Peer assessment of each other's work and therefore understanding what they have to do themselves
- Translation exercises to test understanding
- Surveys

- Speed dating
- Using mini whiteboards for many different kinds of activities
- Getting students to correct each other's speaking work
- Paired discussion
- Exam questions
- Calculations
- Self-assessment
- Safe environment
- Learning by doing

Data Analysis:

Year 8:

Toxins:

Year 8's believed that being rushed by the teacher led to them not being able to understand what was going on and absorbing the knowledge. They agreed with the Year 10's that just writing from a textbook is very uninteresting along with disliking essays. In terms of teaching styles they did not enjoy it when a teacher was too strict as they felt they could not connect with them and they can't learn well. The tree displayed that the Year 8's found one of the toxins to be a large amount of homework, that they said put too much pressure on them and took too much time out of their evenings when they wanted to relax.

Helpful:

The activities they view as helping them learn best were when they could work together and help each other learn but they felt in whatever activity they did they needed to have enough time given to them by the teacher which is something the Year 10's did not believe was that much of an issue. The Year 8's also felt that practical lessons were particularly beneficial to their learning experience, as well as the random hat; something which was also echoed in the Year 10 responses on their tree (preferring the no-hands rule instead however). Despite this, they stated how they liked lessons to be taught outside; a factor the Year 10's said was not important enough to put onto the tree for them as it was not detrimental to their studies but didn't help them a vast amount either.

Useful atmospheres:

The atmospheres given to us by the students in Year 8 all seemed to require a humorous atmosphere where they need to have friendly banter with the teacher so that they feel comfortable in their learning environment. They said they learnt best in a class where everything ran smoothly so they knew exactly what they needed to do and when to do it, they felt this order meant they could relax and absorb information more easily.

Year 10:

Toxins:

The informative gathered from the students displays that the Year 10's found the toxins to be to do with a large amount of work or homework similar to the view of the Year 8's, they also showed that non-practical activities such as copying from a textbook which they described as very boring and losing their attention so they 'switch -off' and don't learn as well. The also displayed that the style of teaching where the class has to be silent led to them finding the experience uninteresting and not helping them learn, but they also really disliked continuous talking as well. In terms of activities they really disliked the use of posters, presentations and essays (much like the Year 8's).

Helpful:

The activities they enjoyed revolved around practical lessons and watching videos as well as school trips; they also liked being rewarded through the use of commendation cards when they did a good piece of work, showing that praise was preferable to them over disciplinary action. This is echoed by one saying they liked rewards; this was also supported by the Year 8's as they said they liked it when teachers gave them rewards too. They said the random hat was good because it meant that everyone was able to answer questions and not just the same people answering each time.

Useful atmospheres:

The tree gives us an insight into the atmosphere and as such the teaching styles preferred by the year groups; study periods instead of cover lessons as they felt they could do more by themselves, colourful rooms where they can talk to each other while they are working and said that they need to have a connection with the teacher to learn effectively.

Teachers:

The responses to the question posed suggest that the majority of teachers are already trying to cater to all three methods of learning in order to allow students to perform to the best of their abilities. As students learn in a variety of different ways, teachers try to vary between different techniques and activities; for example by setting pair work, using mini whiteboards or the flyswatter game. The correspondence between the student and teacher responses suggest that there is a general understanding about student needs within the classroom, and that the teachers are using the correct techniques in order to meet them. Variety is key to an effective learning experience, as it ensures students remain interested and engaged with the topic.

Furthermore, there was also a general consensus that making use of random questioning techniques was beneficial in ensuring students pay attention in class. One teacher discussed how, as students didn't know whether or not they would be picked next, they would remain alert and would therefore be more engaged in their learning. The students agreed that such a method of teaching is beneficial, be it using the 'no hands-up' rule, or using the random hat programme which comes as standard on staff laptops. Continuing to make use of such a method will ensure students stay attentive and engaged in class, and will allow them to learn more in school instead of having to catch up outside of school through homework and reading through the textbook (both techniques which students dislike when learning, which in itself could act as an incentive for students to pay attention more in class).

In addition, teachers also reported that a positive reinforcement towards student responses and classwork was beneficial in learning the required topic content. This is because it acts as a 'self-fulfilling prophecy', as such reinforcement acts as an incentive for students to push themselves further. Even though such a technique is already being practiced to a degree, the information gathered from both trees suggests that teachers should use a reward-based system more often, as it acted as an incentive to do well. Commendation cards are prime examples of this (amongst various others) as they let both the students and their parents know that they have been performing well in class, spurring the students onwards to perform even better within the classroom; if teachers were to make use of these more, this should help boost student performance.

However, there is also some conflict between teacher and student perception as to the effectiveness of different learning techniques, as some simply fail to engage the students. For example, the teacher responses suggested that they felt methods of visual learning such as creating posters were beneficial to learning, contrasting entirely with the Year 8 and 10 responses which suggested that such activities are simply of no use to them. Often, such material is simply created and never referred to again, which means that valuable teaching time is wasted.

Conclusion

Overall, the study shows that there is general consensus between both teachers and students as to the most useful activities and techniques in the learning experience. Activities which are particularly proactive seem to be favoured by both teachers and students, as they interest and engage the students as well as allowing them to progress through the topic. The feedback suggest how activities such as the no-hands rule, the use of mini whiteboards as well as lessons which involve more practical work as opposed to merely written work are considerably beneficial, and should potentially be adopted by teachers more often in order to help their students to learn.

It is encouraging to see how teachers are willing and able to use a wide variety of different teaching techniques inside the classroom in order to maintain a student's knowledge outside the classroom. It seems important therefore to refine the choice of activities based upon the student responses, leaving out some choices of activity such as excessive creative work and minimising other techniques which are uninteresting to students yet important to the subject, such as essays and extended writing.

The report also emphasises how the relationship between student and teacher is an extremely important learning technique in itself. In developing and improving this relationship, a student is likely to feel more relaxed within the classroom setting which is often daunting for some students, therefore allowing them to perform to the very best of their ability.

Reliability

The information that we collected from the students allows us to make a general observation as to what students feel is beneficial to their learning. However, the sample does not necessarily reflect the opinions of the corresponding year groups as a whole, and the responses we received may actually not correspond to the beliefs of the year groups as a whole. Furthermore, the tree itself could be seen as rather limiting, as it simply asks for very small responses to the question as a whole; it also is not subject specific, and the methods in teaching suitable for one subject area may be completely useless in another subject area. However, coupling the student responses with the teacher responses (which are a lot more broad due to the nature of the question), these small responses are able to explain themselves, as the teacher responses delved into the specifics associated with different learning techniques. Additionally, being students, we are able to relate to and emphasise the student voice, as we have first-hand experience of a wide range of the different techniques the students and teachers in the sample have reported.