

How Do Teachers Nurture Students' Enthusiasm Within Their Subject?

A project to divulge which teaching techniques enable a student's enthusiasm to be maintained, thus allowing the student to learn efficiently and effectively

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Rationale

A student's ability to learn and develop is centred, in large part, around their willingness to engage in lessons and with the subject content. The willingness of students to do this can be prescribed under the term 'enthusiasm'. This element is not a natural proficiency in all students and in such cases the responsibility lies with their teacher to encourage participation, thus developing the student's enthusiasm for the subject. We decided to investigate this as we believe that enthusiasm acts as the basis for academic progress and success. The process of nurturing a student's enthusiasm is complex and can be approached in a variety of ways. Our hypothesis is that the greater ability for a student to remain 'enthusiastic' with their subject content will result in a greater ability to learn it. Subsequently, we also believe that greater encouragement from teaching staff to nurture a student's enthusiasm is directly related to successful learning.

Methodology

Data Collection

Initially, our chosen data collection method was a journal for both students and teachers, which would enable us to compare their ideas on how to nurture enthusiasm in a classroom environment, and whether both had similar ideas on the importance of enthusiasm when learning the subject content.

→ Student Journal

The journal for students was designed to explore different aspects of the term 'enthusiasm'. This involved questioning students on their contribution to lessons, as this is one of the key attributes displayed by a student when enthused with the content. However, as this is qualitative data based, to an extent, on the performance of the student being questioned, some would argue that the answers will be biased so to reflect themselves in best possible light. We subsequently overcame this by reassuring the students that all the comments made on the journals will remain anonymous, encouraging them to answer as accurately as possible. The next heading was a follow-up question which asked about which teaching techniques in particular were responsible for the student's aforementioned contribution levels. We used this as a basis for our recommendation, as we could subsequently pinpoint what exact methods a teacher could deploy to maintain an element of enthusiasm within the classroom. In addition, so not to discard any contributions the journal could not capture beforehand, we included an 'other comments' section, whereby students could make any relevant comments about the lesson. We chose to include core subjects (English, Maths and

Science for year 8 students, the latter being replaced by Chemistry for year 10 students) due to the ease at which data could be compared and recommendations could be made, as in most cases, students study these core subjects for most of their schooling career. A slight difference arose for year 12 students, whereby candidates were selected on the basis that they studied subjects across different disciplines (Maths, Sciences as well as Humanities), enabling us to provide recommendations which are applicable across the curriculum. Some would argue that the subjects were not diverse enough to provide a recommendation across all subjects; however we believe that the ability to compare data from the same subjects had to take priority over the type of lesson chosen. It is also important to note that our subject selection included a lesson which involved essay writing (English), one which involved calculations (Mathematics) and one which involved experimentation (Science/Chemistry), allowing us to transcribe the results found to similar subjects (for example for year 12 students studying similarly disciplined subjects)

Lesson	Did you contribute to the lesson? If so, why so? If not, why not?	Did the content inspire/engage you? If so, why so? If not, why not?	What teaching techniques encouraged you to learn? What worked well and what didn't?	Other Comments (Please write any other related comments/feelings regarding the lesson)
English	Yes. Ideas for advertisement.	Yes it gave me ways to how I could solve my classes in the future.	It worked well. Mr. Deacon taught the lesson well and got us all involved.	
Maths	Yes we all had set work on maths high that we had to complete.	Yes we learnt how to work independently.	Learning maths through online games is effective.	
Science	Yes Our team went up to the front to launch our water rockets.	We had to design (which I like doing) and build our rocket.	We had to learn how to work in a team & be the boss of our own company.	

Please Give A Rating (1-very low; 5-very high)

Question	1	2	3	4	5	Justify your decision
How interested were you in the topic that you were studying in the lesson?				✓		I enjoyed learning about one of two points perspectives.
From your perspective, how engaged and enthusiastic were the class in this lesson?				✓		I got on with my work and tried not to get distracted by my classmates.
Are you looking forward to next lesson?				✓		Yes I enjoy art and want to do art GCSE.

An example of a Year 8 Student Journal

The student journal also consisted of a justified rating system, whereby each student was asked to rate different aspects of their favourite lesson (on a level of 1 to 5). These included the interest levels within the subject, as interest within a certain topic can directly link to a student's enthusiasm within the lesson, their class' level of contribution for the lesson and whether they were looking forward to the next lesson. The latter element was included to measure

the level of enthusiasm that had been maintained towards the end of the lesson which in turn would make the student look forward to the following lesson. We chose to do this for the student's favourite subject so that we had a broader set of data that encompassed the differences between core subjects (or the subjects they had chosen in the case of year 12 students) and their favourite subject. However in hindsight, we found that it more difficult to make recommendations based on these results as it is difficult to improve the enthusiasm a student bears for their favourite subject. We thought the justified rating system would allow students to quantify their enthusiasm within a certain subject, which allows for better data analysis. The "justified" element included the students justifying the reason for which they gave a particular rating to a question, so to enable the student to think about the rating that most applies to them, whilst also providing us with written and numerical data, enabling us to make more comprehensive recommendations to the teaching staff. A limitation to a rating system is that it can be difficult for students to quantify their opinions, however this is overcome by the fact that they have to justify their ratings.

→ Teacher Journal

The teacher journal however, was an idea that did not progress due to the time constraints faced by us and the teaching staff themselves (due to the periodic examinations). We were planning to collect data on whether they felt the class was enthusiastic in their lesson (through a rating) and then why they felt the class were enthusiastic about the subject

content. This would have ideally given us the opportunity to analyse the teacher's view on nurturing enthusiasm, and whether drastic recommendation would have to have been made should the student responses have varied considerably.

<i>Teacher Journal</i>		
Year Group Lesson	What teaching techniques did you deploy? <small>How effective were these in engaging the class?</small>	How far were you & your teaching techniques responsible for the students' enthusiasm? <small>Were the students themselves already engaged in the lesson & topic or was their participation and enthusiasm down to your actions?</small>

An example of the teacher journal we intended to use

Sample

Initially, we chose a sample of three students (of varying abilities) from each year group in the school, ranging from year 7 to year 12 students. We also decided to choose a mixture of 9 boys and 9 girls in the original 18 group sample as this would ensure the data was unbiased, whilst also being an accurate representation of the ideas of the entire school, so to make informed recommendations to teaching staff. However, due to the constraints on our time for data collection, the sample was reduced to three year groups (year 8, year 10 and year 12), as this would still provide us with the information necessary to analyse the responses and provide accurate recommendations on how to nurture enthusiasm (within the given time period) across a wide range of school year groups. We used random sampling to select the 9 students and this provided us with 4 girls and 5 boys within the various year groups. This ensured we could analyse the differences or similarities between responses of a certain gender and year group but also gave less of a representation of the entire school.

Lastly, when analysing the data, we found that a few of the responses were very brief and shallow and therefore offered us little insight into the enthusiasm levels within the classroom and whether it had been nurtured throughout the lesson. In contrast, there were also a few subject specific responses which made it difficult for us to extract broad recommendations from them.

Data Analysis

A prominent motif within the year 8 journals was the idea of teamwork. Each of the students mentioned an element of teamwork within the journal as a teaching technique which encouraged them to learn. According to one student, working as a team helped develop their teamwork skills. Another student felt that discussion with a partner helped them to learn. That particular student went on to specify that the lesson was 'good' as it was 'free' for them to talk to their partner. It is evident from the responses that working with others, as part of team or even with a partner, encourages students to work well and therefore can be seen a useful technique in evoking enthusiasm on the part of students.

Independent learning was another key theme, with it being mentioned in two of the three journals as the reason for why the lesson content inspired and engaged them. One student cited independent learning as the teaching technique which helped them to learn in that lesson claiming that the teacher giving them examples and then letting the students work independently was a 'successful' technique. The same student claimed for another subject that working amongst themselves meant that they didn't have to rely on others. Crucially, by having to work independently and therefore interacting with the subject on their own basis, it appears that students felt more enthused by the content.

The notion of application was also mentioned in various contexts in the journals as a reason for why the content engaged them. One student claimed that the content of the lesson engaged them as they were able to see the things they had learnt about in action. Another student found the topic they were studying (advertisement) useful as it gave them knowledge which they could use in the future. It appears that application of content into real life situations gives students a motive to learn and therefore could be seen as a means of nurturing students' enthusiasm for the subject.

The justified rating system is an important element upon which recommendations can be made, as it not only provides an opportunity for numerical analysis, the comments made enable recommendations to be made more specific. Whilst the questions indirectly referenced to the student's enthusiasm levels within the subject, positive answers would in turn, reflect nurtured enthusiasm within the subject as it would have been maintained over the course of the lesson, most probably due to the teaching techniques used. Subsequently negative responses would demonstrate areas for improvement in relation to nurturing enthusiasm within the lesson.

Whilst most comments were positive due to that fact that students were commenting on their favourite subjects, there were still aspects of the journal where year 8 students alluded to a lower level of enthusiasm than first expected. For example, despite the rating of 4 (with the highest rank of 5 pertaining to a "very high" level of engagement from the class), the student mentioned that distraction from other classmates was an issue within the lesson which may have been the reason for the category not being given a rating of 5. It was also interesting to note the relationship between the familiarity of the topic and the enthusiasm levels of the student in the subject. One student commented that due to the topic being covered previously, their enthusiasm in the subject dropped, resulting in a rating of 4, whilst the other categories were rated 5 (the highest rating possible). This seems to suggest that when a

familiar topic is covered whilst not being elaborated on largely, enthusiasm drops and subsequently, the student's ability to learn successfully also lowers.

In the journals of year 10 students, group work was once again a key feature. Two of the three students mentioned group work as a teaching technique which encouraged them to learn. Another element of collaborative learning that was mentioned by two students was class discussion. In both cases, class discussion was listed for the same subject (English) and while this may not be applicable across all subjects, in English and perhaps subjects of similar nature (e.g. humanities), discussion could be seen as a particularly effective teaching technique.

Another recurring theme within year 10 journals was the role of the teacher with each of the journals mentioning the subject teacher in some way. As a teaching technique which encouraged them to learn, two students cited a 'one to one' session with their teacher. For one of these students, the content engaged them 'because the teacher helped'. It is clear from this that the teacher and content go hand in hand when it comes to inspiring students. Another student described their teacher as being 'intelligent' and 'engaging', with these characteristics in themselves encouraging the student to learn. Teachers also had a role when it came to students contributing to the lesson. One student stated that they contributed to the lesson because the teacher made everyone 'feel very comfortable' to do so. Another student contributed as the teacher prompted them to do so. It is evident that the teacher has a big role to play when it comes to nurturing the students' enthusiasm due to the fact that across the year 10 journals, the role of the teacher was mentioned in some way in every column of the journal.

The year 10 students, despite similar answers being expected, provided another avenue for recommendation, whereby students referred to the fact that the ability to answer questions constantly within the lesson retained the enthusiasm levels within the classroom. In particular, the students mentioned that due to the teacher asking multiple questions to the class, in fear of getting them incorrect, the students had to remain engaged and subsequently enthused with the subject. This ultimately enhanced the student's learning of the subject content. The other students in the year 10 sample alluded to a similar factor, whereby constant interaction between the teacher and their students was pivotal in keeping the students enthusiasm for the subject high.

The year 12 responses provide us with an interesting basis of comparison to the responses of year 8 and 10 students. Whereas year 8 and 10 students contributed largely if they had answers to give, each of the year 12 students contributed, in at least one of their lessons, by asking questions when they didn't understand a particular thing. This implies that year 12, have more confidence when it comes to asking questions in front of the class, an attribute which perhaps students lower down the school do not possess. This may be down to increased maturity that comes with age, the increased difficulty of the subject content or the learning environment which the teachers create for the students. There were, however, some insecurities present in the responses. Two of the year 12 students did not contribute as they felt that their ideas weren't good enough compared to others in the class. Such insecurities needs to be addressed and one of ways of doing so would be to develop the enthusiasm of such students for the subject content which would encourage them to contribute and subsequently diminish any fears that they had.

Furthermore, the year 12 responses exhibited a great deal of contrasting attitudes. While two of the students weren't inspired by the content as the topic they were studying either wasn't their favourite or they weren't confident with it, another student found the difficulty and challenge of the topic as being their source of inspiration. Another contrast concerns teaching techniques; while one student stated that group discussion encouraged them to learn, another dismissed group work, the reason being that some people in the group don't contribute. These disparities may reflect purely individual preferences or may exist due to the sixth form students taking subjects within different disciplines and therefore having a completely different learning experience.

The role of the teacher once again appeared in all three responses. For one student, the way the teacher spoke to them as well as the content, was the reason they were inspired. For another, it was the teacher's depth of subject knowledge which helped them learn. The third student, while finding the subject challenging, was offered help whenever they needed it. These responses clearly re-affirm the idea that teacher's play a big role in nurturing students' enthusiasm.

The justified rating system highlighted the different learning techniques adopted by different years, as year 12 students referenced the ability to consider both the advantages and disadvantages of a certain topic as an element that encourages enthusiasm from the students. This may be due to the acknowledgement of the lessons helping to refine examination techniques and subsequently students are encouraged to be enthused with the topic to enhance their understanding of the subject content. Students who referenced teachers employing such technique rated the category a 4 or 5 (the two highest ratings possible) showing the importance of the teaching technique in nurturing enthusiasm.

Implications for Practice

Whilst the responses were not always insightful, the student journals provided some useful recommendations for the teaching staff. For year 8 students in particular, group work and independent work are two techniques which are successful when it comes to encouraging the students to interact with the content in different ways. These different approaches help students develop key skills for example team skills and independent learning skills which will help them in the future. By using different approaches, the students' enthusiasm for the topic can be developed.

Another technique which appears to be successful in engaging students is through application of theory to real life scenarios. By making the theory appear applicable to a real life situation as opposed to the theory being dealt with in a restrictive classroom environment, students are likely to better understand the theory and be more engaged in the lesson and therefore are likely to be more enthusiastic.

Whilst the subject content being covered at the time has a large influence on a student's enthusiasm within the subject, the justified rating system also highlighted other possible areas which, once improved, will allow greater information retention through higher levels of enthusiasm within the subject. The justified rating system enabled us to pinpoint the need for teachers not to make certain topics over-familiar with students, as unless the subject topic is

being elaborated on, year 8 students in particular lost enthusiasm for the subject. Whilst we are not discouraging lessons where subject content is recapped, we would recommend that teachers consult the students on whether the topic should be covered again and subsequently move on if the students want to, as it ultimately enhances their learning as they are more enthusiastic within the subject.

Moreover, it is clear from responses on the student journals that the teacher has a big role to play when it comes to developing a student's enthusiasm; feedback commonly received from both year 10 and year 12 students. 'One to one' activities can help engage students who may initially struggle with the subject content. Students must also be encouraged to contribute by the teacher by asking as well as answering questions. Crucially, a 'friendly' environment must be created in which all students must feel that their responses are valued thus eliminating any fears/insecurities that students have which may prevent them contributing. Even if the answer is wrong, teachers must reassure students and pick out any promising aspects of the student's answer. If students are not contributing to the lesson then the teacher should ask such students to answer questions. Although such students may be out of their comfort zone initially, over time they are likely to become accustomed to contributing.

In addition, the justified rating system highlighted a particular teaching technique that we would recommend is adopted by the teaching staff of year 10 students in particular, but also for teaching staff of all year groups. The use of constant questioning appeared in the student's justifications whereby they felt that not only did the questions maintain an element of enthusiasm within the classroom, they also succeeded in enhancing the learning of the subject topic being questioned upon. We would therefore encourage teachers, wherever possible, to engage the students frequently, with the use of a 'question and answer' system to nurture the students' enthusiasm for the subject content.

Lastly, the justified rating system also highlighted the need for a teaching technique slightly tailored for students who have impending examinations. Year 12 students referenced to evaluating certain topics, by looking at the advantages and disadvantages of the subject content. Not only would this enhance their examination technique, but in doing so, would retain a level of enthusiasm within the classroom through the knowledge that failure to engage with the lesson may result in lower examination grades. We would therefore recommend teaching staff to regularly employ an 'evaluation' section to their lessons, whereby students are encouraged to be analytical in discussions to promote examination techniques and enthusiasm within the given subject.