

Investigating the use of competition and student-led activities in the classroom to increase motivation and achievement

LSIS Research



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Background

Coming from two very different institutions, a sixth form college dedicated to A levels and a general further education college, we were interested to note that both colleges were struggling with student motivation.

At both colleges there has been a noticeable decline in learners' ability to write effectively and problem solve. Many seem to want the answer fed to them and are not prepared to do the additional independent activities that ensure the higher grades.

We felt that competition could be used to bring back a desire to succeed in the classroom and were interested to see how this would fit with our various teaching styles. We

also wanted to investigate if we could generate any of the 'Deep Thinking Skills' identified as important by the Qualifications Curriculum Development Agency (QCDA) though such competitive activities

The study was completed over several weeks in a variety of classrooms (hair and beauty, engineering and Key Skills classes for A-level learners) and culminated in a half-day learner conference.

We have learned a great deal about how our learners felt about competition, as an overwhelming majority felt that it improved their learning. We also gained an insight into how easy it was to facilitate the development of 'Deep Thinking Skills' which will allow them to become better learners through competitive activities.

Starting point

Our starting point was a questionnaire that was given out to 100 learners on a variety of courses including a range of A levels, such as business, English language, music, and mathematics; Level 2 and Level 3 hair and beauty; and engineering. Surprisingly, 75% of the learners said they enjoyed copying notes from the board. This is probably because 80% of them felt that it helped them to learn better. A third still preferred the teacher to give them all the information, although most (95%) appreciated that finding things out for themselves helped them to become an independent learner. The learners had no preference over working in groups or individually. A large majority (90%) enjoyed having competition in the classroom and 80% felt that it improved

their learning. It was surprising that 80% also enjoyed comparing their performance against each other and 90% felt that it made them work harder. We were very surprised that it was almost 50-50 whether they were happy for those results to be displayed. We then went on to discuss learning 'games' and found that 70% liked them, 10% didn't and the rest weren't bothered either way. Finally, when discussing theory or practical activities, 70% both preferred practical and felt that it helped them learn more effectively. However, we do acknowledge that a large percentage of the cohort were hair and beauty and engineering learners.

Following on from the questionnaire, we invited 20 learners to a half-day conference to try out three activities bearing in mind our new found evidence about competition. We wanted to see their responses to competing individually and in groups and also to see what they thought about various teaching styles. We also wanted to link our findings to the QCDA 'Deep Thinking Skills' that we hoped to help develop in our learners. For example, if 80% felt that teacher-led activities such as copying from the board, helped them to learn, could they actually relate similar activities to the skills we are hoping to develop?

We felt it was important to set the scene as an adult environment where their views were important, so we set up the conference room, created

delegate packs and badges, and put on a 'working lunch'.

The activities were:

1. 'Chalk and talk' lecture activity
 - We read out some information on two topics and told them there would be an individual quiz after with a prize.
 - For the first topic, the learners were not allowed to take notes. We found that no-one scored full marks. We then discussed with them the power of taking effective notes in lecture type situations.
 - For the second activity, all the learners furiously wrote down the key points and two learners got full marks in the quiz that followed
2. Paired peer-teaching activity
 - The learners were each given a page on a topic (the history of Nottingham) and had a few minutes to read it carefully.
 - The learners were split into a 'speed-dating' set up and each had 30 seconds to teach their partner something from the text before they had to move on to the next person.
 - After they had moved round they were quizzed on the information
3. Group e-learning problem-solving activity
 - Working in teams, the learners had to work out the stopping distances of a car given certain equations. It required them to work collaboratively, but the team that worked out the most correct answers was awarded a prize.

- This generated a heated competition as the groups were egging each other on.

After each activity we asked the learners which of QCDA's 'Deep Thinking Skills' they thought they had developed. They were given a sheet of the skills and a different colour highlighter for each activity and asked to identify which skills they felt each activity had developed.

Impact

The conference demonstrated to the learners that there were more enjoyable activities than copying from the board that were equally effective at helping them learn. It also made them realise how they could develop their independent learning skills through such activities. Through talking to them on the day we also found out that they felt more confident about trying new ways of learning and moving away from working 'outside' their usual comfort zones. They revealed that that they now understood how important 'risk' and 'challenge' (such as problem-solving with new people and being brave enough to share ideas freely in new settings) are in developing deep and profound learning skills and the desire to learn. Learners were motivated by the competitive element of the activities and both their academic and emotional intelligence were engaged.

At the end of the conference the 20 learners completed a further questionnaire that revealed:

- All 20 learners felt the competitive nature of the

activities created motivation for them to learn.

- 95% felt the competition may them more willing to experiment with different ways of learning.
- 80% of the learners felt that the 'learner-led' activities helped them to learn more.
- 95% stated they would like to see more competitive resources used in the classroom.

In addition, all 20 learners felt they had developed 'Deep Thinking Skills' in the following areas after completing the tasks.

- Independent Enquirer (e.g. Identify questions to answer; plan and carry out research; explore issues from other perspectives; and support conclusions using reasoned arguments).
- Reflective Learner (e.g. Assess themselves and others; set goals with success criteria; invite feedback and deal positively with setbacks; and communicate their learning to others).
- Team Worker (e.g. Collaborate with others; adapt behaviour to suit different situations; reach agreements and manage discussions; and take responsibility).
- Self-Manager (e.g. Seek out challenges and show flexibility; work towards goals showing initiative, commitment and perseverance; respond positively to change; and deal with competing pressures).
- Creative Thinker (e.g. Generate and explore

possibilities; ask questions; try out alternatives or new possibilities; and question assumptions).

- Effective Participator (e.g. Propose practical ways forward; act as an advocate for views and beliefs; negotiate to reach solutions; and be persuasive).

The learners also felt that they had played a valuable part in an important event, as these comments show:

"I think more of these conferences must be held to encourage students and tutors to communicate in the best suitable manner that satisfies everyone."

"Really enjoyable to see and understand how other students learn."

"Really made me think about what is best for me."

"Good to be involved in the future of teaching which will help teachers and students."

Conclusions

The desire to learn is often assumed to be linked to a need to process relevant information for our own understanding of a subject. If desire to learn also arises because 'we need to know it before our peers', a competitive element significantly heightens feelings of achievement by utilising additional basic human instincts of survival, dominance and hierarchy.

We have since included competitive activities into our

lessons and have found that the learners have responded positively. An example of this was a revision quiz in Key Skills lessons where there were both team and individual rounds. The teams were very keen to win the small prizes and we saw the more able learners support the weaker ones for the greater good of the team. The results in the Key Skills Level 3 exam went up by 10% after these revision classes. We have also experimented with learner-led activities such as independent project research that has then been taught to the rest of the class by the learners. They responded well and showed a variety of teaching methods themselves, such as paired activities, within their own 'mini-lessons'.

Our next steps are to initiate similar activities at the start of the year and monitor any improvements in results over a longer period of time.

Appendix

Questions used in initial research:

1. Do you enjoy copying notes from the board?
2. Does it help you learn the information better?
3. Do you prefer it when the teacher gives you all the information or when you have to find things out for yourself?
4. Does finding things out for yourself help you to become a more independent learner?
5. In the classroom, do you prefer to work alone or in groups?
6. Do you like the teacher

- to mix groups around frequently?
7. Do you think that having competition between the groups and individuals makes things more enjoyable?
 8. Do you think it improves your learning?
 9. Do you like comparing your performance against the other individual's in your class?
 10. Do you think it makes you work harder?
 11. Would you be happy if those results were displayed publicly?
 12. How do you feel about 'learning games' in the classroom?
 13. Do you prefer practical or theoretical activities?

14. Which do you think helps you learn more effectively?

Further reading

John Shindler (2009)
Transformative Classroom Management: Positive Strategies to Engage All Students and Promote a Psychology of Success. Jossey-Bass Teacher

You can read more about student-led learning in Inside Evidence – the evidence bulletin for busy professionals in the learning and skills sector: www.excellencegateway.org.uk/page.aspx?o=195275

If you are ready to carry out your own small scale enquiry, research tasters will help you plan your approach and link you to the evidence. You can find them at: www.rtweb.info/ls

Contact

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