Does engaging in social interactions improve engagement in classroom discussion?

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ABSTRACT

This study investigated the effect of social interaction on levels of involvement in classroom discussions. Both qualitative and quantitative methods were employed. Data was collected from a cohort of level one learners aged between sixteen and nineteen, who answered questionnaires at the beginning and end of the research, as well as participating in a focus group at the end. The learners took part in a weekly Venn diagram activity and were provided with a different discussion topic each week. The learners took part in pairs that rotated each week to ensure all learners in the group had spoken with each other. The overall analysis of the data indicates that an increase in social interaction had a positive effect on engagement in class discussions. The findings suggest that when learners felt psychologically safe in the classroom, engagement increased. Moving forward it would be beneficial for subsequent research to investigate this over the course of the whole academic year and to account for the limitations found within this current study.

Keywords: social interaction, class discussions, engagement

Literature review

The current research was implemented in a Further Education (FE) college located in South Wales. The college offers a wide range of services and courses, including a level one provision[1] which sits under the *Step Up* department. The report from the most recent Estyn inspection

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states that 'The "*Step up*" programme is a useful foundation for learners entering college with limited prior attainment or gaps in their skills' (Estyn, 2022, p. 7). This provides an indication of the level and ability of the learners in the current research. Level one learners often struggle with communicating with others effectively, This struggle is particularly salient with other learners who they perceive as different from themselves or their social group and research suggests that when adolescents feel that they have things in common with others it increases the likelihood of them engaging positively in the classroom (Mikami et al., 2017). FE Colleges therefore have a role to play in ensuring that all students, whatever their abilities or backgrounds, are able to develop their skills and abilities within an environment that can support them to achieve.

According to Maslow's hierarchy of needs (1943) there are five different levels of human needs that have to be met in order for a person to achieve their full potential (self-actualisation). This can be applied in an educational setting as before a learner can meet their cognitive needs they first need to address their basic, fundamental physiological and safety needs (Kurt, 2021). Within the FE establishment where the current research took place the learners had access to free breakfasts, fresh fruit and water fountains. They had regular breaks throughout the day and had access to a range of support services. This meant that they had plenty of opportunity to satisfy their basic needs within the college environment. However, there is not a guarantee that they will partake in these services and this also does not account for their experiences outside of the college. The next priority is the need for belonging, which includes friendship and a sense of connection. Research conducted by Mikami et al. (2017) found that adolescents' perceived relatedness with fellow classmates predicted an increase in behavioural engagement in the classroom. However, Skinner et al. (2009) suggest that there is a difference between behavioural engagement and emotional engagement. Behavioural engagement is how much the student is involved in the classroom activities, paying attention and taking part. Emotional engagement refers to the internal engagement of the student. For example, how much they enjoy the activities and how much fun they are having (McKellar et al., 2020).

Self-determination theory (SLD) posits that intrinsic motivation is a better predictor of engagement than extrinsic motivation (Ryan and Deci, 2017). A meta-analysis conducted by Howard et al. (2021) found that intrinsic motivation was correlated with learner success and well-being. In addition, the findings suggest that introjected regulation was

related to performance goals and positively correlated with indicators of anxiety. Ryan and Deci's (2017) theory of SLD suggests that there are three psychological needs that influence intrinsic motivation: competence, autonomy and relatedness. Relatedness refers to having the ability and desire to have a sense of belonging to a social group and feelings of closeness and attachment to others.

With regard to the current study, anecdotal evidence observed at the beginning of the academic year that a large number of the learners were reluctant to engage in whole group discussions or to answer in front of the class. Learners voiced that they did not like moving groups or speaking to learners who were not in their circle. One learner at the beginning of term said that when group discussions were mentioned they 'just pretend that they're not there'.

Another learner said of the group on the table behind them that they 'didn't even know them', despite being in a class for four weeks together. Calling on learners by name had to be utilised frequently to encourage answers in class discussions and a large majority of learners tried to avoid speaking out loud in class. Embarrassment caused a participant to withdraw from a group activity after their mistake was met with laughter. These anecdotal observations served as the basis for the current study. Additionally, research by Dweck (2006) has shown that creating a supportive environment where mistakes are viewed as learning opportunities helps learners develop. Furthermore, research by Yeager et al. (2019) found that promoting a psychologically safe learning environment significantly improves student engagement, particularly for students who initially feel less of a belonging in school. Other research has found that when students felt psychologically safe, they were more likely to actively participate in class discussions. They were also more likely to ask questions or provide answers, even if they were unsure whether they were correct (Clark, 2020). It is imperative, therefore, that FE learning spaces are developed in ways that help students feel safe and supported to contribute effectively to their own learning.

The aim of the current study was to explore methods of developing and encouraging level one learners to feel safe to engage in classroom discussions. Based on the review of the literature it was evident that one way of encouraging learner engagement in class discussions was to ensure that learners felt comfortable and safe with the other learners in their class. The aim of the current study was to encourage learners to communicate with each other, with the further aim of breaking down

any barriers that might prevent them from talking to every learner in the class.

Methodology

Participants

There were twenty-eight participants – the majority of whom identified as female. There were three separate groups of learners within the cohort and the research was carried out with each group in order to gain a more holistic picture of the results. The research was also conducted at the beginning of the session that had the same subject matter being delivered to each group in order to ensure consistency and reduce the number of confounding variables. Once the learners had completed a Venn diagram with another learner, they were encouraged to discuss the similarities and differences that they had found with each other.

Stimuli

The use of Venn diagrams is a simple and easy way to encourage communication and discover similarities and differences between people (Blue, 2022). With the purpose of highlighting features that the learners may have had in common with one another and breaking down feelings of difference between each other, a Venn diagram activity was implemented once a week before a specific teaching session. The learners completed a Venn diagram with another learner in the classroom and this rotated over a period of eight weeks until each learner had had the opportunity to talk to each other. The learners were provided with a conversation starter topic by the tutor, which differed each week. For example, 'if you could have any superpower, what would it be and why?'

Data collection

There were three primary data collection methods employed in this research – questionnaires, observational analysis recorded by using a reflective diary, and a focus group.

The learners were asked to complete a questionnaire consisting of eight questions that focused on how they felt about class discussions and included a combination of closed and open ended questions. This was implemented at the beginning and end of the study. It was important for the purpose of the research to gather participants' opinions both at the start and at the conclusion of the study to determine whether the research had had any impact. The questionnaire included questions that would produce both qualitative and quantitative data. The advantages of this are that gathering quantitative data means that comparisons can be easily and quickly made. However, gathering qualitative data as well, ensures that a fuller understanding of the results can be obtained, by gaining an understanding into the attitudes, experiences and motivation of the learners.

Ethical considerations

Before the data was collected ethical approval was provided from the research panel overseeing the project and the research protocol adhered to BERA (2021) code of ethical procedure for research. Consent was gained from the learners who participated in the study. The learners were asked to complete a Google Form which had a statement explaining any potential risks and asking them to sign to confirm that they agreed or did not agree to participate in the study and that the data collected would be used solely for the purpose of this research. The participants were informed of their right to withdraw from the study.

Observational analysis was also carried out by the researcher with the aim of measuring the level of enthusiasm and involvement during the sessions. The results were recorded in a reflective diary. Utilising observational analysis in conjunction with other methods can enhance the quality of the evidence collected by allowing the researcher to capture the behaviour and interaction of the learners in the classroom (Jepsen et al., 2004). This in turn can enhance the quality and depth of the data collected. In addition, it provides an insight into the behaviour of the learners without simply relying on self-report methods which can be subject to response bias and demand characteristics (McCambridge et al., 2012).

Finally, at the end of the eight-week time period a focus group was carried out. This involved three learners (one from each class) coming

together and answering ten questions that enquired about their feelings around classroom discussions and their experience of utilising the Venn diagrams. The person who asked the questions was a colleague of the researcher. This was to ensure that the risk of response bias was minimised. For example, the researcher may have inadvertently asked leading questions that could potentially elicit responses from the learners that aligned with the expectations of the researcher. Or conversely, the learners may have been tempted to respond in a way that they thought the researcher expected (McCambridge et al., 2014).

Results

Thematic analysis was used to identify patterns and recurring themes in participants' responses. The results of the qualitative element of the questionnaires show some change in the way that learners felt about class discussions over the course of the research.

For example, in answer to the question 'explain how you feel when asked to take part in class discussions', the main themes from the first questionnaire were: nervous, anxious/scared, frustration/indifference (figure 1). However, the main themes from the second questionnaire indicated a mix of anxiety and positive engagement and included happiness alongside anxious/nervous (figure 2).

This is congruent with the responses to the question 'list three words that come to mind when you hear the words class discussions', which showed that whilst the overall response for both questionnaires centred around talking and listening, the results for the second questionnaire also included fun and teamwork as common themes. This suggests that whilst the learners still felt apprehensive about class discussions they were also more aware that they could be enjoyable, particularly when working with others. However, these findings could also be affected by numerous other factors, such as the mood of the learners on the days involved.

For instance, if the learners were feeling rested and energised this could have positively affected their answers or conversely if there had been disagreements between the learners during the day this could have had a negative impact on their responses.

This is supported by the responses in the second questionnaire to the question 'what would make you less likely to get involved with class discussions'? The results indicate that students were less likely to

Figure 1.

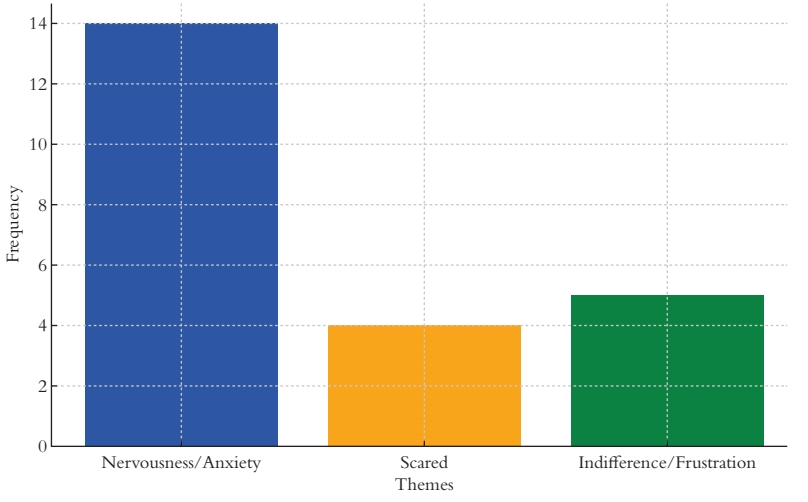


Figure 2.

participate when they felt socially uncomfortable or emotionally drained (figure 3).

There could also have been an element of response bias involved, with the learners answering the questions in a way that they thought the researcher was hoping for. Although response bias cannot be entirely eliminated, the risk was minimised as much as possible by ensuring confidentiality and anonymity and using language that was neutral and not leading. When asked what factors would make them more or less likely to become involved in class discussions the most common factor for both aspects was the topic that the discussion was focused on. If the learners found the topic interesting they were more likely to become involved and if the topic was uninteresting or difficult this resulted in them becoming less likely to participate. This is in line with the findings of research of other studies which found that interest is a powerful motivational tool (Harackiewicz et al., 2016; Subraminaniam, 2009). The other overriding theme to arise from this was that learners needed to feel supported and not judged by their peers if they were to feel comfortable enough to get involved in class discussions. This is congruent with the research findings mentioned earlier that when learners felt psychologically safe, they were more likely to actively participate in class discussions (Clark, 2020). There was no significant difference between the results of the first or second questionnaire for this topic.

The results of the quantitative element of the questionnaires also indicated negligible change in the opinion of the learners between the first and second questionnaire. This could be due to factors such as acquiescence bias or order bias, both of which are common issues in questionnaires with quantitative elements (Feenberg et al., 2015). There

Figure 3.

was also a downward trend from the beginning to the end of the research, in response to the question 'how confident are you at getting involved in class discussions?'

At the start of the research 53.6% of learners felt confident or extremely confident (figure 4) and at the end only 45.8% of learners said that they felt confident (figure 5). This suggests that the increase in engagement levels were not correlated with intrinsic feelings of confidence. It is also possible that other factors not accounted for in this research may have had an impact on results. It would be beneficial for future research to examine this further. In addition, some learners who responded to the first questionnaire did not respond to the second and vice versa, which could have influenced the results. It would be prudent for future research to address this.

Observational analysis was also implemented which provided a more objective comparison between the learners' answers and the actual

Figure 4.

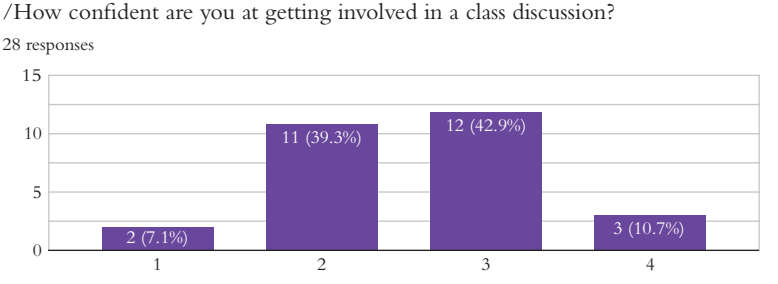
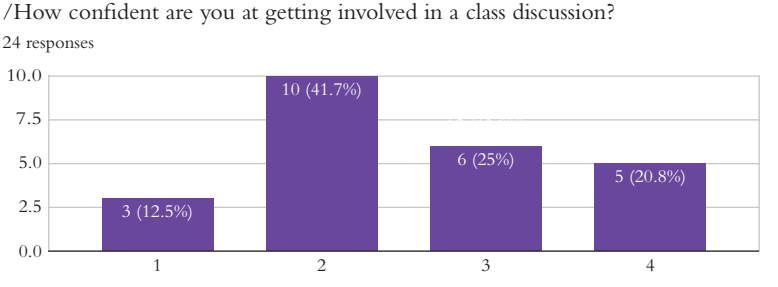


Figure 5.



participation in classroom discussions. The results of the observational analysis are consistent with the qualitative outcomes of the questionnaires. Initially the learners were reluctant to take part, especially when they were asked to pair up with a learner that was not in their usual friendship group. However, they grew more enthusiastic as the weeks progressed and were especially more eager to participate when they judged the discussion starter to be fun. The most favoured topic among the learners appeared to be: 'if you could have any superpower, what would it be and why?' This topic resulted in high engagement levels and is congruent with the outcomes of the focus group where learners expressed that they were more likely to get involved in class discussions if the activities were 'fun'. This is in line with other research that also found links between fun and playfulness and student interest (Blinkoff, et al., 2023; Lucardie, 2014; Tisza, 2023).

It was also apparent through the observational analysis that learners' participation levels were higher when the more challenging learners were absent. This is congruent with the previous research by Yeager et al. (2019) which found that promoting a psychologically safe learning environment significantly improved student engagement. Another prominent finding was that as the time period progressed the learners began to engage in the activity independently and without intervention from the tutor. They became supportive of each other and in one session a more confident learner helped a reluctant learner by rephrasing the question to aid better understanding. This suggests that as the activity became part of their weekly routine and was consistently implemented, the learners' level of engagement and social skills improved.

The focus group findings are in line with the qualitative questionnaire results and observational analysis with the main themes appearing as learners stating that they are more likely to participate in class discussions when the activities are fun and engaging. The learners also indicated that they prefer smaller groups for discussion activities and that they were more inclined to participate in discussions when the environment was comfortable and there was respect between learners.

Conclusion

The main outcome of this research was that learners became more involved in class discussions when they felt safe and not judged and when

they considered the activities fun. This is congruent with the previous research that stresses the importance of having supportive and safe learning environments in encouraging learners to become more engaged in the classroom. It is also consistent with the previous research that found higher levels of behavioural and emotional engagement were present when the learners were having fun and enjoying the activities. However, defining fun could prove difficult as it depends a lot upon context and individual differences. For example, personal preferences differ between people in what activities they deem as fun. Additionally, cultural and background factors could also influence this. For this reason, future research should explore the use of self-selection of activities in order that each student can choose to engage with activities that they may enjoy.

The qualitative data shows an overall change in the feelings of the learners towards class discussions over the course of the research, with feelings changing from negative to more positive over time. This suggests that their perceptions of class discussions may have been influenced by the familiarity of the activity. The observational analysis supported this finding by showing how the initial reluctance of the learners decreased over time and was followed by increased engagement in the class discussions. This combined finding heightens the credibility of the research.

The decline observed in the quantitative responses does not align with the findings from the qualitative analysis, suggesting the presence of additional influencing factors. One possible explanation is the design of the questionnaire itself, which may have impacted the responses. Future research should consider refining the questionnaire to ensure clarity and consistency in measuring student perceptions. Additionally, psychological factors may play a role. For example, while learners may still feel discomfort with speaking, observational data suggests they engage positively with the activity. To gain a more comprehensive understanding, future studies could benefit from employing alternative methodologies or mixed-method approaches. Furthermore, variations in the sample (some learners who completed the first questionnaire were different from those who completed the second) may have contributed to inconsistencies in the results. Overall, whilst the findings indicate that increasing social interaction had a positive effect on engagement in class discussions, there were limitations that future research could mitigate for.

Further research

Building on the current findings, future research might want to explore the following suggestions to gain a deeper understanding, and to address any limitations that have arisen from this study:

- Employ a different method of encouraging class discussion based on the findings of this research (fun activities and safe environment)
- Employ methods of making the learners feel safe or looking into what types of activities learners deem 'fun'
- Implement the research over a wider range of participants
- Implement the research over a longer time scale
- Implement the research from the beginning of the academic year
- Compare individual responses at the beginning and end of the research to gain a clearer picture of any changes that may have occurred.

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Notes

1 Level 1 learners in Further Education (FE) colleges typically consist of individuals who are at the beginning stages of their educational journey or are seeking to improve basic skills. They are usually school leavers between the ages of 16–19 years old. Level 1 courses provide foundational knowledge and skills, with an emphasis on providing a supportive environment that aims to build confidence while laying the groundwork for further education or employment.