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**My hand is up, therefore I am a good learner:  
A study into Year 4 pupils' perspectives on  
voluntary classroom participation.**

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*Abstract*

*Active learning appears at the forefront of educational discourse in which pupils are expected to participate in order to take ownership of their learning. This research investigates the motivations and influential factors for putting hands up in the classroom environment and why some pupils choose not to participate. This case study uses mixed methodological strategies to collect both qualitative and quantitative data from a Year 4 class in rural Cambridgeshire (aged 8-9 years old). The data is analysed in relation to pupils' perceptions of their own identities as learners, along with internal and external motivations towards classroom participation. Findings conclude that self-esteem can link with participation rates, which in turn could be increased by embedding a positive growth mindset within the classroom environment.*

# **My hand is up, therefore I am a good learner: A study into Year 4 pupils' perspectives on voluntary classroom participation.**

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## **Introduction**

In order to enhance classroom learning, there is scope to improve methods to encourage children to learn through participation (Dinkmeyer & Dreikurs, 2000). Successful classroom learning has been defined as involvement in shared learning through participation (James, 2008); learning “requires a great deal of shared experience and conversation” (Rowe, 1986, p.43). With regards to classroom participation and new pedagogies seeking to engage the learner, the emphasis on ‘active learning’ has increased significantly (Harrison & Howard, 2009). As a result, there is an opportunity to research why children choose, or perhaps more importantly choose not, to actively participate in class. This research intends to explore pupils’ perspectives on voluntary participation, specifically ‘hands up’ participation, within one Year 4 classroom in rural Cambridgeshire.

## **Aim**

*To investigate motivations and influential factors for putting hands up in the classroom environment and why some pupils’ choose not to participate actively in this way.*

The research will discuss connections between factors influencing voluntary participation and pupils’ perceptions of their own identities as learners. Influential factors such as peers, classroom culture, confidence and pupils’ perceptions of attainment will be explored (Dinkmeyer & Dreikurs, 2000). Finally, the research questions posed are as follows:

- 1. How do pupils’ perceive classroom participation, associated with hands up and its connection with learning?*
- 2. What are the main motivations for putting hands up/not putting hands up in a classroom setting?*

## **Literature Review**

### **The importance of pupil perspectives and participation**

Research suggests pupil perspectives on learning can provide a wealth of inside knowledge that could enhance education (Rudduck & Flutter, 2010). In terms of participation, research shows pupils can discuss and make sensible choices in regards to who they work well with as well as which lessons they work hardest in (Rudduck & Flutter, 2010). Fisher (2013) suggests that pupils have a high understanding of classroom politics and the importance of the student voice is vital to improve learning. This chapter will review literature regarding classroom participation, in particular the 'hands up' culture associated with motivations to participate and learner identity.

Current studies define classroom participation as 'Active Learning'; a pedagogy that engages the pupil in a meaningful learning process in which students take ownership of their learning through independent work as well as collaborative work (Harrison & Howard, 2009). Active learning refers to pupils doing the learning for themselves, displaying intrinsic motivations towards learning (Dinkmeyer & Dreikurs, 2000). The 1975 ORACLE study observed learning influenced by social interactions across Key Stage Two (Galton, Hargreaves, Comber, Wall, & Pell, 1999). The motivations linked with the 'hands up' approach, are combined within personal motivational characteristics as well as social interactions within the classroom environment (Turner & Patrick, 2004). Regularity of participation is influenced by many factors, largely associated with socialisation (Davis, 2007), classroom culture (Rudduck & McIntyre, 2008) and psychological motivations and goals (Pintrich & Schunk, 2002).

### **Confidence and understanding the question**

Higher levels of participation, particularly in regards to 'hands up', are often associated with confidence and personal goals (Patrick & Turner 2004). Personal Mastery goals refer to the learner's commitment to master skill and maintain genuine interest, in comparison to performance goals that concern themselves with demonstrating competence and comparing learning to peers (Patrick & Turner, 2004). Reluctance to participate in a classroom environment could be due to the high levels of anxiety linked to their own intellectual confidence (Harrison & Howard, 2009). As such, pupils might be shy about putting their hands up in class or feel insecure about exposing their misconceptions to their peers and teacher (Elliot, Hufton, Willis & Illushin, 2005). Pupils may

perceive themselves as unconfident and are therefore reluctant to participate in class, displaying avoidance performance goals (Patrick & Turner, 2009). “Ego-involvement” defines how a child relates learned experience to their identities as learners; negative feedback triggers withdrawal from classroom participation and confidence levels decrease (Harrison & Howard, 2009, p.7). This can have equal effect on both the high and low-attainers causing avoidance to class discussion (Harrison & Howard, 2009).

Common belief suggests ‘hands up’ in class portrays that pupils know the answer, but research suggests children are compelled to answer the teacher and often guess, hoping their response is what the teacher expects (Rowe, 1986). Impulse to participate in lessons can also be due to personal experience; good experience generating the desire to repeat and bad experience stimulating avoidance (Rudduck & McIntyre, 2008). This related to Social Learning theories and Skinner’s (1985) theory proposing behaviour is shaped according to learned experiences; good behaviour warrants praise, therefore generating motivation to repeat the action to repeat the reward (Winokur, 1971). To continue, research suggests that hands up participation may be limited after the first initial pupil response due to the slow process of dialogic information (Pescarmona, 2014). Thus, primary school children are often unable to process information and construct reasoning from dialogue quick enough to formulate a response (Pescarmona, 2014). Consequently, pupils are perceived as not participating, but actually, they might not have grasped the developmental skills and knowledge to immerse themselves in continuous dialogue (Whitebread, 2012).

### **Engagement and rewards**

There is a common misconception that those who are motivated to participate in class are defined as a “successful achiever”, whilst those who do not participate are defined unsuccessful (Turner & Patrick, 2004, p.1759). In terms of considering motivations for pupils to actively participate in lessons, research shows children are more likely to be engaged when they enjoy it (Rudduck & McIntyre, 2008). To further support this, the Goal Theory suggests that motivation to vocally and voluntarily participate in a lesson is not only due to individual pursuits, but also the surrounding classroom environment (Turner & Patrick, 2004). It can be argued that when a question is answered and the pupil receives praise and peers view that pupil as ‘clever’; children convert praise to “looking smart” (Turner & Patrick, 2004, p.1762). There is a trend of outperforming peers and increasing self-efficacy (Turner & Patrick, 2004, p.1762) in which Pintrich and Schunk (2002) label

pupil participation as intrinsically or extrinsically motivated. Children who often have their hands up could be described as intrinsically motivated, closely relating to mastery goals and ownership of learning (Turner & Patrick, 2004). Conversely, some children only participate in class if there is a reward, consequently they are extrinsically motivated, linked to social learning theories of learned experience; if 'good' learning is praised the action is repeated (Rudduck & McIntyre, 2008).

### **Classroom culture, peers and time for talk**

Some research suggests that if pupils are given peer talk time before they are expected to answer the teacher's question, pupils might feel more confident answering a question in front of the class having been able to discuss their answer (Harrison & Howard, 2009). This allows pupils to confer ideas, key vocabulary and construct reasoning; this might increase confidence to participate in class (Rowe, 1986). New learning approaches insist on the importance of 'talk for learning', in particular the significance of teacher led questioning to gauge where the learner's knowledge is currently at and to further enhance their understanding (Harrison & Howard, 2009). A study on wait time conveys that a pupil usually answers a question within one second and the teacher also responds to that answer within one second (Rowe, 1986). If wait time is increased by up to three seconds it can improve the use of language, reasoning and cognitive skills (Rowe, 1986). It is proposed that when children are given the opportunity to talk or participate within a class they are not always given the time required to construct a reasonable answer, consequently limiting the range of responses and potentially deterring pupils from participation (Cullingford, 2007).

Theories suggest that in order to achieve high levels of classroom participation and contribution from a wide range of children, the teacher must have created a positive classroom culture within a growth mindset (Elliot, Hufton, Willis, & Illushin, 2005). Pollard, (2006) conveys that learner identities are composed through social interactions in the classroom. Thus, status is validated through vocal involvement; perceptions of being clever associated with 'hands up' (Pollard, 2006). Willingness to put hands up in lessons might improve if there was a supportive network of peers (Pollard, 2006). Studies show that the likelihood of children participating fully in classes is largely dependent on the teacher-pupil relationship in that particular class (Rudduck & McIntyre, 2008). Interviews with primary school children found that interpersonal relationships with class teachers played a vital role in the motivation to want to participate, or to have the confidence to publicly share ideas within the classroom environment (Rudduck & McIntyre, 2008).

## **No hands up policy**

Removing the hands up policy could minimize the pressure of participation and positively engage pupils (Harrison & Howard, 2009). A ‘no hands up’ policy links to the concept that an increased wait time should allow a large majority of the class to answer a question without having to put their hands up (Rowe, 1986). However, it is possible to argue that this may cause anxiety for pupils who are shy or perhaps do not know the answer and display avoidance performance goals (Patrick & Turner, 2004). To counter this, there are suggestions to enhance a ‘no hands up’ policy by introducing a system like coloured cards, for example: a red cards means the pupil does not know the answer and a green card displays the pupil does know the answer (Harrison & Howard, 2009). Pupils are given an element of choice here, in which Fisher (2013) argues plays a positive role in the construction of learner identities. Although, this is a good way of formative assessment for the teacher, it could be argued this process highlights the children with low confidence or who frequently do not know the answer, thus consequently you are left with the green cards from the dominant peers, much the same as a hands up policy. So how do we counter this? Research returns back to the role of classroom climate and the enforcement of a safe and encouraging learning environment (Pollard, 2006).

## **How participation is perceived – a view of the teacher and pupil**

‘Hands up’ participation is very much perceived in alternative ways, particularly in comparison to the pupil and the teacher (Cullingford, 2006). Observations of pupils convey those who do not put their hand up as frequently are disengaged from the lesson and excluded from the learning process (Harrison & Howard, 2009). To describe constant ‘hands up’ as defining participation should not be considered a true reflection of primary schooling (Pollard, 2006). Research conveys that participation occurs through in-depth dialogue with peers, however some children find this a difficult concept to grasp without the social interactive skills in place, thus their voice can only be heard through a hands up policy (Pescaroma, 2014).

## **Methodology**

In order to explore pupils’ perspectives on voluntary classroom participation, specifically in regards to the ‘hands up’ approach, it was necessary for this case study to gain both qualitative and

quantitative components in order to provide extensive, rich data (Stake, 2000; Bell, 2010). Due to the nature of a case study, it was important to define and identify the case to be used (Hamilton, 2011). The identified case consisted of a Year Four class of 25 pupils (14 boys and 11 girls) aged 8-9 years old. The focus age group is mid Key Stage Two. This group proved to be a particularly interesting focus age for the study due to their emerging awareness of Goal theory; the increasing influence of peers as well as individual goals in terms of voluntary participation (Turner & Patrick, 2004). The case study took place in a small single form village school in rural Cambridgeshire in which I was teaching Year Four where I had access to data and appropriate clearance to conduct research.

### **Research design – quantitative**

A sample size of 25 completed a short online questionnaire consisting of ten short multiple-choice questions. This questionnaire used a qualitative component at the end of the survey in which participants could share ideas, keeping pupil voice and perspectives at the centre of the research (Fisher, 2013).

Year Four completed the questionnaire at the start of a Computing lesson. Computers made the questionnaire accessible for all the pupils; pupils could ask for an adult to read the question to them if required (Bell, 2010). Personally distributing online questionnaires minimised writing barriers, allowed briefings and questions, and gave children a sense of privacy and anonymity (Bell, 2010). The survey aimed to ascertain pupils' perspectives on the most common influential factors of voluntary 'hands up' participation including, peer and teacher influence, curriculum exploration and other motivations such as team rewards.

### **Research design – qualitative**

From the 25 pupils that took part in the questionnaire, two smaller focus groups were selected (three in each group). These focus groups consisted of three key parts. Both groups completed a mind map exploring what participation is (Appendix 1) and a card sorting exercise in which pupils sorted cards into two columns, 'I am participating' and 'I am not participating' (Appendix 2). These activities were used to generate discussions prior to the interviews. Finally, a semi-structured interview took place in which pupils discussed the motivations of 'hands up' participation, linked to identity and influential factors (Appendix 3).

The qualitative approach was inspired by Fisher’s (2013) semi-structured interview used for gaining enriched data in regards to pupils’ perspectives and conveyed the benefits of using a prompt sheet, as opposed to rigid questions. This encourages rich dialogue as a result of open-ended questions that aid an informal atmosphere and keep the pupil voice at the centre of research (Fisher, 2013). In contrast to this methodological approach using individual interviews, this case study, see Table 1, uses two focus groups (three children in each group, each group had one child of observed average participation) in order to generate pupil led discussions.

	Numeracy level	Writing level
Group 1		
Gemma	3A	3B
Jake	3C	2A
Zach	3C	3C
Group 2		
Harry	2B	2C
Sally	2A	2B
Josie	2B	2B

*Focus Group One: children who often put their hands up in class.*

*Focus Group Two: children who did not put their hands up as often.*

**Table 1. Numeracy and Writing levels for Focus Group One and Two**

Focus groups were arranged in order to minimise certain pupils dominating conversation, which allowed every child equal opportunity to engage in discussion (Elliot, Hufton, Willis, & Illushin, 2005). These focus groups were intended to gain a deeper understanding into how participation links with learner identity and perceptions of themselves as learners and their peers. Research suggests rich qualitative data comes from discussion between peers, and children are put at ease when they have peer support (Graue & Walsh, 1998).

### **Approach to analysis**

Data from the case study intends to analyse the link between ‘hands up’ participation and learner identity; does the perception of self and peer participation reflect perceptions of ability? Quantitative data was analysed in terms of modal responses and the theories linked to this. Data was also briefly analysed by gender and responses compared against assessment data. Finally, qualitative data was analysed according to pupil perspectives in regards to confidence and motivation. These responses were quantified and comparisons were drawn between Focus Group One and Two, as well as reflecting back to quantitative results. The findings are analysed in two



sections referring to the two focus research questions. The mixed methodology intends to explore pupils' perspectives by using discussion as a tool to promote student voice (Fisher, 2013).

## **Ethics**

Case studies consist of an in-depth examination of a specific area of concern within a wider context, as such the ethical concern regarding education is particularly high (Stake, 2000). The methodology used for this research adheres to British Educational Research Association's (BERA, 2011) guidelines in regards to the ethical concerns when conducting research with children in primary schools.

### **Consent and anonymity**

As Lewis and Lindsay (2000) comment, ethical consent was gained from the Headteacher to ensure the safeguarding of children and research aims were discussed. Permission was granted for the use of audio recording equipment to be used during interviews as well as consent from parents/carers and the class teacher (Denscombe, 2002). Furthermore, it was important to gain informed consent from the pupils prior to participation (BERA, 2011). The Year Four class were fully informed of the research and the role they had been asked to participate in. The purpose of the research was explained, terminology was defined (i.e. 'participation') and pupils could ask questions. From this, pupils were also given the option to withdraw from the data collection process and were informed that their participation was completely voluntary (Fisher, 2015). The online survey required pupil names to enable their responses to be cross-referenced with assessment data, particularly when analysing the assessment data correlations with online survey responses from pupils that participated in the focus groups. However, BERA (2011) and Fisher (2013) also state the importance of ensuring that the participant's anonymity is kept at all times, therefore real names were removed from all data after analysis.

### **Sensitivity, trust and confidentiality**

As this case study researched pupils' perspectives and involved the participation of children, it is important to take into consideration the sensitivity linked to the research (Stake, 2000; BERA, 2011). The case study involved subjects linked to self-esteem and perceptions of themselves as

learners, which required the creation of a sensitive environment (Fisher, 2013). Because of this, interviews had to be non-intrusive and open ended in order to respect pupil privacy and allow participants to lead the conversation to issues they were confident with (Stake, 2000). All pupils were told their confidentiality would be maintained throughout the research project and any information divulged would be kept confidential (Blaxter, Hughes & Tight, 2010). In addition, pupils were told that any data collected via the online survey or interviews would be destroyed on completion of the research (Fisher, 2013)

### **Professionalism**

Due to the dual role of teacher and researcher, it was important to consider issues related to objectivity and neutral mindedness (Denscombe, 2002). Fisher (2013) argues the importance of the ability to accurately interpret information collected. However, being both the researcher and teacher improved participant-interviewer relationship (Fisher, 2013) and also allowed data to be analysed with a deeper understanding of classroom participation (Stake, 2000). This positive relationship encouraged participants to share honest information in a trusting and safe environment (Fisher, 2013).

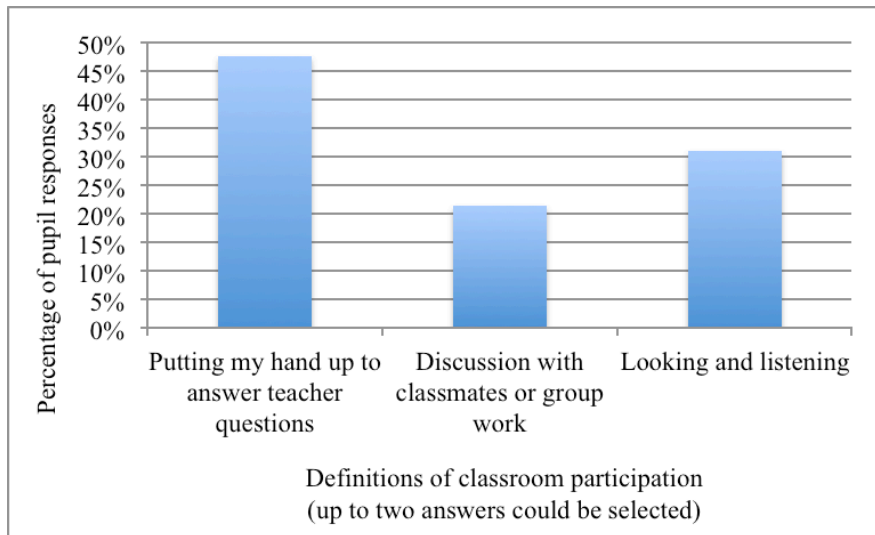
### **Research Findings**

The findings from the case study will be discussed in two parts referring to the two main research questions. Each section will present the findings from the quantitative results and then qualitative results.

#### **Research Question 1: How do pupils' perceive classroom participation, associated with hands up and its connection with learning?**

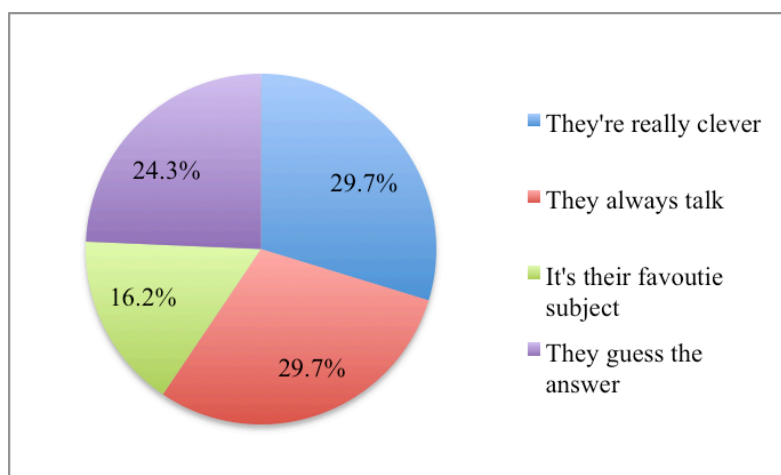
##### *Quantitative findings*

The online questionnaire sought to understand how pupils perceived the term participation associated with the 'hands up' approach and what this meant to them within the classroom. In terms of sample size (25 pupils) for the quantitative data, 56% of the sample were male (14) and 44% female (11).

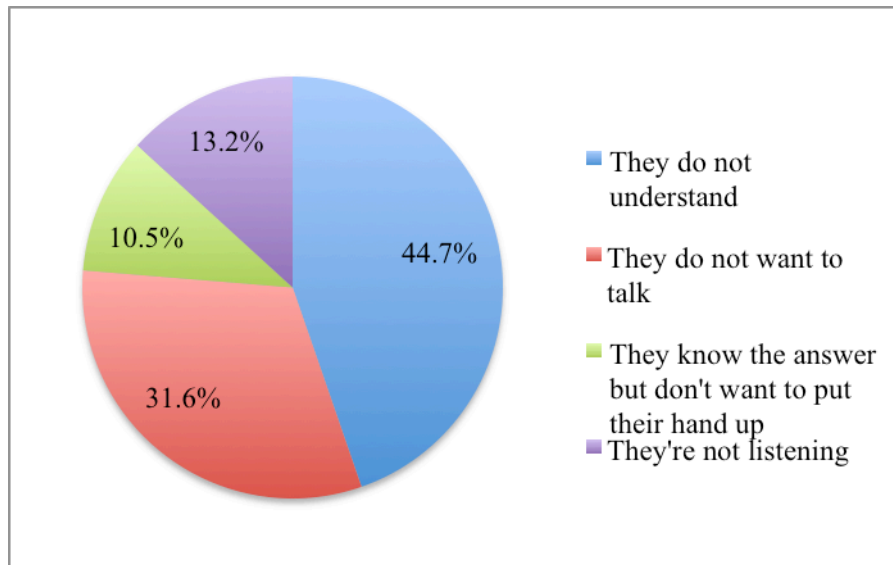


**Figure 1. What does participating in class mean?**

Figure 1 shows 47.6% of responses by pupils thought that putting their hand up to answer teacher led questions defined classroom participation. Interestingly, a lower percentage (21.4%) defined participation as discussion, yet 31% of pupil responses assumed looking and listening also meant participation. This could be a reflection of the teaching practice in the classroom (perhaps more focused on whole class discussion), or pupils' perceptions that small group discussions do not hold as much significance in terms of participation (Dinkmeyer and Dreikurs, 2000). The way pupils interpret the meaning of participation is further explored in their perceptions of peer participation. It is often easier for a child to comment on participation they can see in the class, thus removing themselves from the situation and reflecting on peer behaviour (Pintrich & Schunk, 2002).



**Figure 2. Pupil perceptions of peers who always put their hand up.**



**Figure 3. Pupil perceptions of peers who don't always put their hand up.**

According to Figure 2 an equal percentage of pupils responded that they perceive peers who always put their hand up to either be really clever or always wanting to talk. Conclusions could be drawn that pupils perceive confidence to talk in front of the class and ability as closely interlinked (Turner & Patrick, 2004). Figure 3 clearly shows a large majority of pupils think their peers do not put up their hands because they do not understand or do not want to talk as opposed to disengagement in the classroom. Here perceptions of peers are linked to competence as opposed to poor learning attitudes (Fisher, 2013)

### *Qualitative findings*

Both groups were asked to mind map (Appendix 1) what participation is and then complete a card sort activity (Appendix 2). During both activities, each group had a common understanding of classroom participation and discussed the idea of how 'not looking' during teaching input could be classed as not participating. However, the groups counter-argued that they don't always have to be looking to be participating. From this, small-scale semi-structured interviews took place in a discussion based format (see Appendix 3).

During discussion about hands up participation, Focus Group One unanimously described putting their hand up as something they should do only if they know the correct answer. Gemma commented, "Well my hand is always glued to the air...I think of myself as very clever."

(Appendix 3, section 1). When quizzed on her opinion Gemma went on to protect her learning identity and said, "I'm a very good reader for my age, did you know that?" (Appendix 3, section 2). This could suggest that Gemma associates hands up learning with both confidence and competence, further demonstrating personal performance goals and having an awareness of her ability in comparison to her peers (Turner & Patrick, 2004). In terms of perceptions of learner identity, Josie in Focus Group Two reconfirmed this view on 'hands up', as "Only really for the children that are smart or have done a lot of practice at home." (Appendix 3, section 5). Josie equates children with their hands up to be clever because of the amount of work they do and the support they have at home. Interestingly, Josie rarely hands in homework indicating she has a lower image of her learner identity. Thus, self-efficacy plays effect here; pupils with high self-efficacy are more likely to participate (Pintrich & Schunk, 2002).

To continue, in terms of perceived participation, both focus groups also commented on those who do not participate in class. Focus Group One largely saw participation avoidance as associated with intelligence level. For example, Gemma said, "Yeah, but if you don't participate then your not clever and you're very boring. You have a bad attitude. " (Appendix 3, section 3). Jake and Zach both supported Gemma's comment, but added that those who don't have their hand up don't understand. In contrast to this, although Focus Group Two suggested regular participation is connected to ability, they explored a deeper meaning between understanding and differing levels of ability within the classroom. Sally referred to one child, Nick, as the "cleverest one in the class" and the pupils in this group discussed a time when Nick didn't get the answer correct. Sally said, "I think it means that everyone has different levels of knowing stuff." (Appendix 3, section 7 and 8). This suggests participation will vary according to pupil knowledge, or their engagement within a particular subject and classroom communication differs (Young, 1992). Furthermore, Josie and Harry both commented that if the class were taught a topic they knew about then maybe their peers would view them differently. For example, Josie said, "If we had a lesson about Portugal I think people would think I was clever too." (Appendix 3, section 9). This suggests pupils view the interaction and engagement of their peers in a lesson and attempt to place them on a tangible intellectual scale (Pintrich & Schunk, 2002). The most significant finding from interviews with Focus Group Two would be the emphasis the pupils placed on self-confidence stemming from what they considered a negative learning experience. This mirrors Rudduck and McIntyre's (2008) findings and suggests that the pupils from this focus group often exercise the avoidance theory during lessons, withdrawing from classroom participation through fear of failure.

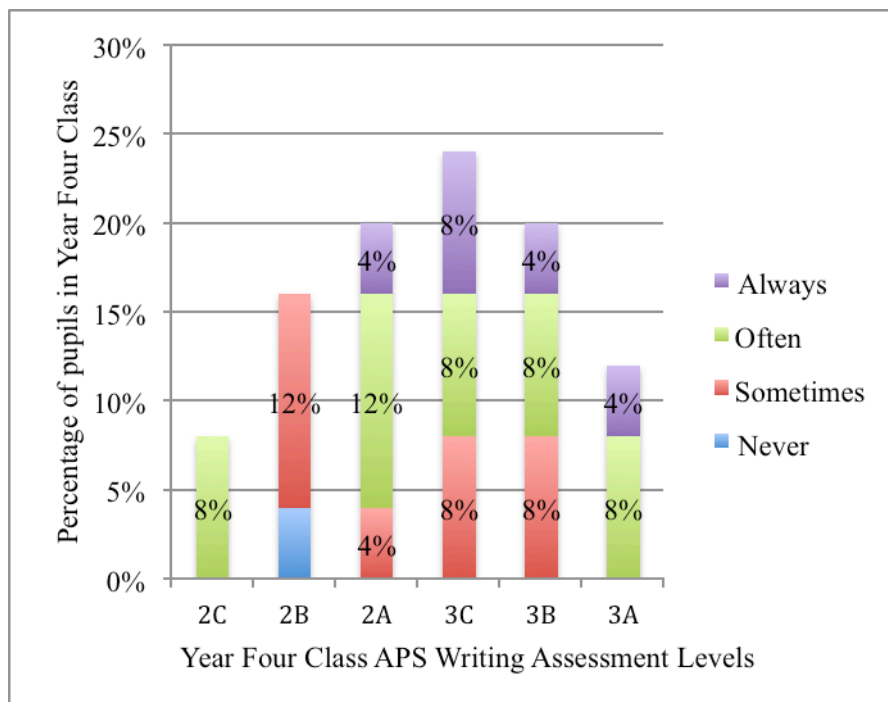
**Research Question 2: What are the main motivations for participating/not participating in a classroom setting?**

*Quantitative findings*

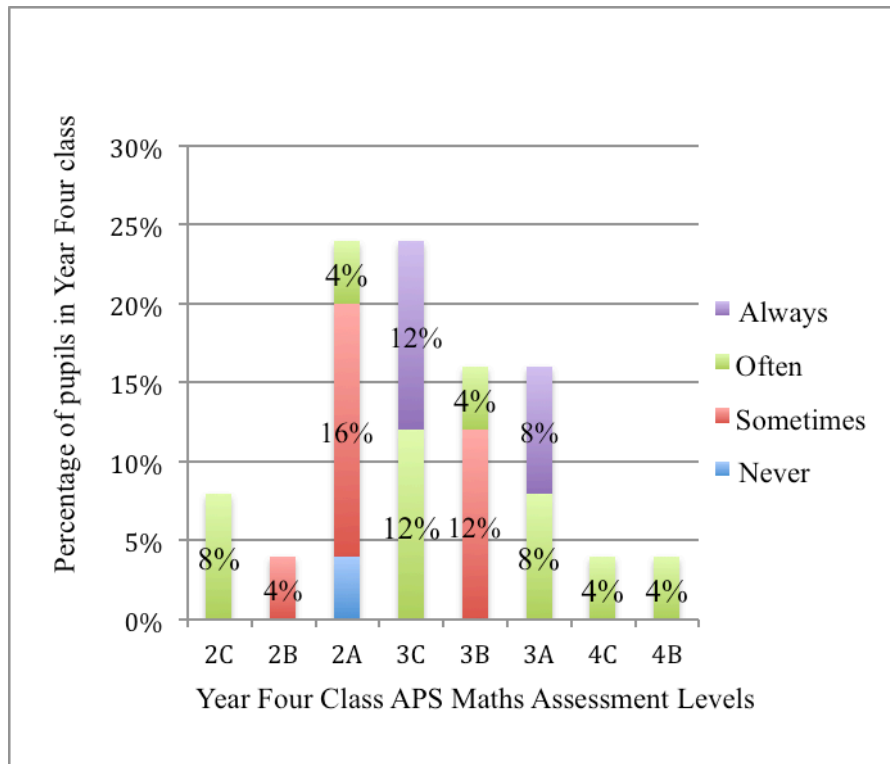
Pupils were asked how regularly they put their hands up in class and responded as follows:

4% never      32% sometimes      44% often      20% always

The option selection for this question could be subject to interpretation. However, the category ‘often’ was intended to positively represent participation and ‘sometimes’ as a more negative representation. These results suggest 64% of children perceive their participation as relatively regular, but a large percentage (32%) thought their participation was less than regular. In terms of the research question, this response was analysed against assessment data to see if response was linked to assessment levels. (Figures 4a & 4b represents Average Point Score (APS) levels for Writing and Mathematics respectively).



**Figure 4a. Relation between perceived participation and assessment data in writing.**



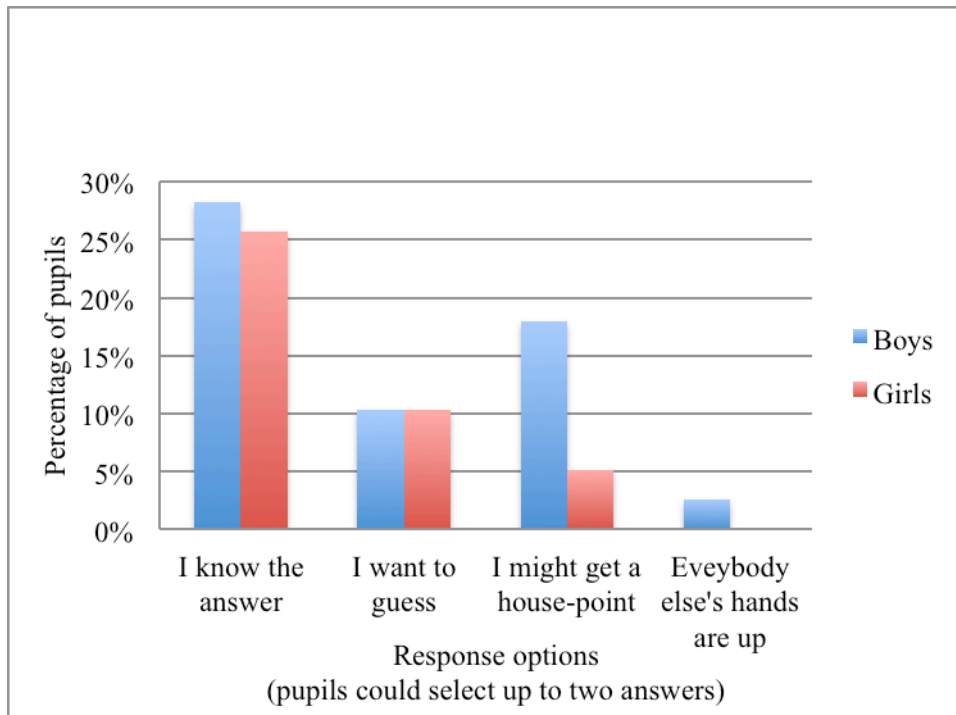
**Figure 4b. Relation between perceived participation and assessment data in numeracy.**

For this assessment data, many of the pupils remain in the same level for writing as they do in numeracy, however, there is some movement within this. Assessment data for writing, suggests that children who perceived their participation to be ‘always’ were predominantly from higher achievement levels (2A-3A). This could reflect back to participation linked to ability, or perhaps confidence levels within a certain subject (Turner & Patrick, 2004). Interestingly, only one child responded as ‘Never’ at a level 2B. This particular child struggles with writing and has very low confidence levels which could translate to Turner and Patrick’s (2004) performance avoidance goals; withdrawal from participation is dependent on confidence and competence. In terms of numeracy data, the spread of participation rate across the levels varies in an interesting way. Pupils who claimed to ‘always’ participate were found in the middle ability groups as opposed to the higher ability group. This contrasts with findings from Figure 2 and could suggest that in terms of participation there is not always a link between attainment and confidence. However, across both graphs the response for ‘often’ participating was largely spread across all levels. As there are a high number of middle ability pupils for both writing and numeracy it could suggest that pupils have a shared learning network with their peers, in which similar ability peers feel comfortable sharing ideas with the whole class (Pintrich & Schunk, 2002). Despite being told to answer these questions

without being subject specific, when children were asked how often they participate in class they may have responded with one question in mind, thus these results may not show a true reflection; participation may vary across subjects.

To continue, this quantitative data found that 52% of these Year 4 pupils felt they sometimes had to participate in class, despite not wanting to (Appendix 3). Only 8% felt they never had to participate, 24% said often and 16% said always. Thus there is a large proportion of pupils who felt a pressure to participate which relates to the classroom climate in practice, particularly in regards to “teacher-student interactions.” (Pintrich & Schunk, 2002, p.323). To further explore motivations for putting hands up, 54% of pupils said they would participate more in lessons they found enjoyable and 31% said they’d take part more if the lesson was easy (Appendix 5). This could convey that motivation relates to enjoyment and ease, thus supporting Tuner and Patrick’s (2004) performance goals; motivation comes from demonstrating competence. Due to the gender imbalance of the sample it was important to compare pupil motivations across gender. Figure 5 shows that the vast majority of pupils (28% of boys and 25% of girls) choose to put up their hand in class because they know the answer. Again this strengthens Turner and Patrick’s (2004) findings that pupils participate according to competence; learners seek the need of confirmation to increase their self-efficacy. Furthermore, 18% of boys stated their motivation to participate was heavily influenced by a reward in comparison to only 5% of girls. This could suggest that boys are more extrinsically motivated by rewards and peers (3% of boys would participate if other hands were up) whereas girls were more intrinsically motivated in regards to personal goals, ability and enjoyment (Pintrich & Schunk, 2002).





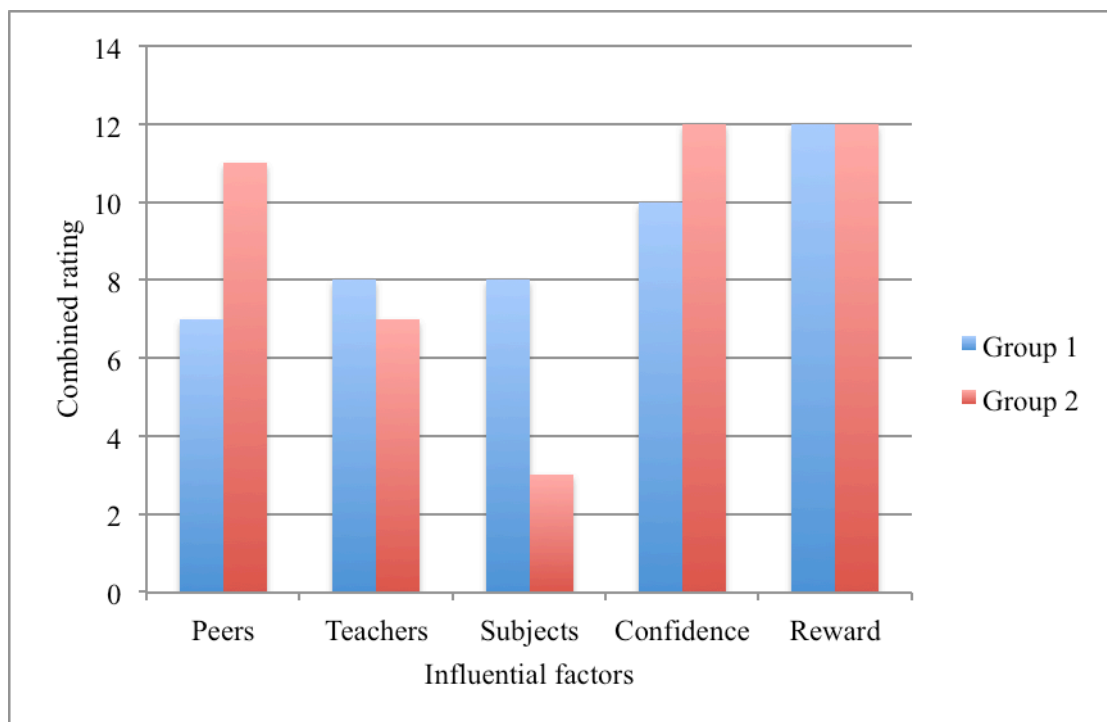
**Figure 5. A gender comparison to show pupil responses as to why they choose to put up their hand.**

In terms of participation and motivational influences there was a mixed response across both groups. A five-point scale was used (1 least influential and 5 most influential) to quantify the factors that influence participation in the classroom and compared across both groups. Figure 6 shows that for both groups, their confidence, both academically and socially, as well as rewards were the most influential factors. Results indicate that Focus Group Two were more influenced by peers than subjects, whereas Focus Group One’s results were reversed. As Focus Group Two had a higher response for confidence and peer influence, it could be suggested that these two factors are interlinked; some children may withdraw from participation due to the anxiety towards how their peers will perceive them, thus peer socialisation plays a key role (Elliot, Hufton, Willis, & Illushin, 2005, p.118).

*Qualitative findings*

During discussion, all children in Focus Group Two confessed to feeling shy putting their hand up in class and spoke of feelings connected to embarrassment. For example in regards to getting the wrong answer, Harry commented (Appendix 3, section 10), “Yeah like on my table they look at me funny.” This clearly relates back to Skinner’s (1985) theory of learned experiences. Because the

children in Focus Group Two experienced negative emotions connected with participation (i.e. embarrassment), they now associate negative feelings to putting their hand up and avoid these situations (Rudduck & McIntyre, 2008). Conversely, in Focus Group One Gemma and Jake described what could be conveyed as a competitive motivation to participate: Jake said, “Like when Andrew puts his hand up I always do too! We try to get the house point first!”(Appendix 3, section 4). This could convey a multiple goal theory relating to performance goals concerning their performance compared to peers but also the extrinsic motivation through reward (Turner & Patrick, 2004). Figure 6 shows that both groups are equally extrinsically motivated in this way.



**Figure 6. Factors influencing classroom participation.**

Unexpectedly, Focus Group Two discussed the influence of the peers they sit with. They referred to their afternoon seats (mixed ability) and Josie commented that her peers on this table laughed at her when she got the answer wrong. This was a finding not supported by the more confident children that may suggest that pupils who avoid participation and are less confident and so might associate with like peers to receive affirmation and increase confidence (Elliott, Hufton, Willis, & Illushin, 2005). Harry in Focus Group Two suggested he never gets picked when his hand is up, or he waits so long he has forgotten what he had to say. This mirrors Young’s (1992, p.3) research that pupils are sometimes withdrawn from participating due to the “rule-governed”, “turn-taking” approach

instilled in the classroom. Thus, due to the age of the sample, the pupils have not fully developed their short-term memory skills and therefore don't have the ability to hold onto an idea internally until they are allowed to speak (Whitebread, 2012). Finally, both groups made vague references to teachers and stated they would participate depending on the teacher. Zach stated: "I put my hand up for proper teachers." (Appendix 3, section 5). This is an interesting point that student-teacher rapport can have a significant influence on pupil participation (Elliot, Hufton, Willis, & Illushin, 2005). Focus Group Two further suggested they were more likely to participate if they felt comfortable with the teacher, thus relating back to a growth mindset classroom culture (Harrison & Howard, 2009).

### **Summary**

To conclude, in terms of pupils' perspectives, the quantitative data reflected the notion that participation somewhat aligns to ability, in which both focus groups from the qualitative data confirmed. Thus indicating a stable triangulation from both methods. From these findings, those children who are particularly confident to participate in the classroom are less concerned with the way peers perceive them, however, they are more likely to compete with peers to demonstrate their competence (Patrick & Turner, 2004): a main motivational factor which reaffirms their identity as learners.

### **Critical Reflection on Research Methodology**

First and foremost, it is important to note that this research was constructed as a case study: a specific study focusing on a small group (Stake, 2000). It is relevant to discuss here the limitations of this case study and the drawbacks of particular findings in regards to 'hands up' participation. As Stake (2000) proposes, this case study cannot draw broad generalisations that can be applied to other Year Four classes due to the small sample size (25 pupils for the online questionnaire and 6 pupils for the focus groups) and the lack of SEN or EAL pupils involved in the study. Furthermore, referring back to the questionnaire, in relation to Figure 5 (refer to research findings) which compares motivations for participation with gender, the findings suggest boys are more extrinsically motivated by peer influence and rewards than girls. However, it is important to consider the gender imbalance within the sample (Denscombe, 2002) and the limited ethnic background of the class. Thus the results are positively skewed towards white British male pupils

and are not representatives of the Year Four population. Due to the focused aim of this study, generalised conclusions cannot be drawn from this research (Bell, 2010). However, this shortcoming does not limit the validity and value of this research as the case-study focuses on in-depth perspectives and seeks to convey results according to specific aims (Hamilton, 2011; Stake, 2000).

The use of mixed methodologies provided rich and detailed data for analysis, which enabled research into pupils' perspectives (Hamilton, 2011). Qualitative methods often pay reference to the rapport built between the researcher and participant: if the participant feels secure and comfortable they are more likely to participate honestly (Hamilton, 2011; Pollard, 2006). However, participants may have blurred the role of researcher and teacher and thus manipulated their answers to suit their own motives (Fisher, 2013). Alternatively, researching children's perspectives always creates a separation between child and researcher: the researcher is placed in the category of 'other' as there is no fundamental bond of similarity between the two (Graue & Walsh, 1998). Likewise, the interpretation of questions (particularly in the questionnaires), as well as the capability to construct well-articulated answers could be misinterpreted due to pupil age and development (Whitbread, 2012). The scale used to collect motivational responses from pupils in the focus groups utilised a five-point scale in which pupils made decisions as to the influence each factor has on them. Much like a Likert Scale, this is subjective to each participant (Bell, 2010). Furthermore, categories such as 'rewards' in both methodological components are also subjective and require interpretation from the child (some interpreted it as a prize, stickers or extra play time). To continue, Figure 4 (refer to research findings) aims to analyse the relation between assessment levels for writing and numeracy with pupils' perceptions of how regularly they participate. However, it is important to note that participants were asked broadly how often they think they put their hand up and were not told to relate this specifically to a subject. Perhaps if participants were asked to specify subjects, participation rates may have been different and somewhat more accurate (Turner & Patrick, 2004).

## **Research Implications**

In terms of professional development, this case study has provided a wealth of in-depth knowledge into how some Year Four pupils perceive their own learning identities, as well as that of their peers through 'hands up' participation in the classroom. This research has found that perspectives differ according to confidence and what the pupil regards as the most influential factor. Although

individual characteristics and approaches to learning are difficult to adapt, this case study suggests similar findings to that of Tuner and Patrick's (2004) research in terms of motivational influences on student learning: pupils are continuously influenced by classroom environmental factors and their attitudes to learning thus depend on this environment. The case study on Year Four 'hands up' participation approach suggests engagement behaviour can be adapted according to the manipulation of classroom culture (Turner & Patrick, 2004): embedding a growth mindset within classrooms could improve pupil confidence and participation within lessons (Hansen, 2014). For this Year Four class, embedding growth mindset could stimulate active learning and participation (Hansen, 2014) and minimise the influence of peer pressure and low confidence by altering their perceptions of their own learner identities.

The implications from this study suggest that despite influential factors on 'hands up' participation, the diverse factors can largely come under a branch of classroom culture (Harrison & Howard, 2009). In order to encourage children to actively speak in whole class settings it is important for the child to feel secure, confident and embedded within a growth mindset (Fisher, 2014). Although this case study showed assessment data and participation rates do not positively correlate in a traditional way, both qualitative and quantitative data did suggest peers with less academic confidence were less likely to participate. Therefore, classroom culture alone cannot be solely responsible for influencing 'hands up' participation levels (Elliot, Hufton, Willis, & Illushin, 2005). However, if pupils felt confident to participate and trusted that the classroom climate respected all learning, it could observe a rise in participation (Pollard, 2006). In regards to pupils who frequently put their hands up, there was a pattern of competitiveness, displaying a more performance goal orientated approach (Patrick & Turner, 2004). It could be argued that a shift from performance goals to personal mastery goals, or dual goals, could encourage pupils to take more of an interest in their learning and become more intrinsically motivated to learn (Patrick & Tuner, 2004).

To conclude, in terms of personal professional development, findings from this case study have shown an insight into pupils' perspectives of 'hands up' learning and the positive and negative influential factors. In view of the stigma associated with 'hands up' learning and the low levels of confidence essentially marginalising a proportion of the class, it could be proposed it is time to move away from a 'hands up' culture, as well as reinforcing a positive learning culture within the classroom (Rowe, 1986). Much like Pollard's (2007) ethnographic study, future research might use longitudinal studies to explore participation linked to learner identity or use a larger sample size.

Alternatively, repeating another case study with the same Year Four class after efforts to encourage a growth mindset could convey whether learner identities have changed accordingly (Pollard, 2007). Learner identity is somewhat entwined within a mass of misconceptions in which pupils inaccurately equate intelligence with regularity of ‘hands up’ participation, generating negative self-esteem and damaging confidence (Pintrich & Schunk, 2002). Consequently, as a result of my findings I intend to encourage pupil engagement in future teaching with productive and explorative learning away from the ‘hands up’ approach and enforce a growth mindset in which pupils increase their self-esteem and develop positive identities as learners within a positive classroom climate.

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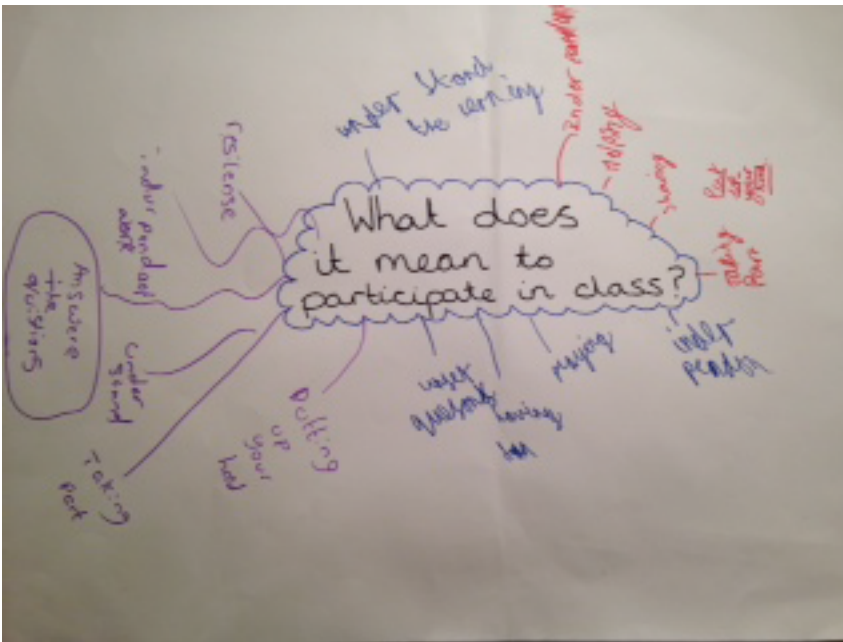
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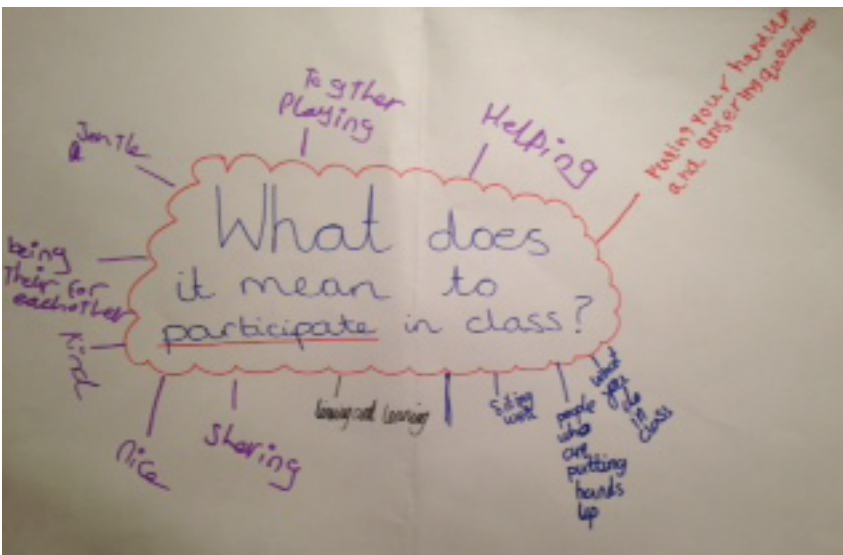


## Appendix 1

### Group 1 - mind map

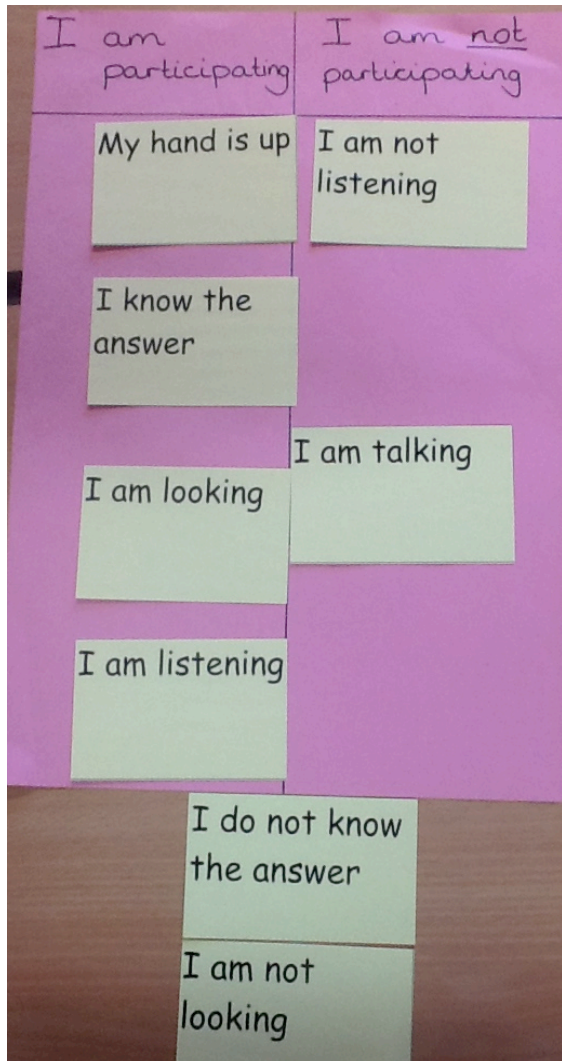


### Group 2 - mind map

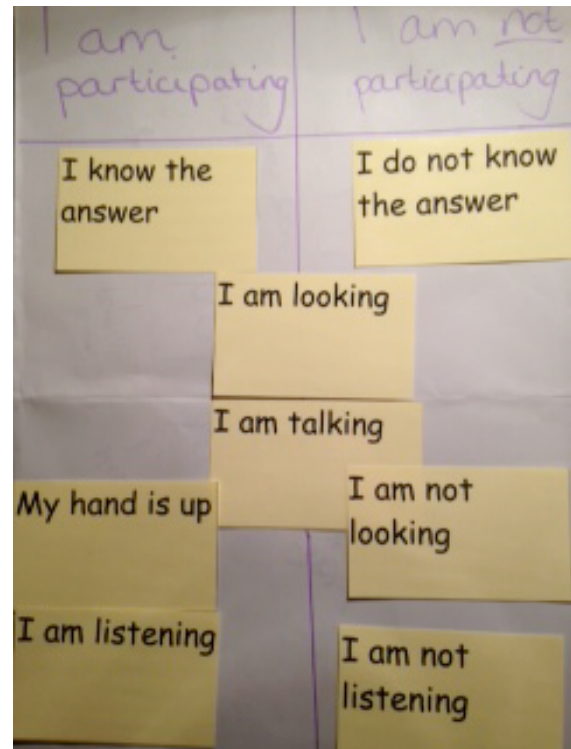


## Appendix 2

*Focus Group 1 – card sort*



*Focus Group 2 – card sort*



## Appendix 3

### *FOCUS GROUP 1*

#### Reasons for participation:

1. **Gemma:** Well my hand is always glued to the air. My hand is always up. I think of myself as very clever.
2. **Gemma:** Yes I am! The teacher always says I'm right Jake. I'm a very good reader for my age, did you know that? So I always do that 'parti-station' thing.
3. **Gemma:** Yeah but if you don't participate then your not clever and you're very boring. You have a bad attitude. It's obvious you don't listen.

#### Participation Influences:

4. **Jake:** Like when Andrew puts his hand up I always do too! We try to get the house point first!
5. **Zach:** No. I don't care about that. I put up my hand in all subjects. I'm good at all of them. I put my hand up for proper teachers. [Laughs].

### *FOCUS GROUP 2*

#### Reasons for participation:

6. **Josie:** Only really the children that are smart or have done a lot of practice at home. They always do their homework.
7. **Sally:** Like Nick always has his hand up. He is really clever. Like the cleverest one in the class actually.
8. **Sally:** Oh yeah! That made me remember actually. Nick did get something wrong in maths didn't he? [*Harry and Josie agree and become animated*]. But everyone works differently I think because we know different things. I thought he knew everything. But one

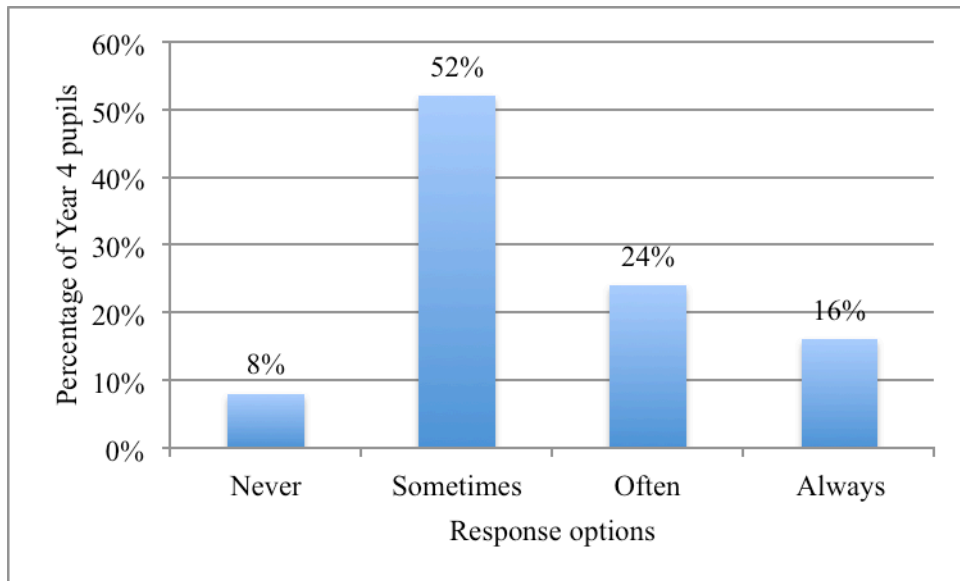
time he didn't put his hand up because he didn't know and I think that made him upset. Like, I think it means that everyone has different levels of knowing stuff. Yeah.

**9. Josie:** If we had a lesson about Portugal I think people would think I was clever too. I know everything about Portugal. I could answer everything!

#### Participation influences

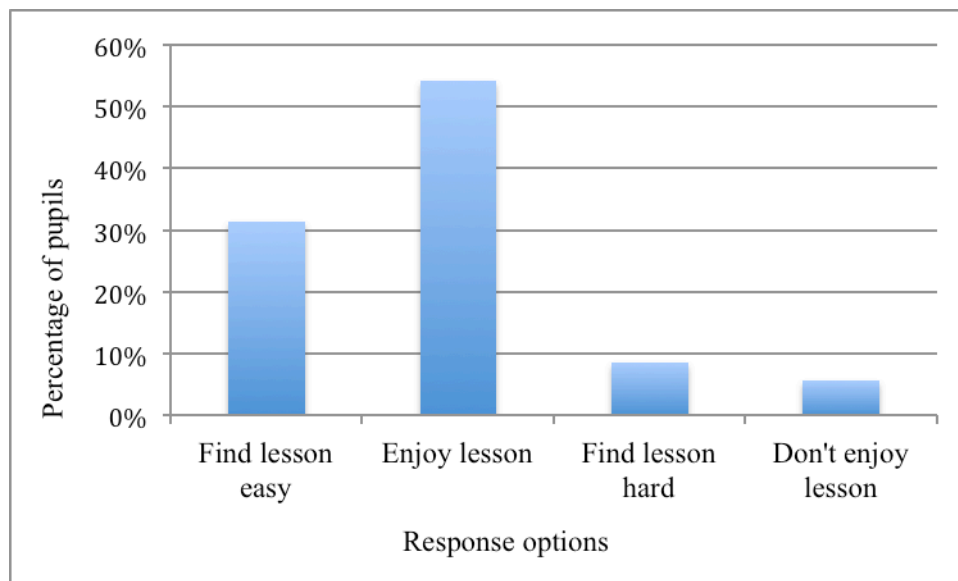
**10. Harry:** Yeah like on my table they look at me funny. Yeah. You know when the teacher says they'll give table points if a table can answer the question, sometimes I can't. I feel that embarrassed thing that she said.

## Appendix 4



**Figure 7. Do you feel you have to participate in class? Pupil response.**

## Appendix 5



**Figure 8. A graph to show when pupils are more likely to participate in class.**