

# The impact of attainment-based grouping on students' motivation and outcomes

Katarzyna Li 

Department of Education, University of Oxford, Oxford, United Kingdom

Received: December 1, 2023 / Accepted: July 31, 2024 / Published Online: August 12, 2025

© Pioneer Publications LTD 2025

## Abstract

In the UK (and countries that chose to base their education system on the English one) students learning foreign languages (FL) at school are often divided into groups based on their performance or predicted grades. Such groups or sets are being implemented with the intention of providing nurturing environment to the most gifted, and a supporting, non-judgmental environment for the lower ability students. Most commonly, students are assigned to sets based on their SAT scores (in math and English), and once assigned, it is not easy to change the group one was assigned to. Moreover, students are moved between sets in sets not only based on their ability and performance, but also based on behavior. This practice often leads to teachers' and students' perception of lower sets as groups where hardly any learning can place, either due to extremely high volume of varied special needs students clustered together, or interruptions caused by students' misbehavior. Simultaneously, higher set students frequently complain about unrealistic pace of the lessons, excessive volume of work and lack of explanations during their lessons, as the teachers tend to assume, they will simply figure it out on their own. This article presents the evidence from the UK and other countries suggesting that not only splitting the students based on their attainment or predicted grades creates unnecessary division by labelling students as "smart" and "dumb", it also does not benefit students' progress, harms their motivation, and, most importantly, limits their chances for development by limiting students' future based on metrics which are not directly related to their FL performance (to in some secondary schools lower sets students are not allowed to take GCSE in FL not to harm schools' statistics).

**Keywords** attainment-based grouping, setting in FL teaching

## 1. Introduction and rationale

Attainment-based grouping (also known as "streaming", "setting" or "tracking") refers to teaching students divided into stratified, homogenous groups, based on their attainment in a given subject (McCoach, et al., 2006) and it is particularly pervasive in language learning (Mazenod, et al., 2019). However, the question whether it is the best possible strategy to support learning remains unanswered. Knowing students' perspective in the specific environment could lead to improved designing grouping and have positive impact on students' attainment and motivation.

The enquiry aims to answer the questions: "*How does attainment-based grouping affects students' motivation and outcomes?*" To do so, first, a pertinent literature review is presented. Then, research methodology is explained. In subsequent section, results are presented and commented. Finally, conclusions regarding the enquiry are drawn.

## 2. Literature Review

McCoach et al. (2006) define two main categories of grouping arrangements: between-class and within-class. In within-class grouping the teachers divide students into more homogeneous subgroups, and divide their time providing adaptive instruction based on the students' expected attainment, while the other groups are engaged with student-led activities (Kim, 2012). Between-class grouping is a school-level arrangement, usually based on students' previous academic achievement (Kulik & Kulik, 1982). In foreign language teaching the latter is prevalent – students are either placed into different advancement level classes or placed into classes which have different goals (Sheppard, et al., 2018).

## 3. Attainment-based grouping and students' motivation

Some scholars agree that being placed in between-class attainment-based groups seems to lead to lower self-esteem and have detrimental effect on low-attainers' motivation (Slavin, 1990; Hallam & Deathe, 2002; Kim, 2012) as they tend to compare themselves to other students. Moreover, the lack of a high achieving role-

model might damage students' motivation, and leave them questioning the equity of the education system in the presence of deepening attainment gap (Saleh, et al., 2005).

By contrast, most recent studies from Japan show that in selective schools, where the students would have already been pre-grouped by the entry exams the academic self-concept of high achieving students grouped in a homogenous environment is negatively affected, due to being confronted with the presence of other high-achieving classmates. Consequently, the self-esteem of lower aptitude students rises in this context (Sheppard, et al., 2018). Sheppard et al., (2018) attributes this to having more realistic role model, reminding that low- and average-attaining pupils to not consider high-achieving classmates as role models. Thus, the success of someone of similar attainment level might increase others' motivation. This study however does not consider that in this context students are grouped based on level of advancement: basic, intermediate, proficient; rather than on the predictions regarding their ability for certain attainment, which might result in a self-fulfilling prophecy (Rosenthal & Jacobson, 1968).

Moreover, according to research, teachers observe that lower sets are rarely truly homogeneous, and often aggregate students with a range of learning needs or learning disabilities (Sheppard, et al., 2018), thus making it difficult to create a "one size fits all" lesson for such groups. Furthermore, teachers expect lower sets to be disaffected and display poor behaviour (Kim, 2012), which is why they tend to resort to structured tasks involving rehearsal and repetition (Hallam & Ireson, 2005). Teachers also tend to have lower expectations of their students, which may lead to giving them little possibility for discussion. Additionally, difficulty with engaging the students from lower sets over time might lead to loss of sense efficacy (Kim, 2012). Sheppard et al (2018) also concludes after Rogers (2002) and Darling-Hammond (2010) that teachers tend to be enthusiastic about preparing materials for gifted and talented, which is in line with Kim's (2012) observation that teachers who teach low attainment groups consider material preparation an additional strain and tend to become demoralised, which might be sensed by the students and impact their motivation.

## 4. Attainment-based grouping and students' outcomes

The main premise of attainment-based grouping is the belief that it facilitates collaborative learning, thus might increase academic achievement of the students. Kulik (1982) advocates that attainment-based grouping has a "small but significant" positive effect on achievement in exams. Saleh, et al., (2005) suggest that this result might be based on the premise that high-attaining students generate more cognitive conflict and in response produce more collaborative elaborations when grouped exclusively together, thus benefitting from setting. They also confirm following Lou et al. (1996) and Webb (1991) that average-attaining students attain more in homogeneous classes, as they receive more explanations, can collaborate better, and

in consequence play a more active role in academic discourse, which is crucial for effective language learning. However, some findings based on post-test scores of high and low-attaining students show that they benefit more from heterogeneous grouping (Saleh, et al., 2005). Simultaneously, high attainers would benefit from cognitive restructuring necessary for giving the explanations, and questions asked by low-attainers might trigger detection of knowledge gaps and misconceptions (Webb & Palinscar, 1996).

By contrast, according to Robert (2010) there is no evidence that working in homogenous groups increases pupils' attainment. Triggered by the notion of being of "lower ability", students may foster dependency on teachers leading to "learned helplessness" (Rosenholtz & Simpson, 1984). In line with this theory, Chang (1990) observes that lower sets' students tend to use inappropriate language learning strategies, which in result is detrimental to their learning. Kim (2012) points out that 32% of the interviewed students notice having significantly less opportunities to learn more challenging concepts.

Openly stating the expectations regarding the attainment has been proven to affect students' outcomes (Friedrich, et al., 2015). This phenomenon is called the Pygmalion effect. Furthermore, once placed in the lower track, the students have limited opportunity to become proficient in the language, thus limiting students' chance of academic success in the future (Sheppard, et al., 2018). In contrast, a Finnish country-wide case study presents clear evidence that mixed-group teaching can lead to high, yet equitable learning outcomes (Sahlberg, 2012).

## 5. Methodology and Methods

The enquiry aims to answer the question how does attainment-based grouping influence students' motivation. It was based on a comparative, mixed study approach where the answers of the students of top and bottom sets in year 9. Equally boys and girls participated in the enquiry.

### 5.1. Data Collection

First, selected classes were observed during their language lessons to establish behaviour baseline and learn about behaviours and interaction in students' natural settings (Bradley, et al., 2007). After that, students were given a set of anonymous questionnaires. This method was chosen to get an overview of students' individual opinions, which would be free of peer pressure or fear of potential retaliation. To make the questionnaire equally accessible to all students, it was designed in a form which would not require much writing, the questions were kept short, and the number of options to choose from was also kept minimal. The answers were placed on a numerical rating scale ranging from strongly disagree to strongly agree (1 to 5) (Appendix 1). The range of answers was chosen deliberately to represent varied enough options, but not to overwhelm the students with level of detail.

Finally, the students in each set were asked to participate in the semi-structured interview to generate qualitative research data. Data was acquired through participant observation direct, semi-structured in-depth

interviews. Individual interviews were chosen, since they are named to be the least anxiety-inducing, when addressing a sensitive topic (for example the stigma of being in a bottom set), and enable the students to express their opinions without fear of reprisal (Bradley, et al., 2007). The interviews were guided by a list of main questions, however depending on the flow of interview some of the questions were dropped, reworded, or asked in different order. Students were being interviewed on two separate days until enough data to represent a range of opinions. During the interview, a great deal of effort was paid to establishing good rapport, as it is believed that participants will only talk candidly if they feel comfortable and secure (Bradley, et al., 2007).

Additionally, a range pf probes were being used to elicit more information from the interviewees:

Table 1. Types of probes used during the interview.

Types of Probes	Action
silent	Nodding, tilting head
echo	repeating the statement and asking respondent to continue
direct	could you tell me more about it?
detail	wh-questions
clarifying	you said this, could you please explain what you meant by that?

### 5.2. Data Coding

The data was then categorized into sets of alike chunks representing the key attributes of the verbal information that were similar in different ways, further referred to as codes, which were then gathered into a code structure. The following framework was followed:



Figure 1. Data coding process.

Code structures were applied to data from the questionnaires and data collected during the interviews. The code structure development was based on an integrated approach, where initial codes (start list) were drawn from the literature review. This approach was chosen, as it retains benefits of inductive coding by

limiting the possibility of researcher forcing a preconceived result, at the same time acknowledging that certain types of codes are useful in directing data interpretation and analysis (Bradley, et al., 2007). Scheme of the code structure used for analysing the data and examples of use can be found below.

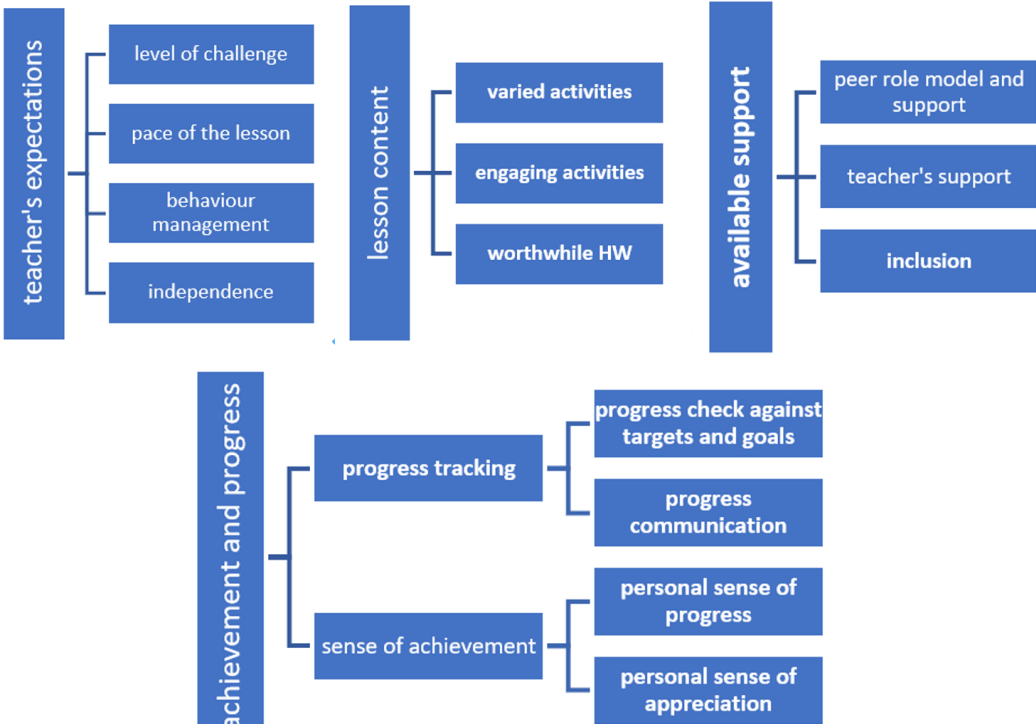


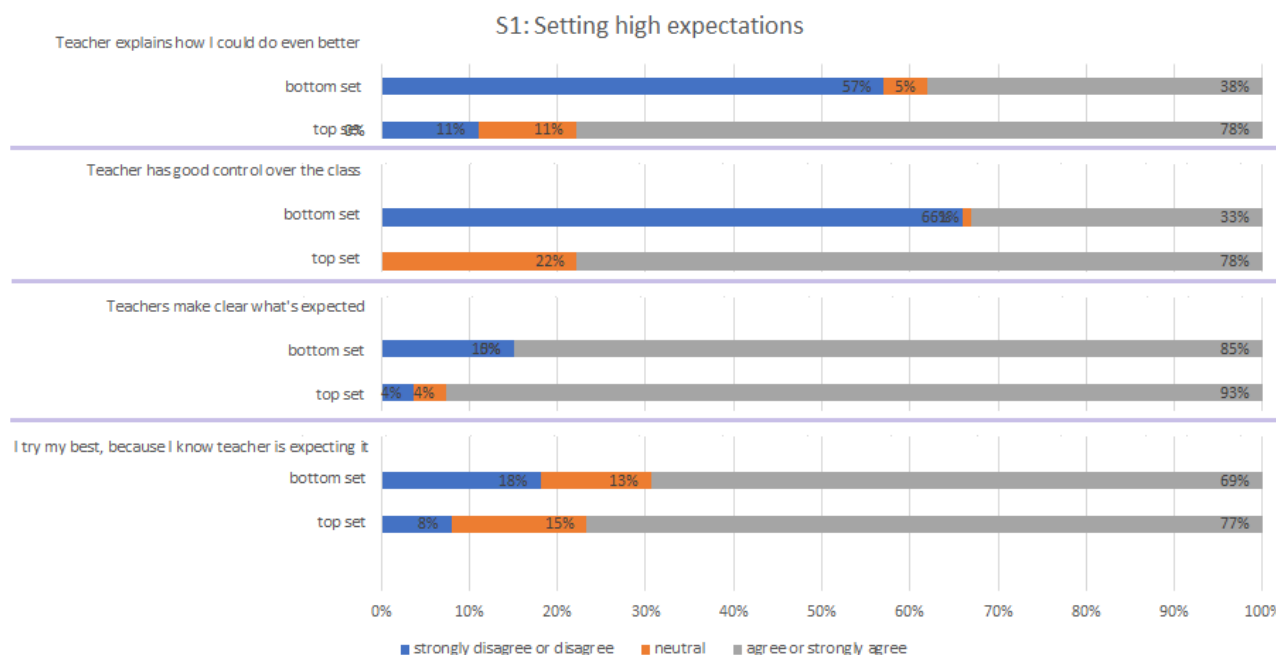
Figure 2. Code structures.

### 5.3. Analysis of Findings

Researchers name four factors which contribute to students' motivation in the classroom: (1) class atmosphere and settings, (2) methods of teaching, (3) interactions with the teacher and (4) success rate (Yusuf, et al., 2020). Data corresponding with these factors were then analysed in context of PGCE Teaching Standards. Below you will find the comparison of the perception of teachers' expectations in top and bottom sets, and information of students' perception regarding their progress and available support.

### 5.4. Expectations

Results of the questionnaire suggest that both top and bottom set students feel well informed of teachers' academic expectations. At the same time bottom set students feel that the teachers do not expect them to be successful, but rather to get by without disturbing the lesson. One potential explanation for the lower expectations might be the fact that the teachers of top sets are evaluated based on students' GCSE results, whereas bottom set students are not allowed to take GCSE in languages, thus demotivating not only the students but also the teachers.

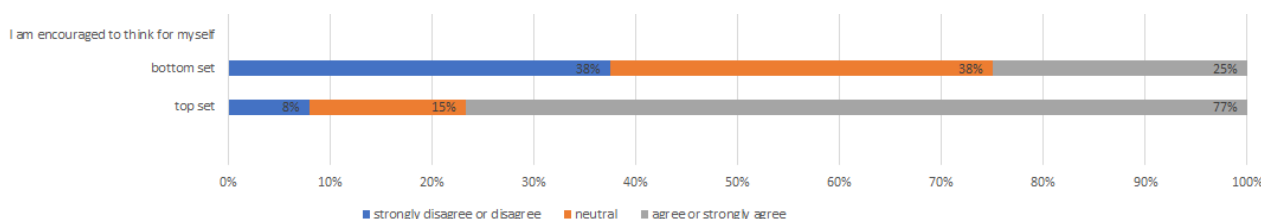


**Figure 3.** Students 'perception of teachers' expectations.

Most noticeable differences in terms of expectations are the expectations regarding behaviour for learning and students' independence. In top sets students are expected to follow the school policy, whereas in bottom set many infractions are overlooked, which might lead to demotivating and demoralising other students losing control over the class as a whole (Kim, 2012), especially, if students were moved to lower sets based on behaviour, not based on attainment. Students' comments confirm these observations (see Appendix 2).

Moreover, the results of the questionnaire and interviews clearly point that bottom set students in the school have significantly less opportunity to work independently. Figure 5 shows clearly that 80% of the top

set interviewees feel encouraged to work independently, whereas only 25% of bottom set students feel that they should take ownership of their learning. Furthermore, none of the interviewed bottom set students mentions independence as a factor in their interviews (see Appendix 2). Issues with taking initiative is in line with the data gathered during class observation (see Appendix 3) and literature points out that frequently teaching methods recommended for the bottom set students tend to foster dependency and lead to learned helplessness (Rosenholtz & Simpson, 1984). In our case it is the example of certain students not even taking the books out, unless directly told so.



**Figure 4.** Students' perception of their intellectual independence.

## 5.5. Achievement and Progress

Students use various indicators to evaluate own performance. to some, it might be being able to complete their work and receiving praise from the teacher to others it is completing their work fast and accurately, and some want to score high in the quiz. The answers to this question

were expected to fall within Gaussian distribution. Interestingly, more of the bottom set students chose the extreme answers (below average of above average), once again showing that as a group they tend to be less homogeneous, and grouping them together in attempt to create a group with “one size fits all” pedagogy might not meet the S2 standard (Sheppard, et al., 2018).

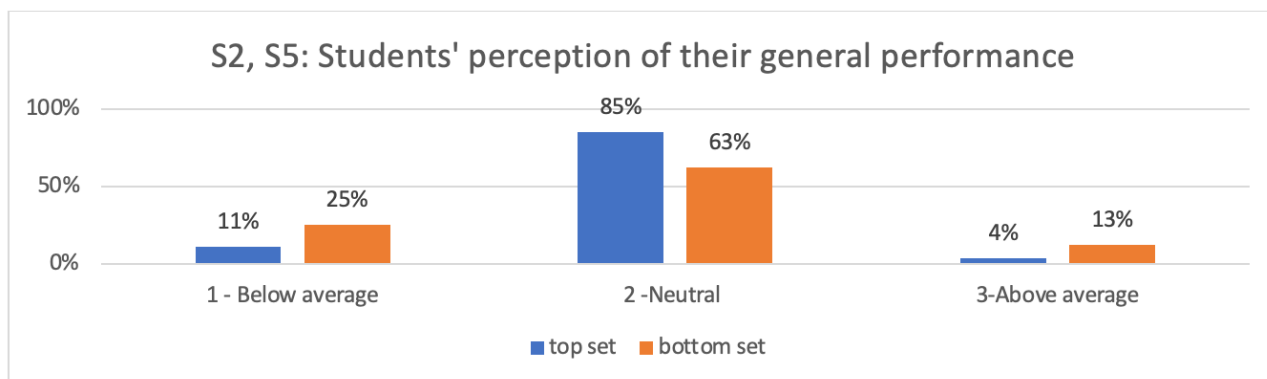


Figure 5. Students' perception of their general performance.

The observation and the interview suggest that such difference might stem from the fact that certain students are assigned to the low sets because of the EFL needs even though they might in fact be extremely high attaining language learners, who were simply never given the chance to develop their skills. A strong example for it is one of the bottom set interviewees with strong intrinsic motivation to do well in languages due to her multicultural background,

who despite completing all the work on time was not able to realise her potential nor be granted the permission to take the GCSE. Researchers recognise this problem, pointing out that being assigned to a lower set might lead to talented students losing their motivation for studying due to being offered less opportunities to learn (Kim, 2012; Sheppard, et al., 2018), which might be reflected by the feeling of lack of progress presented in Figure 7.

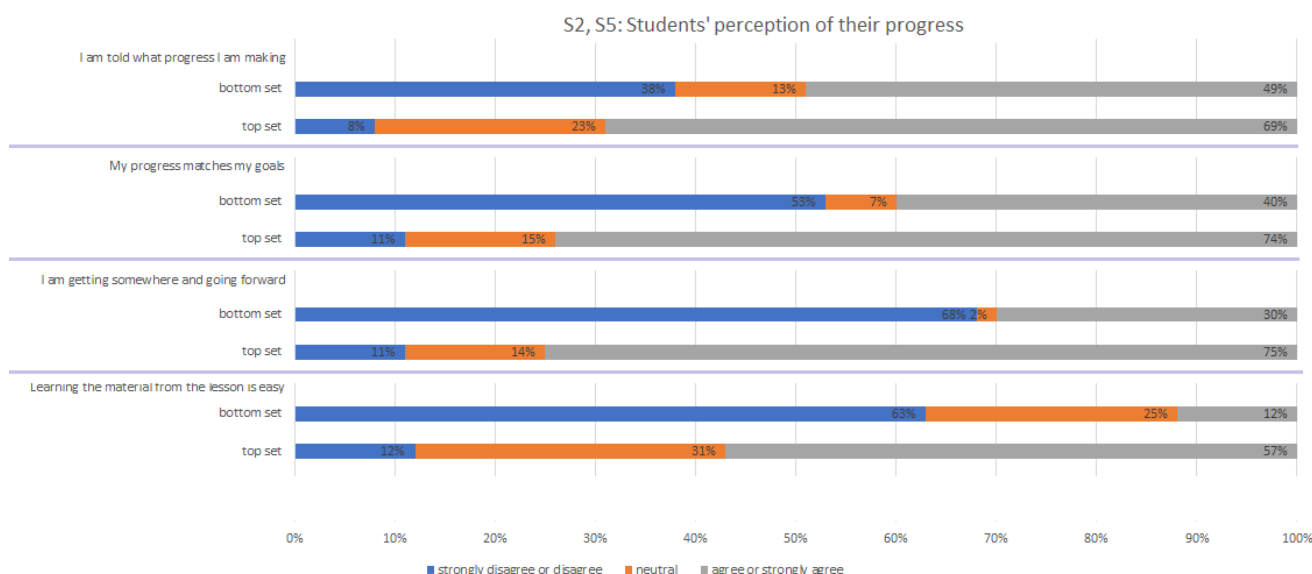


Figure 6. Students' sense of achievement after the lesson.

## 5.6. Available Support

Availability of the support was another frequently mentioning factor in term of motivation for learning. Interestingly, the types of support quoted as helpful, and motivating were also different between the students of top and bottom sets. The main differences in this aspect concerned the presence of peer role models and support. In the top set students frequently mentioned that their peers appreciate their input, but also contribute to forming

the final answer or idea by “*bouncing ideal off each other*”. In this group, students' ambitions are amplified by the ambitions of others around them, which finds reflection in findings of Saleh (2005). At the same time bottom set students focus more on teacher's direct support in form of pre-completed or simplified tasks (for example copying instead of matching). Additionally, lesson observation shows that where students from top sets are motivated to proactively seek solutions and collaborate, bottom set students rarely seek help from their classmates.

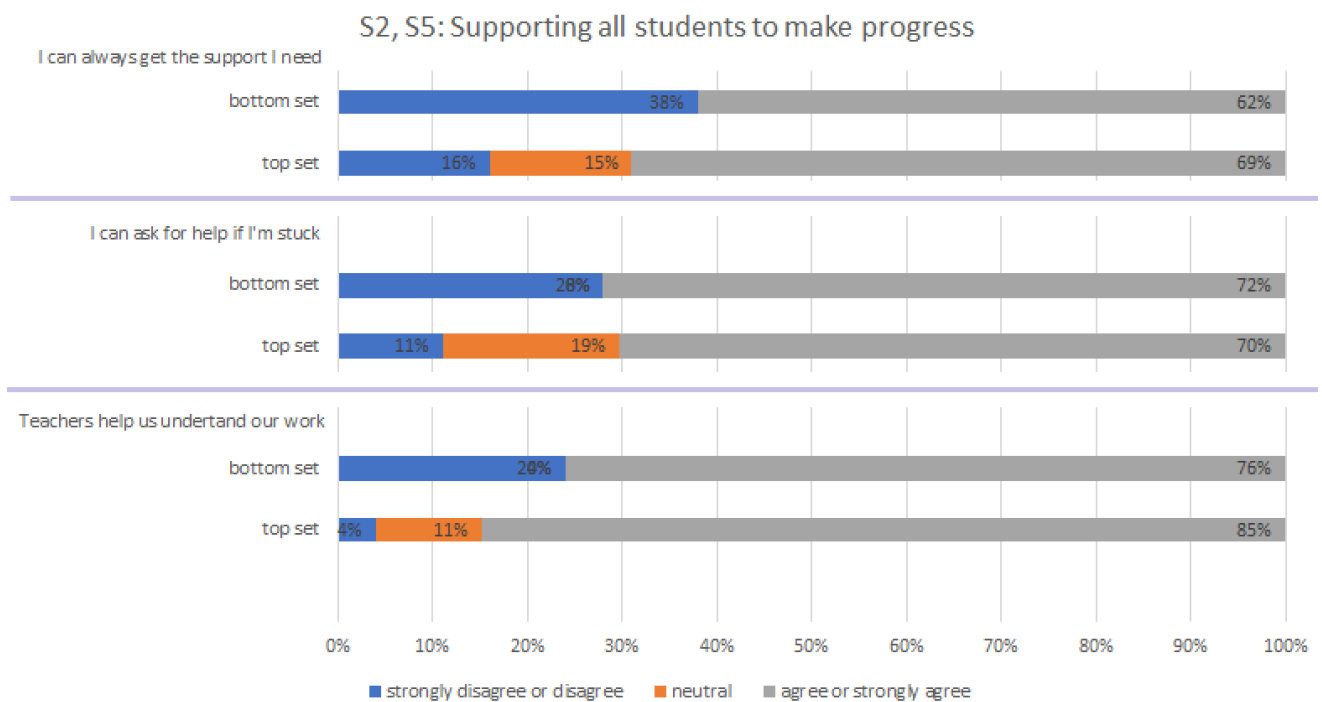


Figure 7. Students' perception of available support.

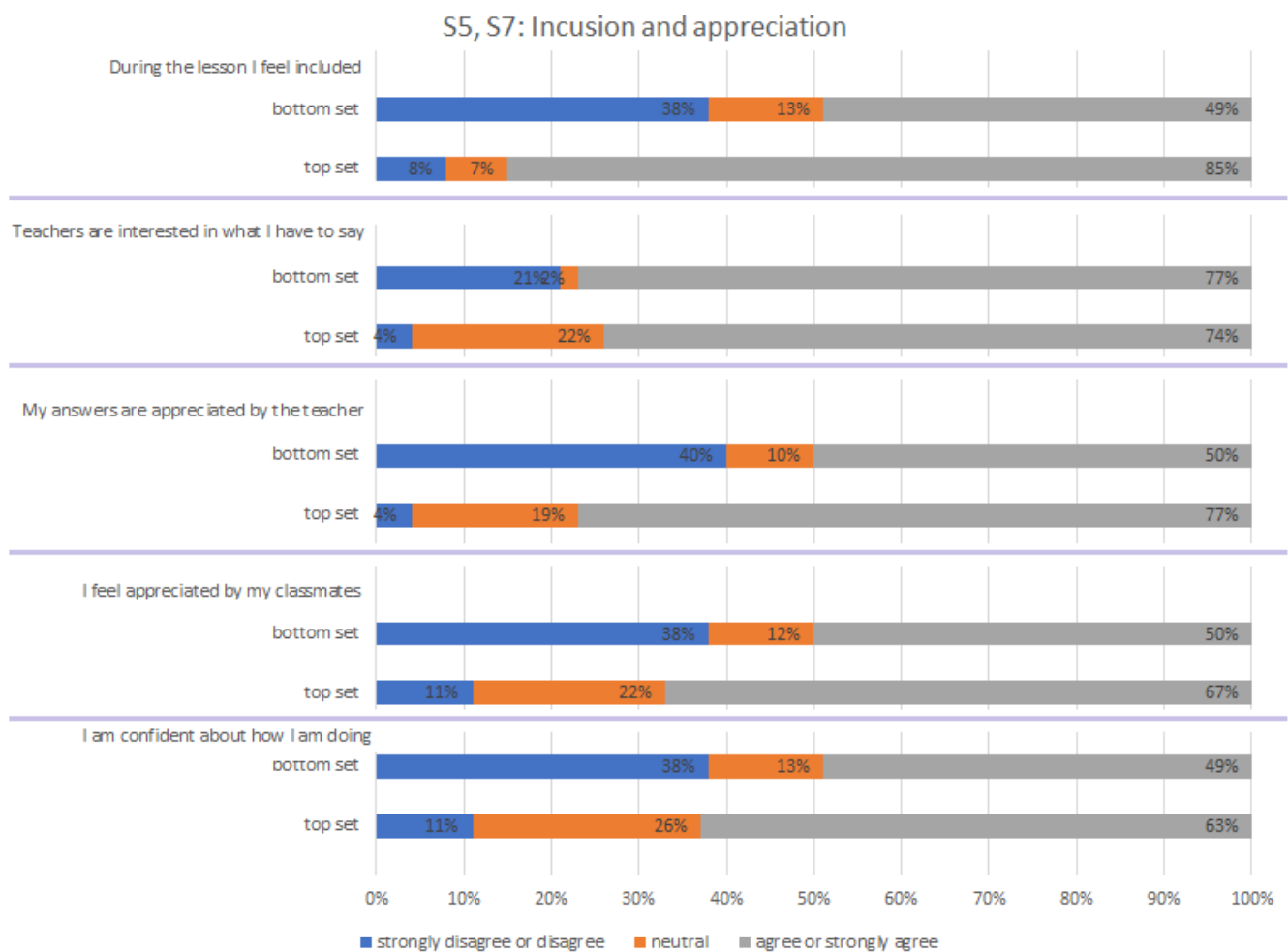


Figure 8. Students' sense of inclusion and appreciation.

Furthermore, for many of the students being assigned to top set is a form of validation (see Appendix 2, “How do

you feel about being in this set”). At the same time, some of the bottom set students recognise the group as an



impediment to learning but the majority prefers to stay there, believing they “*don't deserve to be in a higher set*”. Friedrich et al. (2015) find that students' mindset based on teacher expectancy (also referred to as Pygmalion effect) can affect both academic outcomes and students' self-concept.

Most importantly though, despite the theoretical framework proposing that grouping students by attainment level shall increase their level of inclusion in the lesson (Webb & Palinscar, 1996) the observation suggests that students in bottom set do not feel included, which in long term might lead to disaffection and complete attrition of interest in the subject and motivation.

## 6. Conclusion and implications

Attainment-based grouping is believed to help to give students the access to the curriculum without overburdening them with the material, which might potentially motivate lower attainers. Some research shows that attainment-based grouping for language learning has certain potential to be beneficial, however, its positive results have only been confirmed in highly contextualised situations. Moreover, the studies from Japan, although confirming that attainment-based grouping has an impact on students' attainment in language learning context, present contradictory conclusions regarding the groups affected, showing negative impact on motivation and attainment of high achievers grouped in a homogeneous set. Although most teachers recognise the potential benefits of attainment-based grouping, there seems to be a consensus regarding the fact that it comes at much too high a cost, often leading to students' disaffection, loss of self-worth, and forming sink groups; but also to increased teacher workload and decreased morale among those teaching bottom sets. Furthermore, the success of Finnish case sets an example to be followed, by showing how mixed education can be effective in terms of boosting students' attainment and motivation.

Results of this study further suggest that attainment level is not an applicable criterion to segregate students, as it may lead to depriving students who are passionate about a topic the access to quality education in this area based on criteria which are not necessarily relevant for success in the field. Furthermore, interviews with the students clearly show the mechanism of forming a sink group, where the students slide towards learned helplessness, however a longitudinal study would be necessary to draw stronger conclusions.

It is also important to mention that the results of this study are strictly limited to the context of the two groups of students within the school. It is therefore not possible to produce country or age-group level generalisable results based on this enquiry. To increase the impact of this study I would recommend assigning it earlier, for example right after the literature review assignment, to enable broader data collection and more time to analyse the information. Another visible weakness is potential bias of the author, which might be easier to avoid, in case of a group task, as such process would enable negotiating the code and debate analytic processes.

**Kat Li (Katarzyna Jasinska-Belfort)** is a polyglot and a language teacher currently on the way towards a DPhil in Education at the University of Oxford. Her research interests include the neurobiology of L2 acquisition, child multilingualism, vocabulary acquisition, factors that affect one's ability to attain high proficiency in L2, the effectiveness of certain input methods in context of L1-L2 relationships, and statistical data analysis methods in context of education-related research.

Email: [katarzyna.jasinskabelfort@education.ox.ac.uk](mailto:katarzyna.jasinskabelfort@education.ox.ac.uk)

## References

- Bradley, E. H., Curry, L. A., & Devers, K. J. (2007). Qualitative data analysis for health services research: developing taxonomy, themes, and theory. *Health Services Research*, 42(4), 1758-1772.  
<https://doi.org/10.1111/j.1475-6773.2006.00684.x>
- Friedrich, A., Flunger, B., Nagengast, B., Jonkmann, K., & Trautwein, U. (2015). Pygmalion effects in the classroom: Teacher expectancy effects on students' math achievement. *Contemporary Educational Psychology*, 41, 1-12.  
<https://doi.org/10.1016/j.cedpsych.2014.10.006>
- Hallam, S., & Ireson, J. (2005). Secondary school teachers' pedagogic practices when teaching mixed and structured ability classes. *Research Papers in Education*, 20, 3-24.  
<https://doi.org/10.1080/0267152052000341318>
- Kim, Y. (2012). Implementing ability grouping in EFL contexts: Perceptions of teachers and students. *Language Teaching Research*, 16(3), 289-315.  
<https://doi.org/10.1177/1362168812436894>
- Kulik, C. C., & Kulik, J. A. (1982). Effects of ability grouping on secondary school students: A meta-analysis of the evaluation findings. *American Education Research Journal*, 19, 415-428.  
<https://doi.org/10.2307/1162722>
- Mazenod, A., Francis, B., Arche, L., Hodgen, J., & Taylor, B. (2019). Nurturing learning or encouraging dependency? Teacher constructions of students in lower attainment groups in English secondary schools. *Cambridge Journal of Education*, 49, 53-68.  
<https://doi.org/10.1080/0305764X.2018.1441372>
- McCoach, D., O'Connell, A., & Levitt, H. (2006). Ability grouping across kindergarten using. *The Journal of Educational Research*, 99, 339-46.  
<https://doi.org/10.3200/JOER.99.6.339-346>
- Rosenholtz, S., & Simpson, C. (1984). The formation of ability conceptions: Developmental trend or social construction? *Review of Educational Research*, 54, 31-93.  
<https://doi.org/10.3102/00346543054001031>
- Rosenthal, R., & Jacobson, L. (1968). *Pygmalion in the classroom: Teacher expectation and pupils' intellectual development*. New York: Holt, Rinehart and Winston. <https://doi.org/10.1007/BF02322211>
- Sahlberg, P. (2012). A Model Lesson Finland Shows Us What Equal Opportunity Looks Like. *American Educator*.  
<https://files.eric.ed.gov/fulltext/EJ971754.pdf>
- Saleh, M., Lazonder, A., & Jong, T. (2005). Effects of

within-class ability grouping on social interaction, achievement, and motivation. *Instructional Science*, 33, 105–119.

<https://psycnet.apa.org/doi/10.1007/s11251-004-6405-z>

Sheppard, C., Manalo, E., & Henning, M. (2018). Is ability grouping beneficial or detrimental to Japanese ESP students' English language proficiency development? *English for Specific Purposes*, 48, 39–48.

[10.1016/j.esp.2017.10.002](https://doi.org/10.1016/j.esp.2017.10.002)

Webb, N., & Palinscar, A. (1996). Group processes in the classroom. In D. C. Berliner, & R. Calfee (Eds.), *Handbook of Educational Psychology* (pp. 841–873). MacMillan.

Yusuf, Y. Q., Inayah, N., & Mutiaran, M. (2020). Teachers' reinforcement: Building students' motivation to learn English. *International Journal of Language Studies*, 4, 105–128.

[https://www.researchgate.net/profile/Yunisrina-Yusuf/publication/344769482\\_Teachers'\\_reinforcement\\_Building\\_students'\\_motivation\\_to\\_learn\\_English/links/5f8ea221299bf1b53e348916/Teachers-reinforcement-Building-students-motivation-to-learn-English.pdf](https://www.researchgate.net/profile/Yunisrina-Yusuf/publication/344769482_Teachers'_reinforcement_Building_students'_motivation_to_learn_English/links/5f8ea221299bf1b53e348916/Teachers-reinforcement-Building-students-motivation-to-learn-English.pdf)

#### Conflict of Interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Copyright © 2025 Li. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.



## Call for Papers

### Submit via <https://jlt.ac/>

#### Areas of Interest:

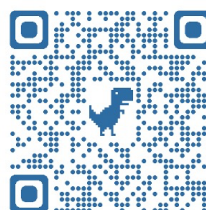
Language teaching intervention and experiments; Curriculum development; Language teacher education; Bilingual education; New technologies in language teaching; Testing, assessment, and evaluation; Educational psychology, and more.

#### We accept the following types of submission:

1. Research article: (6,000 to 8,000 words)
2. Review: (3,000 to 8,000 words)
3. Book review: (up to 3,000 words)
4. Features: (3,000 to 8,000 words)

Scan to submit your articles\* &  
read more articles for free.

\*Article Processing Charges Apply.



Contact: [editor@jlt.ac](mailto:editor@jlt.ac)



Pioneer  
Publications

ISSN (Online)  
2770-4602