

*Ruth Morris undertook a Walter Hines Page scholarship in March and April 2018, sponsored by teaching union, NASUWT. Here, she shares her findings.*

### Introduction

My research question was ‘What are the most effective methods to teach English vocabulary to Tenth Grade students whose first language is English?’ The aim of the research was to identify the most effective teaching methods and to then use this information to inform Schemes of Work for GCSE English students in England. I was based in Austin, Texas and my research trip lasted for a two week period, 24th March - 8th April 2018.

### Background to the question

I decided to investigate vocabulary learning and teaching as it has recently become much more important in the English educational system due to changes in the GCSE Examination specifications. It is also an element of the curriculum which has always interested me and has been a focus of my teaching in all the schools in which I have taught. This research has been written in the context of my eight years’ experience as a secondary school English teacher in a variety of different educational institutions in England. I have taught GCSE English in independent schools, state schools, multi-academy trusts and in private tuition centres. Depending on the demography of the school and the attainment levels of the students, each institution has approached the teaching of vocabulary in a myriad of different ways. These experiences have led me to develop an educational resource which is distributed nationally by ZigZag and provides a series of activities to promote vocabulary learning for students aged 14 years and over. It has been designed to bridge the transition from Key Stage 3 to Key Stage 4. I see this as being the critical period in secondary education.

Vocabulary learning has always been an important topic. The National Curriculum in England Key Framework Document (December 2014) states: ‘Pupils’ acquisition and command of vocabulary are key to their learning and progress across the whole curriculum’ (National Curriculum in England: Framework for Key Stages 1-4). It goes on to stress the importance of pupils ‘knowing the language which defines each subject in its own right, such as accurate mathematical and scientific language.’ The responsibility for vocabulary teaching therefore falls on all teachers but recently it has become of critical importance to English teachers due to the changes in the weightings of Assessment Objectives in both the GCSE English Literature and English Language qualifications. In English Literature, the marks for AO4 which is the ability to ‘use a range of vocabulary and sentence structures for clarity, purpose and effect, with accurate spelling and punctuation’ (Department for Education English Literature: GCSE Subject Content and Assessment Objectives) constitutes 5% of the total marks, whilst for English Language, the same criterion, labelled as AO6 in this examination, ‘must constitute 20% of the marks for each specification as a whole’ (Department for Education English Language: GCSE Subject Content and Assessment Objectives). Before the changes in the weightings of Assessment Objectives, the marks for vocabulary and sentence structure was 12% for English Language. In America, vocabulary learning has always formed an important

component of the SAT (Scholastic Aptitude Test) and there are many resources available online to help students learn vocabulary. Recently however, there have been changes to the style of questions for vocabulary. From Spring 2016, the questions focus more on the meanings of words in context and 'high utility' lexis which students are likely to encounter regularly rather than obscure words. In both the British and American education systems, the teaching of vocabulary is changing in its importance and in its uses. This makes this transitional period a pertinent time to be researching the methods and techniques employed to teach it.

My literature review has shown there to be relatively little research into the learning and teaching of vocabulary for students aged 16 as the majority of the literature relates to the importance of vocabulary learning at a younger age. One of the most important is a study by Hart and Risley (2003) which found that 3-year-olds who grew up in poverty possessed half the vocabulary of their middle-class peers. The study is entitled the 'The early Catastrophe: the 30 Million Word Gap' because it states that 'by age 3, children from privileged families have heard 30 million more words than children from underprivileged families'. This is a startling difference in the level of exposure to language which children can hear before they begin school but perhaps more significant than simply the number of words that children hear is the effect that this has in their later life. The study includes follow-up data which compares the vocabulary exposure aged three with what the children were predicted to achieve in the third grade. There is a strong link between the two, implying that the vocabulary gap remained five years later at age 9. The other main area of research is for students acquiring English vocabulary when their first language is not English (Nation: 2001). However there is relatively little information about vocabulary learning for teenage students whose first language is English.

One of the main debates about vocabulary learning and teaching is whether the methodology should be implicit e.g. vocabulary should be taught alongside other topics, meaning that vocabulary is not the main teaching objective; or if the methodology should be explicit e.g. vocabulary learning in the sole purpose of the teaching activity. In different ways, my research addresses these different positions to try to determine whether implicit or explicit vocabulary teaching is the most effective.

### Methodology

The key participants in the research were English teachers who teach Grade Ten English in Austin, Texas. The staff taught in two very different schools: Headwaters and Ann Richards School for Young Women Leaders. Headwaters is independent and private. It accepts students from early childhood to grade 12: beginning with a Montessori foundation and progressing to the International Baccalaureate (IB) Diploma Programme. Ann Richards School for Young Women Leaders is a preparatory public school and is single-sex. Each year, 75% of the students come from schools where the majority of students are from economically disadvantaged families. The different outlooks provided by these schools will give a range of methods by which vocabulary is taught and this will enable a discussion of the techniques which are most effective. Additionally as one of the most important trends in research into

vocabulary is the relationship between vocabulary and poverty (Hart and Risley, 2003), using different schools with different demographics will contribute to the existing literature in this area.

A homogeneous purposive sample of participants was drawn from the two schools in Austin: Headwaters and Ann Richards School for Young Women Leaders. The sample was homogeneous i.e. the participants will have a/some shared characteristic(s), which in this study is that they all have experience of teaching Tenth Grade English at schools in America. This shared characteristic best enabled the research question to be answered because the participants all have direct experience of teaching at this level, are aware of the assessments that the students will take as well as being able to comment on their first-hand experience of the teaching methods they employ for developing vocabulary.

Palys (2008) states that 'purposive sampling is almost synonymous with qualitative research'. As questionnaires are the main method by which data was gathered, purposive sampling was therefore the most effective way of collecting data in this study. It was the only viable sampling technique for gathering data from a specific group and this focus on a particular group with an important shared characteristic enabled more accurate data to be collected than if the study was randomised because the 'non-probability based sampling' (Kerlinger 1986) of purposive sampling shows the deliberate effort to obtain representative samples through the inclusion of particular groups. This also meant that the sample size was quite small because in a staff of teachers at a particular school, a relatively small proportion will be English teachers and of these, a further small proportion will have experience of teaching Tenth Grade.

Despite homogeneous purposive sampling being the most appropriate and effective sampling method for this study, it does have some disadvantages. These disadvantages were minimised as much as possible but they are inherent in this sampling technique. The main drawback relates to the validity of making broader generalisations from the research because the sample size is both small and homogeneous. The implication is therefore that the results would only be representative for this particular group in this particular context and so the findings cannot be translated to another group operating in another context. This is a large disadvantage for this study in particular as it is hoped that the research findings from the schools in America could be applicable to schools in England where the demands for improved vocabulary have only been formally assessed since examinations starting in June 2017. This disadvantage has been minimised by conducting the research in schools which operate in very different contexts: Headwaters is independent and private whereas Ann Richards School for Young Women Leaders is single sex and public. Therefore although the sample is homogeneous, the contexts for the teachers are different in the different schools and so it is more likely that the findings can make more reliable generalisations than if only one school were used.

As the sample is not randomised, the potential for researcher bias is another drawback of purposive sampling. This is because the judgement of the researcher has been used when selecting the participants. In this study, such judgement is unavoidable because there is only

a specific and relatively small group who has the appropriate characteristic to provide accurate and informed data based on their own teaching experiences. Although researcher bias cannot be eliminated in this study, it has been minimised by asking as many teachers as possible with the appropriate experience at each of the two schools. A teacher who has some experience of teaching Tenth Grade English participates in the same way as a teacher who has much more experience. This means that the sample size is bigger and also reduces the amount of judgement required by the researcher because having teaching experience for Tenth Grade English is an objective measure.

### Questionnaire design

A questionnaire was chosen for data collection because it can be quickly completed, which was important due to the time constraints of my time in America; it can be anonymised as the teachers do not need to write their name just the amount of Tenth Grade English teaching experience they have; and it provides results that are scalable, meaning that comparisons can be made across the schools.

Two of the main disadvantages of this method of data collection are that the participants may have differences in interpretation and understanding of the questions and question order bias in the construction of the questionnaire. Both of these disadvantages have been limited by piloting the questionnaire before it was completed by American teachers. The questionnaire was given to Year 11 English teachers in five different secondary schools in England. This helped to reduce the potential for differences in interpretations. Additionally, the questionnaire was checked by an American to ensure there were no words or phrases which have different meanings in American than they do in British English.

Question order bias is another disadvantage of questionnaires whereby the answer to one question may provoke feelings of an expected response in the participant. This has been minimised in the questionnaire design by asking general questions about the teacher's feelings about the importance of teaching vocabulary before more specific questions about the methods they use to teach it. This means that the participant does not feel as though they 'should' regard teaching vocabulary as important which would have been the case if the more specific questions were asked first. Piloting the questionnaire helped to reduce the impact of question order bias.

Some of the questions use the Likert scale (Likert, 1932). This scale allows belief, opinion or attitude to be measured which is critical for this study. The scale is useful because it means that the participants can remain neutral on a particular question as they do not have to express either agreement or disagreement. The scale also allows for comparisons to be made between different questionnaires and their respondents. This subsequently enables the results from different educational contexts to be compared and so encourages more broader generalisations to be made rather than the findings remaining only viable for the small sample groups at each school.

The main disadvantages of the scale are that the participants may feel as though they are expected to express either extreme opinions or to cluster around the central, neutral points.

This can make the results misrepresentative and so compromise the validity of the findings. Furthermore, participants may feel as though they are 'expected' to answer in a certain way and so adjust their answers accordingly. Again this can lead to distorted results. Both of these have been minimised in the study by anonymising the questionnaire. This will give the participants greater freedom to respond honestly without concern that there will be detrimental consequences.

## Results

The questionnaire was divided into three main areas which addressed different aspects of vocabulary teaching and learning. The first section was about the teachers' views about vocabulary in a broad sense. It included questions such as how the teachers rated vocabulary teaching as a priority or not within the classroom and a general perspective on whether they feel there is enough time to commit to vocabulary, if indeed this is regarded as something important for them. The second section of the questionnaire looked more closely at the methods the teachers used to teach vocabulary. Many of these methods were drawn from Schmitt Taxonomy (2001). In both of these sections, the Likert scale was used in order to assess how important each of these factors was to teachers. The questionnaire was designed as such as it enabled all the results to be gathered together and so for patterns to emerge. The third section of the questionnaire asked teachers to write longer answers. These questions were concerned with lesson structure, classroom environment and the teachers' opinions about vocabulary teaching methods. The answers to these questions provided me with a greater level of depth about the teachers' views. The following presentation of results will follow the same structure as the questionnaire in terms of how each section was answered.

### Section One: Views about vocabulary teaching and learning

The Likert scale for this section was:

1. Strongly disagree
2. Disagree
3. Neither agree nor disagree
4. Agree
5. Strongly agree

The results show that there was no pattern in answer to the statement 'Improving vocabulary is the most important skill students develop in Tenth Grade English'. There was a spread of responses in answer to this, ranging across the spectrum from 'strongly disagree' to 'strongly agree', with a small cluster around the neutral statement of 'neither'. This is largely

expected as the deliberate use of the superlative adjective ‘most’ enquires whether teachers prioritise vocabulary teaching above other topics and this is shown to not be the case.

There were marginally more ‘agree’ results in response to ‘improving vocabulary is the most important factor for improving reading comprehension’. Although only showing a marginal agreement, this result does concord with much of the research into the relationship between these two factors.

Other statements which the teachers generally agreed with were: ‘students take responsibility for improving their own vocabulary’; ‘students start Tenth Grade with different levels of vocabulary’; and ‘students are expected to know and be able to use a certain vocabulary by the end of Tenth Grade.’

The two statements which the teachers generally disagreed with were: ‘students are regularly tested on vocabulary’ and ‘improving vocabulary is the most important factor for improving spelling.’

#### Section Two: Views about methods used to teach vocabulary

The Likert scale for this section was:

1. Almost always
2. Often
3. Sometimes
4. Seldom
5. Never

‘Often’ was the main response for the following methods used to teach vocabulary:

- ‘Ask students to use the internet
- Ask the student to consider cognates of the word
- Ask the student to work out which part of speech the word is
- Ask the student to discuss possible meanings of the word with a partner
- The teacher gives the meaning of the word
- The teacher gives a synonym for the word
- The teacher uses the same word in a different context
- Ask the student to use the new word in a sentence of their own

-Return to new words in future lessons

The only statement to receive 'seldom' as the majority response was 'Ask the student to associate the word with antonyms' whilst 'Test the student on new vocabulary items' was the only statement to receive 'sometimes' as the main response.

### Section Three: lesson structure, classroom environment and the teachers' opinions about vocabulary teaching methods

The teachers had a variety of teaching methods which they were the most effective for vocabulary teaching. These were:

- 'finding creative opportunities for students to revisit words'
- 'asking students to use the word in their own sentences'
- 'asking students to paraphrase new words in their own language so that they understand the definition'
- 'teaching the skills of independent word discovery while reading'
- 'encouraging word association with synonyms'

In answer to the question, how do you ask students to reflect on their own vocabulary learning, there were a range of responses:

- 'through self-annotations'
- 'by using the word in context and practice writing sentences'
- 'rarely'
- 'to recall and discover new words in context'

The question 'what do you think is the students' role in vocabulary learning?' produced the following responses:

- 'they can generate lists when reading and look up words unique to their own needs'
- 'students take on the discovery of new words'
- 'remind them to maintain vocabulary as a focus'
- 'to read widely and constantly'
- 'they should have ownership'

-‘they should do the heavy lifting’

The question, ‘in an average English lesson, approximately how much time is used to teach vocabulary?’ generated these answers:

-‘15-20%’

-‘3 minutes’

-‘10 minutes a week’

-‘as much as is organically needed’

The question ‘do you teach vocabulary as a separate part of the lesson or is it integrated into other activities?’ produced these responses:

-‘Integrated because it adds context’

-‘both - two words a week and in shared texts’

-‘not separate’

-‘not separate - word wall becomes ‘white noise’

### Discussion

This discussion will focus on four of the main findings from my research, which can be tied into broader literature on the topic. These are: the link between reading comprehension and vocabulary; the use of context in determining the meaning of new words; whether it is effective to regularly test new vocabulary; and the use of implicit or explicit vocabulary teaching methods.

My research broadly agreed with the statement that ‘improving vocabulary is the most important factor for improving reading comprehension’. Many studies have indicated that it is the association between vocabulary and reading comprehension which severely disadvantages students with limited vocabulary by prohibiting them from accessing the curriculum. Biemiller (2003) shows that vocabulary is a strong indicator of reading success whilst Chall et al. (1990) show that disadvantaged students found reading comprehensions increasingly difficult because they were restricted from understanding by their narrow vocabulary. For the purposes of my research, this link is important because of the increasing demands on students to engage with unfamiliar texts containing obscure lexis or even words which are no longer used in the present day vernacular. In the English Language GCSE examination, students encounter a compulsory pre-1914 unseen extract. There is a short glossary or some unfamiliar

words but students are also expected to decode the meanings of other words from context. If students are therefore entering the examination with a limited vocabulary, they will be unable to access some of the questions. The English Literature GCSE specification also requires the study of a pre-nineteenth-century text with all the associated linguistic challenges that this brings. Although this text will have been studied in the classroom, it is impossible for teachers to explain every unfamiliar word and so this examination also requires either dedication by the student for individual work and revision or an ability to decipher words from the context in which they appear. If context is all important, the methods to teach vocabulary must be tailored to achieve this outcome. For example, although word lists can be useful for learning large amounts of vocabulary quickly (Nation 1982) and rote learning has been proved effective (O'Malley and Chamot 1990), neither of these would be particularly useful for students aged 16 in either America or England as the examinations do not require this skill. Indeed this has been a large change in the SAT questions which American students will now encounter. Prior to the change, the memorisation of long lists of words was required in order that students could match up the words with the correct definition in multiple-choice questions. This type of questioning did not test student's ability to use words or to read their meaning within context and it also presupposed that words had a singular meaning that did not change dependent upon its use. These were some of the main criticisms levelled at the previous format. The College Board, who run the SATS examinations, now will focus on 'Tier Two' words which are words which may have multiple meanings dependent on the context and often appear more in written language than in conversation. 'Tier Two' words therefore require students to decode word meanings from sentences. Professor McKeown, who along with Isabel Beck, devised the system of classifying words into different tiers at the University of Pittsburgh, states: 'We don't need a bunch of memorised definitions in our head. It's an integration of the sentence and the word that's going to help us. The more they have to integrate, the more that reflects what you need to with vocabulary as a reader.' This also brings in the broader question of what it means to 'know' a particular word. Rubin (1987, p. 29) in which learning is "the process by which information is obtained, stored, retrieved, and used" and Ma (2009: 27) states 'a simple, straightforward answer to the question would be that most people associate word knowledge with knowing the meaning of a word and also how to use it correctly in various contexts.' The changes to the importance of vocabulary reflect these definitions of 'knowing' a particular word. Such changes to the examinations in both England and America are also perhaps reflective of the age at which the students are assessed. As Cohen and Aphek (1981) show, advanced students found contextualized words more helpful rather than word lists which were better for beginning students. Although this research was conducted primarily for students of a second language, sometimes analyzing a 100 year old text in your native language can feel as though you are reading foreign literature.

My research shows that 'Test the student on new vocabulary items' was the only statement to receive 'sometimes' as the main response. This differs from much of the literature about revisiting new vocabulary as other studies have emphasized the importance of returning to new words, sometimes by being tested. Apthorp (2006) shows that children should have six encounters with new a word if they are to remember it. According to Nation (2001: 74-76), a

word cannot be well known after only one exposure since there is so much information about a single word. Therefore, repetition and recycling of vocabulary are of crucial importance when it comes to actually learning new words (Nation 2001; Schmitt 2010).

My research shows that the teachers favour implicit language teaching rather than explicit. Implicit language learning techniques rely on vocabulary being acquired 'totally unconsciously as a result of abstraction from repeated exposures in a range of activated contexts' (Ellis 1994: 219). These activities are ones in which vocabulary learning or teaching is not the primary objective but happens almost incidentally to the main aim. One of the most obvious tasks which involve implicit language learning is reading. Lightbown and Spada (2006: 146) have shown that reading large amounts of books does lead to an increase in vocabulary. Krashen (1989: 441) concludes that regular readers show an improved performance in vocabulary tests in school. Other implicit language learning techniques include the use of word walls and vocabulary wall displays in which the words are shown and the students are exposed to them but no explicit teaching is derived from their presence. Milton (2001) suggests that this type of vocabulary teaching derives from a widely held belief in the acquisition of second languages that vocabulary is learnt implicitly and as such, there does not need to be explicit teaching. Although this research derives from second language acquisition, similar processes for improving vocabulary of one's native language are needed.

### Conclusion

My research trip to Austin has been a wonderfully enriching experience. Visiting different schools in America has proved invaluable to developing Schemes of Work at my school in England and has also encouraged me to develop more vocabulary-based resources for ZigZag. It has allowed me to complete my MA Education as my findings in Austin form the basis of my dissertation. In addition, during my time in Texas, I conducted some literary research for a book I am writing, which I hope to be published in 2019. Thank you for such an inspirational experience and a special thank you to Pamela Bell and Nancy Alliegro.

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