Implementation of Knowledge Organisers in Year 8 English lessons

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About IEE Innovation Evaluation Grants

The first four IEE Innovation Evaluation Grants were awarded in February 2017. Funded by the Institute for Effective Education (IEE), these grants supported pilot evaluations of innovations of teaching and learning approaches based on the Research Schools Network's goal of improving the attainment of pupils by increasing the use of evidence-based practices.

Since then a further 26 projects have been successful in their application for an IEE Innovation Evaluation Grant, bringing the total number to 30. The applications we received included a wide range of interesting, school-led innovations – from after-school film clubs to improve the creative writing of Year 5 pupils, to the use of audio feedback with Year 12 pupils – and we were really impressed with the thought that applicants had put into how these innovations could be evaluated.

The evaluations are small-scale, and test the kinds of innovations that schools are interested in. This is very much a "bottom-up" exercise, allowing schools to get some indicative evidence behind real-world initiatives. Many evaluations are now coming to an end, and we are starting to publish reports on the findings. It is important remember that these are small-scale projects, often carried out in one school, so it is not possible to generalise their findings. In fact, the main benefit of the Innovation Evaluation projects may be in the process, rather than the findings.

Contents

Executive summary

Description of the innovation

In this evaluation, Knowledge Organisers (KOs) were used as follows:

- Pupils were given a KO at the beginning of the unit that categorised all the knowledge that pupils would need over the course of that unit.
- Each lesson began with a five-question knowledge recap pertinent to the ensuing lesson.
- Pupils were encouraged to refer to the KO during lesson time to reinforce missing knowledge.
- Weekly 10-question quizzes tested pupils on a specific knowledge category.
- Homework consisted of quiz revision and completion of activities taken from the KO.

Summary of the evaluation

The project took place in a mixed, comprehensive school in Brent, north-west London. Among the 1,600 pupils enrolled, there is a large mixture of ethnic backgrounds and one-in-three pupils speak English as a second language or are bilingual.

173 pupils across six Year 8 English classes (age 12–13) participated in the intervention. All classes were mixed prior attainment. Classes were randomly allocated to be either intervention or control classes. The evaluation was carried out over one unit of work, which was taught over six weeks.

During pre- and post-tests, pupils answered the same question in relation to different texts. Responses to the questions were assessed in relation to the following criteria: read, understand and respond to the text; analyse language, form and structure; and explore the relationship between texts and context.

Summary of findings

As a whole, pupils who took part in the innovation made less progress than those who did not (effect size = -0.17). Having said this, elements of the lesson design were popular with pupils and teachers alike.

Introduction

Description of the problem

As the examinations in English have moved to a linear set-up, pupils need to rely significantly on memory. They need thorough and in-depth knowledge of the texts they study, including contextual information and subject terminology, as well as the knowledge of the skills they need in order to succeed. English has long been considered a skills-based subject, but skills can only be developed when knowledge is secure. The embedding and quizzing of this knowledge needs to be actioned from Key Stage 3 (KS3) and pupils need the resources to assist them.

Review of existing research

While there is opinion to support the success of Knowledge Organisers (KOs), their use as an effective teaching tool is unproven.

Research carried out by the Education Endowment Foundation (EEF) has suggested that homework can increase a pupil's progress by five months, and meta-cognition and self-regulation can increase progress by eight months. However, the methodologies for how to achieve this are slightly vague:

> "The potential impact of these approaches [metacognition and self-regulation] is high, but can be difficult to achieve in practice as they require pupils to take greater responsibility for their learning and develop their understanding of what is required to succeed." (EEF, 2018)

I believed KOs could aid pupils' progress in these areas because:

1. They require pupils to take responsibility for their learning. When pupils fill in homework grids based on their KO, this is simply retrieving and transferring information. Nothing is abstract or inferential – it is all based on fact. Therefore there is minimal, if any, reason for a pupil to claim not to have understood a homework task.
2. They provide a clear framework for pupils to improve their understanding.
3. They provide a reference point for the meta-language used throughout English lessons that pupils need to know in order to succeed.

Cognitive science literature puts emphasis on quizzing/testing and makes the use of KOs pertinent as they are designed to be used in testing. Evidence from the field of cognitive psychology identifies promising approaches to learning through quizzing/testing: Highlighted in Coe et al.'s 'What makes great teaching' (Coe et al., 2014) report for the Sutton Trust, incorporating opportunities for testing, interleaving and spacing can support pupils' memory of the topics they are studying (Dunlosky et al., 2013). Spacing is the process of revisiting areas of study leaving 'spaces' between them (rather than learning everything all at once) and interleaving is the practice of alternating between different topics in a short space of time in order to improve information recall.

I believed, a structured, formalised and tracked approach to teaching could benefit those from less advantaged backgrounds. This is because having homework pre-set, with a competitive element to quizzing, is not dependent on parental help/assistance or attendance, (pupils who miss a quiz take a catch-up quiz), and encourages the pupil to take more autonomy for their success.

Method

Sample

Six out of nine Year 8 English classes (age 12–13) were recruited, which comprised 173 pupils. Two classes were excluded because they were taught by the lead teacher, and a further class was excluded as numbers needed to be kept even.

The number of pupils started at 179. One parent withdrew consent for their child's data to be used, four pupils left the school within the project time period, and one pupil moved forms during the evaluation period meaning their data was discounted.

School information

Claremont School:

- is located in Brent (urban location)
- is a mixed comprehensive Years 7–13 (age 11-18)
- has 1,600 pupils enrolled
- has received Outstanding judgements from Ofsted in 2009 and 2014
- became a multi-academy trust In September 2017
- has a large mixture of ethnic backgrounds and one in three pupils speak English as a second language or are bilingual.

Participant information

TABLE 1

	Control group	Innovation group
Number of pupils	87	86
Sex	43 female, 44 male	43 female, 43 male
Mean age	13 years, 2.6 months	13 years, 2.4 months
Free school meals (FSM)	4 pupils	3 pupils
Pupil premium (PP)	14 pupils	14 pupils
Prior attainment	41 high, 26 medium, 15 low, 4 no data	43 high, 22 medium, 13 low, 8 no data

Assignment to condition

Six mixed prior attainment classes, totalling 173 pupils, took part. Three of the classes were control groups and three intervention groups. This was generated randomly, by flipping a coin.

TABLE 2

Form class	Control or intervention
F	Intervention
R	Control
L	Intervention
H	Control
O	Intervention
N	Control

All pupils completed a pre-test before starting the unit of the work that used the KO. If there were large gaps in attainment between classes it would have been necessary to re-randomise, however this wasn't needed.

Innovation

Summary

This research was conducted over a six-week half-term period (a unit of work.) This totalled 36 hour-long lessons.

In the intervention classes, the procedure worked as follows:

- All pupils were given a KO (see Appendix) at the beginning of a unit of work. This was glued in their exercise book for reference. If a pupil started a new exercise book, they were given a new KO.
- Pupils also received a second KO to be glued into their planner. This was to ensure that they always had one in case they didn't have their exercise book with them (ie, if it was taken in for marking).
- The KO was created by the lead teacher, along with all quizzes and homework resources. It comprised the skills needed for the completion of that unit, and also skills that are transferrable to other English units. For example, use of language techniques (Section A) is required in GCSE English, and alternatives to 'shows' and sentence starters for talking about effect on the reader (Section C), help pupils to use a wider vocabulary and explore different angles when thinking about the impact of a text.
- Teachers instructed children on how to use their KO and how to revise from it for homework. Teachers implemented a 15-question quiz once a week on knowledge revised from their KO that linked directly to their day-to-day school work. This was a summative quiz.
- Three five-question starter activity formative quizzes were implemented at the beginning of each lesson; the answers to which could be found in the KO. The lead teacher provided examples of these quizzes; however, individual teachers were allowed to adapt them to suit the needs/knowledge of their class.
- Summative quizzes were designed by the lead teacher and made available to all innovation classes.

Teachers had a one-hour training session at the start of the unit that informed them how to:

- use KOs in class
- administer summative (15-question) quizzes once a week
- upload results and calculate averages of these quizzes
- react to test scores (eg, helping pupils more specifically in lessons/phoning home if there is a perceived lack of effort or changing the seating plan so that certain pupils can be helped by others/the teacher more readily)
- administer pre-tests and post-tests and upload post-test scores onto an Excel spreadsheet.

Detail

Teachers encouraged KOs to be used in lessons to complement and assist with pupils' work. The first five minutes of every lesson involved a three- to five-question knowledge recap. All five questions covered knowledge learnt in lessons from the previous day, week or unit (three from a previous lesson, one from a lesson the previous week and one from another lesson in the unit (over a week ago if possible)). As all the answers could be derived using the KO, all pupils had the opportunity to achieve 5/5. Pupils were encouraged to use their KOs if needed, and to check answers themselves once they had written them. Teachers circulated and questioned/asked orally for scores to gain an indication of pupil knowledge, and identified any pupils who may need further support during the lesson. Subject teachers could devise these questions by themselves in order to suit their pupils. However, examples were circulated by the lead teacher a week in advance, which teachers could use if suitable.

Homework centred around KOs and was two-fold:

> Task 1: These tasks (20–30 minutes) per week required pupils to use their KOs directly to complete activities. Such activities included a copy of part of the KO with sections missing that were then filled in. Alternatively, pupils might have completed a mini-quiz or a timeline if important dates were key to a literature unit.

> Task 2: (two x 15 minutes per week) Pupils were taught how to revise using KOs (covering up the definitions of key terms, for example, and memorising the answer). Collaborative revision with peers was encouraged.

Pupils had a 15-question quiz once a week on particular sections of the KO. All quizzes were provided by the lead teacher and teachers uploaded quiz marks centrally onto a shared Excel spreadsheet. A competitive element was therefore added in that classes taking part in the experiment would have their test scores averaged by the class teacher so that they would compete with other classes in the same cohort.

In total, four teachers needed training (class O had two teachers, the other two classes had one teacher). Although not taking any classes, the head of English was also trained so that they were aware of the research taking place.

Pupils who scored poorly in quizzes were focused on by teachers and teaching assistants in lessons in order to assist them further. If a pupil scored 4/15 or less, a teacher may have put them in for a re-test as part of their detention if they also failed to fill out Task 1 homework activities.

Control classes

Pupils were taught as normal using existing resources created for the scheme of work. Quizzes were administered but they were not linked to a KO as none were used.

To avoid cross-contamination, teachers of control groups were made aware that pupils should not be copying a KO from a pupil in another class, and that they were being taught using a different method.

Outcome measures

All pupils completed a pre-test and a post-test for each unit. These tests were administered in class time but on the same day to avoid cross contamination/cheating. Pre-tests were written on lined paper and marked and moderated. Both tests were scored out of 30. The marking grid was a KS3 version of the AQA GCSE assessment grid and used the same objectives. The marking therefore took into account ability to: Read, understand and respond to the text (AO1), analyse language, form and structure (AO2) and to explore the relationship between texts and context (AO3).

The unit of work was Roald Dahl Short Stories*.*

Both pre-test and post-test asked the same question, but concerned different extracts. The pre-test extract was from 'Man from the South' and the post-test extract was 'Lamb to the Slaughter'. Although pupils read the entirety of 'Man from the South', there was minimal discussion prior to the pre-test, in order for a pupil's raw ability to be more accurately measured.

The question was: "*How does Roald Dahl use language and structural features to engage the reader and create suspense? Your response should comprise three to four PEA paragraphs (Point-Evidence-Analysis) and you should focus on the methods (techniques) Dahl uses to create humour, suspense and intrigue.*"

Pre-tests could not be revised for (except for the reading of the text beforehand), however, the post-test could, and innovation groups used the KO in order to help them do this. All pupils knew the assessment title and had three lessons (one hour each) of preparation for it in class time, assisted by the teacher.

Individual class teachers marked all post-tests. However, all test papers were handed in and assigned randomly, using a number system. This included mixing up innovation group and control group tests. All test grades were then uploaded onto a spreadsheet and analysed by the lead teacher.

All pupils were also identified by a number to ensure that no bias was given.

Moderation took place pre-marking of the post tests, with all teachers given three papers (top, middle and bottom), and explaining the reasoning behind the grading. These moderated pieces were marked by the lead teacher. Time for further moderation was allowed for to ensure continuity in marking.

Process evaluation

In addition to test results, perception data was collected on the pupils and teachers who took part in order to gauge how effective they believed using a KO is and whether it affected their workload/confidence.

In order to assess the perception data, I administered surveys using Survey Monkey (www.surveymonkey.com). Surveys were carried out post-innovation for all teachers. Only pupils taking part in the innovation carried out surveys (also post-assessment). Unfortunately, only 50 out of 86 pupils completed this survey, in part because they were not able to complete it at school. Survey Monkey had been blocked by the school's ICT technician team recently (and without my knowledge). By the time this issue was realised, it was deemed too late by the lead teacher (three weeks after the end of the unit including half-term) to create a survey using a different platform. Instead, the survey was set as homework (or through the lead teacher's computer where the site was not blocked). Although pupils were given plenty of time and reminders to complete the short survey at home, 36 chose not to.

Questions asked in this survey looked for evidence of:

- pupil confidence in subject-knowledge
- pupil motivation
- pupil engagement
- teacher subject-knowledge
- teacher workload
- timeliness of teacher response to the needs of learners.

To ensure all teachers were using KOs appropriately, the lead teacher observed a lesson for each class, and took a random sample of five exercise books per class to look for:

- quizzing taking place once a week
- formative quizzing taking place at the start of lesson
- all KOs stuck into books
- knowledge from the KO being referred to in lessons.

Issues/feedback were documented and followed up where necessary. Control classes were also checked to confirm that no cross-contamination took place.

Analyses

Pre-test and post-test essay marks were compared and analysed to see what improvement (if any) had been made and whether the improvement was greater using KOs.

This data was used to estimate an effect size using the EEF's DIY evaluation guide (Coe et al., 2013). Data was also measured against the pupil's FFT 20% target grade (marks were converted into A–E grades, following the school's grading policy).

The analysis also looked at outcomes for pupil premium (PP) pupils, boys and lower prior-attaining pupils (from the pre-test), to ascertain any effects to these groups. Lower prior-attaining pupils are defined as pupils who gain below the expected standard (average) at the end of Key Stage 2.

Perception data was also taken into account from the survey filled out by all pupils and teachers involved with the innovation to see how they responded to the style of KO lessons, quizzes and homework. This was conducted at the end of the six-week period.

Perception data was interpreted from the survey information to ascertain any benefits and limitations to the study.

With the analysis, the lead teacher:

- quantified the size of the effect of the intervention
- identified if the intervention is more successful for certain groups of pupils than others (pupil premium, boys and lower-attaining pupils).

Cost

TABLE 3

Budget Item	Amount
Cover costs: To deliver two x one-hour Inset to teachers taking part in the innovation	£100 per teacher per lesson (5 teachers in total including HOD) = **£500** (one Inset took place in department time)
Refreshments for Inset	£10/session = **£20** total
Survey Monkey subscription	1 month @ **£35/**month
Marking costs: 20 hours in total	5 minutes per paper. 179 papers = 895 minutes 895/60 = 14.92 hours 14.92 hours @ £35/hour = **£522.08**
Total expenditure	**£1077.08**
Expenditure for innovation on (Inset cover and other costs)	**£520**
Cost per pupil for innovation	**£5.84**

Results

Outcome findings

Overall

TABLE 4

	Mean pre-assessment mark	Mean post-assessment mark	Mean increase	Effect size
Control (n=87)	8.128	15.791	7.64	-0.171
Intervention (n=88)	8.767	15.442	6.639	

Boys/girls

TABLE 5

		Mean pre-assessment mark	Mean post-assessment mark	Mean increase	Effect size
Boys	Control (n=44)	7.864	15.341	7.432	-0.23
	Intervention (n=43)	8.778	14.778	5.956	
Girls	Control (n=43)	8.405	16.262	7.857	-0.051
	Intervention (n=43)	8.757	16.171	7.390	

Pupil premium/non-pupil premium

TABLE 6

		Mean pre-assessment mark	Mean post-assessment mark	Mean increase	Effect size
PP	Control (n=14)	7.6	15.1	7.5	0.067
	Intervention (n-14)	8.364	16.363	7.959	
Non-PP	Control (n=73)	8.197	15.881	7.658	-0.299
	Intervention (n=72)	8.827	15.307	6.44	

Previous attainment at KS2

TABLE 7

		Mean pre-assessment mark	Mean post-assessment mark	Mean increase	Effect size
High	Control (n=41)	9.974	17.462	7.487	0.145
	Intervention (n=43)	10.721	18.442	7.651	
Medium	Control (n=26)	8.2	15.04	6.84	-0.180
	Intervention (n=22)	7.048	13	5.952	
Low	Control (n=15)	4.429	12.857	8.286	-0.288
	Intervention (n=13)	7.385	12	4.615	

Process evaluation findings

Survey data – pupils

QUESTION 1:

What did you think about the information in your Knowledge Organiser? (definitions, key words, ways to talk about effect etc.) Did you know it all already?

Answered = 49   Skipped = 1
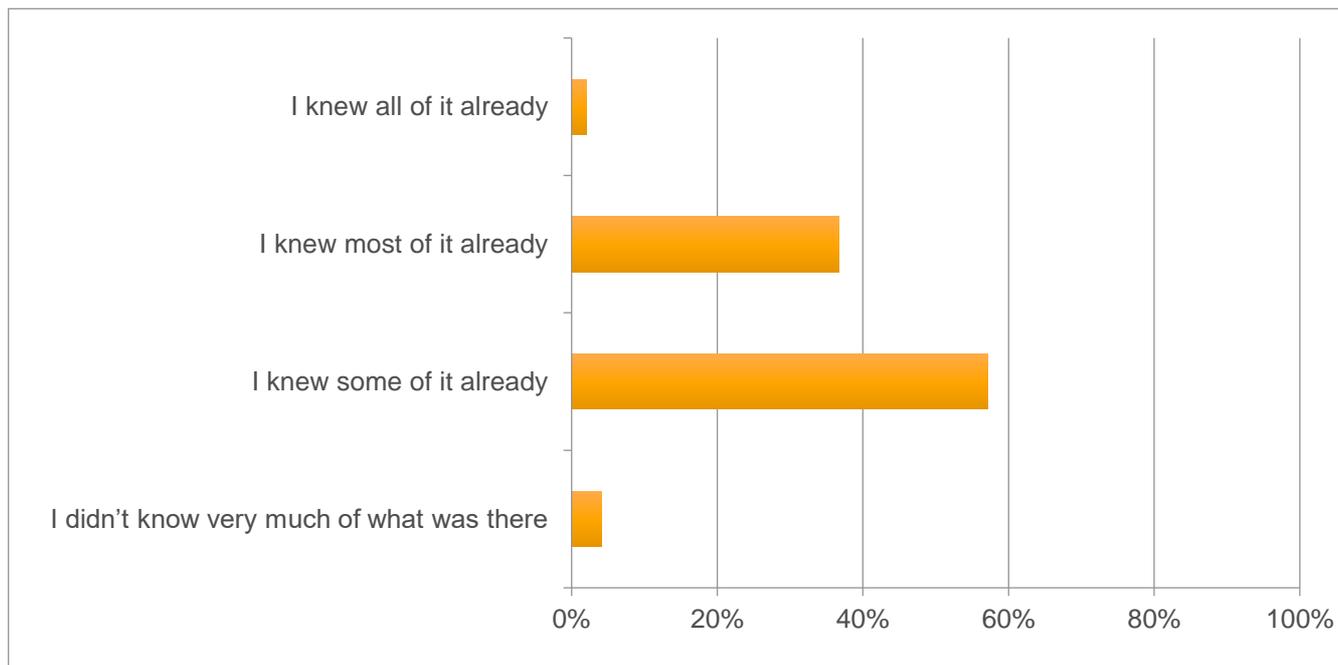
Answer choices	Responses	
I knew all of it already	2.04%	1
I knew most of it already	36.73%	18
I knew some of it already	57.14%	28
I didn't know very much of what was there	4.08%	2
Total		49

Now to lesson time: How often did you use your Knowledge Organiser during lesson time?

Answered = 50   Skipped = 0
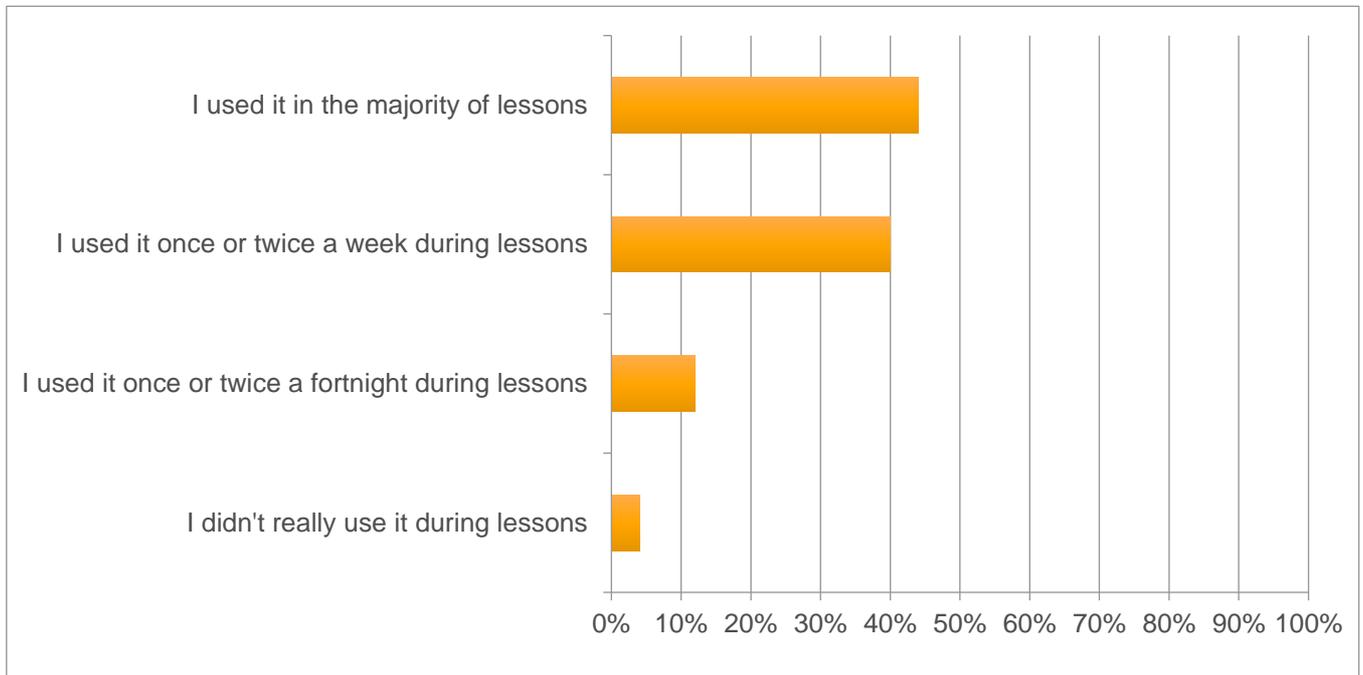
Answer choices	Responses	
I used it in the majority of lessons	44.00%	22
I used it once or twice a week during lessons	40.00%	20
I used it once or twice a fortnight during lessons	12.00%	6
I didn't really use it during lessons	4.00%	2
Total		50

QUESTION 3:

Most of your lessons would have started with a few questions that were a recap of previous terminology, or terminology you needed for the lesson. Did you find this useful during the lesson?

Answered = 49   Skipped = 1
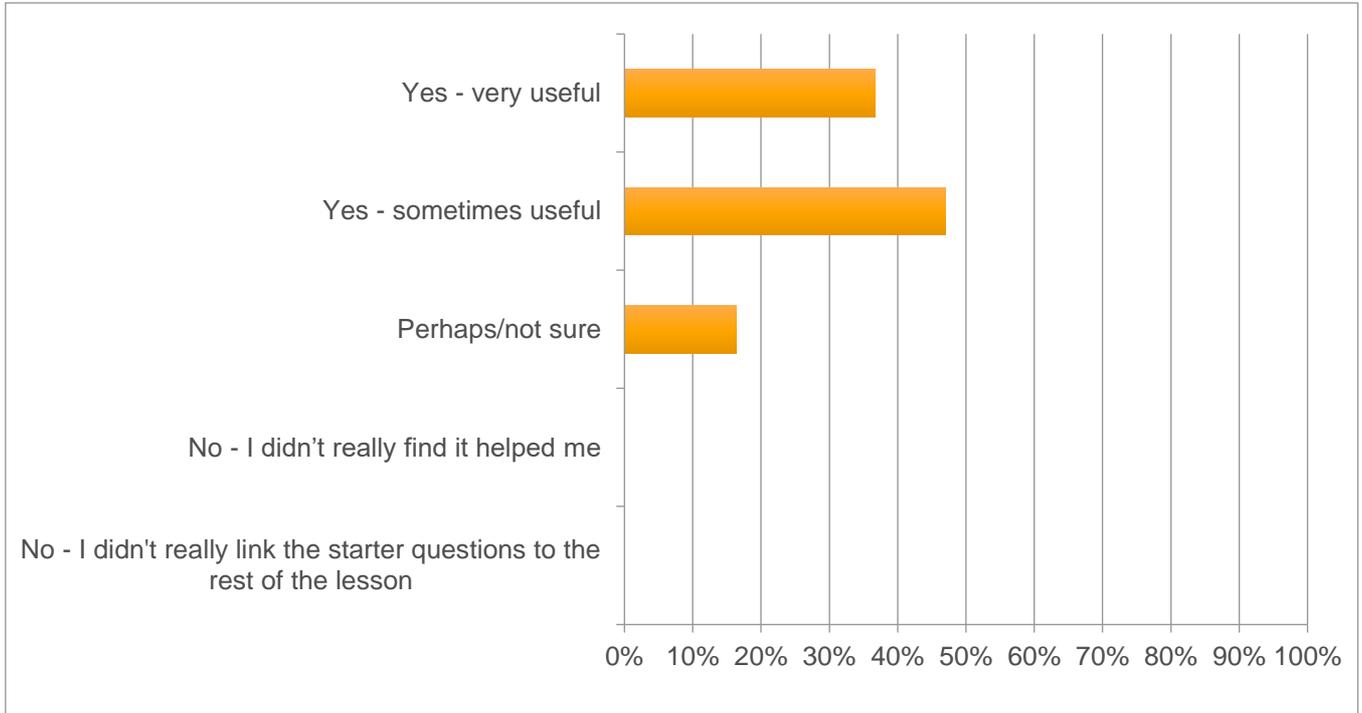
Answer choices	Responses	
Yes – very useful	36.73%	18
Yes – sometimes useful	46.94%	23
Perhaps/not sure	16.33%	8
No – I didn't really find it helped me	0.00%	0
No – I didn't really link the starter questions to the rest of the lesson	0.00%	0
Total		49

QUESTION 4:

On average, how much time did you spend revising for quizzes, using your Knowledge Organiser, each week?

Answered = 50   Skipped = 0
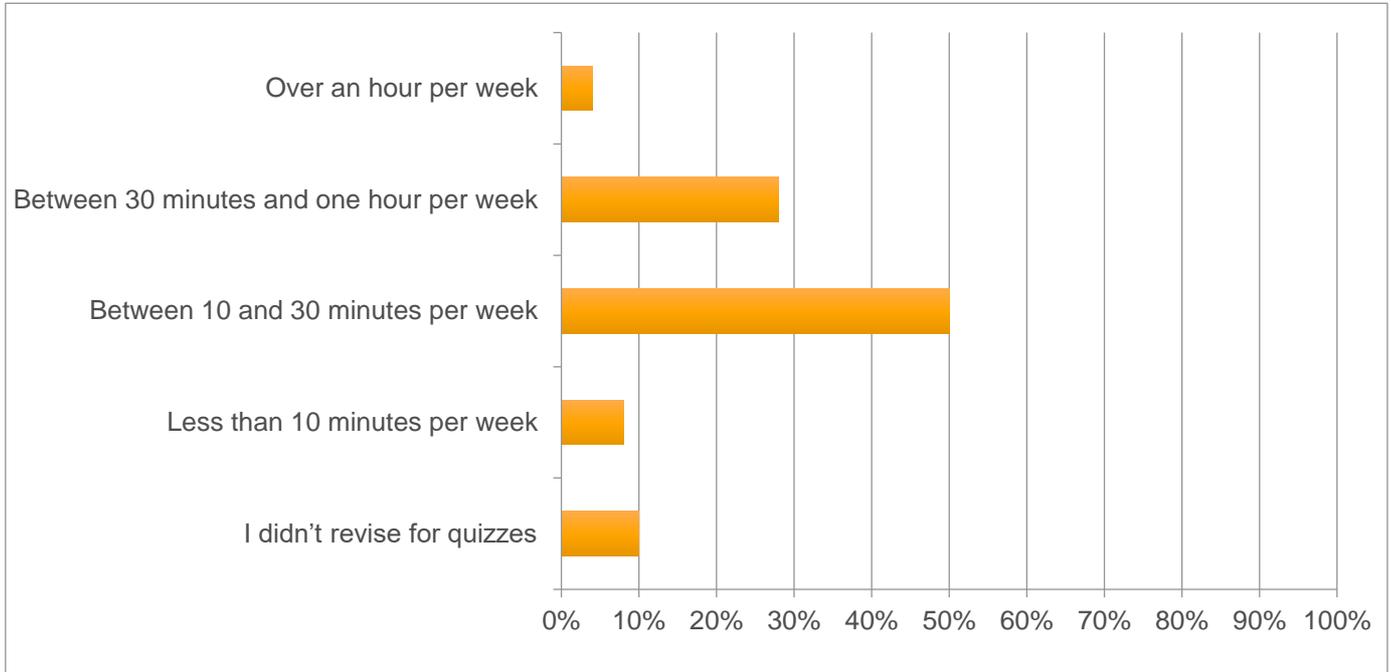
Answer choices	Responses	
Over an hour per week	4.00%	2
Between 30 minutes and one hour per week	28.00%	14
Between 10 and 30 minutes per week	50.00%	25
Less than 10 minutes per week	8.00%	4
I didn't revise for quizzes	10.00%	5
Total		50

On average, what score did you get for each of your quizzes (out of 15)?

Answered = 49   Skipped = 1
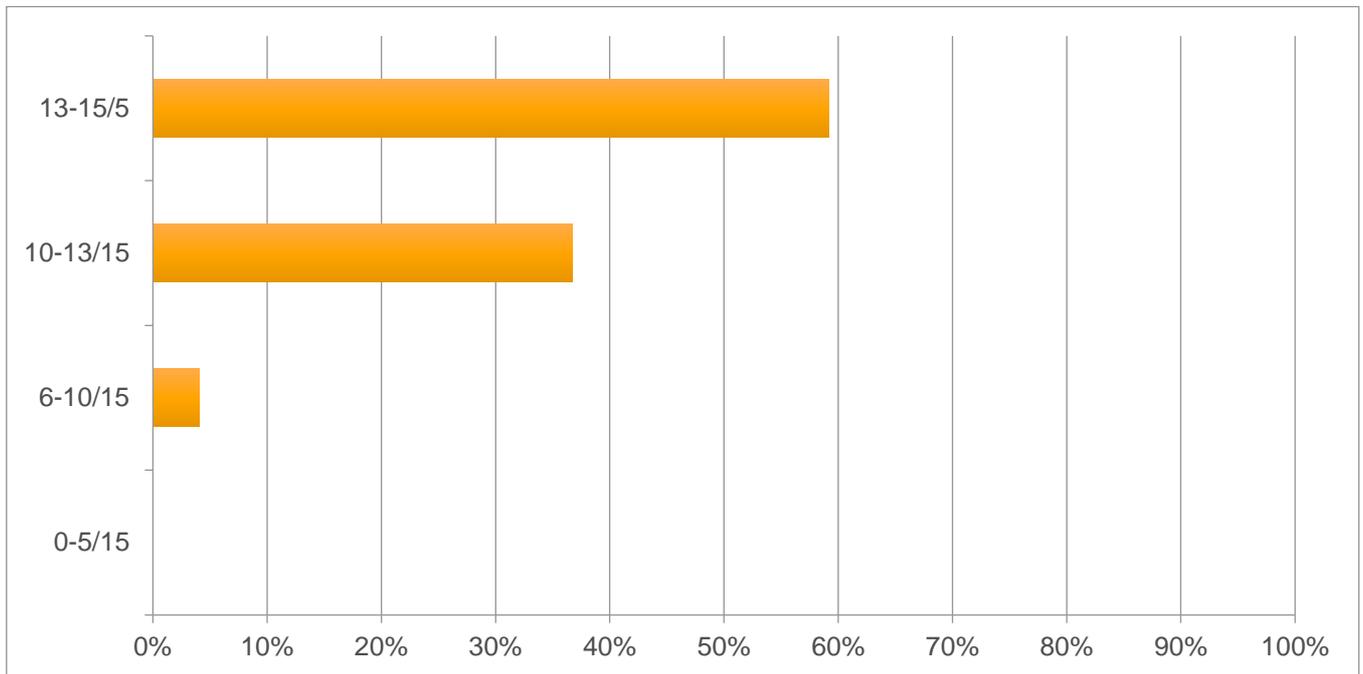
Answer choices	Responses	
13–15/15	59.18%	29
10–13/15	36.73%	18
6–10/15	4.08%	2
0–5/15	0.00%	0
Total		50

QUESTION 6:

How did you find the quizzes themselves? Tick all that are appropriate.

Answered = 50   Skipped = 0
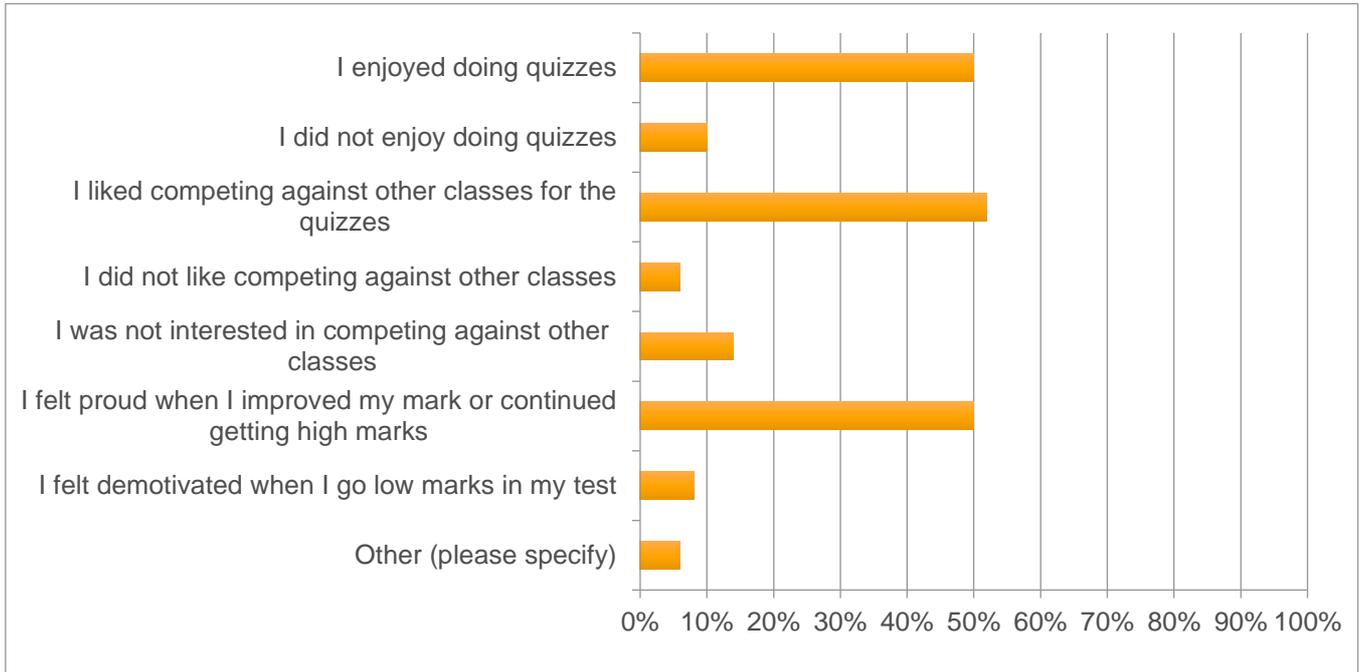
Answer choices	Responses	
I enjoyed doing quizzes	50.00%	25
I did not enjoy doing quizzes	10.00%	5
I liked competing against other classes for the quizzes	52.00%	26
I did not like competing against other classes	6.00%	3
I was not interested in competing against other classes	14.00%	7
I felt proud when I improved my mark or continued getting high marks	50.00%	25
I felt demotivated when I got low marks in my test	8.00%	4
Other (please specify)	6.00%	3
Total respondents = 50		

"OTHER" RESPONSES:

I feel as though the quizzes were quite easy, as long as you looked at the Knowledge Organiser prior to them! It was a breeze to do them. You never knew exactly what would come up, so that was rather exciting to complete. I always got high marks; it was effortless. However, without the Knowledge Organiser to revise from, I felt that I wouldn't have done so well.
Every time that I got lower than 13, it pushed me to do better.
I found the quizzes easy as they were based on your Knowledge Organiser. If you learnt some of your Organiser, then it will be easy to answer questions.

QUESTION 7:

What did you think of revising for the weekly quizzes as a form of homework?

Answered = 50   Skipped = 0
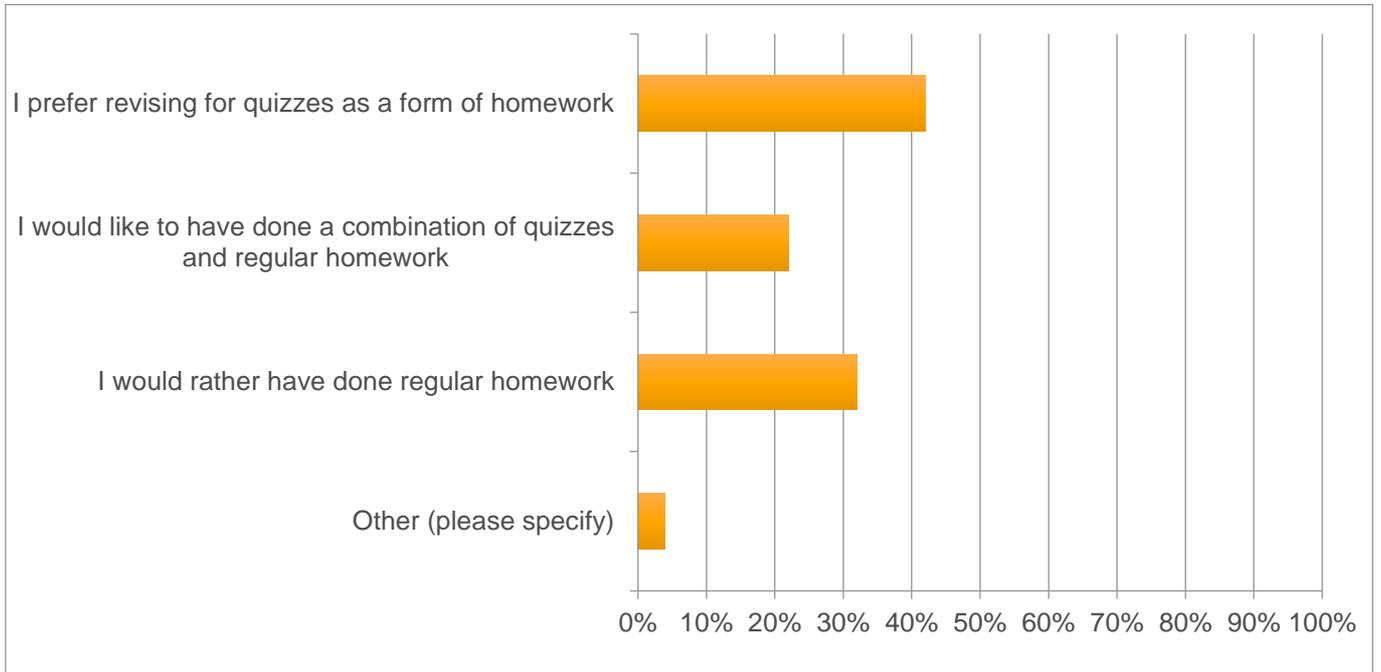
Answer choices	Responses	
I prefer revising for quizzes as a form of homework	42.00%	21
I would like to have done a combination of quizzes and regular homework	22.00%	11
I would rather have done regular homework	32.00%	16
Other (please specify)	4.00%	2
Total		50

"OTHER" RESPONSES:

I'm not sure.
I liked revising but I don't mind what type of homework we get.

Do you think having your Knowledge Organiser helped you with planning for and completing your assessment?

Answered = 49   Skipped = 1
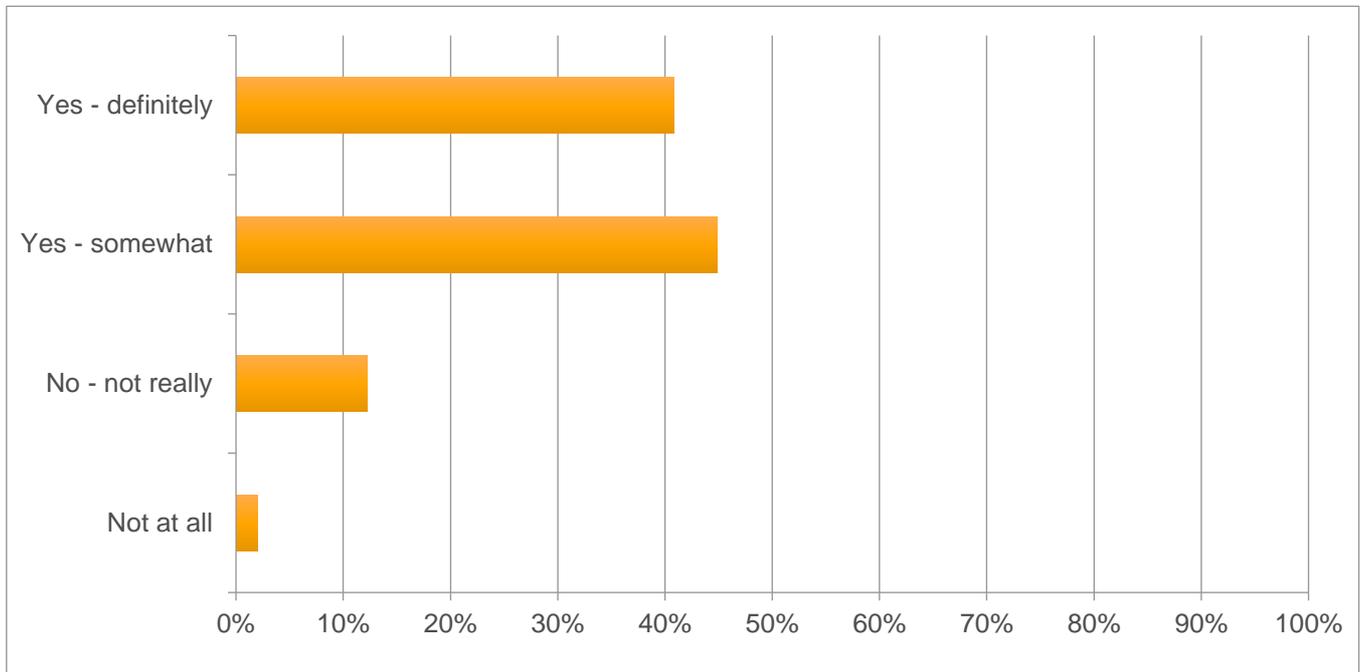
Answer choices	Responses	
Yes – definitely	40.82%	20
Yes – somewhat	44.90%	22
No – not really	12.24%	6
Not at all	2.04%	1
Total		49

QUESTION 9:

Would you like to have Knowledge Organisers for future units of work in English?

Answered = 49   Skipped = 1
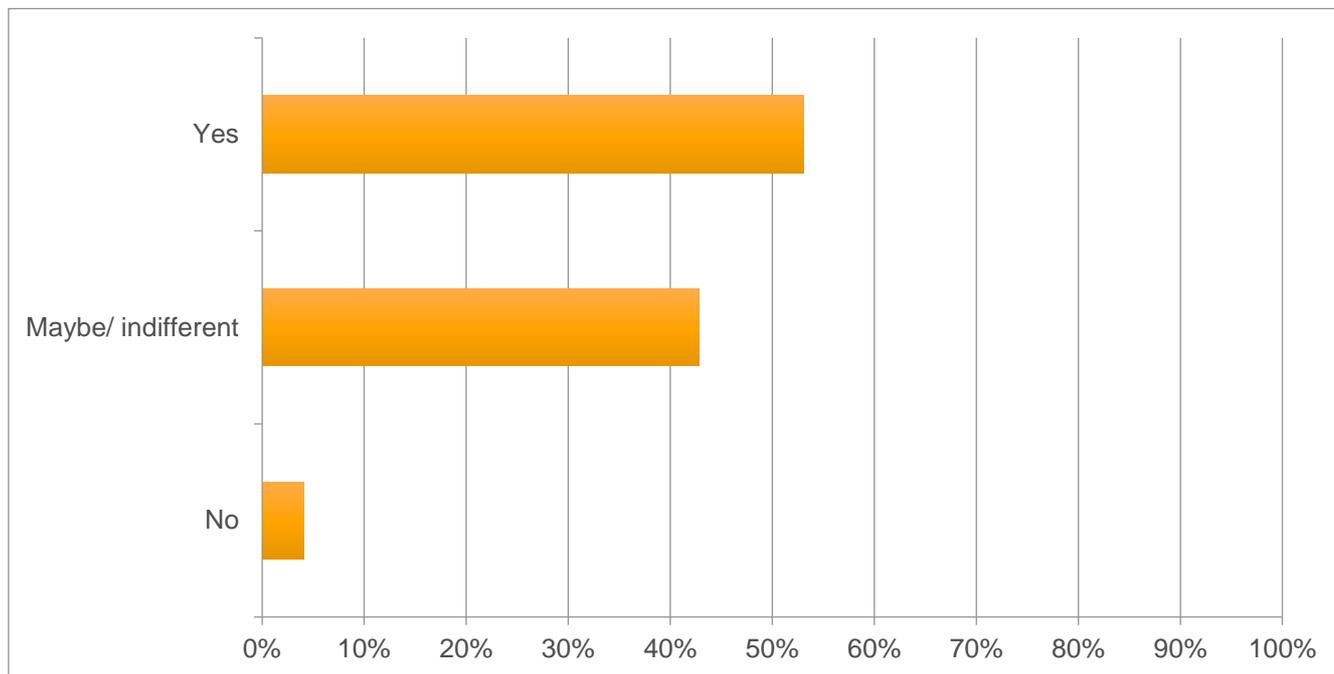
Answer choices	Responses	
Yes	53.06%	26
Maybe/indifferent	42.86%	21
No	4.08%	2
Total		49

Would you like to have Knowledge Organisers for future units of work in other subjects?

Answered = 49   Skipped = 1
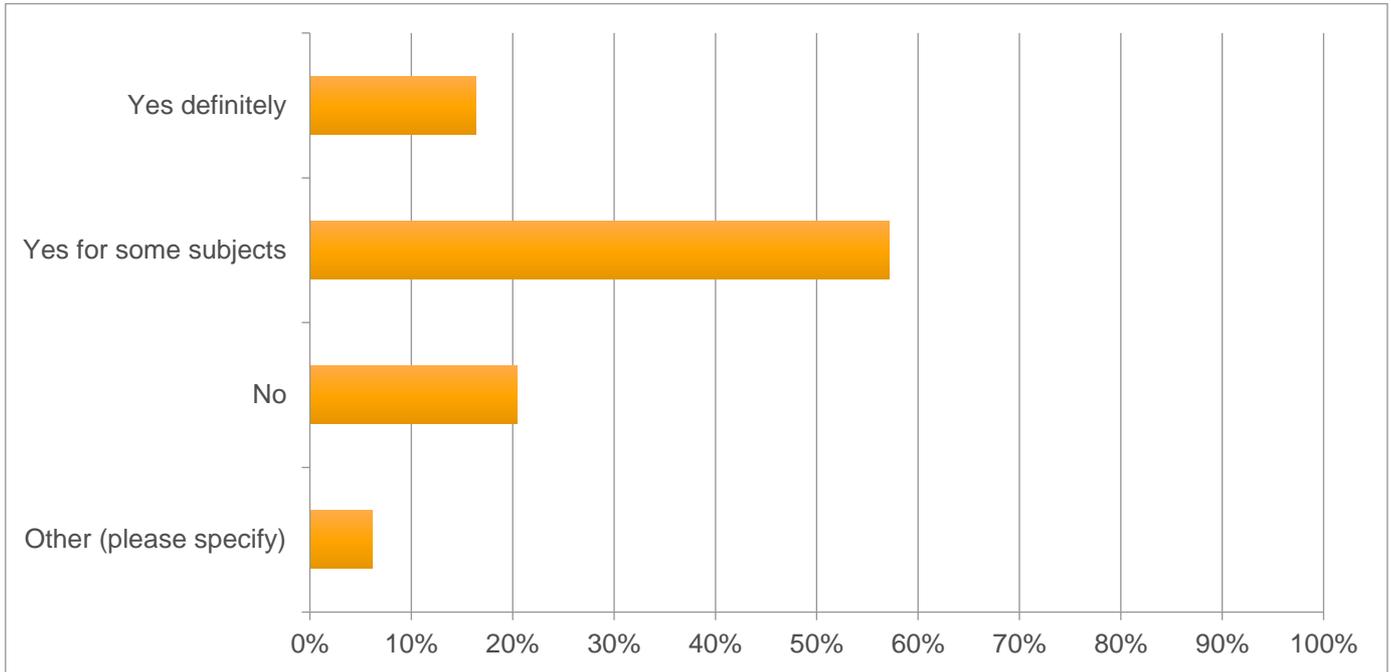
Answer choices	Responses	
Yes	16.33%	8
Yes for some subjects	57.14%	28
No	20.41%	10
Other (please specify)	6.12%	3
Total respondents = 49		

"OTHER" RESPONSES:

Maybe in the subjects that I need to improve on.
Possibly, in subjects where you have to memorise a lot of things. Maybe not history, though, as it would take the fun out of learning, since most of the information would be summarised on a double-sided A4 sheet. Also, maybe not maths. I'm not sure why; it feels like it would be a bit unnecessary. Makes the subject too easy – with every question, you just refer back to the sheet, maybe for formulas. I feel like you wouldn't actually learn much with it in maths, even though I did learn well with it in English. I think science would be best for Knowledge Organisers; there's a perfect mix of memorising information and using your own brain. Maybe they would be most useful for subjects where you are not put into sets based on your ability, as I feel everyone would understand concepts a lot faster, and we could get on with work. But, in general, I would not like to use Knowledge Organisers for other subjects, mainly due to me feeling as though it wouldn't fit in with the natural hype/feeling around subjects.
Partially, it depends on what we are doing. In addition I find it very useful for writing in general it reminds you of alternatives and such.

QUESTION 11:

Overall, did you find your Knowledge Organiser useful during your Roald Dahl lessons?

Answered = 50   Skipped = 0
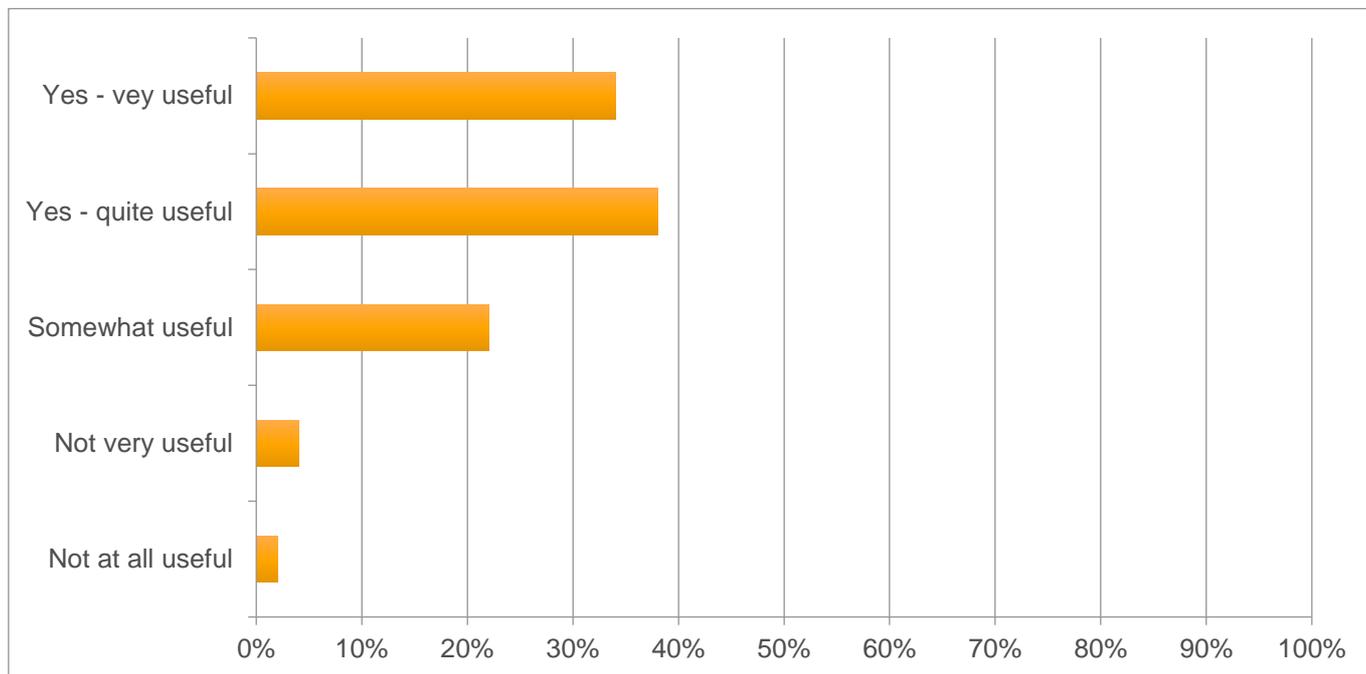
Answer choices	Responses	
Yes – very useful	34.00%	17
Yes – quite useful	38.00%	19
Somewhat useful	22.00%	11
Not very useful	4.00%	2
Not at all useful	2.00%	1
Total		50

Questionnaire data – teachers

Q1: Do you think that pupils found the Knowledge Organiser (KO) sheet to be useful? If so, how?

TEACHER OF GROUP F*:* Pupils could see a possible overview of the skills and ideas being covered in the unit. They could see what they would learn in advance. For logically minded pupils who like lists and to feel they have completed tasks this was a good way to ensure they felt on top of things.

TEACHER OF GROUP L*:* I think the pupils in my class found the KO very useful. It gave them the security of knowing where to find appropriate terminology related to the learning, which allowed them to use it with more confidence and made more reluctant learners a bit more willing to answer questions or to even volunteer answers without prompt.

TEACHER OF GROUP O*:* The higher attainers who remembered to use it and could use the terms appropriately, yes. The others, less so, as it was difficult.

Q2: Did you as a teacher feel the KO was a useful tool to guide your teaching?

TEACHER OF GROUP F*:* Yes I did. Although I would have possibly changed a couple of the points/added on different terms... looked to see how their knowledge of narrative theory was developed... but this is not important.

TEACHER OF GROUP L*:* I found the KO worked well with the lessons planned, which I tried to follow. However, I would have liked to have made a few changes/additions to it to suit my style of teaching and the needs of pupils in my class.

TEACHER OF GROUP O*:* It was good to have specific aims.

Q3: As for daily recaps (five-question starters) – did you use them? Why/why not?

TEACHER OF GROUP F*:* Yes the kids liked them. Either this was because they always like routines or because they liked being reminded of knowledge they were learning....

TEACHER OF GROUP L*:* I used the daily recaps/terminology quizzes at the start of lessons as dictated by the [PowerPoint presentations] as they usually helped to prepare the class for the material to be covered in the lesson. It also seemed to boost their confidence using subject terminology each lesson.

TEACHER OF GROUP O*:* Yes I did. Good to call back to previous learning.

Q4: What about the quizzes – did you implement them fully? Do you think they were effective in improving children's knowledge / self-esteem? Or were they unnecessary?

TEACHER OF GROUP F*:* The quizzes were fun but I am not sure how much they really measured knowledge against recall... and ability to USE the knowledge... as seen in the tests when they did not always remember what to say... just more practice needed? Short space of time?

TEACHER OF GROUP L*: I fully implemented the weekly quizzes. At first it was a challenge getting the class on board with the routine as it was unusual for them. The competitive element with the other participating classes helped with this. By the end of the unit, there was much more buy-in which saw an improvement in overall class performance. It was obvious that the students whose performance improved, particularly when near/full marks were achieved felt a sense of accomplishment and pride, probably boosting self-esteem and confidence with terminology related to writers' methods.

TEACHER OF GROUP O*: Good for tracing which pupils are studying and which aren't.

Q5: Do you think KOs would serve any other purpose? ie. just in KS4/as a revision tool/for pupils to create themselves?

TEACHER OF GROUP F*: Yes. Definitely. The pupils in KS4 are learning facts about all their subjects and they liked to have an idea of a definitive base line of knowledge that they should learn. Not sure about the differentiation needed to make this work for everyone though. Might need some more work. BUT great idea.

TEACHER OF GROUP L*: KOs as a revision tool at KS4 would be beneficial. Even as a pre-unit resource at KS3 to give pupils the opportunity to engage with learning before it starts has its benefits.

TEACHER OF GROUP O*: Good for cheat sheet creation for exams.

Q6: Would you use KOs again in your teaching? If so, would you make them yourself or want them provided for you? If not, why?

TEACHER OF GROUP F*: Yes. I would definitely use them. I liked the structure and I liked the process of learning. I would probably add in more for KS4. I used something similar in the past called place mats. They worked well too. Could have generic ones for grammar to help think about structure for written tasks. Also spellings and rules around different parts of speech. Perhaps have a generic one for poetry at KS3 etc...

TEACHER OF GROUP L*: I would definitely use KOs again in my teaching. Guidance on the criteria needed would help teachers to create these for themselves, but a template with things that MUST be covered along with space for additions to fit the needs of my class or additions I would like to make would be ideal for me.

TEACHER OF GROUP O*: Yes, though I would probably use them in terms of teaching pupils how to create a unique cheat sheet/revision sheet for their own revision.

Lesson observation

TABLE 8

Control or intervention? C or I	Class	KOs in books?	Evidence of completed homework activities linked to KO?	KO referred to in lessons?	5 question starter tasks in books?	Quizzes in books?	MEAN QUIZ SCORE PER CLASS
C	R	NO	NO	NO	NO	YES*	N/A
C	H	NO	NO	NO	NO	NO	N/A
C	N	NO	NO	NO	NO	NO	N/A
I	F	SOME	SOME	YES	YES	YES	11.8
I	L	SOME	YES	YES	YES	YES	10.8
I	O	SOME	SOME	YES	YES	YES	12.8

* but not linked to Knowledge Organisers

Discussion

Interpretation of findings

Overall, the Knowledge Organisers (Kos) and quizzing had a negative effect on pupil progress and, in particular, boys and lower prior-attaining pupils at Key Stage 2 (KS2). This seems contrary to existing evidence, specifically in relation to quizzing, highlighted in Coe et al.'s 'What makes great teaching' (Coe et al., 2014) report for the Sutton Trust, inclusion of desirable difficulties (Bjork and Bjork, 2011) and incorporating opportunities for testing, interleaving and spacing, can support pupils' memory of the topics they are studying (Dunlosky et al. 2013).

There was a marginal increase in scores of pupil premium (PP) pupils, and those with high literacy scores at KS2. I believe that this could be because the homework/quizzing element of the innovation was accessible to all pupils, inclusive of those with PP backgrounds; it did not require internet access or help from parents. This could have been an advantage for PP pupils. However, the fact that the difference was so small means that it is necessary to accept that KOs are perhaps not an inherently effective way to improve pupil grades. It could be that the creation of homework activities stretches pupils' knowledge and understanding more effectively.

From a teacher's perspective, the three primary teachers of the intervention classes were generally positive. They noted that KOs gave pupils confidence, in particular the "logically minded pupils" and generally contributed to pupils' sense of achievement. However, at the same time, they were perhaps limiting to lower-attaining pupils as the content of the KO was 'difficult'. The overall consensus seemed to be KOs had the foundations of a good idea, but that being so prescriptive with their use and design was difficult: Teacher F commented about the need for differentiation, Teacher L commented that they'd like to create their own KOs tailored to the needs of their class, and Teacher O said they'd prefer to use KOs as revision aids, or for pupils to create themselves.

As for the formative and summative quizzes, teachers acknowledged their use although Teacher F raised a valid point in that pupils can 'recall' information without necessarily being knowledgeable about it.

Interestingly, pupil feedback for the use of KOs and quizzing was noticeably positive. Around 82% of pupils stated that having formative starter questions was useful, and no pupils stated that they served no purpose at all (18% were unsure). In addition, 96% of pupils felt their KO helped them with their assessment and 96% of pupils wanted further KOs in future English units of teaching. Four out of five pupils could see the benefit of KOs in other units. One pupil commented that they would help with "subjects they needed to improve on". Another pupil thought that they would be useful for some subjects but that they could "take the fun" out of some lessons.

Half the pupils who answered the survey felt the following: Firstly, that they enjoyed the quizzes; secondly, that they enjoyed the competitive element of the quizzes; and thirdly, that they felt proud when they improved their results. One pupil wrote: "Every time I got lower than 13, it pushed me to do better". As a means for motivating and engaging pupils, the innovation lesson structure seems effective.

Limitations

There are a number of limitations that need to be considered when interpreting the findings of this project.

The length of the project

This project was only six weeks long and during that time two days of school were cancelled due to snow, and another day was a 'Deep Learning Day' where pupils were off timetable. Group F had teacher absence for three lessons. Inclusion of assessment days meant that actual teaching days were again reduced.

Teacher compliance/ extenuating circumstances

The intervention group whose overall improvement was lowest (Group F) was also the class where the lesson structure was not followed consistently. Some pupils had homework worksheets stuck into their exercise books but were not filled in or were incomplete, and this had not always been followed up on. Formative tasks were not evident in all exercise books and some books had no KO in, with pupils saying they did not receive one or they had lost it. This meant that results for this class were possibly lower than they could have been had these extenuating circumstances not been present. Similarly, with Group O, not all pupils had completed homework, and this had not always been followed up on.

The PowerPoint presentations for each lesson

I had rewritten PowerPoint presentations for every lesson, for both control and intervention groups, so that the project was fair. Evidence of these PowerPoints being used was in all control group classes. These PowerPoints contained a lot of knowledge without directly pointing pupils towards revising it. This was possibly enough for pupils to do well in the tests.

The post-test survey for pupils

This proved difficult as I was not aware when I created, and paid for, the survey function that Survey Monkey had recently been blocked from pupil's computers at school. As a result, the survey was set as homework, yet only around half of pupils completed it, despite constant reminders. Another survey platform was considered, but this would have created even more time between the end of the unit and the survey.

Implications for practice

Firstly, the format and use of KOs needs revision. In its current format and use, it is no more successful, and in fact somewhat less successful than other teaching methods in our school. Its design I believe needs to be more flexible to accommodate the needs of the class/priorities of the teacher. In addition, the homework and quizzing process could perhaps be interleaved with more extensive and varied homework opportunities so that pupils don't miss out on these benefits.

From carrying out this study, I also believe the length of the research project is important. A six-week timeframe was not enough, particularly given the unavoidable circumstances surrounding weather and teacher absence. Since the project, Teachers F and L have both commented that pupils from their intervention classes have retained greater knowledge of techniques learnt in the unit, such as foreshadowing and dramatic irony, and have been able to identify and talk about them in subsequent teaching units. This suggests that the time of the innovation project

was perhaps not long enough, and that a project spanning a longer period of time might have yielded different results.

In our school, KOs are more likely to be used for revision purposes at KS4 rather than KS3. I would also remove some information from them, like plot summaries, as I agree with the pupil comment that it can take away the fun from learning. Alternatively, a KO could be built up over a period of weeks to provide a fuller picture as pupils become immersed in a unit of work. This would be the teacher's decision and not a prerequisite of the school.

If wanting to provide a knowledge-based curriculum, an innovation like this requires complete buy-in from teachers. It is possible, however, that the knowledge base could come from the lesson design and occasional quizzes (not necessarily weekly). It is important to acknowledge the teaching styles of teachers and allow a little more flexibility when introducing new ideas.

On reflection, I believe that the style of assessment was not ideal (in that the post-assessment was something pupils could revise for). As teachers knew what the final assessment would be on, they could prepare pupils to succeed. How much teachers could assist pupils with their planning was a bit of a 'grey area' and I would address this in a future project.

Ultimately, I believe that the delivery of lessons and the quality of the resources are what drive pupils to success. Resources for both intervention and control classes were quite knowledge-rich and the short time-frame meant that pupils were able to retain this knowledge in their long-term memory despite not being actively tested on it.

Implications for further evaluation

One area of interest was the lower prior-attaining pupils who appeared to benefit least from the innovation. Having knowledge of terminology by itself is not enough – and even though pupils may have done well in their knowledge test, they did not necessarily know how to transfer what they had learnt into their responses. It would be interesting to see whether a version of the KO might be more successful for lower prior-attaining pupils, perhaps with visual prompts to match key words, or more explicit focus on how knowledge would be evidenced in writing.

Another area of interest is the idea of 'teaching to the test' and whether, in fact, pupils were more successful when following precise, uniform lessons plans (provided by the lead teacher), or whether teachers creating their own resources would yield higher results.

I feel that this innovation could be successful in subjects like science or history, where pupils are required to have a wide range of factual knowledge.

Conclusion

In conclusion, I feel that the running of this project has altered my views about the importance of knowledge and how we teach it in English. No two teaching styles are the same, and although we may perceive a teaching method to be the optimum one, this is not always the case, as was proved with this study. Although the reduction of a unit of work's knowledge to one/two sides of A4 allows pupils a practical way to reference ideas and information, and promote independence and confidence, this in itself is not a replacement for the deep level of understanding and engagement that good teaching and thoughtful resources can offer. Knowledge Organisers and quizzing may be more effective in the long term, and provide pupils with a useful revision tool, but it is a teaching method that requires personalisation and differentiation, for both teacher and pupil, and there is no one-size-fits-all reality.

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Appendix

Knowledge Organiser side 1

Section A: Terminology - Language

Word Classes / Parts of Speech

1	Noun	Person (girl), place (town) or thing (pen)
2	Proper Noun	Name of a person or place.
3	Pronoun	Replaces a noun (e.g. he, they, your)
4	Verb	A doing word; describes an action (jump)
5	Adjective	Describes a noun (happy girl, grey wall).
6	Adverb	Adds information about a verb (jump quickly)
7	Preposition	Describes relationships between nouns (under, above, next to, below, through)

Language Techniques

1	Metaphor	Something is presented as something else.
2	Alliteration	Repetition of the same sound over a series of words
3	Personification	Giving human traits to something non-human.
4	Simile	Something is presented as like something else.
5	Onomatopoeia	When a word recreates the sound it describes
6	Sibilance	's' sound
7	Plosive	b/p/c sound
8	Juxtaposition	Two ideas together which contrast each other.
9	Irony	Like sarcasm, where the opposite is implied.
10	Hyperbole	Exaggeration
11	Caricature	A character with exaggerated features or description, created for comic effect
12	Zoomorphism	When animal characteristics are given to humans

Section B: Terminology - structure

1	First person	Told from a character's perspective (I).
2	Second person	Directed to the reader (you).
3	Third person	External narrator- knowledge of more than one character's feelings (he/she/they).
4	Atmosphere	The mode or tone set by the writer.
5	Climax	The most intense or decisive point.
6	Dialogue	Speech (conversation)
7	Foreshadowing	Hints what is to come (can mislead).
8	Plot Twist	A radical and surprising change in the plot
9	Zooming	Focussing from something big to something small/outside to inside/outer feelings to inner feelings

Story Structure

1	Exposition	Introduces the setting and the main characters
2	Inciting Incident	The catalyst for the story. Reveals concern/challenge that the main character faces
3	Rising action	A series of suspenseful events that keep the reader interested. May include foreshadowing.
4	Climax	The main character comes face-to-face with their challenge. Often the most dramatic part of the story
5	Dénouement	The result of the climax of the story. Details how the main character deals with the incident. Brings the story to a close.

Section C

Alternatives to 'shows' (RED HIP CHIPS)		Effect on the reader	
Reveals	Confirms	Reminds us	Builds an atmosphere of
Emphasises	Hints at	Persuades us	Evokes feelings of
Demonstrates	Implies	Forces us to	Might make us feel
Highlights	Proves	Makes us realise that	Elicits an emotional response
Implies	Suggests	Creates a sense of	Might provoke a feeling of
Portrays		Teaches the reader	Confronts the reader with

Knowledge Organiser – Short Stories

Year 8

February – March 2018

Roald Dahl short Stories – Glossary

Man From the South

#	Term	Definition
1	Azaleas	Flowers
2	Buckskin	Animal skin
3	Panama Hat	Wide brimmed hat
4	Shillings	Old form of currency (money)
5	Martini	Alcoholic drink

Lamb to the Slaughter

#	Term	Definition
1	Translucent	See-through
2	Blissful	Joyful
3	Luxuriate	To delight in
4	Nausea	Sickness
5	Mantle	Window-sill

The Hitchhiker

#	Term	Definition
1	A Hitchhiker	Someone who asks for a lift from a stranger in order to travel in their car to a location
2	Seldom	Rarely
3	Flabbergasted	Surprised / astounded (informal)
4	Pickpocket	A thief who steals things out of pockets or bags
5	Fingersmith	A "talented" pickpocket

Parson's Pleasure

#	Term	Definition
1	Parson	A vicar
2	Prosperous	Wealthy (rich)
3	Dilapidated	Worn out /crumbling
4	Clergyman	A religious leader
5	Obsequious	Grovelling
6	Chippendale	Furniture designer
7	Home Counties	Counties that surround London, including: Essex, Kent, Berkshire, Hertfordshire
8	Imbecility	Stupidity
9	Eulogy	A speech of praise (given after a death)
10	Right Wing	Conservative political beliefs
11	Commode	(in this context) – a chest of drawers
12	Mahogany	Type of wood
13	Mawkish	Over-emotional
14	Carcass	Dead body of an animal

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