Developing Subject Specific Vocabulary in Art & Design with Deaf Students

A study submitted in partial fulfilment of the requirements for the degree of Master of Arts of the University of Hertfordshire

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"Most vocabulary is acquired <u>indirectly</u> through <u>daily</u> interactions with adults, siblings and peers that occur through <u>conversations</u> and <u>routines</u>."

(Laundry & Smith, 2006)

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Abbreviations

CYPD	Children and Young People who are Deaf
QTOD	Qualified Teacher of the Deaf
TOD	Teacher of the Deaf
KS1	Key Stage 1
KS2	Key Stage 2
KS3	Key Stage 3
KS4	Key Stage 4
GCSE	General Certificate of Secondary Education
A-Level	Advanced Level
BTEC	Business & Technology Education Council
NDCS	National Deaf Children's Society
SEN	Special Educational Needs
DFE	Department for Education
D&T	Design and Technology

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Abstract

This study explores the impact of structured vocabulary interventions on the use of subject-specific language by deaf students in secondary Art & Design education. Using an action research methodology, the project involved five Year 9 students with varying degrees of hearing loss and additional educational needs. Over an eight-week period, targeted vocabulary interventions were embedded within the curriculum, with pre- and post-assessment data collected to measure changes in vocabulary use. A novel feature of the study is the categorisation of vocabulary into basic naming words and complex topic terms, allowing for a more nuanced analysis of language development. Results showed measurable improvements across all participants, particularly in the use of basic colour vocabulary, with more modest gains in abstract terminology. The findings underscore the importance of explicit, visual, and scaffolded vocabulary instruction for deaf learners and have practical implications for supporting language development in visually creative subjects at Key Stage 3 and beyond.

1 Introduction

This is a study based at a secondary school, the school's communication policy is teaching through oral language, immersing children and young people who are deaf (CYPD) in spoken and written-English, sign language is not used in the classroom.

There is a developing school-wide vocabulary policy, which has emphasis on supporting use of new vocabulary in lessons, how new vocabulary is taught and words of the term, across the curriculum in all classes, these are targeted groups of words, for example, emotions or exam language.

I am a Qualified Teacher of the Deaf (QTOD) and a qualified teacher of Design & Technology (D&T) Textiles. I believe that there is a need for more direct, specific vocabulary teaching within Art & Design, following and in line with the school vocabulary policy. A clear aspect of Art & Design assessment which requires students to be confident and have clear understanding with using subject specific vocabulary for analysis. I set high expectations for my pupils and use direct vocabulary interventions to help them achieve higher grades.

2 Literature review

2.1 Introduction

The structure of this literature review will be in five parts.

1. Current Academic Achievements Analysing data on the academic performance of CYPD at the secondary and General Certificate of Secondary Education (GCSE) levels. This section will explore attainment correlations from Key Stage 1 (KS1) and Key Stage 2 (KS2), assessing how GCSE achievements influence higher education choices and future success.

2. Language and Literacy Acquisition Examining existing literature and reviews on language and literacy acquisition in CYPD, with a particular focus on vocabulary and writing development.

3. Visual Literacy in Art & Design Education Investigating how visual literacy has been studied and its implications for teaching and learning in art and design education.

4. Assessment and Pedagogy in Art & Design at GCSE Reviewing the official assessment framework for art and design at the GCSE level, alongside an analysis of pedagogy and teaching methods aligned with GCSE specifications.

5. Justification and Benefits of the Current Study Concluding with a rationale for this study and an outline of its potential benefits.

2.2 Search strategy

Due to the location and demographic of this study, I will research literature cautiously, within this study CYPD attend a school using oral/ aural approach to learning. Most literature has mixed demographic of CYPD using sign, oral/aural or total communication as an education method.

Table 2.1 Literature Search Method

Search terms used in Scopus	Titles	Abstracts or papers relevant	Changes in search terms
Vocabulary development and writing	1147	26	Limited to papers/ literature published within the last 15 years
Vocabulary development and writing and deaf children	18	4	'deaf children', 'deaf young people', students who are deaf', 'children who are deaf'
Writing development deaf children	112	16	'Writing development' 'writing and language' 'deaf teenagers'

Writing development deaf teenagers	2	0	
Attainment gap deaf children	3	0	
Achievement at GCSE for deaf children	0	0	
GCSE deaf teenagers	0	0	'GCSE and deafness' 'Deaf children GCSE'
Deaf children in practical subjects	15	1	'Creative subjects' 'Art & Design' 'art and language'
Art and Design vocabulary	465	1	

These search terms were used within Scopus, a large amount of unrelated literature was retrieved in the results, selecting only relevant selections, still offered a range of literature to be reviewed. As well as these initial search terms, papers cited within reviewed literature were searched, and some found to be appropriate. Additional literature searches were made on google scholar and on ResearchGate, this is where further relevant papers were found for the literature review.

2.3 Current academic data for CYPD

Most up to date data from National Deaf Children's Society (NDCS), 2023, compiling results at Key Stage 4 (KS4) GCSE results across England, stated that results

cannot be compared to previous years, due to the pandemic examination years being cancelled, teacher assessed and return to eternal examinations using comparative grade boundaries (NDCS, 2023). Between 2022 and 2023, the attainment gap between deaf and other children has decreased this is mainly due to other children's attainment decreasing further than deaf children's attainment (NDCS, 2023).

According to detailed 2022 data CYPD are falling a whole grade behind "all children". This group include all children who were entered for GCSE in England, from 3,989 state-funded schools with 575,863 pupils (NDCS, 2022). Using provided attainment 8 results, which are average scores of achievements for up to 8 qualifications at GCSE level.

"Attainment 8 measures the average achievement of pupils in up to 8 qualifications. This includes: English language; English literature (if only one GCSE in English is taken then it is double weighted); maths (double weighted); three further qualifications that count in the English Baccalaureate (EBacc); and three further qualifications that can be GCSE qualifications (including EBacc subjects) or any other non-GCSE qualifications on the DfE approved list" (GOV.UK, 2022).

Attainment 8 data tells us that on average CYPD are not achieving equivalent results with all children. Suggesting that at some point within their school life they are falling short of achieving expected or average results. This data links to the percentage of CYPD achieving grade five or above in both English and Maths, in 2021 CYPD 37.7% and the hearing population of 51.9%, which correlates to achievement across their wider curriculum grades (Marschark et al, 2015. Rambly et al, 2013. Avdi, 2011. Graham, 1987). It should be noted that the data for CYPD is gathered from children

who have been formally identified with Special Educational Needs (SEN) for their deafness, not those who have not been identified or have deafness listed as a secondary need to another identified SEN (NDCS, 2022). The data can be used to make comparisons but does not cover the whole population of CYPD.

Links to KS1 and KS2 can also be seen where the gap between CYPD and the hearing population begins in primary education. However, due to the recent pandemic and changes in assessment, there is no data for 2020 and 2021 to make direct links with. Referring to data from 2019; shows a comparable gap between CYPD and the hearing population. Achieving expected standards in reading, writing and mathematics in KS2 shows a proportion of 44 CYPD against 65 in the hearing populations. This suggests that the gap in attainment from Primary to Secondary does not close by the time CYPD take formal assessments in KS4, Advanced Level (A Level).

In the last three years, attainment in Art & Design subjects has dropped, students achieving grade four and above has decreased (Ofqual, 2023). This pattern of a decline in attainments has a similar trend to results in English language. Ofqual's (2023) data does not differentiate between SEN or CYPD, so it is not possible to directly investigate CYPD Art & Design GCSE results.

The Department for Education's figures indicate a clear achievement gap between CYPD and hearing peers. Sarant et al (2009), comment on research between 1992-2004, which explore language development at infancy. Highlighting spoken language gaps at entering pre-school, with CYPD acquiring language at a rate of 50-60% reaching expected levels, which is lower that their hearing peers. The gap in language development effects other areas of development, communication, social

and emotional development (Meinzen-Derr et al. 2018, Netten et al. 2015, Lederberg et al. 2013), entering a school environment at a disadvantage. This is reflected in the data analysed that the disadvantage continues into later childhood.

2.4 Language Development

Language development is a large focus of research due to the importance it has on life accomplishments (Albertini & Schley, 2011).

In the wide demography of hearing children, early spoken language development is directly linked to acquiring literacy skills, reading and writing skills (Mayer & Tresek. 2018). Focusing on standard language development, this should also be the case for CYPD (Perfetti & Sandak. 2000, Paul, Wang & Williams. 2013), the majority of CYPD do not acquire language as quickly as their hearing peers resulting in language correlated with literacy delays (Kilpatrick & Wolbers. 2019).

2.4.1 Why language is delayed in CYPD

Laundry & Smith (2006) state that most vocabulary is developed within the home environment indirectly, through interactions and through incidental learning.

Every CYPD will have different experience and understanding of language, oral language environments are not fully accessible, and some language is indecipherable (Kuntze et al, 2016). Factors of wide heterogeneity of the CYPD population, early identification, cochlear implantation before three years, maternal

education and socio-economic status, effects access to or the quality of the language environment in the home (Marschark et al. 2014, Hintermair. 2014, Calderon & Greenberg. 2011). Ledeberg et al (2013) created a report which summarised theories and studies into the trajectory of language development in CYPD. The conclusion was that the delays in language are varied and changing constantly; upgrading technologies and receiving amplification at much younger ages, giving CYPD different listening experiences. Most CYPD follow the typical timeline for language acquisition in hearing children, those CYPD who don't, may have additional SEN. Moores and Martin (2006), highlight a high incidence of additional disabilities in CYPD, due to the main causes of deafness to be through premature birth, meningitis and other congenital conditions (Sheffield & Smith, 2019). Resulting in young CYPD to not reach the typical points in the developmental timelines due to gaps in progress and opportunity, which can affect how they reach targets compared with hearing children (Moeller et al, 2015. Ewing & Jones, 2003).

2.4.2 Vocabulary development

Vocabulary acquisition is a foundational component of language development and is closely tied to reading comprehension, academic success, and expressive communication. For CYPD, vocabulary development can be significantly impacted due to limited access to spoken language in early childhood—especially when incidental learning opportunities are reduced (Convertino et al., 2014; Van Zeeland & Schmitt, 2013).

Research consistently shows that much of vocabulary learning in hearing children occurs informally through overheard conversation, shared reading experiences, and social interaction (Akhtar, Jipson and Callanan, 2001; Biemiller and Boote, 2006; Laundry & Smith, 2006; Mol and Bus, 2011; Farrant and Zubrick, 2013). These contexts offer exposure to a wide range of language use, including word meanings, syntax, and pragmatic cues. However, CYPD often experience barriers to accessing this rich language input. Even in oral/aural environments, where spoken language is prioritised, the auditory signal may be degraded or incomplete depending on the child's hearing loss, use of amplification, and acoustic conditions (Lederberg et al., 2013).

Several studies highlight the direct correlation between vocabulary knowledge and reading comprehension (Ma & Lin, 2015; Paul, 1996). Deaf learners frequently show delays in both areas, as limited vocabulary restricts their ability to understand text and articulate ideas in writing (Traxler, 2000; Marschark, 2010). This is compounded by the fact that vocabulary is not only about knowing individual words but also about understanding their semantic relationships and context of use—skills which are often underdeveloped in CYPD without intentional and repeated teaching (Marschark et al., 2014).

Moreover, vocabulary acquisition in deaf learners tends to be slower and more variable than in hearing peers (Paul, Wang & Williams, 2013). While early intervention and access to hearing technologies (e.g., cochlear implants, digital hearing aids) can help narrow this gap, they do not automatically ensure age-appropriate vocabulary growth. Studies have found that even with technological

support, many deaf learners fall behind in vocabulary knowledge unless they receive explicit, structured vocabulary instruction (Guven, 2015; Lund & Douglas, 2016).

As a result, vocabulary teaching for CYPD must be intentional, multimodal, and reinforced over time. This includes strategies such as visual scaffolds, direct teaching of word meanings, repeated exposure in different contexts, and the use of metacognitive strategies to develop word-learning skills. These approaches are particularly important in subject areas like Art & Design, where specialised vocabulary (e.g., “composition,” “texture,” “contrast”) is essential for meeting curriculum expectations and expressing critical analysis.

Overall, the evidence suggests that without targeted intervention, CYPD are at risk of falling further behind in vocabulary development, which can have cascading effects on literacy, academic progress, and overall language confidence.

2.4.3 Writing development

Writing is proven to present difficulties to CYPD (Yoshinaga-Itano & Snyder. 1985, Arfe & Boscolo. 2006), as well as delays discussed previously, CYPD are known to have lower assessed scores for verbal working memory than their hearing peers (Harris et al. 2013, Pisoni & Cleary. 2007). Verbal working memory contributes to the writing skill of CYPD (Arfe et al. 2015). Arfe, Rocci and Sicoli, 2015 noted in their study, that many reports and connections have been made between verbal working memory and cognitive control. Demonstrating with CYPD, this influences the richness of spoken and signed stories, while further exploring its impact on oral production and writing. They found that CYPD were outperformed by their hearing

peers, oral production scored higher overall than their written productions. It was noted that this could be due to a secondary task of oral rehearsal, followed by written production and limitations in the study, Arfe et al (2015) suggest that literacy level and knowledge could be a factor of CYPD performance.

Theory of mind is the ability to understand thoughts, feelings and the actions of others and recognising that these might be different to their own.

Chilton, Mayer & McCracken (2019) write that CYPD theory of mind mostly is delayed alike that of CYPD language development. They comment that studies suggest, theory of mind is linked to writing development and the ability to create character, narrative and writing for an audience. These links between language and theory of mind delayed development could suggest a link between the ability to write for a purpose.

2.5 Visual Literacy

Visual imagery is hugely important in everyday life, visual information is provided in media, travel, in homes, education and many further aspects.

Hudson (1987) wrote that in the 1930's over 65% of information was gathered visually, then stated that it was over 85% in 1987. Chung (2005), states that with advancements in technology, media and access to these, figures continue to increase. For example, travel graphics—such as those found in airports, train stations, and town centres—help facilitate understanding. This includes systems like Transport for London (TfL), which use clear visual communication to guide passengers simply and efficiently. Despite the levels of graphics in day-to-day life, in

education students are rarely taught or use imagery as stimulus for learning across the curriculum (Harris, 2006; Goin. P, 2001), predominantly exclusive to the Arts and Humanities. Boughton (1986) classed Visual Literacy in three concepts; Basic, The Artistic and The Aesthetic. The second concept relates to direct teaching in education, using a range of artwork to engage pupils in developing how to read and respond to artwork.

Within the National Curriculum in England; one of the aims of accomplishment are for pupils “to evaluate and analyse creative works using the language of art, craft and design” (gov.uk, 2014). Obvious connections between visual literacy and the language of art are an expression of understanding, what CYPD see and what CYPD are physically able to communicate, be this verbal or written.

2.6 Art in Education

“The arts are potentially a meaningful way of integrating and synthesising knowledge, skills and understanding” (Peter, M.1998)

This article discusses how the arts can serve as a powerful vehicle for inclusion and cross-curricular learning, especially for pupils with SEN.

Art is a way of communicating, if that is through fine art, mixed medias, music or performance. Visual aids and active learning are beneficial for all children and more so for CYPD (Birinci & Saricoban, 2021. Nikolaraizi, Vekiri, & Easterbrooks, 2013.) Within Champions of Change research by Fiske (1999), exploring the effect of learning the arts across other achievements, it finds that the arts are accessible to a wider demographic of students, those with additional disabilities to a lower socio-

economic status. The research states that learning in the arts becomes a level playing field, relating to CYPD and their successes and enjoyment found in learning within the arts. However, GCSE and A-Level assessment requirements would not support the ‘level playing field’ statement, CYPD have barriers to areas or language and written expression, which could put them at a disadvantage to accessing comparable grades with hearing peers (Moores & Martin, 2006). As mentioned before assessment in the arts requires an understanding and fluency of subject specific vocabulary, there is a range of guidance available for teachers available for art education to younger children, The National Curriculum in England: Art and Design programmes of study (GOV.uk) and The National Society for Education in Art and Design (NSEAD.org). in contrast, limited literature covers secondary art, KS4 & KS5 assessment and knowledge needed, these only come in the form of content suggestions and scheme guidance from exam boards (AQA,2015). No guidance or literature relating to teaching art & design to the current assessment objectives except for teachers sharing resources.

Knoors and Herman (2010), reviewed factors that are important in educational settings; classroom management, pacing and quantity of instruction, appropriate feedback, groupings and the process in which information is communicated. Ways in which teachers can encourage children who are deaf to participate can be simple alterations in their ‘normal way of working’. Monitoring the pace at which they give instructions and having visible resources to support, giving instructions in clear steps so the child can process the order of the task and how to tackle it. QTODs can advise when extra intervention may be needed, vocabulary support, pre-teaching/ learning or reading time.

2.7 Assessment of Art & Design at KS4

Expressing meaning, thoughts and opinions on what students see is still relevant today in the curriculum, as evidenced within the GCSE and A Level curriculum (AQA, 2015; Edexcel, 2015; WJEC Eduqas, 2019). Which should naturally grow in complexity from the National Curriculum at KS2 & KS3.

“Students must record their ideas, observations and insights both visually and through written annotation using appropriate specialist vocabulary, as work progresses.” AQA, 2015.

Writing is expected throughout two components of GCSE Art & Design, the level of written work is explained through assessment objectives, grading criteria and standardisation examples made available to professionals at training events. An example of the grading criteria for the highest marks are within the table below, ‘exceptional ability to skilfully and rigorously record’ suggest fluent, and accurate use of subject specific vocabulary in written annotation.

Table 2.2 GCSE Assessment Marking Criteria

Grade	Assessment objective 3

	Record ideas, observations and insights relevant to intentions as work progresses
24 – Convincingly 23 - Clearly 22 - Adequately 21 – Just	An exceptional ability to skilfully and rigorously record ideas, observations and insights through drawing and annotation, an any other appropriate means relevant to intentions, as work progresses.
20 – Convincingly 19 - Clearly 18 - Adequately 17 – Just	A highly developed ability to skilfully record ideas, observations and insights through drawing and annotation, an any other appropriate means relevant to intentions, as work progresses.
16 – Convincingly 15 - Clearly 14 - Adequately 13 - Just	A consistent ability to skilfully record ideas, observations and insights through drawing and annotation, an any other appropriate means relevant to intentions, as work progresses.

Teachers are given freedom to create their own programs of study for pupils to achieve these assessment objectives. For CYPD to access these levels and grade criteria, regular formative assessments of their progress are essential. Teaching can then be planned to fill gaps in expressive language and subject-specific language.

2.8 Literature Review Conclusion

It is noted that a large number of studies which are relevant, are from American literature and studies, and these have been used. The limitations to this review are that the American educational curriculum differs for KS3 years and formal assessments in the UK. In addition to this; accessible literacy papers on language, reading and writing are wide, within the time constraints the number of studies considered were sufficient to produce a well referenced literacy review. In contrast relevant art & design articles and reports were historical, before changes in curriculum or not related to Art & Design teaching but associated with artwork in the general sense.

CYPD are a diverse group; individual factors concerning each child affects their development in different ways. This makes studies and information regarding language acquisition in CYPD, both broad and diverse.

Based on current literature, arts in the curriculum are beneficial for all pupils (Peppler et al, 2014. Boyes & Reid, 2005), it is also clear that a large demographic of CYPD can have positive experiences within the arts due to its visual nature (Kovacevic & Dokovic, 2023). It is unclear on how CYPD achieve in specific art & design subjects because there is no access to national data for specific subjects taken for CYPD. But we can assume from data of the English Language qualification pass rates, that they are falling behind hearing children (NDCS, 2022). The specifications of art & design (AQA, 2015; Edexcel, 2015; WJEC Eduqas, 2019) are clear that students must produce written annotation with their practical work.

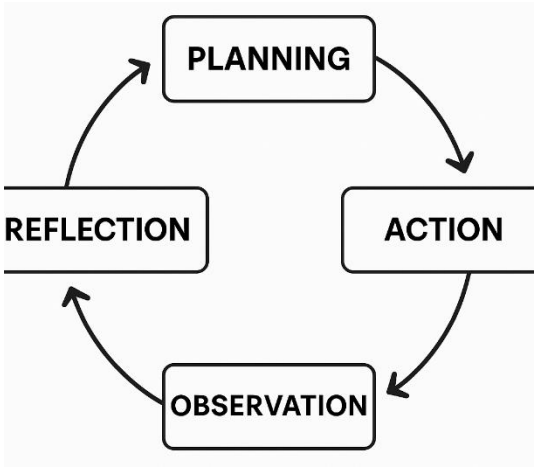
This review of literature of how CYPD learn vocabulary and written literacy through direct focused teaching, this study will explore how subject related specific vocabulary interventions, effect outcomes.

3 Methodology

3.1 Action research

This study design will follow action research methodology. Action research is carried out in the field by practitioners to support changes to develop practice (Thomas, 2013). Thomas (2013) states action research is the best research method to assess interventions within normal teaching lessons. This research will be carried out on the work produced by pupils in lessons; the researcher will be the classroom teacher. In this case, action research will support embedding QTOD strategies and teaching methods within the classroom, findings could immediately change/ improve teaching strategies. In 1946, Kurt Lewin produced a paper using action research, improving intergroup relations, to directly affect the practitioner.

Figure 3.1 Illustration of Lewin's Model



Designed by a circle or planning, action and fact finding followed by refection and further action (Lewin, 1946). While some aspects have evolved, Lewin's 1946 model is still regularly cited in recent academic literature. Most current research acknowledges his influence, even if adapted or expanded, especially in education and social practice contexts. Lewin's original model—a cyclical process of planning → action → observation → reflection—has been instrumental in shaping modern educational practices. Educators and researchers

have employed this iterative approach to address various challenges, including curriculum development and the inclusion of students with special educational needs.

For instance, a recent study by Ghosh and Coppola (2024) explored redesigning design education courses to be more inclusive for students with disabilities. By engaging in cycles of planning, implementing changes, observing outcomes, and reflecting on the process, they were able to identify and mitigate ableist trends in design education, thereby creating a more accessible learning environment. Similarly, Pacheco (2023) applied action research principles to investigate the role of digital technologies in supporting students with vision impairments during their transition to higher education. Through iterative cycles of action and reflection, the study highlighted how digital tools can be leveraged to enhance accessibility and support for these students.

Action research needs to be planned, with clear ‘actions’, here will be interventions within lessons, reflection and responses to work (Lewin,1946. Bell and Waters, 2018. Thomas, 2013. Denscombe, 2007.). For this study it will be two action cycles, where reflection on the first cycle will impact on the second before results are discussed. However, could become a continuous cycle of improvements and revising the most productive way of achieving goals, like the natural course of teaching in the classroom (Thomas, 2013.).

The advantages of action research (Denscombe, 2007. Bell, 2010):

- Completed by practitioners alongside normal way of working
- Professional self-development
- Directly influences practice

- Collaborative work across the workplace
- Practically addresses problems

The disadvantages of action research (Dencombe,2007. Bell, 2010.)

- Smaller studies cause limited scope and reliability
- Hard to generalise to support changes for wider practitioners
- Possibility of bias and hidden agenda in settings.

Due to this research looking at a minority group of CYPD, a small-scale action research project, can intentionally influence teaching. Hallenbeck et al (2019), explore how research and case studies benefit the population of CYPD and state that the population is unique, wide and diverse, as is the research which they are involved.

3.2 Methodological research

Selecting an appropriate methodological approach is a critical foundation for ensuring that educational research is valid, ethical, and relevant to its specific context. In studies involving CYPD, the chosen methodology must be responsive to the learners' needs, the classroom environment, and the practical constraints of school-based research. While a range of approaches were considered—such as ethnography, longitudinal studies, and large-scale quantitative designs—these were deemed unsuitable due to the study's small participant group, time-limited scope, and the embedded nature of the intervention within a real-time teaching context. Ethnographic and longitudinal methods, for example, would require extended observation or data collection across years, which was not feasible. Likewise, a

purely quantitative design would not have captured the nuance and depth of students' vocabulary development. This section therefore explores and critically evaluates the most relevant methodological options—namely case studies, qualitative vs. quantitative methods, and ultimately, the rationale for adopting a practitioner-led action research design.

3.2.1 Case studies

Case studies are in-depth research into one or a small number of cases, information, detail and data can be collected and reflected upon with clear analysis (Thomas, 2013.). They create a holistic view of the case (Alder and Clark, 2014.), which is incredibly important in understanding the outcomes of individuals from a unique population. Case studies can use a collection of a number of data gathering methods (Bell and Waters, 2018.), including surveys, interviews and observations. This means that a combination of Qualitive and Quantitative methods can be used to build a large picture around one case study (Thomas, 2013.).

A multiple case study will involve looking at each individual in a small class of CYPD, all information can be compared, however understanding each individual case. The comparative results will show better representation of the huge range of CYPD learners, however, is noted that it can't be generalised to every CYPD and suggest the same results for the whole population (Thomas, 2018.). Due to the small number of participants and the variation in their individual needs, (none of which are being assessed as part of this research) in-depth case-specific research methods are not appropriate

3.2.2 Qualitative vs Quantitative

Qualitative and Quantitative are different methods of collecting data, Denscombe (2017) states that the two methods are used in different ways to suit the research project and used separately, however, using a combination of these methods can support results and comparability of data (Thomas, 2018. Bell et al, 2018. Silverman, 2013.). Often called mixed methods research (Bryman, 2016), within case studies the strengths and weaknesses of both methods can be used to build a wide picture of information (Dencombe, 2007.), meaning that analysing data can be thorough and a large amount of data can be used to come to conclusions. This could also cause concerns that mixed methods can become time consuming – due to the amount of data to analyse and the difficultly of marrying the numerical and worded data together (Denscombe, 2007.)

3.2.3 Research Design Decision

Following consideration of various educational research methodologies, this study adopts a practitioner-led action research design. While case studies and mixed methods were explored as potential frameworks, action research was ultimately selected for its close alignment with the study's aims and classroom-based context. As a classroom teacher and researcher, the goal was to investigate and refine teaching practice in real time by implementing and evaluating vocabulary interventions with deaf learners in Art & Design lessons.

Action research offers a cyclical structure of planning, acting, observing, and reflecting (Lewin, 1946), which allows for iterative development of practice. This approach is particularly suited to small-scale, context-specific inquiries and aligns with my dual role as educator and investigator. Although elements of case study and mixed methods are incorporated—such as individual participant analysis and the use of both qualitative and quantitative data—these serve to strengthen the rigour of the action research rather than define it.

Therefore, the overarching research design is qualitative action research, with elements of mixed methods data collection used to triangulate findings. This design allows the study to generate meaningful insights into the effectiveness of vocabulary interventions while remaining embedded within an authentic educational setting. It also supports professional reflection, continuous improvement, and practical relevance for teaching deaf learners in creative subjects.

Qualitative data will be collected and analysed, showing clear increase or decrease post-intervention cycle. If the intervention cycle were to have a positive effect of CYPD learning subject specific vocabulary, there will be an increase. If the analysis shows a decrease or static results, further qualitative analysis could support the study. Qualitative data analysis will include assessing the level of vocabulary used (not quantity). It can also analyse; repetition, using less scaffolds, relevance and confidence in language use.

This study design will use triangulation with both qualitative and quantitative methods of data collection to produce the most complete results; quantitative data will be collected through assessment to show any progress which may or may not have been made for each pupil. However, quantitative data will be used to analyse

alongside qualitative data, through analysis of accessed work and interventions used, to make the conclusions more reliable.

3.3

3.3.1 Setting and venue

The setting supports CYPD to study the national curriculum, opting for GCSE qualifications, followed by post-16 qualifications like A-Levels, Business and Technology Education Council (BTEC) diplomas and vocational courses. All subject teachers are QTOD or teachers of the deaf in training (TOD), supported by specialist Teaching Assistants for the deaf, classroom teaching assistants and post 16 support staff. The researcher teaches Textile Design, following the DT & Art & Design curriculum. The CYPD participants are upper KS3 (year 9), the school year before GCSE. CYPD will move on from D&T Textiles Design to GCSE Art & Design Textiles Design. Opportunities to then study Art & Design Textiles Design at A Level.

The provisions communication approach is aural/oral communication, this is used in all classrooms, where CYPD utilise personal amplification, a group aid system, where CYPD can listen to not only the teacher, but themselves and their peers, and lip reading in ideal built listening environments.

3.3.2 Participants

The recruitment of CYPD, to give permission to access classwork data from timetabled lessons, in the secondary school where the researcher works. KS3 year groups were considered for this research as all follow a vocabulary intervention, year 7 were disregarded due to time constraints and the scheme of work they follow, year 8 were disregarded due to class sizes and access to CYPD. Year 9 follow a suitable scheme of work and will fit into the time constraints of this study, and they are preparing for GCSE content. In the Autumn term two groups will follow the intervention cycle fully and complete pre and post assessments, this will allow access to 10 sets of results from CYPD.

Table 3.1 – Participant Information

Child	Type and degree of hearing loss	Age of Hearing Aid use or age of implantation	Additional SEN	Reading age (years and months) Accelerated reader
A	Moderate to Profound	Diagnosed and amplified at 4 years	ASD	13.03
B	APD	Grommets at 3.5 years	APD ASD SPLD	Unavailable
C	Bilateral sensorineural loss	Birth	ADHD	7.06

D	Bilateral sloping normal to profound loss	Birth diagnosed at 6 months	N/A	12.00
E	Bilateral profound	Birth, aided at 3 months	N/A	10.11

3.4 Action research cycle

The assessment, intervention cycle has been embedded in the scheme of work for two years prior to this research. The interventions have changed slightly during that time to improve CYPD engagement. The visuals used in assessment have also changed, this was to suit the topic and age/ interest of the CYPD.

CYPD will undertake a short assessment designed by the classroom teacher, annotation of a piece of artwork relevant to their project work. An eight-week intervention cycle where CYPD will complete short 5–10-minute vocabulary building interventions, with the intention of improving confidence and variety of vocabulary used. This will be followed by an identical short assessment to keep a consistency and be able to make direct comparison in qualitative and quantitative data analysis.

Interventions are designed to be short, regular and frequent. Vocabulary was looked at from the formal elements of art, these are used to aid with work at GCSE level. The Art & Design GCSE exam board used, provide subject specific vocabulary lists which were also used to create these word banks. Topic vocabulary interventions are split between KS3 and continued in KS4. Over the last two years these topic words from the formal elements have moved around and it is now settled that year 9

focus on the word lists relating to colour, this means that all the interventions and assessments are focused to suit that topic. This also links well to the scheme of work they follow at year 9.

3.5 Interventions

This section outlines the vocabulary intervention strategies implemented during the eight-week study cycle. All interventions were embedded within the Art & Design Textiles scheme of work for Year 9 and aimed to improve CYPD's confidence and use of subject-specific vocabulary. The interventions were short, consistent, and varied in format to support engagement and multimodal learning. (See appendices for intervention samples C-H)

3.5.1 Intervention Overview

Each week, CYPD engaged in a structured vocabulary activity lasting approximately 5–10 minutes. These tasks were aligned with the topic of colour—a key focus within both the Year 9 scheme of work and the Art & Design GCSE assessment criteria. The vocabulary was drawn from the formal elements of art and subject-specific word lists provided by the exam board (AQA, 2015).

To ensure inclusivity and accessibility for neurodiverse learners and students with varying levels of speech intelligibility, all interventions were designed with visual support and written expression in mind, rather than verbal responses alone.

3.5.2 Pre- and Post- Intervention Assessment

Students completed a written annotation task before and after the intervention cycle (See appendix B). These assessments required them to describe a visual stimulus (artwork) using relevant vocabulary. Assessments were not marked for spelling or grammar, allowing all CYPD—including those with dyslexia or expressive language challenges—to demonstrate vocabulary knowledge fairly.

Assessments measured:

- Number of subject-specific words used
- Relevance to the visual stimulus
- Use of colour-related vocabulary and expressive terms

This allows both quantitative (word count) and qualitative (type and use of vocabulary) analysis.

3.5.3 Intervention Activities

The weekly interventions included the following formats:

a. Similes Worksheet

Students practised creating descriptive similes (e.g., “red like fire”) to deepen their understanding of visual and emotional associations with colour. This supported

expressive vocabulary development and metaphorical thinking—often more challenging for CYPD (Chilton et al., 2019).

b. Synonym Exploration

This task encouraged lexical variety by asking students to find and use synonyms for common colour or descriptive words. This aimed to expand vocabulary breadth and prepare students for analytical writing tasks in Key Stage 4.

c. Word Scramble

Jumbled subject-specific vocabulary was presented visually for students to rearrange and decode. These tasks reinforced spelling, recognition, and recall through a fun, low-stakes format. Visual cues supported accessibility for students with reading difficulties.

d. Labelling and Word Matching

Students labelled parts of artwork or materials with correct terms from a vocabulary bank. This was based on findings by Lund & Douglas (2016), showing that direct vocabulary teaching supported by visual prompts is highly effective for CYPD.

e. Annotation Practice

Using teacher-provided sentence starters and word banks, students annotated samples of work using colour-related vocabulary. These sessions were scaffolded to build confidence and reduce cognitive load.

f. “Express Myself” Tasks

Open-ended creative prompts encouraged students to write about feelings, mood, and tone within artwork using colour-based language. These activities aimed to bridge the gap between visual perception and written articulation.

g. Group Description and Peer Tasks

Students worked in pairs or small groups to describe artwork collaboratively using newly learned vocabulary. These peer-supported tasks reinforced vocabulary use in a social, expressive context, enhancing retention through repetition and interaction.

3.5.4 Visual and Environmental Supports

Throughout the intervention cycle, classroom walls featured:

- Visual word banks
- Annotated exemplars
- Colour-coded vocabulary charts

These displays (see appendix I) allowed students to repeatedly access key terms during interventions and other lessons in the scheme of work. Visual learning environments have been shown to support memory and engagement, particularly for CYPD (Hulya, 2015; Kustini, 2020).

3.6 Limitations

Assessment through written expression may not show the vocabulary knowledge but writing abilities. Therefore, it is planned that as well as interventions for learning

vocabulary, scaffolding for writing is needed for CYPD to be able to show understanding of the vocabulary. Even though the pre and post assessments will be assessing vocabulary and will not assess the spelling or grammar. It must be considered that vocabulary might be picked up from elsewhere in the curriculum and not specifically as a result of the interventions.

There are limitations to the amount of data that can be accessed, due to class sizes and time limits of the study. The time that data will be accessed is in the Autumn term, this means that it will only be part of the academic year. At this time only two groups out of year 9 will have worked in Textiles, followed and completed the intervention cycle, this is due to the carousel rotation structure in D&T for KS3.

Additionally, the limited pool of CYPD available for this study presents a further challenge to the generalisability of the findings. Due to the small class sizes and the specific carousel timetable structure in KS3 Design and Technology, only a subset of Year 9 students had access to the full intervention cycle during the study period. This reduced the number of eligible participants and limited the diversity of learner profiles represented. Furthermore, CYPD are a highly heterogeneous group with varying degrees of hearing loss, language backgrounds, and co-occurring needs. As such, the outcomes observed in this small, context-specific sample may not reflect the full range of experiences and responses among the wider CYPD population. While the findings offer valuable insights into the potential effectiveness of vocabulary interventions, they should be interpreted as indicative rather than definitive, and warrant further investigation with a larger, more varied cohort.

3.7 Ethics

Ethics approved by Hertfordshire university (See appendix A). All data accessed by the researcher will be stored on the secure password protected university one drive. All data is part of the settings routine practice, produced by CYPD in timetabled lessons, as part of their normal scheme of work and will not complete any new or changed activities for this research.

This study was conducted in accordance with the ethical guidelines of the University of Hertfordshire and received formal ethical approval prior to data collection (Ethics Protocol Number: SLE/PGT/UT/06189). Given that the participants were CYPD, additional care was taken to ensure that all ethical procedures were age-appropriate, inclusive, and accessible.

Informed consent was obtained through a two-tier process: parental or guardian consent for all participants, and assent from the education provider itself. Participant information sheets and consent forms were written in plain English and explained verbally or through BSL to ensure full understanding. Students were informed of their right to withdraw at any point without consequence, and this was reiterated during the study period.

Anonymity and confidentiality were safeguarded by assigning pseudonyms to each participant and omitting any identifying information from published materials. All data, including written assessments and observation notes, were securely stored on the university's password-protected cloud storage. Only the researcher and academic supervisor had access to this data.

Lastly, the study design avoided any deception, ensured transparency, and prioritised the well-being of participants. Interventions were low-risk and educational in nature, designed to support, not disrupt, student learning.

3.8 Reflexivity

As the researcher and classroom teacher, I hold a dual role in this study—as both practitioner and investigator. This positionality presents both strengths and potential biases. My professional background as a QTOD and subject specialist in Art & Design Textiles has directly informed the design of the intervention and the choice of assessments. While this expertise ensures that the interventions are pedagogically sound and tailored to the needs of the learners, it also carries the risk of confirmation bias, particularly when evaluating the success of the strategies I have developed and implemented.

It is important to acknowledge that a positive outcome from this study could be seen to validate my own teaching approach and interventions, which may unconsciously influence how data is interpreted. To mitigate this, I employed consistent data collection tools and assessment criteria across all participants and ensured that pre- and post-intervention tasks were identical in format and focus. This consistency helped to limit subjective influence and allowed for fairer comparison of progress. Additionally, by incorporating both quantitative (e.g. word counts, vocabulary categorisation) and qualitative (e.g. relevance and complexity of vocabulary used) data, I aimed to present a balanced and triangulated view of the outcomes.

Moreover, I have remained mindful throughout the study of my relationship with the participants. As their regular classroom teacher, students may have been more motivated to engage with the interventions or may have responded in ways they believed would meet my expectations. While this may have enhanced participation, it also introduces a potential for response bias. The familiar classroom setting, however, also allowed for naturalistic observation and reduced anxiety or disruption to students' routines, which is a recognised strength of practitioner-led research.

Overall, I have approached this study with a commitment to critical self-awareness and an openness to learning from both the successes and the limitations of the interventions trialled. This reflexive stance has not only supported the integrity of the research but has also contributed to my ongoing professional development as an educator working with CYPD.

4 Results

This eight-week block of vocabulary intervention is part of the scheme of work for year 9, once a week a short intervention is used to encourage learning new vocabulary, frequency of use and confidence. Aimed to prepare moving to KS4 where more advanced visual analysis is required. There was a possibility of ten students across two groups, within the time limit or ethics retrieval. Only five participants had authorised ethics to access work completed in this time frame. Two participants started in the setting this academic year, meaning some participant data is unavailable, for example examination predictions and speech and language assessment data, however, they were present from the studies pre and post assessment, all interventions and are included in the study.

4.1 Age range

All participants are in year 9 but due to one participant being outside chronological year groups, the ages range from 13:4 (years: months) and 14:10, with the mean age of the group being 14:1. Even though one participant is outside chronological age of the study, their placement in year 9 was due to significant delays in language, BVPS III shows all pupils standardised scores as either moderately delayed or significantly delayed. A range between 4 years and 11 months and 8 years and 8 months.

4.2 Pathway to GCSE – target range

Table 4.1 Participant predicted grades for KS4

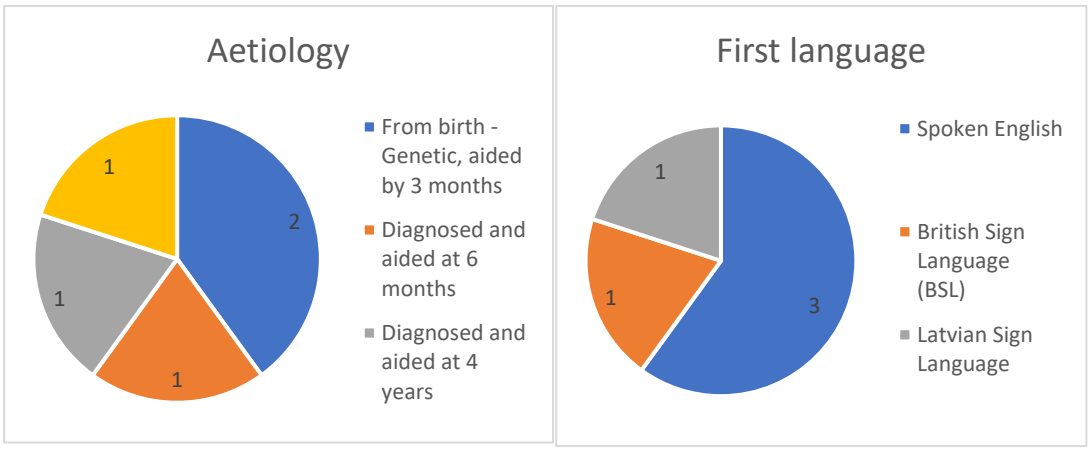
Participant	midYIS	Alps
A - o		**5/4**
B - ek		**6/5**
C - R	**2**	**3/2**
D- J	**3**	**3/2**
E- e	**4/5**	**5**

All participants are on a pathway to GCSE, Art & Design subjects are an option for GCSE students, these could be selected. At the setting all pupils take an ALPs aptitude test, this is a standardised test that measures a pupil's aptitude is certain subject areas. The participants have all taken the test and have predicted grades in Art & Design subjects for GCSE. These ranges from 3/2 to 6/5 predicted grades at GCSE level. A similar standardised test is also used, MidYis which predicts GCSE potential grades, only three of the five participants have this data, ranging from a grade two to grade five.

4.3

4.3.1 Profile

Figure 4.1 Audiology and communication profile



Two participants were born deaf due to a genetic cause and were aided as newborns. Both use sign language as their first language at home—one using British Sign Language (BSL) and the other Latvian Sign Language.

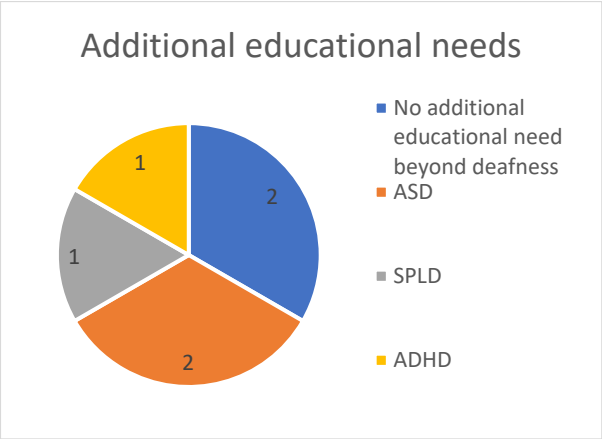
The three participants whose first language is spoken English all experienced delayed diagnoses, with one identified as early as six months old. One of these participants was diagnosed and amplified at four years old, though the exact timing of their deafness is unknown.

The final participant has been diagnosed with Auditory Processing Disorder (APD) and remains unaided.

4.3.2 Neurodiversity Additional needs

Participants in this study have a range of neurodiversity and additional needs; APD, ADHD, ASD, Dyslexia, working memory difficulties and executive functioning difficulties. These factors affect the language delays commented on above and reflect variety in predicted grades for GCSE.

Figure 4.2 Additional Educational Needs



Only diagnosed additional needs are shown above, it is important to note that one participant has several additional needs, and two participants have diagnoses of only one additional education need. Two participants have no diagnosed additional educational needs, but all participants are known to have significant language delays and processing difficulties.

4.4 Attendance

Table 4.2 Attendance of Participants

Attendance during 8-week intervention cycle								
Participant	**Pre-intervention assessment**	**Week 1**	**Week 2**	**Week 3**	**Week 4**	**Week 5**	**Week 6**	**Post-intervention assessment**
a	/	/	/	/	/	/	/	/
b	/	/	/	/	/	/	/	/
c	/	/	/	/	/	/	/	/
d	/	/	/	/	/	/	/	/
e	/	/	/	/	/	/	/	/

All participants included in the study were present for both pre- and post-intervention assessments, and each intervention session. This means each participant had a full set of results, had fair opportunity to access the interventions and completed the scheme of work as planned.

4.5 Pre and Post Assessment

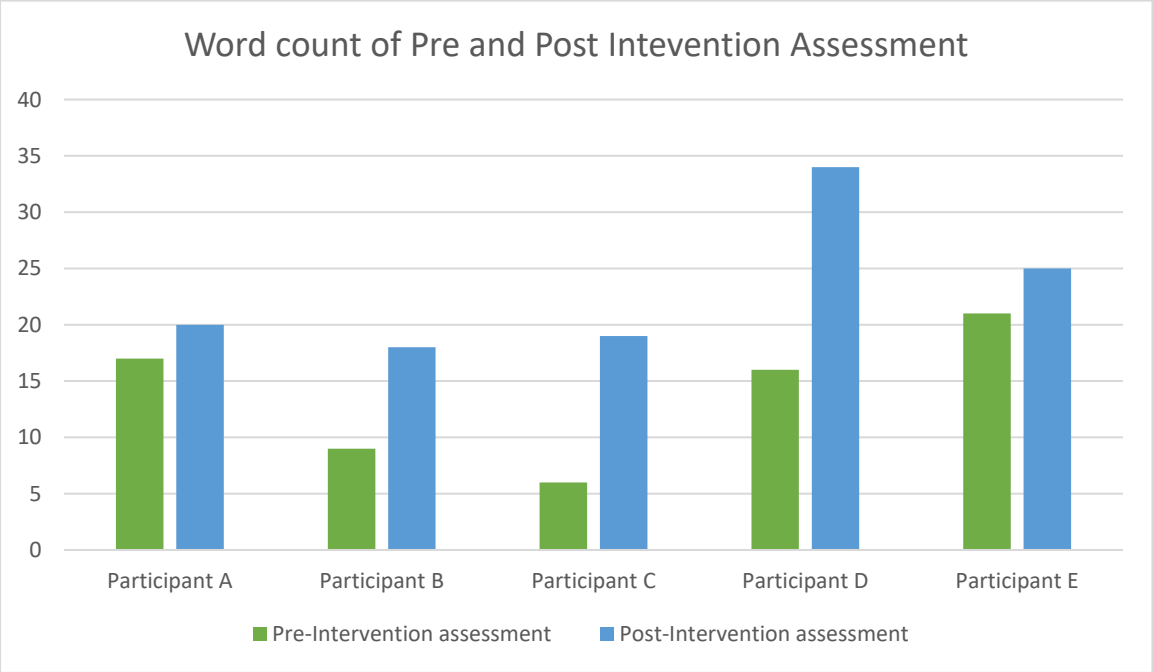
Table 4.3 Pre and Post Intervention Assessment

Participant	Pre	Post	Difference	% change
A	17	20	+3	18%
B	9	18	+9	100%
C	6	19	+13	217%
D	16	34	+18	113%
E	20	23	+3	18%

All participants word count went up from the pre-intervention assessment to the post-intervention assessment. Two participants had a smaller difference in written word count, they both begun with a higher number of words, and the difference was plus three and four. One participants word count doubled, where their pre-intervention assessment went from a word count of nine and post-intervention assessment to 18, improving by 100%. Two participants percentage change were above 100%, although the increase from participant D (18-word gain) is numerically larger than the increase from participant C (13-word gain), the percentage improvement is actually higher in the second case. This is because percentage change measures the increase relative to the starting word count. Participant C had a 13-word gain increase which is more than triple the pre-intervention assessment word count – a 217% improvement. In contrast, participant D had an 18-word gain increase from 16 to 34, whilst larger in terms of number of words, it's just over double the pre-intervention assessment word count, resulting in a 113% improvement. This means

participant C, despite a smaller word count gain, it reflects a more significant improvement due to its much lower starting word count.

Figure 4.3 Word Count Illustration



The data demonstrates, overall, each participant showed an increase in word count from pre- to post-intervention assessment. Indicating that the intervention had a positive effect on each participant with a varying degree of improvement. The most pronounced effect was seen in participant D, while others showed smaller but still notable gain.

Table 4.4 Vocabulary Classification

	Pre-Intervention assessment		Post-Intervention assessment	
Participant A	pink	burgundy	colour	faceless
	old	blue	blue	vibrant
	magazines	red	orange	people

	Scraps	green	white	hungry
	colour	yellow	red	children
	black	brown	purple	green
	white	silver	black	yellow
	orange	grey	grey	pink
			brown	microphone
			shouting	
	Pre-Intervention assessment		Post-Intervention assessment	
Participant B	colour	Background	white	paint
	person	people	Space	fingerprint
	scream	Alot	red	collage
	Plastic	more	blue	painted
	white		dark	think
			colour	footballer
			front	singing
			back	lots
			brown	detail
	Pre-Intervention assessment		Post-Intervention assessment	
Participant C	White	singing	Chocolate	green
	background	plastic	brown	azure
	colourful	recycled	white	jet
			space	microphone
			hungry	table
			children	chair
			people	warm
			depressing	light

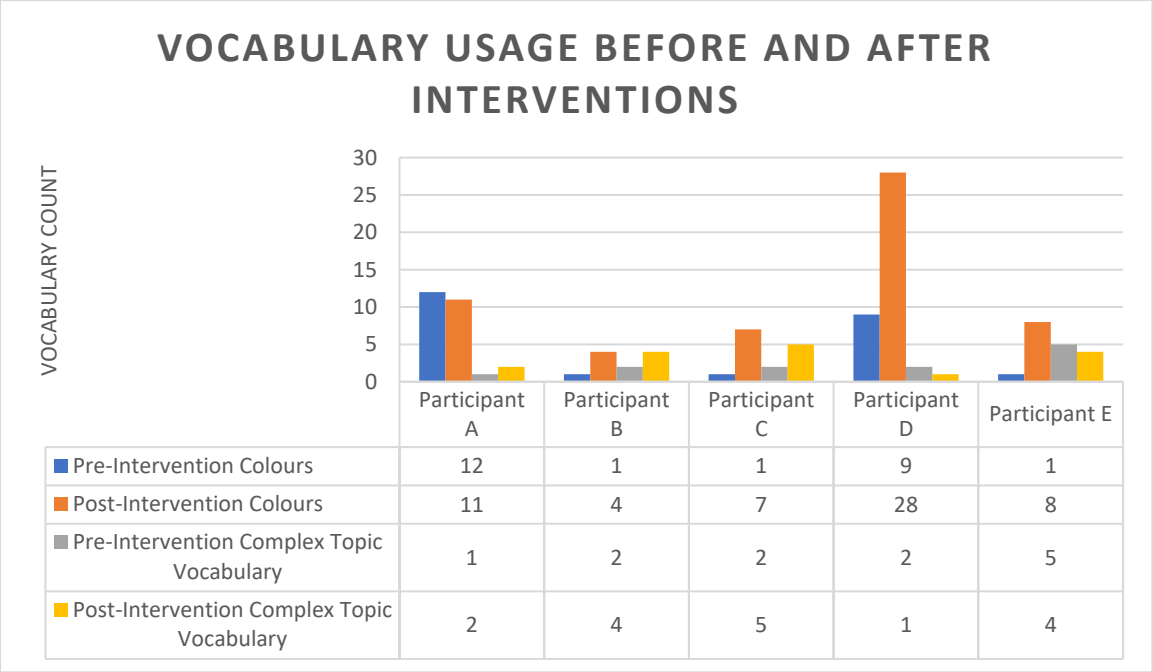
			blue	bright
			colourful	
	Pre-Intervention assessment		Post-Intervention assessment	
Participant D	White	red	strokes	Mustard
	background	maroon	paint	brown
	yellow	vibrant	Singing	beige
	orange	paint	eating	chocolate
	blue	squares	Green	sienna
	grey	strokes	emerald	orange
	brown	ink	lime	amber
	green	paper	olive	rust
			red	salmon
			crimson	black
			maroon	monochrome
			scarlet	lavender
			blue	magenta
			azure	violet
			indigo	yellow
			teal	gold
			purple	lemon
	Pre-Intervention assessment		Post-Intervention assessment	
Participant E	lots	plastic	colour	strips
	details	fingerprints	oranges	blue
	texture	paint	human	chair
	man	white	microphone	Colourful
	singing	space	slate	salmon

	recycled	background		black	people
	materials	bright		paint	olive
	painting	colours		splash	White
	children	eating		colourful	background
	sitting	melted		green	details
				table	shoes
				food	

To gain a deeper understanding of the types of vocabulary used by participants, words from the pre- and post-intervention assessments were categorised into two distinct groups: colour naming words and complex topic vocabulary. Colour naming words refer to basic, concrete terms commonly used to identify hues, such as “red,” “blue,” “green,” and “orange.” These words are typically acquired earlier through direct sensory experiences and everyday interactions and are often reinforced through incidental learning. In contrast, complex topic vocabulary includes more abstract or descriptive terms used in the analysis and interpretation of visual elements, such as “vibrant,” “monochrome,” “recycled,” or “composition.” These terms require a higher level of conceptual understanding and are directly linked to the language of critique and evaluation used in Art & Design specifications. Categorising vocabulary in this way enabled clearer analysis of whether students were not only expanding their word banks but also progressing toward more sophisticated, subject-specific language use. This distinction also aligns with curriculum expectations at GCSE, where students are assessed on their ability to describe, analyse, and evaluate artwork using appropriate specialist terminology.

The words in white have been classed as irrelevant to the intervention topic.

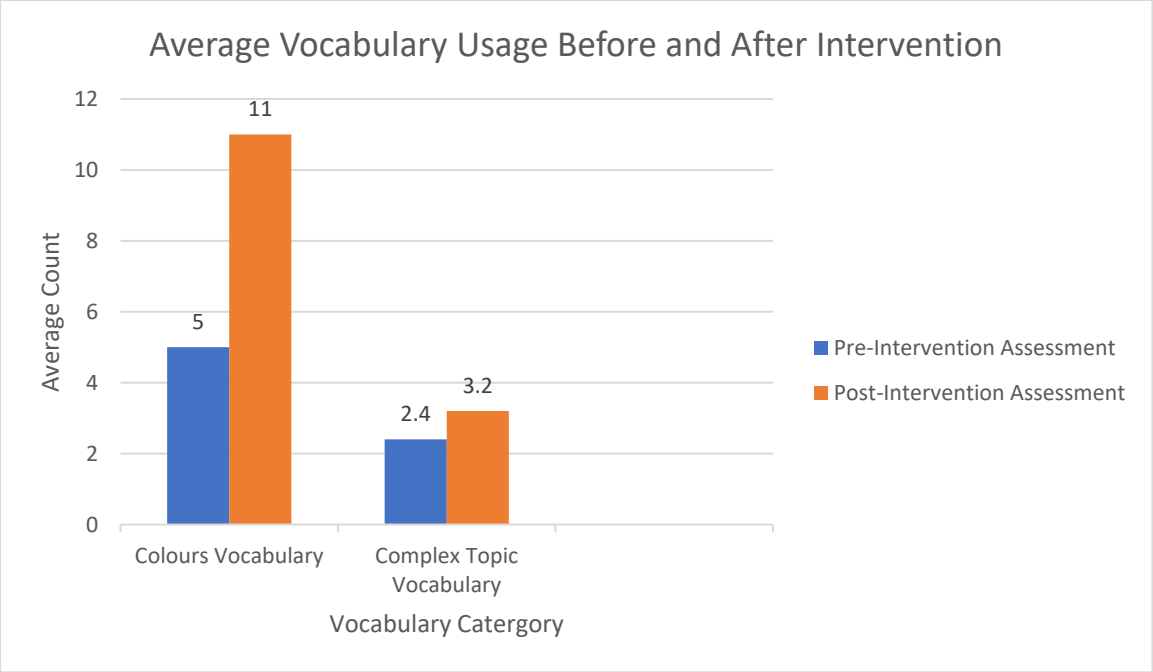
Figure 4.4 Assessment Scores using Classification



	Participant A	Participant B	Participant C	Participant D	Participant E
Pre-Intervention Colours	12	1	1	9	1
Post-Intervention Colours	11	4	7	28	8
Pre-Intervention Complex Topic Vocabulary	1	2	2	2	5
Post-Intervention Complex Topic Vocabulary	2	4	5	1	4

Each participant has four bars here, pre and post colours and pre and post complex topic vocabulary. Catergorising vocabulary within the topic shows how the use of vocabulary has changed and excludes irrelevant vocabulary. Here four participants clearly improved in the post-intervention assessment using names of colours, especially the large jump of participant D, with only participant A dropping. Three participants improved their use of more complex colour topic vocabulary, including participant A who improved by one word, Participant A had a similar Pre and Post intervention assessment score overall. More significant gains came from using more variety of naming colours than using more variety of complex colour topic vocabulary. Participants B, C and E all show consistent increases in both vocabulary types.

Figure 4.5 Average Vocabulary Usage Before and After the Intervention



Showing averages of vocabulary usage before and after the intervention shows an increase in average for both categories. Here it clearly shows a stronger impact of the intervention on the use of colour naming vocabulary compared with the use of complex topic vocabulary.

5 Discussion

This study examines how subject-specific vocabulary interventions influence the expressive language of CYPD in Art & Design lessons. It explores whether structured vocabulary instruction improves the use of relevant terminology, especially for GCSE Art & Design assessments where annotation is crucial.

The discussion interprets the findings, relates them to existing research, and considers implications for theory, practice, and future studies.

CYPD generally perform better in practical-based subjects with fewer barriers to achievement. However, reaching higher grades in these subjects requires a strong understanding of subject-specific vocabulary. This vocabulary can be classified into naming words and more abstract terms linked to processes and expressive descriptions.

5.1 Interpretation of Key Findings

5.1.1 Effectiveness of Vocabulary Interventions

The data showed a consistent improvement in vocabulary use among all five participants following an eight-week intervention. Increases in word count from pre- to post-intervention assessment ranged from three to 18 words, representing percentage gains of 18% to 217%. These improvements suggest a positive effect of the structured vocabulary-building interventions on students' ability to produce subject-specific language in written form.

This finding supports previous research indicating that CYPD benefit from direct, repeated, and visually supported vocabulary instruction (Paul & Lee, 2010; Convertino et al., 2014). The structured and routine nature of the interventions—aligned with the scheme of work—appears to have helped students internalise key vocabulary and develop confidence in using it independently.

5.1.2 Vocabulary Categorisation: Naming vs. Complex Topic Terms

One of the key contributions of this study is the classification of vocabulary into naming words and complex topic vocabulary. This distinction provided a useful framework for analysing the depth and type of vocabulary used by deaf students and revealed differential patterns of progress across the two categories. While prior research has highlighted vocabulary delays among deaf learners (Paul, 1996; Lederberg et al., 2013), few studies have explored how the nature of vocabulary—concrete versus abstract—affects learning outcomes in specific subjects. This study extends existing research by demonstrating that students showed greater gains in naming words, which are typically learned earlier and reinforced through visual cues, compared to complex topic terms, which require deeper conceptual understanding and contextual application. This insight has practical implications for curriculum design and suggests that targeted scaffolding is needed to support the acquisition of more abstract, subject-specific language.

Analysis of vocabulary usage revealed greater improvement in naming colours than in more abstract or complex topic vocabulary, such as descriptive or process-based

terms. For example, Participant D increased their use of colour-naming words from eight to 24, while their use of complex topic words increased only modestly.

This pattern may be attributed to the nature of vocabulary acquisition. Naming words, such as “green” or “purple,” are often learnt incidentally through early life experiences and are reinforced through repeated exposure in visual contexts. In contrast, abstract vocabulary (e.g., “composition,” “monochrome,” “vibrant”) requires both conceptual understanding and contextual usage, which is often less accessible to CYPD due to limited incidental learning opportunities (Van Zeeland & Schmidt, 2013; Paul, 1996).

The findings suggest that interventions may need to place greater emphasis on scaffolding complex vocabulary through multimodal instruction, repetition, and contextual application to support CYPD in mastering higher-level descriptive language.

5.1.3 Most Effective Interventions and Student Engagement

Interventions that combined visual supports, scaffolded repetition, and interactive elements—such as labelling, simile exercises, and word scrambles—were particularly effective. These activities reinforced both form and meaning and allowed students to engage with vocabulary in a creative and low-pressure context.

For instance, the word scramble task helped consolidate spelling and recognition of key terms, while the simile worksheet supported figurative and expressive thinking—both of which are essential in GCSE annotation. This is consistent with research

highlighting the value of multimodal and game-based vocabulary activities for CYPD (Kustini, 2020; Lund & Douglas, 2016; Guven, 2015).

Students demonstrated a high level of engagement during these sessions, and anecdotal teacher observations noted increased verbal and written use of target vocabulary during class discussions and critiques.

Among the range of interventions delivered, labelling and annotating tasks using supportive vocabulary materials emerged as particularly effective (see appendix I). These activities enabled students to apply subject-specific terms in context, reinforcing understanding through visual cues and repeated exposure. The combination of structured word banks, and visual prompts supported students in making precise connections between visual elements and the appropriate descriptive language. This approach was especially beneficial for learners with language processing difficulties, as it reduced cognitive load and provided a clear framework for expressing analysis. The consistent improvement in post-assessment annotation tasks suggests that this intervention played a significant role in building both vocabulary confidence and written articulation.

5.1.4 Variability in Response: Role of Additional Needs

All participants in this study had diagnosed or suspected additional needs, including ASD, ADHD, APD, and dyslexia. While all students showed progress, the degree of improvement varied. For example, Participant C, with ADHD and early cochlear implantation, showed a 217% improvement, whereas Participant A—despite being aided at an early age—demonstrated more modest progress (18%).

This variability underscores the heterogeneity within the CYPD population and aligns with literature suggesting that language development in CYPD is influenced by a range of factors including age of amplification, home language environment, and co-occurring neurodiversity (Lederberg et al., 2013; Moeller & Tomblin, 2015). While the interventions were accessible to all learners, the findings suggest that additional scaffolding may be required to support students with executive functioning or language processing difficulties.

5.1.5 Implications for Progress at GCSE

The positive outcomes observed in this short-term intervention suggest promising implications for future academic progress, particularly as students transition into GCSE Art & Design. The ability to confidently use subject-specific vocabulary is critical for achieving higher grades, as outlined in the GCSE assessment objectives (AQA, 2015), which require students to annotate and reflect on their creative processes using appropriate terminology.

The post-intervention improvements—especially in vocabulary range and descriptive language—indicate that even brief, targeted interventions can produce measurable gains. This supports the idea that regular and sustained vocabulary instruction throughout Key Stage 3 could help close the gap in expressive language skills by the time students reach Key Stage 4. Building this foundation early is vital, as GCSE assessment involves not only practical outcomes but also the written articulation of artistic intent, analysis, and evaluation.

Furthermore, students who demonstrated the greatest percentage increases (e.g., Participants C and D) started with lower baseline scores, suggesting that focused vocabulary teaching may be especially impactful for learners with greater language delays. These gains imply that similar interventions applied longitudinally—throughout Years 9 to 11—could potentially raise predicted GCSE attainment by enabling students to meet the higher-level descriptors within the assessment grid, particularly around annotation and analysis.

Although the intervention was short-term, the trend of progress suggests that vocabulary acquisition is cumulative. Continued use of these techniques could reinforce not only the recall of key terms but also deepen students' understanding of abstract artistic concepts, enabling richer written and verbal analysis. This would help shift vocabulary knowledge from basic colour-naming to more nuanced descriptive language, critical for achieving top band criteria at GCSE.

Given that Art & Design is often seen as a more accessible subject for CYPD due to its visual nature, the integration of language-focused strategies can help ensure that CYPD are not disadvantaged in areas of written annotation, which are essential to attaining higher grades. Therefore, expanding the intervention model across KS4 could support not only vocabulary development but overall academic success in creative subjects.

5.2 Theoretical and Practical Implications

5.2.1 Theoretical Contributions

This study contributes to the growing body of evidence supporting direct vocabulary instruction for CYPD, particularly in visually rich and practical subjects. It aligns with the qualitative similarity hypothesis (Paul, Wang & Williams, 2013), which argues that while CYPD may follow similar language learning pathways as hearing peers, they require more explicit and supported instruction.

The categorisation of vocabulary into “naming” and “complex topic” terms may provide a useful framework for future studies exploring semantic depth and expressive language development in visual subjects.

5.2.2 Implications for Practice and Curriculum

The ability to use subject-specific vocabulary confidently is not only central to students’ conceptual understanding in Art & Design but is also explicitly required in assessment criteria at GCSE level. Terms such as composition, texture, contrast, and process are embedded in the language of mark schemes and examiner expectations. Without access to this academic language, CYPD risk being unable to fully articulate their ideas, intentions, or evaluations — all of which are necessary for achieving higher attainment bands. The study highlights that explicit teaching of this vocabulary enables students to meet assessment demands more effectively, bridging the gap between visual expression and written analysis.

Vocabulary interventions should be embedded within the Art & Design curriculum across KS3 to prepare students for the increasing language demands of GCSE and A-Level assessments. Teachers should consider:

- Using a tiered vocabulary framework (e.g., Tier 1 = basic naming, Tier 2 = descriptive and process terms)
- Integrating vocabulary-building activities into each project cycle
- Continuing to use visual scaffolds and interactive tasks to consolidate meaning

Schools and policy-makers should acknowledge that despite the practical nature of arts subjects, written annotation remains a key assessment component. Supporting CYPD in developing the necessary language skills to meet these criteria is essential to closing the attainment gap.

5.3 Limitations

While the findings are encouraging, several limitations that must be considered when interpreting the results and assessing their broader application.

5.3.1 Small sample size (n = 5)

This study involved only five participants, all from the same year group, school, and subject context. Although the individual progress made by each student provides valuable insights into the potential effectiveness of vocabulary interventions, the

small sample size limits the ability to generalise these findings to the broader population of CYPD. The diverse nature of CYPD—especially in terms of hearing loss levels, communication preferences, and additional learning needs—means that outcomes could vary significantly in other settings. Larger-scale studies involving multiple schools and broader participant demographics are needed to confirm the intervention's wider applicability.

5.3.2 Data collection was confined to a single term and one setting

The intervention took place over an eight-week period within a single school term, which restricts the scope of the findings. This limited timeframe may not fully capture the longer-term retention or transferability of vocabulary learning, especially in relation to how it might impact students' performance in formal GCSE assessments. Additionally, conducting the research in only one educational setting—an oral-aural specialist provision—means that contextual factors such as teaching style, classroom environment, and curriculum design may have influenced the results. These factors may differ considerably in mainstream or sign-bilingual environments, reducing external validity.

5.3.3 Vocabulary development and external factors

While the interventions were carefully structured and embedded within the curriculum, it is possible that vocabulary acquisition was also shaped by other factors beyond the scope of the study. For example, students may have encountered

relevant terms in other subjects (such as English or Humanities), through home support, or via informal peer interactions. This makes it difficult to determine the extent to which observed vocabulary gains were a direct result of the intervention, rather than cumulative exposure or parallel instruction elsewhere.

5.3.4 Post-assessment measured a written output

The assessment relied on written responses to measure vocabulary knowledge. While this provided a practical and accessible method for comparison, it may not reflect students' full understanding or receptive knowledge of the target vocabulary. Students with writing difficulties—due to dyslexia, working memory issues, or limited transcription skills—may have understood more than they were able to express. This could underestimate the intervention's impact on internal vocabulary development or oral expression. Future studies could incorporate a broader range of assessment methods, such as oral responses, concept-mapping, or multiple-choice tasks, to capture a more holistic view of vocabulary acquisition.

5.4 Recommendations for Implementation Across the Visual and Performing Arts Faculty

The success of the vocabulary interventions in this study highlights a significant opportunity to enhance teaching and learning across the wider Visual and Performing Arts (VAPA) faculty. While this research focused on Art & Design Textiles, the strategies and outcomes have clear relevance for other creative disciplines including Fine Art, Graphics, Photography, Music, Drama, and Dance—all

of which require students to analyse, annotate, reflect, or evaluate using subject-specific language.

1. Embed Regular Vocabulary Interventions Across Subjects

Introduce short, weekly interventions similar to those trialled in this study—such as synonym work, scaffolded annotation, word banks, or simile building—tailored to the vocabulary demands of each subject. These could be aligned with current schemes of work, ensuring vocabulary development is seamlessly integrated into creative tasks.

2. Develop a Shared Tiered Vocabulary Framework

Create a shared bank of Tier 1 (basic), Tier 2 (descriptive), and Tier 3 (technical) vocabulary across the VAPA faculty. This would support consistency and progression in language learning from KS3 through KS5. For example:

- Tier 1: Colour names, emotions, tools
- Tier 2: Abstract descriptors (e.g. “dynamic”, “chaotic”, “harmonious”)
- Tier 3: Subject-specific terms (e.g. “chiaroscuro”, “melodic motif”, “blocking”, “aesthetics”)

3. Use Visual Supports Across All Classrooms

All VAPA classrooms should display visual vocabulary prompts such as labelled diagrams, annotated examples, and word walls. These are especially helpful for CYPD and other learners with language delays or processing difficulties and promote passive reinforcement of key terms.

4. Collaborative continued professional development (CPD) and Resource Sharing

Facilitate joint CPD sessions and resource banks across the faculty where teachers can share effective strategies, vocabulary lists, and examples of annotated student work. This collaborative approach strengthens teacher confidence in developing language, particularly in subjects where verbal and written analysis are critical but not always explicitly taught.

5. Align Assessment Rubrics with Vocabulary Use

Incorporate vocabulary expectations into assessment rubrics and feedback forms. For instance, marking student reflections or annotations with prompts such as “uses subject-specific terminology accurately” or “demonstrates expressive use of descriptive language” encourages ongoing focus on language development.

6. Track Vocabulary Progress Longitudinally

Use the intervention structure as a baseline for tracking vocabulary development over time—through Years 9 to 11. This could form part of departmental or faculty-level assessment cycles, providing clear evidence of student progress and supporting early intervention where needed.

7. Adapt Interventions for Performing Arts Contexts

For Music, Drama, and Dance, adapt the format of interventions to include verbal rehearsal, structured group critiques, or oral vocabulary games, recognising that these subjects often assess through performance and discussion rather than written output. For example, drama students could practise “emotion word banks” when developing character, or music students could use peer vocabulary prompts during composition critiques.

Overall, expanding vocabulary intervention across the VAPA faculty offers a consistent, inclusive approach to supporting all learners—particularly those who are deaf or neurodiverse—in accessing the higher-order thinking and language required for success in creative GCSE and post-16 qualifications.

5.5 Recommendations for Future Research

Future studies should:

- Include a larger, more diverse sample across different educational settings.
- Examine long-term retention of vocabulary and its application in formal assessments.
- Explore the effect of these interventions across other creative subjects (e.g., Music, Drama, Photography).
- Investigate how different types of neurodiversity affect the acquisition and use of subject-specific vocabulary.

6 Conclusion

The research identified a consistent improvement in students' ability to use subject-specific language, particularly basic colour-naming vocabulary, following the interventions. More modest gains were observed in the use of complex topic vocabulary, such as descriptive or process-related terms, highlighting a need for continued, scaffolded exposure to abstract language. The categorisation of vocabulary into these two types emerged as an original contribution of the study, offering a nuanced analytical framework that reflects the layered cognitive demands of language use in Art & Design. It also highlighted the disparity between vocabulary that is easily reinforced through visual or incidental learning and vocabulary that requires more structured conceptual teaching — a distinction that is especially relevant for CYPD who experience barriers to incidental language acquisition.

Importantly, the study reinforced the value of short, regular, and visually supported interventions, not just as a language development tool, but as a means of improving student confidence and participation. Interventions such as synonym tasks, visual word banks, and scaffolded annotation activities proved particularly effective in supporting engagement, especially among students with additional neurodiverse profiles. The qualitative data, supported by classroom observations, suggested that learners became more willing to take linguistic risks, more independent in their use of terminology, and more confident in expressing themselves through written annotation — a critical skill for GCSE success.

While the study's findings are promising, they must be interpreted in light of several limitations. The sample size was small (n=5), context-specific, and confined to one

school term, which limits the generalisability of results. Additionally, vocabulary gains were measured primarily through written output, which may not fully capture receptive understanding or oral expression, especially for students with co-occurring writing difficulties. Future studies could expand on this work by incorporating longitudinal data, alternative assessment formats, and broader participant cohorts across different educational settings.

Nevertheless, this research offers clear implications for practice. It underscores the importance of embedding explicit vocabulary instruction into Art & Design teaching at Key Stage 3 and beyond, especially for CYPD who may not naturally acquire specialist language through conventional means. It also supports a more intentional and structured approach to language development in creative subjects — one that acknowledges the linguistic demands of formal assessment criteria and responds with inclusive, differentiated strategies.

Ultimately, this study contributes to a growing body of evidence advocating for the importance of language in the learning and assessment of CYPD. It demonstrates that, with appropriate support, CYPD can engage meaningfully with subject-specific vocabulary and improve their expressive skills in contexts where visual and linguistic literacy intersect. As a practitioner, this research has deepened my understanding of how language shapes learning in Art & Design and reaffirmed the importance of responsive, reflective teaching practices grounded in the real needs of diverse learners.

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8 Appendices

8.1 Appendix A – Ethics forms

Ethics approval

University of Hertfordshire UH

SOCIAL SCIENCES, ARTS AND HUMANITIES ECDA

ETHICS APPROVAL NOTIFICATION

TO	**Danielle Waterston**
CC	**Dr Joy Rosenberg**
FROM	**Dr Ian Willcock, Social Sciences, Arts and Humanities ECDA Chair**
DATE	**07/10/2024**

Protocol number:	SLE/PGT/UH/06189
Title of study:	Developing Subject Specific Vocabulary in Art & Design with Young People/ Students who are Deaf

Your application for ethics approval has been accepted and approved with the following conditions by the ECDA for your School and includes work undertaken for this study by the named additional workers below:

No additional workers named

General conditions of approval:

Ethics approval has been granted subject to the standard conditions below:

Permissions: Any necessary permissions for the use of premises/location and accessing participants for your study must be obtained in writing prior to any data collection commencing. Failure to obtain adequate permissions may be considered a breach of this protocol.

External communications: Ensure you quote the UH protocol number and the name of the approving Committee on all paperwork, including recruitment advertisements/online requests, for this study.

Invasive procedures: If your research involves invasive procedures you are required to complete and submit an EC7 Protocol Monitoring Form, and copies of your completed consent paperwork to this ECDA once your study is complete.

Submission: Students must include this Approval Notification with their submission.

Validity:

This approval is valid:

From: 07/10/2024

To: 18/12/2024

Please note:

Failure to comply with the conditions of approval will be considered a breach of protocol and may result in disciplinary action which could include academic penalties.
Additional documentation requested as a condition of this approval protocol may be submitted via your supervisor to the Ethics Clerks as it becomes available. All documentation relating to this study, including the information/documents noted in the conditions above, must be available for your supervisor at the time of submitting your work so that they are able to confirm that you have complied with this protocol.

Should you amend any aspect of your research or wish to apply for an extension to your study you will need your supervisor's approval (if you are a student) and must complete and submit form EC2.
Approval applies specifically to the research study/methodology and timings as detailed in your Form EC1A. In cases where the amendments to the original study are deemed to be substantial, a new Form EC1A may need to be completed prior to the study being undertaken.

Failure to report adverse circumstance/s may be considered misconduct.
Should adverse circumstances arise during this study such as physical reaction/harm, mental/emotional harm, intrusion of privacy or breach of confidentiality this must be reported to the approving Committee immediately.

EC5 - Risk assessment

UNIVERSITY OF HERTFORDSHIRE
ETHICS COMMITTEE FOR STUDIES INVOLVING THE USE OF HUMAN PARTICIPANTS ('ETHICS COMMITTEE')

FORM EC5 – HARMS, HAZARDS AND RISKS:
ASSESSMENT AND MITIGATION

Name of applicant: Danielle Waterston Date of assessment: 06/08/2024

Title of Study/Activity: Developing Subject Specific Vocabulary in Art & Design with Students who are Deaf

Activity Description					
1. IDENTIFY RISKS/HAZARDS	2. WHO COULD BE HARMED & HOW?		3. EVALUATE THE RISKS		4. ACTION NEEDED
Activities/tasks and associated hazards Describe the activities involved in the study and any associated risks/ hazards, both physical and emotional, resulting from the study. Consider the risks to participants/the research team/members of the public. In respect of any equipment to be used read manufacturer's instructions and note any hazards that arise, particularly from incorrect use.)	Who is at risk? e.g. participants, investigators, other people at the location, the owner / manager / workers at the location etc.	How could they be harmed? What sort of accident could occur, eg trips, slips, falls, lifting equipment etc, handling chemical substances, use of invasive procedures and correct disposal of equipment etc. What type of injury is likely? Could the study cause discomfort or distress of a mental or emotional character to participants and/or investigators? What is the nature of any discomfort or distress of a mental or emotional character that you might anticipate?	Are there any precautions currently in place to prevent the hazard or minimise adverse effects? Are there standard operating procedures or rules for the premises? Have there been agreed levels of supervision of the study? Will trained medical staff be present? Etc/	Are there any risks that are not controlled or not adequately controlled?	List the action that needs to be taken to reduce/manage the risks arising from your study for example, provision of medical support/aftercare, precautions to be put in place to avoid or minimise risk or adverse effects NOTE: medical or other aftercare and/or support **must** be made available for participants and/or investigator(s) who require it.

Entering classroom and using classroom furniture	Participants & Investigators	Slips/ trips/ falls/ knocks	Precautions in place include hi-visibility strips on steps. Magnet locks on fire doors which holds these heavy doors open. Classroom rules for entering rooms sensibly at walking pace. Sitting in regular seating plans.	N/A	Pupils only enter classroom when teacher is present.
Behaviour	Participants & Investigators	Suffer stress, bruising and potentially fractures if violent behavioural incidents occur during teaching / learning activities.	Supervision and awareness of student behaviour at all times in the classroom. Awareness of safeguarding pupils and reporting procedures.	Pupils behaviour outside the classroom before lessons is uncontrollable. (However, behavioural incidents are shared in school so teachers are prepared for preventative intervention)	Pupils only enter classroom when teacher is present. Pupils sit in arranged seating plan.

Stress/ Wellbeing	Participants & Investigators	Could suffer stress from workload, assessment. This could transfer to negative emotional and phycological characteristics.	Monitored pupil workload and regularity of assessments.	N/A	Teacher to monitor workload and complete assessments in line with school expectation.
Confidentiality	Participants	Personal information and data could be lost/ shared.	Personal information and data could be lost/ shared.		All electronic data once accessed will be stored on the UH One drive. Paper data will be stored in a locked cabinet; until they can be scanned to the password protected environment.

Signed by applicant: Danielle Waterston	Dated: 06/08/24

EC6 – Participant Information Sheet

UNIVERSITY OF HERTFORDSHIRE

ETHICS COMMITTEE FOR STUDIES INVOLVING THE USE OF HUMAN PARTICIPANTS

('ETHICS COMMITTEE')

FORM EC6: PARTICIPANT INFORMATION SHEET

1 Title of study

Developing Subject Specific Vocabulary in Art & Design with Students who are Deaf

2 Introduction

You are being invited to take part in a study. Before you decide whether to do so, it is important that you understand the study that is being undertaken and what your involvement will include. Please take the time to read the following information carefully and discuss it with others if you wish. Do not hesitate to ask us anything that is not clear or for any further information you would like to help you make your decision. Please do take your time to decide whether or not you wish to take part. The University's regulation, UPR RE01, 'Studies Involving the Use of Human Participants' can be accessed via this link:

https://www.herts.ac.uk/about-us/governance/university-policies-and-regulations-uprs/uprs

(after accessing this website, scroll down to Letter S where you will find the regulation)

Thank you for reading this.

3 What is the purpose of this study?

The aim will be to investigate whether specific vocabulary interventions improve use of expressive vocabulary within written work. The study will access work completed in lessons, be anonymised and used to compare and analyse.

As part of my role as QTOD and Teacher of Art & Design Textiles I am always trying to improve my practice and hope to put an emphasis on specific focused vocabulary interventions within Art & Design teaching.

4 Do I have to take part?

It is completely up to you whether or not you decide to take part in this study. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. Agreeing to join the study does not mean that you have to complete it. You are free to withdraw at any stage without giving a reason. A decision to withdraw at any time, or a decision not to take part at all, will not affect any treatment/care that you may receive (should this be relevant).

5 Are there any age or other restrictions that may prevent me from participating?

The participant group are all in year 9 in school.

6 How long will my part in the study take?

If you decide to take part in this study, nothing will change about your child's learning and they will continue with class work which is the regular year 9 scheme of work. Your consent is required to use classwork, examples and formative assessment data as part of the research dissertation. This will mean if permission is agreed I will access this data through scanning documents into a password protected environment. All data used will be anonymised.

7 What will happen to me if I take part?

The first thing to happen will be for your child to continue with their lessons as normal, no changes to their learning or classroom activities will be needed. They will still have the same number of lessons and timetable. Once the Autumn/Winter term has finished, I will access the data/assessments and classwork completed, anonymise all data and scan into a password protected environment on the UH One drive. I will then use this data to analyse results and progress.

8 What are the possible disadvantages, risks or side effects of taking part?

There are no known risks to participating in this study.

9 What are the possible benefits of taking part?

If this study results prove a positive impact, it could potentially inform future teaching practice and benefit pupils across all Art & Design subjects.

10 How will my taking part in this study be kept confidential?

All data will be anonymised prior to being included in the research dissertation. All electronic data will be stored on the UH One drive which is a password protected environment, including signed consent forms. All paper forms and data will be kept in a locked cabinet in the school, these will be scanned and uploaded to the password protected environment, then paper copies will be securely destroyed

.

11 Audio-visual material

No audio-visual material will be used in this study.

12 What will happen to the data collected within this study?

- The data collected will be stored electronically, in a password-protected environment, for 24 months, after which time it will be destroyed under secure conditions;

- The data collected will be stored in hard copy by me in a locked cabinet for 24 months, after which time it will be destroyed under secure conditions;

- The data will be anonymised prior to storage.

13 Will the data be required for use in further studies?

The data collected may be re-used or subjected to further analysis as part of a future ethically-approved study; the data to be re-used will be anonymised.

14 Who has reviewed this study?

This study has been reviewed by:

The University of Hertfordshire Social Sciences, Arts and Humanities Ethics Committee with Delegated Authority

The UH protocol number is <enter>

15 Factors that might put others at risk

Please note that if, during the study, any medical conditions or non-medical circumstances such as unlawful activity become apparent that might or had put others at risk, the University may refer the matter to the appropriate authorities and, under such circumstances, you will be withdrawn from the study.

16 Who can I contact if I have any questions?

If you would like further information or would like to discuss any details personally, please get in touch with me, in writing, by phone or by email:

Researcher: Danielle Waterston

Teacher of the Deaf and Teacher of Textiles

Mary Hare School for the Deaf

Arlington Manor

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Supervisor – Dr Joy Rosenberg

Although we hope it is not the case, if you have any complaints or concerns about any aspect of the way you have been approached or treated during the course of this study, please write to the University's Secretary and Registrar at the following address:

Secretary and Registrar

University of Hertfordshire

College Lane

Hatfield

Herts

AL10 9AB

Thank you very much for reading this information and giving consideration to taking part in this study.

EC4 Parent Participant Consent

UNIVERSITY OF HERTFORDSHIRE

ETHICS COMMITTEE FOR STUDIES INVOLVING THE USE OF HUMAN PARTICIPANTS

('ETHICS COMMITTEE')

FORM EC4

CONSENT FORM FOR STUDIES INVOLVING HUMAN PARTICIPANTS

FOR USE WHERE THE PROPOSED PARTICIPANTS ARE MINORS, OR ARE OTHERWISE UNABLE TO GIVE INFORMED CONSENT ON THEIR OWN BEHALF

I, the undersigned [please give your name here, in BLOCK CAPITALS]

……

of [please give contact details here, sufficient to enable the investigator to get in touch with you, such as a postal or email address]

……

hereby freely give approval for [please give name of participant here, in BLOCK CAPITALS]

……..

to take part in the study entitled [insert name of study here]

Developing Subject Specific Vocabulary in Art & Design with Students who are Deaf.....

(UH Protocol number ……)

1 I confirm that I have been given a Participant Information Sheet (a copy of which is attached to this form) giving particulars of the study, including its aim(s), methods and design, the names and contact details of key people and, as appropriate, the risks and potential benefits, how the information collected will be stored and for how long, and any plans for follow-up studies that might involve further approaches to participants. I have also been informed of how my personal information on this form will be stored and for how long. I have been given details of his/her involvement in the study. I have been told that in the event of any significant change to the aim(s) or design of the study I will be informed, and asked to renew my consent for him/her to participate in it.

2 I have been assured that he/she may withdraw from the study, and that I may withdraw my permission for him/her to continue to be involved in the study, at any time without disadvantage to him/her or to myself, or having to give a reason.

3 I have been told how information relating to him/her (data obtained in the course of the study, and data provided by me, or by him/her, about him/herself) will be handled: how it will be kept secure, who will have access to it, and how it will or may be used.

4 I understand that his/her participation in this study may reveal findings that could indicate that he/she may require medical advice. In that event, I will be informed and advised to consult a GP and I acknowledge that, following discussion, he/she may be required by the University to withdraw from the study. If, during the study, evidence comes to light that he/she may have a pre-existing medical condition that may put others at risk, I understand that the University will refer him/her to the appropriate authorities and that he/she will not be allowed to take any further part in the study.

5 I understand that if there is any revelation of unlawful activity or any indication of non-medical circumstances that would or has put others at risk, the University may refer the matter to the appropriate authorities.

6 I have been told that I may at some time in the future be contacted again in connection with this or another study.

7 I declare that I am an appropriate person to give consent on his/her behalf, and that I am aware of my responsibility for protecting his/her interests.

Signature of person giving consent

……Date……

Relationship to participant

.....

Signature of (principal) investigator

....Danielle Waterston.....Date……..

Name of (principal) investigator [in BLOCK CAPITALS please]

.....Danielle Waterston.....

8.2 Appendix B – Pre and Post intervention assessment

Describe this piece of artwork by Artist Mbongeni Buthelezi.

Colours
- blue
orange
white
red
- purple
- black
- grey
- brown

Shouting in a microphone

Vibrant colours in bath

People

hungry child

ng face

colours
- purple
- green
- white
- yellow
- pink
- red
- orange
- brown

8.3 Appendix C – Intervention

Word Scramble worksheet

Do It Now -Colour

Unscramble the letters to make descriptive words for COLOUR

Scrambled Words

1. BODL
2. RTLNAAU
3. LITHG
4. DLLU
5. OLD-ULOTRIUEMC
6. KDAR
7. TLSBUE
8. CEALR
9. ALCM
10. LRYBUR
11. GSSPEIDNRE
12. DCOL
13. MWAR
14. ECLAR
15. ALEP
16. ANTNGCRSOIT

Bold	Natural	Multi-coloured
Light	Dark	Contrasting
Subtle	Clear	Depressing
Calm	Blurry	Pale
Cold	Warm	Clear

Word scramble worksheet example

Do It Now -Colour

Unscramble the letters to make descriptive words for COLOUR

Scrambled Words

1. BODL = bold
2. RTLNAAU = Natural
3. LITHG = light
4. DLLU = Dull
5. OLD-ULOTRIUEMC = multi coloured
6. KDAR = Dark
7. TLSBUE = subtle
8. CEALR = clear
9. ALCM = calm
10. LRYBUR = Blurry
11. GSSPEIDNRE = depressing
12. DCOL = cold
13. MWAR = warm
14. ECLAR = ~~clear~~ clear
15. ALEP = Pale
16. ANTNGCRSOIT = contrasting

Bold	Natural	Multi-coloured	Dull
Light	Dark	Contrasting	
Subtle	Clear	Depressing	
Calm	Blurry	Pale	
Cold	Warm	Clear	

8.4 Appendix D – Intervention

Synonym worksheet

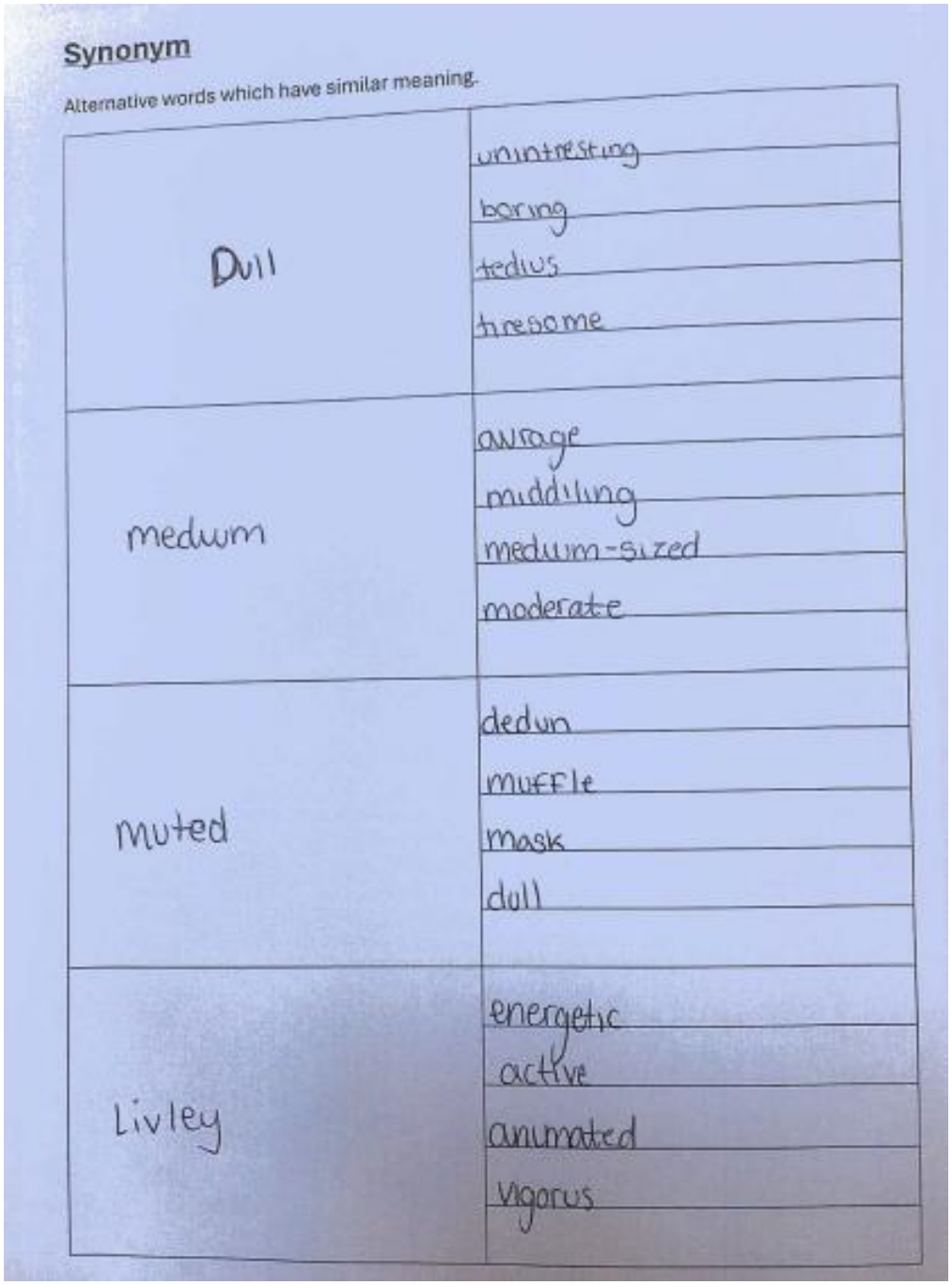
Synonym

Alternative words which have similar meaning.

Contrast	different
	dissimilar
	unlike
	distinct
	separate

Use an iPad to look up synonyms for 4 words you do not know from the Colour and Tone list.

Synonym Worksheet Example



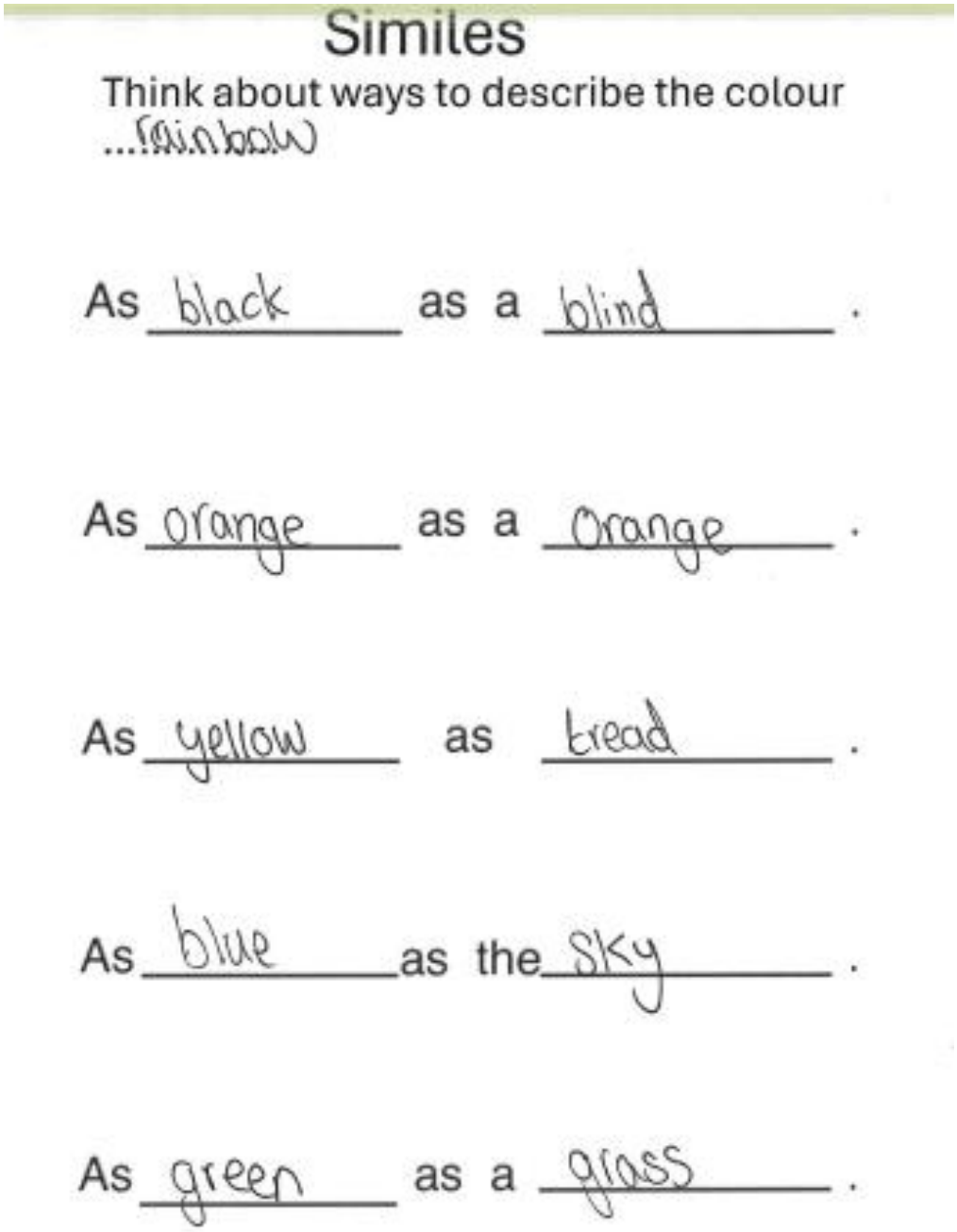
Synonym

Alternative words which have similar meaning.

Dull	uninteresting boring tedius tiresome
medium	average middling medium-sized moderate
muted	dedun muffle mask dull
Livley	energetic active animated vigorus

8.5 Appendix E – Intervention

Simile Worksheet



Similes

Think about ways to describe the colour ...rainbow

As black as a blind .

As orange as a Orange .

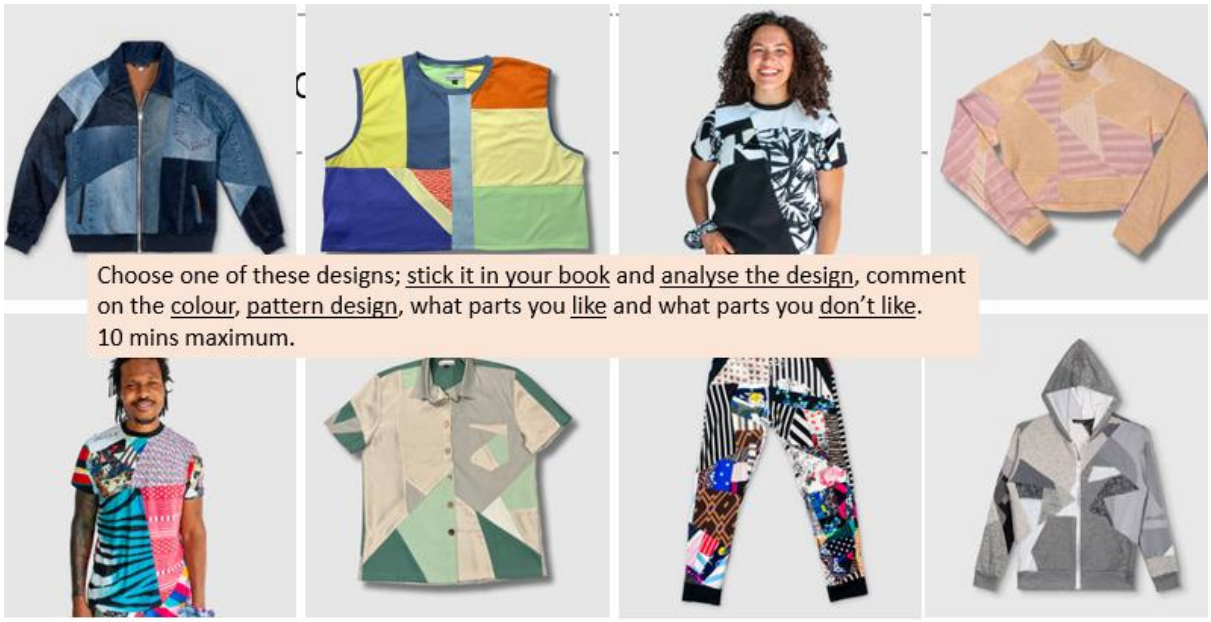
As yellow as bread .

As blue as the sky .

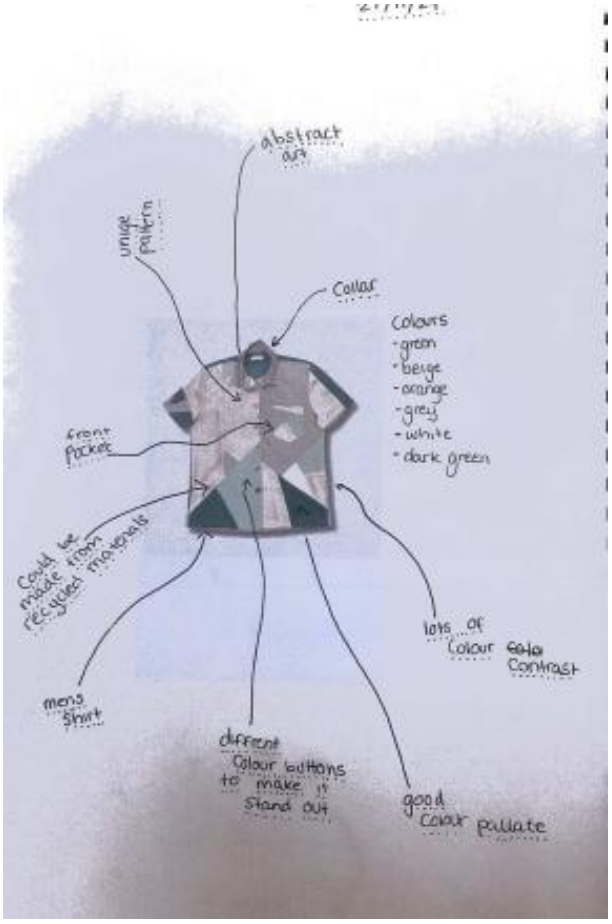
As green as a grass .

8.6 Appendix F – Intervention

Labelling and annotation activity



Labelling and annotation activity example



8.7 Appendix G – Intervention

Labelling and annotation group activity

Do it now – describe the fabrics you have chosen.
Lable or annotate the photos in your books.

Describe your fabric choices…

1. 10 minutes describing your own choices.

You can use the Colour and Tone vocabulary sheets to help.

2. Go around the class and add descriptive words to your peer's work.

(Use a different coloured pen/pencil) This is also helpful feedback for you.

Labelling and annotation group activity examples

8.8 Appendix H – Intervention

Annotation practice

Do it now

Zero Waste Daniel Analysis

Fill the gaps. Use the vocabulary wall to fill in and upgrade your analysis.

This design includes colours like_____,_____and _____.

Zero Waste Daniel uses scraps of fabric in the shape of_____and uses patterns like_____.

I would describe the fabric used in this design as...

I like this design because...

8.9 Appendix I – Supportive materials

Supportive Art Principles worksheet – given as a handout

Supportive word lists – displayed within the Textiles rooms

Colour and Tone	
Muted	Subtle
Greyed	Natural
Pale	Depressing
Subdued	Balance
Calm	Contrast
Strong	Dull
Brash	Gaudy
Bright	Contrasting
Strong	Harmonious
Garish	Light
Striking	Dark
Clear	Medium
Cool	Monochromatic
Dull	Muted
Multi-coloured	Weak
Warm	Vivid
Primary	Lively
Glossy	Stimulating
Blurry	

Supportive GCSE annotation – displayed within the Textiles rooms

Supportive word lists – displayed within the Textiles rooms

Colour

Bright Bold

Primary Secondary Tertiary

Dull Vivid

Contrasting

Deep Pale

Monochrome

Harmonious

Complementary

Natural Earthy

Subtle

Cool Warm

Saturated

Luminous

Strong

Supportive writing and sentence starters displayed and given as handout

Analysis Sentence Starters

- In this piece I have ...
- The materials I have used are...
- The technique I have used is...
- Through working this way, I have learnt how to ...
- I have shown ... in the style of ...
- The artist ... ... has influenced my designs because ...
- This piece could develop further by including ...
- To develop this piece further I could ...
- I think using ... worked well because ...
- I am particularly pleased with ... I now aim to ...