

Assignment mark: 81%

Inclusive Practice Assessment

Identify and discuss up to three strategies that you have implemented
in your teaching to support inclusive practice.

Overview of Setting

Recent changes to special education policy (Welsh Assembly Government, 2021) and the development of a new Curriculum for Wales (Donaldson, 2015) has situated a spotlight on inclusive education in Wales that follows questions of inequity in educational outcomes (Egan, 2017), exacerbated by the COVID-19 pandemic for disadvantaged learners (OECD, 2021). Defined as all children being provided equal opportunities for learning within the same classroom (UNICEF, 2021), inclusion can improve attainment for learners with Additional Learning Needs (ALN) and promote positive social attitudes and self-esteem without negative consequences for ‘typical’ learners (Abt Associates, 2016). Haug (2017) summarised that whilst inclusive ideals reach international consensus, curriculum design, and teacher competence are barriers in their implementation.

Situated in the city of Swansea, Parkland Primary is an English-medium school with 584 pupils aged 3-11, 9% of which have identified ALN that includes the Specialist Teaching Facility those with more severe learning difficulties. Inclusion is implied in Parkland’s vision for a school environment where all learners thrive; our ALN policy describes how this can be achieved through ‘restructuring the curriculum’ to meet learner needs. Indeed, we recently developed our curriculum in line with new guidance (WAG, 2020), mapping prerequisites for skills aligned to ‘pathways’ across areas of learning to ensure teachers plan for progression, differentiating experiences based on learners’ previous skills and knowledge. Research shows competency-based curricula like this offer flexibility and customisation of learning which engages learners (Laurie, et al., 2017) and adapts to various starting points and paces (Operetti, et al., 2011). Welsh teachers’ experiences reiterated these advantages (Power, et al., 2020) and contrast the dominant culture perspective which expects learners to adapt to the curriculum (Greenstein, 2014; Portelli & Koneeny, 2018).

To realise a vision of teachers as ‘agents of change’ (Conn & Hutt, 2020), teacher attitudes must be addressed as a barrier to inclusion so that the curriculum adapts to learner’s needs (Artiles, et al., 2006; Meltz, et al., 2014). Despite arguments that Curriculum for Wales superficially superimposes children’s rights into legislation (Lemke & Zhu, 2018), I feel our practise caters to individual needs, although professional development and training in delivering inclusive strategies that reflect the person-centred ideals of the ALN Code (p. 37) would improve staff confidence. Additionally, in partnership with parents, professionals and learners, the school is implementing Individual Learning Plans to reflect the legislation. However, analyses of the ALN Code and older legislation revealed inconsistencies between this approach and the traditional medical model of disability (Knight & Crick, 2021; Ware, 2014). Regardless, inclusion should not be viewed as a set of systems to follow but as:

[...] a process of people enquiring into their own context to see how it can be developed, [...] how can people in a given context be helped and help one another to explore their context in relation to barriers to participation and learning and how can they be creative in overcoming them. (Ainscow, 2000, p. 41)

Therefore I suggest our school navigates inclusion by avoiding legislative contradictions whilst integrating several approaches that build upon evidence-based practise (Schuelka, 2018): upskilling staff (Evans, 2021), delivering a continuum of provision (Armstrong, et al., 2010), tailoring assessment to support all (Ainscow, 2020), and capitalizing upon learners’ diversity (Thousand, et al., 2018).

Implementing inclusive strategies using reflective practice models

In recognition of these debates where inclusion is viewed as a *process* driven by responsibility for professional development, I have implemented three strategies within my

setting to promote inclusion. Within the Year 6 class of 26 children that I teach, three (Learner A, B and C) have a statement of ALN encompassing speech, language, and communication needs (SLCN) and moderate to severe learning difficulties. These strategies aim to enable these learners to access activities and make progress alongside their peers by breaking down identified barriers. Each strategy's conception and implementation will be analysed using established reflective practice models. The first two strategies will be analysed together using Gibbs' Reflective Cycle (1988, p. 50) which explores thoughts, feelings, and issues around my evaluations. As my third strategy targets specific needs of individuals, I felt the empathetic model of Brookfield's Four Lenses (Brookfield, 1995) to be appropriate. Drawing from Tripps (2012, p. 25), events in my practise are analysed and rendered 'critical incidences', whilst also providing a rationale for each strategy.

Flexible Groupings and Autonomy-Supportive Teaching

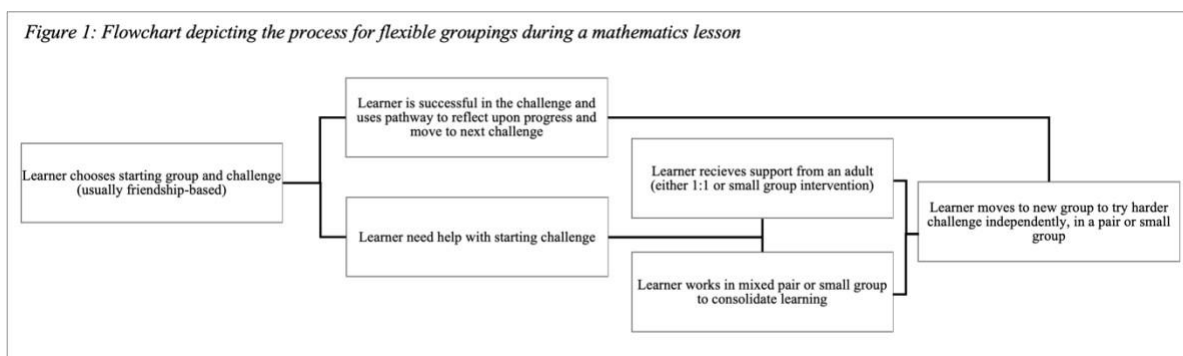
Critical incident, description of strategies and rationale

Prior to the COVID-19 pandemic, mathematics classes were organised by topic across three 'ability' classrooms dependent upon initial assessments on a 'pathway' of skills and knowledge, thought to allow teachers to provide an appropriate level of challenge to their group. COVID restrictions meant classes could not mix across the year group, triggering a feeling of apprehension about how to organise a mixed classroom environment and setting tasks that cater to all needs. Learners with ALN were typically placed within small groups together, supported closely by an adult. Therefore, I questioned whether previously established grouping practices had limited the progress of some learners and asked how the learning environment could be organised to promote inclusion.

There is clear evidence about the damaging consequences of grouping learners by 'ability': such practise establishes boundaries on learning, limits teacher expectations, and

promotes stigmatism (Wilkinson & Penney, 2014); leads to unconsciously biased judgements of ALN, English as an additional language (EAL) and ethnic minority learners by teachers (Hortas, 2017; Campbell, 2015); reduces higher order thinking yet increases reliance upon support staff (Macqueen, 2013); and finally a recent study highlighted in the press found correlation between ability grouping and poor wellbeing for learners in ‘lower’ groups (Papachristou, et al., 2021; Weale, *The Guardian*, 2021). Throughout my teaching practise I have organised groups using this established practise despite the evidence against it, as I have felt apprehensive to remove the illusive targeted support responsible for controlling expectations of what a group of learners could achieve.

Grouping learners should be used strategically to develop skills and knowledge (Blatchford & Russell, 2019) and a diverse classroom composition encourages motivation and a sense of belonging (Hornstra, et al., 2015). Subsequently I implemented two strategies. The first was using flexible grouping, where learners move between groups according to knowledge base, progression of skills, and social interactions (Chapman & King, 2014). I hoped that my flexible grouping approach (Fig. 1) would open up progression in learning and improve motivation and self-esteem within or across mathematics lessons. Grouping was determined through learner self-reflection or by teacher assessment and the tasks, which became progressively challenging according to the topic ‘pathway’, were available to the learners throughout thus providing opportunity for all learners to reach their full potential.



The second strategy, autonomy-supportive teaching, is based upon self-determination theory (SDT) (Ryan & Deci, 2000) which posits that the fulfilment of learners' need for a sense of competency, social relatedness and autonomy in learning brings about increased motivation and higher expectations because learners attribute the achievement of goals as a result of personal effort (Coe, et al., 2019, p. 25). An autonomy-supportive classroom requires the teacher to be responsive learners' needs, accept negative emotions and encourage independent choice in their learning through implicit messages of trust and respect. In practise, this meant giving learners choice in tasks which were progressive in nature, opportunities for collaboration with peers, and using constructive and encouraging language to address negative feelings. I felt this strategy would aid my learners monitor their progress across the groups, in line with the principles ALN Code where learners' views are valued, ultimately 'develop[ing] a sense of responsibility for, and control over, their learning' (WAG, 2021, p. 43). Additionally, my hope would be that learners with ALN would in turn less reliant upon adults.

Evaluation and analysis of the strategies

When my learners were offered the opportunity to choose their groups, most of the class were motivated to work with friends, although initially many learners who had previously worked in 'lower' groups felt reluctant to move groups working on harder challenges, even if successful in their first task. I believe they felt that they wouldn't cope with the cognitive demands, related to these students constructing an idea of themselves as failures (Boaler, et al., 2000), in part due to predominantly working in groups that were adult-led and lacked challenge. Through encouragement from myself during classroom discussions, learners eventually saw the benefits of challenging themselves and working with a broader range of peers, especially after they persevered with the flexible groupings. SDT emphasises

the importance of teacher-learner interactions to establish change (Praetorius, et al., 2018): my acknowledgement of emotional factors as a barrier to inclusivity encouraged my learners to meet their basic psychological need to relate to within a social context. Moreover, Maehr & Midgley (1991) described the classroom as a ‘psychological environment’ where adaptations influence learners’ motivation and beliefs. Learner A, for example, excelled during long division lessons when he reached the final challenge and collaborated with learners who, typically, he would never have been grouped with prior to implementing flexible groupings. Changing the organisation of the learning space gradually transformed his self-image gradually as he worked completed tasks cooperatively within each group. Hart et al. (2004) argued that transformability of an environment allows for co-agency, trust and community, whilst Moscardini (2014) further summarises that if our pedagogical approach is adapted to achieve a ‘commonality’ for learners, rather than thinking about *additional* support individuals require, the mathematics classroom can be more inclusive. Some learners previously labelled ‘low ability’ in my class were now achieving beyond previous expectations in line with their peers. This cultural shift of acceptance led to an expectation for ALN learners to learn alongside their peers, take responsibility for their learning, and improved attainment (Storeygard, 2012).

Reflecting upon specific lessons, I believe that flexible groupings improved attainment and self-image for other reasons. Learning came to be seen as a process in which progress looks different for everyone, where concepts or methods would be grasped at different rates. My learners became more independent identifying an appropriate starting task using the pathway, reflected on their progress through the groups by self-monitoring their learning, making use of feedback, resources, and collaboration to make progress. During interviews, Boaler et al. (2000) students often regarded the pace of learning within ability classes as incompatible with their understanding. This was true of the experiences of learners

in my class. Learner A's ability was often underestimated before the introduction of flexible groupings, capping their potential progress due to the constraints of the tasks set for his group. Now flexible groupings meant that his learning could move at a pace more compatible to his mathematical understanding through continuous assessment of his progress, subsequently improving his confidence and motivation to learn because of a greater sense of competency. My own classroom experiences mirror those of Castle et al. (2005), whose implementation of flexible groupings within a special needs context saw improved on-task behaviour and a greater understanding of and confidence in tasks, though I personally felt that these positive effects also extended to other learners in the classroom in a truly inclusive way. For example, a group of girls in my class with low self-image in relation to their mathematical ability came to see that through sustained effort and resilience they could progress to the harder challenges they previously disregarded as something 'I can't do'.

Nevertheless, there were still a minority of learners, including Learner B, who needed encouragement to engage with their peers, challenge themselves beyond previous expectations within flexible groupings, and take more responsibility for their learning. This could be explained by Ruzek & Schenke's (2019) findings that environmental changes to the classroom are unrelated to an individual's goal orientation and motivation to learn, which calls for alternative reasons to understand why motivation and self-image remained unchanged for Learner B. One study, although focused on those labelled 'gifted or more able,' found that some learners disliked flexible groupings because of a lack of relatedness when working with peers who they perceive as more or less competent (Riley, 2016). Whilst these findings emphasise necessary consideration of all learners' views, I found my experiences implementing flexible groupings encouraged tolerance and respect for diversity. Equally, research has shown that although ability groupings in mathematics demonstrates gains for more able pupils, this is usually at the expense of those with ALN who come to

attribute negative self-image derived by labels attached to their group placement (Francome & Hewitt, 2020).

It is conceivable that I had underestimated the effects of ability grouping on Learner B. Having an awareness of labels leads to a self-fulfilling prophecy; learners who are judged as less able develop shame and lower confidence that is associated with limited attainment (Mazenod, et al., 2019; Francis, et al., 2017) For Learner B, I believe the most pertinent of these associations to be learned helplessness, which is the result of overreliance in adults (especially learning support assistants) when carrying out learning tasks. Until the introduction of flexible groupings, commonly Learner B would receive one-to-one support during mathematics lessons. In their new groups, Learner B demonstrated difficulty choosing an appropriate challenge and relied heavily on their peers to find answers, rather than making use of resources or known strategies. Blatchford & Webster (2018) suggest that inclusion for learners with ALN is problematic within large classes; while smaller classes are preferable to provide the appropriate support, this group of learners' social interactions (a key skill for learning) are limited through over-reliance on adults. In view of the consequences of damaging labels and learned helplessness, in time Learner B can increase their independence and collaborative skills and begin attributing success in mathematics to sustained effort and motivation (Francome & Hewitt, 2020), like Learner A.

The effects of implementing autonomy-supportive strategies (learner choice, structured instructions and tasks, acceptance of emotions) required a range of adaptations were made to my teaching style, the effects of which were difficult to capture in the classroom., Gains to motivation, effort, and perceived competence are linked to learners choosing their learning tasks (Patall, et al., 2008; Stroet, et al., 2013) which was certainly a factor for my learners' enthusiasm when presenting determination as they worked with peers, to try a more challenging task. SDT can explain how autonomy affected intrinsic motivation

in this example. The use of a progressive, goal-oriented pathways of learning tasks along with clear rationales behind the learning provided structure for each lesson; a well-structured learning environment has been found to promote self-regulation and optimal challenge, where feedback becomes personalised due to the individualised structure of the tasks (Sierens, et al., 2009; Jang, et al., 2010) contributing to learners achieving beyond expectations. Despite this, some learners chose tasks that were too difficult or too easy, with some moving on to new challenges despite not having grasped the relevant skill or method which led to feelings of frustration. Whilst I deem the level of challenge available to my learners as appropriate and ‘competence-enhancing’ (Katz & Assor, 2007, p. 434), it has been noted that some learners are unable to accurately judge their own competency (Deans for Impact, 2015) accounting for the frustrations felt. Additionally, in contrast to previous findings that support SDT, Mozgalina (2015) discovered in circumstances presenting fewer choices learners were more engaged. Accordingly, my future practise must account for the complexities of learner task choice and monitoring individuals who require additional support to monitoring their own progress.

The complex nature of autonomy-supportive pedagogy can be further applied to illuminate the implications of emotions and self-image on inclusion. Teacher-learner interactions and use of language are key in satisfying learners’ psychological needs of competency when acknowledging negative feelings in the classroom: controlling language such as ‘must’, ‘should’ and ‘have to’ should be avoided (Su & Reeve, 2011). This challenges current practise in my own school setting of developing success criteria for learning using similar ‘controlling’ language, which could be adapted to enhance learner motivation. On the other hand, I have witnessed improved self-image in relation to mathematics through positive feedback that encouraged resilience and the use of strategies to overcome difficulties. Research has shown positive effects to self-image if teachers listen to

learners and provide more meaningful problem focused instructional support, rather than simply using optimistic language that refutes learners' negative statements about their ability (Vehkakoski, 2020). A consideration for future practice would be to trial effective ways to provide feedback to include all learners; when working across a broad range of skills at different paces this presented difficulties in practise.

Conclusion: Exploring the application of the strategies in relation to the wider context

Overall, the effects of flexible grouping and autonomy-supportive teaching has changed the culture of learning in my mathematics lessons. Most learners, including those who were previously labelled as working within the 'lower group', exhibited improved motivation and progress through structure that optimised challenge. My feedback acknowledged negative emotions and encouraged resilience, which in turn improved self-image for a range of learners. With continued embedment of these strategies, positive implications for my learners could extend to their motivation, success, and happiness in the long-term (Froiland, 2021; Gillet, et al., 2012). This recalls the concept of teachers as 'agents of change'. Where these strategies had little impact for identified learners, actions have been proposed as a way forward.

Autonomy and flexible groupings presents opportunities for successful application within collaborative problem-solving contexts, e.g. Valsiner's zones theory (Hunter, et al., 2020) or Cognitively Guided Instruction (Carpenter, et al., 1996). These opportunities could develop my learners' mathematical problem-solving skills framed by an inclusive culture whilst addressing my school improvement targets in developing metacognition and mathematical proficiency. Elsewhere, the two strategies could be applied to the traditionally inflexible ability groupings used in guided reading sessions to promote further inclusion (Young, 2019; Gibeault, 2008).

On a larger scale, one study explored the impact of using flexible groupings across year groups in a primary school, where colleagues taught simultaneously, enabling individualised support and transformation to an inclusive school culture over two years (Valli & Lähdesmäki, 2017). Whilst ambitious, this could influence change in UK schools, where deeply-rooted fear, misconceptions and scepticism around the benefits of mixed ability groups have prevented the strategy being trialled with effect (Palak, et al., 2018; Francis, et al., 2017; Taylor, et al., 2016). Reeve et al. (2013) explains how our collectivist culture expects individuals to adapt to normative systems and practices, which also influence teacher views on inclusion. If ‘classroom conditions can change, and be changed to enrich and enhance learning opportunities and free learning from existing constraints’ (Hart, et al., 2004, p. 192) I suggest that now, during an era of change in curriculum and legislation is the right time to challenge our how learning environments enable inclusion.

Sketch and Speak

The Autobiographical Lens

Gaining three learners with statements of SLCN in my new class caused a feeling that my knowledge of general strategies to enable their inclusion during lessons was inadequate. Taking guidance from the Great Teaching Toolkit (Coe, et al., 2019, p. 32) which outlines how the provision of scaffolds makes learning more manageable for learners I implemented a recently established strategy tailored to meet SLCN called *Sketch and Speak* (Peterson, et al., 2021; Ukrainetz, 2019). The strategy was implemented to scaffold writing an expository scientific method during a practical investigation into forces. Similar to another tested framework that integrates science learning and language-based scaffolds (Braden, et al., 2021), *Sketch and Speak* was reviewed as providing the largest gains for SLCN learners across a range of speech and language interventions (Peterson, et al., 2020, p. 875). The

strategy supports these learners to use a ‘[...] note it simply, say it fully process [that] invokes the reduction, reorganization, transformation, retrieval, and revision of ideas and language needed for learning academic exposition’ (Ukrainetz, 2019, p. 54).

The Learners’ Lens

During writing lessons, I would often hear from learners that they ‘don’t know what to write’. Additionally, Learner A, B and C demonstrated difficulties sequencing events chronologically during earlier literacy lessons, and often included repeated information or unrelated or unnecessary details in their writing. Reflecting upon the reasons for this, I presumed that cognitive processes involved in writing could present difficulties in their use of language to express ideas, therefore I conjectured that if the learners could plan their method using visual cues and rehearse their instructions using the graphic organiser (GO), the cognitive demands of the task would be reduced as the learners could relate language to concrete experiences. In this context, I anticipated the *Sketch and Speak* structure (Fig. 2) to meet the needs of these three learners to write a well-organised scientific method independently.

Following the implementation of the strategy, numerous positive outcomes based upon observations of the learners and assessment of the work were found. All three learners were engaged in the task (Learner B enjoyed making drawings of her investigation, with Learner A and C confidently contributing concise bulleted notes in their groups); all three

Figure 2: An overview of how the Sketch and Speak strategy was implemented

<i>Sketch and Speak Strategy</i>	As the scientific investigation was carried out, the learners worked in groups using pictography (sketches, diagrams or symbols) and bulleted written notes to visualise each instruction using a graphic organiser.
	After the investigation, the learners rehearsed retelling each instruction orally, making use of the graphic organiser to sequence the method.
	Finally the learners wrote the method in full.

learners demonstrated confidence in their ideas and clear chronological sequencing in their written work; and Learner A and C formed sentences that contained relevant detail and were syntactically accurate overall. Conversely, engagement during the oral rehearsal was poor which I believe affected the level of detail included. This could be attributed to self-consciousness, particularly for Learner B who has more profound difficulties in her expressive speech and reading ability.

The Colleagues' Lens

I shared my planning for the strategy with five other colleagues across my phase. During professional conversations on the effectiveness of the strategy for their learners, my colleagues agreed that the quality of the writing had improved because concrete experiences were visualised through the GO, which in turn provided a memory cue for writing. All members of staff felt that the GO was beneficial for ALN learners but also noted improvements in EAL learners' confidence in writing. Evaluations of the oral retell were mixed; more confident individuals in the class tended to dominate the rehearsal, so it was suggested by my colleagues that we should explore more inclusive (and engaging) methods for this aspect of the strategy. Overall, it was agreed that the strategy enabled more learners to access the expository writing task and that the strategy could be explored across the curriculum.

Theory and Literature Lens

The three lenses used so far evaluated the benefits and weaknesses of the *Sketch and Speak* strategy in creating a more inclusive environment for expository writing. This lens will now critically explore these judgements by linking theory and current literature with potential explanations, as well as outlining ways forward that challenge current practise.

Classroom environments taxes many of our brain functions, but those with SLCN experience greater deficits in their Working Memory (WM) and Procedural Memory (PM) processes and executive functioning (Singer & Bashir, 2018). Moreover, WM depends upon the underlying structure of Procedural Memory (PM) (Ullman & Pierpont, 2005; Gabriel, et al., 2012) which connects knowledge, experience, motor and cognitive skills to perform tasks in order (such as sequencing and navigation) which in turn affects the production of related language, grammar and syntax (Lum, et al., 2012). Therefore, if those with SLCN experience these deficits, reducing Working Memory (WM) load would effectively support learners to comprehend, retain and express information (Archibald & Gathercole, 2006). Visual cues support information retrieval (Bakapoulou, et al., 2019; Jackson, et al., 2019; Quail, et al., 2009) and discernibly reduces WM overload (Herbert, et al., 2018). We could, therefore, attribute the improvement in sequencing and syntax to the GO scaffolding learners' memory processes. However, the validity of these hypotheses have been questioned (West, et al., 2017), whilst others emphasise that specific intervention that combine explicit teaching of syntax and grammar in conjunction with GOs, visual cues, and thinking time most effectively supports learners with SLCN (Singer & Bashir, 2018; Rowe, et al., 2021).

Research also shows that oral rehearsal of expository activities addresses SLCN in addition to scaffolding 'typical' learners to remember events and produce more complex descriptions in their writing (Copping, 2016; Iuliu & Martínez, 2021). This likely contributed to the gains in learners' confidence recalling every step of the method. Furthermore, oral rehearsal points to a reduction in WM load: vocal rehearsal of language supports learners to encode the information visually, imagining themselves carrying out the tasks (Gathercole & Alloway, 2006; Gill, et al., 2003) Dockrell et al. (2007, p. 158) emphasises the requirement for teachers to embed semantics (*what* learners write) in addition to instruction on *how* to write, which is prevalent for learners with SLCN who have greater difficulty understanding

abstract scientific concepts (Wellington & Wellington, 2002). Considering the evidence endorsing oral rehearsal, it should be addressed that some learners benefit from differing activity structure depending on their specific needs (Bruce & Hansson, 2019). For example, an open-ended oracy activity might support Learner B's expressive language difficulties better than a closed activity. Moreover, Gathercole & Alloway (2006, p. 10) argue that oral rehearsal intervention leads to modest impact unless first combined with the acquisition of relevant vocabulary or, according to Herbert et al. (2018), by first providing guided practice and background information. Therefore, to further engage and enhance the effects of *Sketch and Speak* for all learners in future practise I could, in collaboration with my colleagues, explore evidence-based approaches such as jigsaw groupings or vocabulary pre-teaching (Bakapoulou, et al., 2019) to secure understanding of difficult concepts before embarking on the strategy.

Conclusion

Recently, the Welsh Assembly Government launched the *Siarad Gyda Fi/Talk With Me* (2020) campaign to boost young children's spoken language skills and pledged £250,000 (WAG, 2021) to support SLCN in schools following the impact of the COVID-19 pandemic. Despite these learners' identification as high risk and vulnerable by our government, McGregor (2020) nonetheless raised a call to action for these children who are failed too often by our school systems. Although targeted individual intervention for ALN is common practice and deemed essential to address difficulties (Vanderwalle, et al., 2012), implementing *Sketch and Speak* as a simple, evidence-based universal classroom strategy, has the potential to provide teachers with a tool to inclusivity in spoken and written language. This is a strategy that addresses specific needs whilst enhancing *all* learners' oracy skills –

the 'cornerstone' of accessing the curriculum, empowering learners to socially integrate, and thus improving overall wellbeing (Quaine, *TES*, 2019).

Reference List

- Abt Associates (2016). *A Summary of the Evidence on Inclusive Education*
- Ainscow, M. (2000) 'Profile'. In Clough, P. & Corbett, J., (eds). *Theories of Inclusive Education: A Student's Guide*. London: Paul Chapman, pp. 39-42.
- Ainscow, M. (2020) 'Promoting inclusion and equity in education: lessons from international experiences'. *Nordic Journal of Studies in Education*, 6(1), pp. 7-16.
- Archibald, L. M. D. & Gathercole, S. (2006) 'Short-term and working memory in specific language impairments'. *International Journal of Language & Communication Disorders*, 41(6), pp. 675-693.
- Armstrong, D., Spandagou, I. & Armstrong, A. (2010) 'Making Inclusion Special: A Case Study of English Policy Contradictions'. In *Inclusive Education. International Policy and Practice*. Los Angeles, California: SAGE, pp. 85-97.
- Artiles, A., Harris-Murri, N. & Rostenberg, D. (2006) 'Inclusion as Social Justice: Critical Notes on Discourses, Assumptions, and the Road Ahead'. *Theory into Practice*, 45(3), pp. 260-268.
- Bakapoulou, I. Vivash, J., Wall, K., Brackenburg, G., Dockrell, J. (2019) *Supporting Spoken Language in the Classroom: Case Studies*, London, UK: UCL Institute of Education.
- Berger, J.-L., Girardet, C., Vaudroz, C. & Aprea, C. (2017). 'The Motivational Basis of Classroom Management Practices and Beliefs of Swiss Vocational Teachers.' In H. M. G. Watt, P. W. Richardson & K. Smith (eds.) *Global Perspectives on Teacher Motivation*. Cambridge, UK: Cambridge University Press, pp. 95-125.
- Blatchford, P. & Russell, A. (2019) 'Class size, grouping practices and classroom management.' *International Journal of Educational Research*, Volume 96, pp. 154-163.
- Blatchford, P. & Webster, R. (2018). 'Classroom contexts for learning at primary and secondary school: Class size, groupings, interactions and special educational needs.' *British Educational Research Journal*, 44(4), pp. 681-703.
- Boaler, J., Wiliam, D. & Brown, M. (2000). 'Students' Experiences of Ability Grouping - disaffection, polarisation and the construction of failure.' *British Educational research Journal*, 26(5), pp. 631-648.

- Braden, S., Barth-Cohen, I., Gailey, S. & Young, T. (2021). 'Supporting Diverse Learners with Visual and Linguistic Scaffolds.' *Science scope (Washington, D.C)*, 44(6), p. 84.
- Brookfield, S. (1995). *Becoming a Critically Reflective Teacher*. San Francisco: Jossey Bass.
- Bruce, B. & Hansson, K. (2019). 'An exploratory study of verbal interaction between children with different profiles of DLD and their classroom teachers in educational dialogues.' *Child Language Teaching & Therapy*, 35(3), pp. 189-201.
- Campbell, T. (2015). 'Stereotyped at Seven? Biases in Teacher Judgement of Pupils' Ability and Attainment.' *Journal of Social Policy*, 44(3), pp. 517-547.
- Carpenter, T. P., Fennema, E. & Franke, M. L. (1996). 'Cognitively Guided Instruction: A Knowledge Base for Reform in Primary Mathematics Instruction.' *The Elementary School Journal*, 97(1), pp. 3-20.
- Castle, S., Deniz, C. B. & Tortora, M. (2005). 'Flexible Grouping and Student Learning in a High-Needs School.' *Education and Urban Society*, 37(2), pp. 139-150.
- Chapman, C. & King, R. (2014). 'Flexible grouping strategies.' In *Planning and Organizing Standards-based Differentiated Instruction*. London, UK: SAGE Publications, Inc., pp. 153-191.
- Coe, R., Rauch, C. J., Kime, S. & Singleton, D. (2019). *Great Teaching Toolkit: Evidence Review*. [Online] Available at: https://assets.websitefiles.com/5ee28729f7b4a5fa99bef2b3/5ee9f507021911ae35ac6c4d_EBE_GTT_EVIDENCE%20REVIEW_DIGITAL.pdf [Accessed November 29th 2021].
- Conn, C. & Hutt, C. (2020). 'Successful futures for all? Additional learning needs in Wales in the light of curriculum reform.' *British Journal of Special Education*, 47(2), pp. 152-169.
- Copping, A. (2016). 'Speaking and listening scaffolds reading and writing.' In *Being Creative in Primary English*. London: SAGE Publications Ltd., pp. 57-72.
- Deans for Impact (2015). *The Science of Learning*, Austin, TX: Deans for Impact.
- Dockrell, J. E., Lindsay, G., Connelly, V. & Macie, C. (2007). 'Constraints in the Production of Written Text in Children with Specific Language Impairments.' *Exceptional Children*, 73(2), pp. 147-164.
- Donaldson, G. (2015). *Successful Futures. Independent Review of Curriculum and Assessment Arrangements in Wales*
- Egan, D. (2017). *After PISA: A way forward for education in Wales*, Bevan Foundation.

- Evans, G. (2021). 'Back to the future? Reflections on three phases of education policy reform in Wales and their implications for teachers.' *Journal for Educational Change*, 1(1), <https://doi.org/10.1007/s10833-021-09422-6>.
- Francis, B., Archer, L., Hodgen, J., Pepper, D., Taylor, B., Travers, M-C. (2017). 'Exploring the relative lack of impact of research on 'ability grouping' in England: a discourse analytic account.' *Cambridge Journal of Education*, 47(1), pp. 1-17.
- Francis, B., Connolly, P., Archer, L., Hodgen, J., Mazenod, A., Pepper, D., Sloan, S., Taylor, B., Tereshchenko, A., Travers, M-C. (2017). 'Attainment Grouping as self-fulfilling prophecy? A mixed methods exploration of self confidence and set level among Year 7 students.' *International Journal of Educational Research*, Volume 86, pp. 96-108.
- Francome, T. & Hewitt, D. (2020). 'My math lessons are all about learning from your mistakes': how mixed-attainment mathematics grouping affects the way students experience mathematics. *Educational Review (Birmingham)*, 72(4), pp. 475-494.
- Froiland, J. M. (2021). 'The Intrinsic Learning Goals of Elementary School Students, in Their Own Words.' *The Journal of Humanistic Psychology*, 61(4), pp. 629-649.
- Gabriel, A., Stefaniak, N., Maillart, C. & Schmitz, X. (2012). 'Procedural Visual Learning in Children with Specific Language Impairment.' *American Journal of Speech-Language Pathology*, 21(4), pp. 329-341.
- Gathercole, S. E. & Alloway, T. P. (2006). 'Practitioner Review. Short term and working memory impairments in neurodevelopmental disorders: diagnosis and remedial support.' *Journal of Child Psychology and Psychiatry*, 47(1), pp. 4-15.
- Gibbs, G. (1988). *Learning by Doing, A Guide to Teaching and Learning Methods*. Oxford, UK: Oxford Centre for Staff and Learning Development, Oxford Brookes University.
- Gibeault, K. (2008). *The Use of Ability Grouping and Flexible Grouping within Guided Reading*. [Online] Available at: <http://www2.uwstout.edu/content/lib/thesis/2008/2008gibeaultk.pdf> [Accessed 1st January 2022].
- Gill, B., Klecan-Aker, J. & Roberts, T. (2003). 'Following directions: Rehearsal and vizualization strategies for children with specific language impairment.' *Child Language Teaching and Therapy*, 19(1), pp. 85-103.
- Gillet, N., Vallerand, R. J. & Lafrenière, M.-A. K. (2012). 'Intrinsic and extrinsic school motivation as a function of age: The mediating role of autonomy support.' *Social Psychology of Education*, 15(1), pp. 77-95.

- Greenstein, A. (2014). 'Is this inclusion? Lessons from a very special 'unit'.' *International Journal of Inclusive Education*, 18(4), pp. 379 - 391.
- Hart, S., Dixon, A., Drummond, M. J. & McIntyre, D. (2004). *Learning without Limits*. Maidenhead, UK: Open University Press.
- Haug, P. (2017). 'Understanding inclusive education: ideals and reality.' *Scandinavian Journal of Disability Research*, 19(3), pp. 206 - 217.
- Herbert, M. et al. (2018). 'Taking Notes on Informational Source Text Using Text Structures: An Intervention for Fourth Grade Students with Learning Difficulties.' *Learning Difficulties*, 23(2), pp. 34-55.
- Hornstra, L., van der Veen, I., Peetsma, T. & Volman, M. (2015). 'Does classroom composition make a difference: effects on developments in motivation, sense of classroom belonging, and achievement in upper primary school.' *School Effectiveness and School Improvement*, 26(2), pp. 125-152.
- Hortas, D. (2017). 'Setting for English and Maths: 11-year-olds' characteristics and teacher perceptions of school attitudes.' *Research Papers in Education*, 33(3), pp. 1-22.
- Hunter, J., Hunter, R. & Anthony, G. (2020). 'Shifting towards equity: challenging teacher views about student capability in mathematics.' *Mathematics Education Research Journal*, 32(1), pp. 37-55.
- Iuliu, I. & Martínez, M. (2021). 'Oral Narrative Intervention by Tele-Practice in a Case with Developmental Language Disorder.' *Children*, 8(11), p. 1052.
- Jackson, E., Leitão, S., Claessen, M. & Boyes, M. (2019). 'The evaluation of word-learning abilities in people with developmental language disorder: a scoping review.' *International Journal of Language & Communication Disorders*, 54(5), pp. 742-755.
- Jang, H., Reeve, J. & Deci, E. L. (2010). 'Engaging Students in Learning Activities: It Is Not Autonomy Support or Structure but Autonomy Support and Structure.' *Journal of Educational Psychology*, 102(3), pp. 588-600.
- Katz, I. & Assor, A. (2007). 'When Choice Motivates and When It Does Not.' *Educational Psychology Review*, 19(4), pp. 429-442.
- Knight, C. & Crick, T. (2021). 'Inclusive Education in Wales: Interpreting Discourses of Values and Practice Using Critical Policy Analysis.' *ECNU Review of Education*, pp. 1-26.
- Lambert, R. (2015). 'Constructing and resisting disability in mathematics classrooms: A case study exploring the impact of different pedagogies.' *Educational Studies in Mathematics*, 89(1), pp. 1-18.

- Laurie, G., Marquis, E., Fuller, E., Newman, T., Qui, M., Nomikadis, M., Roelofs, F., Van Dam, L. (2017). 'Moving towards inclusive learning and teaching: A synthesis of recent literature.' *Teaching & Learning Inquiry*, 5(1), pp. 9-21.
- Lemke, M. & Zhu, L. (2018). 'Successful futures? New economy business logics, child rights, and Welsh educational reform.' *Policy Futures in Education*, 16(3), pp. 251-276.
- Lum, J. A. G., Conti-Ramsden, G., Page, D. & Ullman, M. T. (2012). 'Working, declarative and procedural memory in specific language impairment.' *Cortex*, 48(9), pp. 1138-1154.
- Macqueen, S. (2013). 'Grouping for Inequity.' *International Journal of Inclusive Education*, 17(3), pp. 295-309.
- Maehr, M. L. & Midgley, C. (1991). 'Enhancing student motivation: A schoolwide approach.' *Educational Psychologist*, 26(3-4), pp. 399-427.
- Mazenod, A., Francis, B., Archer, L., Hodgen, J, Taylor, B., Tereshchenko, A., Pepper, D. (2019). 'Nurturing learning or encouraging dependence? Teacher constructions of studentes in lower attainment groups in English secondary schools.' *Cambridge Journal of Education*, 49(1), pp. 53-68.
- McGregor, K. (2020). 'How We Fail Children with Developmental Language Disorder.' *Language, Speech & Hearing Services in Schools*, 51(4), pp. 981-992.
- Meltz, A., Herman, C. & Pilley, V. (2014). 'Inclusive education: a case of beliefs competing for implementation.' *South African Journal of Education*, 34(3), pp. 1-9.
- Moscardini, L. (2014). 'Developing equitable elementary classrooms through eachers learning about children's mathematical thinking: Cognitively Guided Instruction as inclusive pedagogy.' *Teaching and Teacher Education*, Volume 43, pp. 4369-4379.
- Mozgalina, A. (2015). 'More or less choice? The influence of choice on task motivation and task engagement.' *System*, 49, pp. 120-132.
- OECD (2021). *The state of school education: One year into the COVID pandemic*.
- Operetti, R., Brady, J. & Floran, L. (2011). 'Developing inclusive teachers from an inclusive curricular perspective.' *Prospects*, 41(3), pp. 459-472.
- Palak, R., Styles, B., Walker, M., Morrison, J., Nelson, J., Kettlewell, K. (2018). *Best Practice in Grouping Students Intervention A: Best Practice in Setting Evaluation report and executive summary*. [Online] Available at: https://educationendowmentfoundation.org.uk/public/files/Projects/Evaluation_Report_s/Intervention_A_-_Best_Practice_in_Setting.pdf [Accessed 4th December 2021].

- Papachristou, E., Joshi, H., Midhouhas, E. & Lewis, G. (2021). *Ability-grouping and problem behaviour trajectories in childhood adolescence: Results from a U.K. population-based sample*. [Online] Available at: <https://doi-org/10.1111/cdev.13674> [Accessed 18th December 2021].
- Patall, E. A., Cooper, H. & Robinson, J. C. (2008). 'The effects of choice on intrinsic motivation and related outcomes: A meta-analysis of research findings.' *Psychological Bulletin*, 134(2), pp. 270-300.
- Peterson, A. K., Fox, C. B. & Israelsen, M. (2020). 'A Systematic Review of Academic Discourse Interventions for School-Aged Children With Language-Related Learning Disabilities.' *Language, speech & hearing services in schools*, 51(3), pp. 866-881.
- Peterson, A. K., Ukrainetz, T. A. & Risueño, R. J. (2021). 'Speaking like a scientist: A multiple case study on sketch and speak intervention to improve expository discourse.' *Autism & Developmental Language Impairments*, 6, pp. 1-19.
- Portelli, J. & Koneeny, P. (2018). 'Inclusive Education: Beyond Popular Discourse.' *International Journal of Emotional Education*, 10(1), pp. 133-144.
- Power, S., Newton, N. & Taylor, C. (2020). 'Successful futures for all in Wales? The challenges of curriculum reform for addressing educational inequalities.' *The Curriculum Journal*, 31(2), pp. 317-333.
- Praetorius, A.-K., Klieme, E., Herbert, B. & Pinger, P. (2018). 'Generic dimensions of teaching quality: the German framework of Three Basic Dimensions.' *ZDM*, 50(3), pp. 407-426.
- Quail, M., Williams, C. & Leitão, S. (2009). 'Verbal working memory in Specific Language Impairment: The effect of providing visual support.' *International Journal of Speech-Language Pathology*, 11(3), pp. 220-233.
- Quaine, C. (2019). *Why spoken language is key to accessing the curriculum*. [Online] Available at: <https://www.tes.com/magazine/archived/why-spoken-language-key-accessing-curriculum> [Accessed 19th December 2021].
- Reeve, J., Vansteenkiste, M., Assor, A. & Ikhlas, A. (2013). 'The beliefs that underlie autonomy-supportive and controlling teaching: A multinational investigation.' *Motivation and Emotion*, 38(1), pp. 93-110.
- Riley, T. (2016). 'The Importance of Learning with Like-Minded Peers Through Flexible Grouping in Inclusive Educational Settings.' *The International Journal of Learner Diversity and Identities*, 23(4), pp. 33-47.

- Rowe, A., Titterton, J., Holmes, J., Henry, L., Taggart, L. (2021). 'A classroom intervention targeting working memory, attention and language skills: A cluster randomised feasibility trial.' *Pilot and Feasibility Studies*, 7(45), pp. 1-16.
- Ruzek, E. A. & Schenke, K. (2019). 'The Tenuous Link Between Classroom Perceptions and Motivation: A Within-Person Longitudinal Study.' *Journal of Educational Psychology*, 111(5), pp. 903-917.
- Ryan, R. & Deci, E. (2000). 'Intrinsic and extrinsic motivations: Classic definitions and new directions.' *Contemporary Educational Psychology*, 25(1), pp. 54-67.
- Schuelka, M. (2018). *Implementing inclusive education, K4D Helpdesk Report*, Brighton, UK: Institute of Development Studies.
- Sierens, E. et al. (2009). 'The synergistic relationship of perceived autonomy support and structure in the prediction of self-regulated learning.' *British Journal of Educational Psychology*, 79(1), pp. 57-68.
- Singer, B. & Bashir, A. B. (2018). 'Wait...What??? Guiding Intervention Principles for Students with Verbal Working Memory Limitations.' *Language, Speech, and Hearing Services in Schools*, Volume 49, pp. 449-462.
- Storeygard, J. (2012). 'Building a culture of acceptance in the inclusive mathematics classroom.' In *Count me in! K-5: Including learners with special needs in mathematics classrooms*. Thousand Oaks, CA: Corwin Press, pp. 9-20.
- Stroet, K., Opdenakker, M.-C. & Minnaert, A. (2013). 'Effects of need supportive teaching on early adolescents' motivation and engagement: A review of the literature.' *Educational Research Review*, Volume 9, pp. 65-87.
- Su, Y.-L. & Reeve, J. (2011). 'A Meta-analysis of the Effectiveness of Intervention Programs Designed to Support Autonomy.' *Educational Psychology Review*, 23(1), pp. 159-188.
- Taylor, B. Francis, B. Archer, L., Hodgen, J., Pepper, D., Tereshchenko, A., Tavers, M. (2016). 'Factors deterring schools from mixed attainment teaching practice.' *Pedagogy, Culture & Society*, 25(3), pp. 327-345.
- Thousand, J., Jew, C., Piowlski, L. & Lindsey, D. (2018). *Culturally Proficient Inclusive Schools: All Means ALL!*. Thousand Oaks, C.A.: Corwin.
- Tripp, D. (2012). *Critical Incidents in Teaching: Developing Professional Judgement*. Classic ed. London: Routledge.

- Ukrainetz, T. A. (2019). 'Sketch and Speak: An Expository Intervention Using Note-Taking and Oral Practice for Children with Language-Related Learning Disabilities.' *Language, Speech & Hearing Services in Schools*, 50(1), pp. 53-70.
- Ullman, M. T. & Pierpont, E. I. (2005). 'Specific Language Impairment is not Specific to Language: The Procedural Deficit Hypothesis.' *Cortex*, 41(3), pp. 399-433.
- UNICEF (2021). *Inclusive education*. [Online] Available at: <https://unicef.org/education/inclusive-education> [Accessed 22 December 2021].
- Valli, P. & Lähdesmäki, S. (2017). *Flexible Grouping of Diverse Learning Situations in Initial Teaching*. Conference paper, pp. 3281-3289.
- Vanderwalle, E., Boets, B., Boons, T. & Ghesquière, P. (2012). 'Oral language and narrative skills in children with specific language impairment with and without literacy delay: A three-year longitudinal study.' *Research in Developmental Disabilities*, 33(6), pp. 1857-1870.
- Vehkakoski, T. M. (2020). "'Can do!'" Teacher Promotion of Optimism in Response to Student Failure Expectation Expressions in Classroom Discourse.' *Scandinavian Journal of Educational Research*, 64(3), pp. 408-424.
- Wallace, T. L. & Sung, H. C. (2017). 'Student Perceptions of Autonomy-Supportive Instructional Interactions in the Middle Grades.' *The Journal of Experimental Education*, 85(3), pp. 425-449.
- Ware, J. (2014). 'Changing policy, legislation and its effects on inclusive and special education: a perspective from Wales.' *British Journal of Education*, 41(4), pp. 344-362.
- Weale, S. (2021). *The Guardian*. [Online] Available at: <http://www.theguardian.com/education/2021/nov/26/children-harmed-by-school-streaming-into-lower-ability-groups-uk-study-shows> [Accessed 18 December 2021].
- Wellington, W. & Wellington, J. (2002). 'Children with communication difficulties in mainstream science classrooms.' *School Science Review*, 83(305), pp. 81-92.
- Welsh Assembly Government (2020). *Curriculum for Wales: designing your curriculum*. [Online] Available at: <https://hwb.gov.wales/curriculum-for-wales/designing-your-curriculum/> [Accessed 13 November 2021].
- Welsh Assembly Government (2020). *Siarad Gyda Fi. Talk With Me*, WG41062.
- Welsh Assembly Government (2021). *£250k for early years speech, language and communication support*. [Online] Available at: www.gov.wales/ps250k-early-years-speech-language-and-communication-support [Accessed 11 November 2021].

- Welsh Assembly Government (2021). *The Additional Learning Needs Code for Wales 2021*. WG42338.
- West, G., Vadillo, M. A., Shanks, D. R. & Hulme, C. (2017). 'The procedural learning deficit hypothesis of language learning disorders: we see some problems.' *Developmental Science*, 21(2), pp. 1-13.
- Wilkinson, S. D. & Penney, D. (2014). 'The effects of setting on classroom teaching and learning in mainstream mathematics, English and science lessons: a critical review of the literature in England.' *Educational Review*, 66(4), pp. 411-427.
- Young, T. T. (2019). *Redesigning Guided Reading Instruction: Achieving Equity through Heterogeneity*, The University of Nebraska - Lincoln