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Research Article

Stop Brain Rot! Why We Must Give Narrative Language Priority

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Abstract
The Oxford University Press (OUP) chose "brain rot" as the 2024 word of the year. Rot means decay or weaken – the latter is more appropriate in this context with a focus on mental deterioration due to technology use limiting higher-level thinking from less face-to-face talk. The British Broadcasting Corporation (BBC, 23.11.24) reported a national study of teenagers who spent between 7-14 hours daily on phones. They were asked to use cutback strategies, like putting phones on silent, leaving them elsewhere if studying or sleeping, and turning off notifications. Participant interviews revealed the benefits of reduction strategies, detailing more direct people contacts to feel happier, less anxious and better able to cope. Direct talking with others led to improved thinking and decision-making, so solving problems more effectively from sharing and refining ideas (Kalk et al, 2024). However, the communication process is marginalised in UK education and rarely fully taught and understood, but regarded as a workplace priority for effective job performance in cosmopolitan settings. Studies show a decline in cognition and appropriate actions dependent on high narrative language levels (R, Sage & L. Sage, 2024). Routine procedures are now implemented by intelligent machines (robots) requiring humans to operate at more complex thinking levels to solve life problems. This article results from a UK teenage pilot study finding that narrative discourse is a daily life-problem resulting from differing multicultural communication styles (Sage, 2024 in press). The introduction defines narrative, with 3 sections discussing the topic: 1) Narrative Discourse and Cognition 2) Information Processing Strategies, and 3) Brain Dominance Implications with a discussion and conclusion.

Keywords: Brain Dominance, Cognition, Information Processing, Narrative Discourse

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1. INTRODUCTION

Discourse is broadly defined as the means by which persons organise informal and formal verbal exchanges for various purposes, such as sharing information or determining something. These range from greetings and casual conversations to extended talk and discussion (lesson/lecture), along with written fiction, non-fiction and poetry. Spoken discourse is different to written text. More meaning comes from non-verbal communication - facial expressions, voice tone, gestures, postures, movements, manner, artefacts and the context in which these take place - rather than just word sequences.

Narrative discourse has major impact on educational success, as this extended form communicates knowledge and develops understanding. Westby (1984) argued that narrative forms fall mid-way between the oral to literate continuum, with their development necessary to assemble meaning from instructional monologue language. Japan gives narrative language priority, even to the extent of students regularly teaching lessons to learn how to communicate effectively to mixed audiences. On indices to measure all national performances, Japan has the overall lead, attributing this to their focus on communicative competence for self-confidence, self-regulation and collaboration, leading to resilience, effective decision-making and problem-solving (Sage, Rogers & Cwenar, 2010). They do not formally teach reading, believing that if spoken narrative levels are reached students will move naturally into literacy. High educational standards, and student independence prove their principles.

1.1. Narrative Discourse: Discourse Views

Narrative discourse has two main positions. One emerges from Bruner's model (1975) of narrative and paradigmatic thinking (the way different words are chosen to play a specific role). *Narrative* characteristics stories and drama, and *paradigmatic* addresses mathematics and logic involving experiments and validity (Sutton-Smith, 1986). Van Dongen and Westby (1986) argued that narrative is the primary thinking mode, developing self-talk, self-regulation and integration from social experience. Thus, cognitive development is governed more by narrative scripts than the abstract processes posed by Piaget (1954) and Vygotsky (1962). This is seen when children act out and relate life events (shopping), repeat stories heard, make up new ones and engage in show and tell activities.

The second view of narrative discourse is the existence of *types* or *genres,* which vary across cultures. *Types* are spoken acts and written fiction, non-fiction - poetry, drama, myth, fable etc. *Genres* are chronicles, jokes, orations, custom rites and poetry in four universal types – *recounts, event-casts, accounts* and *stories* (Heath, 1986). Heath suggested that recounts are the most common genre, but may be the least form in early socialisation. These relate past experiences in the present, like the response to: "*what did you have for lunch today, when you returned from your walk*?" showing coordinate clauses with little/no logic or relative importance. The *event-cast* is a verbal replay or explanation of ongoing activity, reporting on a factual scene, or relating a future plan, involving coordination, subordination and how actions are/will be related. *Accounts* share experiences beyond basic need demands and requests, and are spontaneous reflecting individual views. Stories display the full narrative form defining the setting, characters, actions, results and reactions.

Adults rarely make the rule structure explicit - *events in chronological order, specific, relevant knowledge of each happening* and *explanations,* with personal *reviews* and *reflections* at higher narrative levels. *Stories* must be structured coherently for accurate, audience understanding. The Medical Research Council asked me to look at 300 students testing as normally intelligent but with learning problems. They all had narrative difficulties, and as a member of a medical diagnostic team I was able to visit UK centres to produce the following model of how ideas develop into 7 narrative forms within 7 communicative aspects. A teaching programme (The Communication Opportunity Group Scheme, COGS) enabled techniques to be put into practice, with effective academic and social progress for the students involved (Sage, 2000).

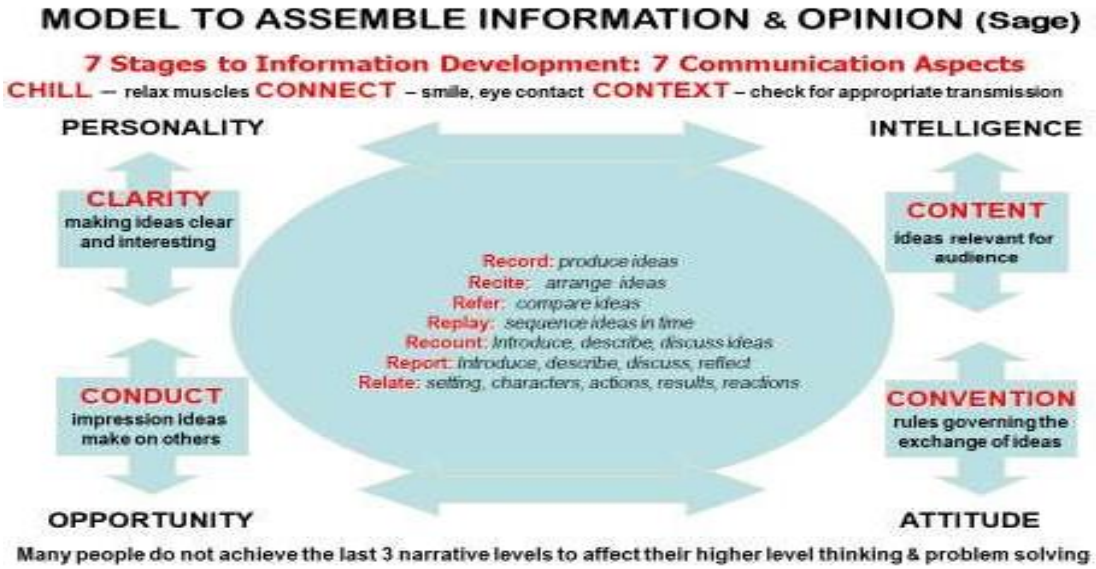

Figure 1. Communication Model

1.2. Instructional Discourse

Instructional discourse is how people organise communicative interactions within education contexts. The main purpose is transmitting scientific and logical knowledge in content and activities recognising participant understanding, coding complexity and assumptions. Everyday discourse regulates

social interactions and inter-personal roles and functions with speaker meanings available from the shared situation. This contrasts with them being reconstructed solely from what is said in de-contextualised, abstract, instructional narratives, like teacher monologues. These require more mental complexity than daily discourse - depending on context and non-verbal cues for comprehension. Ability to follow the mental structure, using *reference, inference* and *coherence* strategies to achieve meaning beyond the actual words said, is vital. High language levels are needed which many people do not acquire today, so that misunderstandings and misinterpretations are common (Sage, 2020, 2024). Teachers must design exchanges for an increasing range of background and ability, avoiding questions that provoke failure (Sage, 2000, 2020). Awareness of the learner's level of narrative development, and classroom management and effective peer interactions, is vital for successful instruction. Subtle social and academic rules underpin classroom communication, guided by questions:

1. *What are each learner's ideas explaining their values, opinions, attitudes and responses?*
2. *What are the social and academic expectations for student participation? (Rules, tasks, grouping)*
3. *How can questions* and differentiated tasks reflect student narrative levels?*
4. *How does content and materials affect language and learning performance?*

(Students below narrative "recount" level on the above model will be unable to answer "why" questions)

An easy assessment to observe narrative levels is from show and tell activities (choose an object to talk about). If ideas expressed are below the number equating to age, this may indicate information processing and/or language and thinking assembly issues. The MRC project, referred to previously, demonstrates the importance of recognising the different ways that meanings are expressed in the narrative levels – descriptive, organisational, comparison and contrast, sequential, enumerative, reflective, as well as cause and effect. These are rarely systemically presented and taught but when fully implemented improve social and academic performances (Sage, 2020).

Recognising school as a culture requires identifying the differences between home and school language (Ripich & Spinelli, 1985). Home language and casual conversations tend to be informal, with the meaning available from context, voice tone, facial, gestural, movement, manner and artefact cues accompanying the giving and receiving of messages. As students advance in education, more meaning is encoded linguistically and less in the context. Educators assume that learners have intact linguistic systems to handle de-contextualised language. Research suggests that they find narrative language a challenge for learning. Time spent with technology results in less listening, attending and talking with others. Some nations assess language on school entry, which is a sensible policy to ensure learner success, to assist teaching at their functional linguistic-cognitive levels (Sage & Matteucci, 2024 a, b).

2. INFORMATION PROCESSING: GENERAL STRATEGIES

Figure 2. What is this?

To consider how we process information look at the figure above. In attempting to decipher it we engage in our preferred analysing strategy. When giving this puzzle to students about half said it was the head of a horse and the other thought it was a group of islands. The "horse" group searched for an overall form to then put in the supporting detail (ears, nose, long head structure) demonstrating a *top-down strategy*. In contrast, the "island" group chose to start with details in order to make meaning. This approach is data-driven and a *bottom-up* strategy – the parts are more prominent for them than the overall concept. Miller (1988) describes the *top-down* mode as analogous to *deductive* thinking and the *bottom-up* one to the *inductive* process. For inductive reasoning the components are gathered until the good-fit analyser draws a conclusion

from the details. In top-down processing a general hypothesis is formed to infer the outcome using detail only to corroborate the applicable framework. The figure above was just some drops from a paintbrush on paper, but the students expected it was something real from my question: "*What do you think this is?"* Nevertheless, it confirmed student analytic differences, and the fact that we may interpret visual information variously. We assume that others see (or hear) things as we do but this is not the case!

Miller's research (1984) showed that the population equally divides between both strategies, and that we tend to present information in line with our preference. Thus, bottom-up analysers will start talking without an overview, and a three-point structure that the brain finds perfect for memorising. They will also punctuate the narrative with stories and examples. We must realise the need to present information for both styles, as Miller found that students learnt more effectively with educators that had the same processing style as themselves, demonstrated in their lesson presentations. Although we have a preferred processing style most of us can use both strategies to make full meaning of information. Academic tasks reflect this. Getting the story gist is a top-down process, as is asking students to tell or write a report on a topic, requiring it to go through various stages. They must be able to present general points supported by detail. However, phonics is a bottom-up process with students expected to synthesise phonemes into words. Bottom-up processing moves from abstract to concrete when blending sounds into words.

2.1. Cognitive Strategies

Many models of human organising principles exist. These range from descriptions of *domains* (Guildford & Hoepfner, 1971) to *principles* guiding thinking (Sternberg, 1985). Gardner (1983) proposed *multiple intelligences – linguistic, logical-mathematical, musical, visual-spatial, bodily-kinaesthetic, inter-personal,* and *intra-personal.* He later suggested *naturalistic, spiritual and pedagogical* ones. This brings a broad approach to human thinking and aptitude in line with what is seen in the wide range of human talents, competencies and views.

The term *metacognition* defines awareness of what one knows with understanding of learning needs, involving decision-making, planning, monitoring and evaluating for problem-solving. Distinction is made between *declarative* knowledge (stored information from experience), and *procedural* involving strategies for completing goals (planning, predicting monitoring, checking, understanding action consequences) (Silliman, 1986, Sternberg, 1985). Intra- and inter-personal variables are important for understanding our strengths and areas to develop, and strategy ones for choosing appropriate actions.

Metalinguistic ability reflects on language as an object, discovering the arbitrariness and custom of labels which are different across cultures, languages and professional disciplines. I was perplexed when moving from a medical to an educational context, as *kinaesthetic* was used instead of *haptic* to describe the sense of feeling. In medicine, the concept is different and applies to wider activity. Also, the teaching of concepts was in a very different developmental order. No wonder as a member on a government medical and educational committee there were constant misunderstandings and resulting conflicts! Language is a code for representation and so rule-bound and predictable, but there are differences in use according to culture. Miller (1986) says metalinguistic ability is not developed before around 7 years old. This questions the early teaching of phonetics in the UK.

In using language for learning we need to be sensitive to the complexity of this thinking, information processing and expressive process. It is not until around 7 years old that children are able to deal with language out of context. This depends on understanding issues of *reference, inference* and *coherence.* Can you work these out in the following text?

Maisie and Manish were sitting on a bench, which was on a pathway in a town park. Suddenly, Manish jumped up and raced across the track as an old lady walking along had suddenly collapsed. He helped her up and sat her on the ground. At the same time, Maisie reached for her phone and dialled 999 for an ambulance as she saw the lady was bleeding. The two teenagers looked worried. They were anxious about the injury, so after a while made another phone call for help. Soon they heard a loud siren and were relieved.

Table 1. Use of Reference, Inference, Coherence

	Text Examples (Based on Sage, 2000)
References	which (the bench)
Words referring to established things	he
	(old lady)
	her (Maisie)
	teenagers (Maisie & Manish)
	they (Maisie & Manish)
	injury (bleed)
Inferences	sitting on the bench (weather fine)
Clues available in the content	raced (realised urgency)
	track (reference to pathway)
	collapsed (fallen down)
	Maisie (name of a girl)
	Manish (name of a boy)
	collapsed (lady might die if not helped quickly)
	injury (bleed)
	anxious (maybe a wait for the ambulance)
	siren (reference to ambulance)
Coherences	suddenly (marks time)
Time-markers signalling changes	at the same time (shows simultaneous actio(Manish)
	her n)
	after a while (signals time period)
	soon (indicates alteration in events)

Knowing your own preferred organising style helps to adjust the communication structure for an audience showing the differences just explained. This means presenting a clear overview (an advance organiser) with steps (3 ideally) towards the goal for those having a top-down preference, and giving detail and illustrative anecdotes for individuals preferring a data-drive, bottom-up style. As a conversational performer who finds it more difficult to give overviews and signposts to the presentation goal, I must check all organisational aids are included to accommodate listeners/readers.

3. BRAIN DOMINANCE

The two cerebral hemisphere functions are popular lore, commonly described as left (L) or right-brained (R) because of learning style preferences. In reality, we have strengths on both sides, which develop and process information in a specific way. The linear hemisphere (normally L) deals with details, parts, language processes and sequential patterns. The lateral, global hemisphere (usually R) copes with images, rhythms, emotions, intuitions and holistic processing. In young children both hemispheres contain all functions until specialisation occurs, which is at a different developmental stage for each individual, with some not showing a hand preference until late. My son picked up a pencil to draw with either the R or L hand until around age 13 years. On average, the lateral, global R hemisphere shows a growth spurt between 4-7 years old. The linear L hemisphere develops later at around 7-9 years. Thus, early learning should be holistic, experiential and active rather than passive and detailed, in order to follow normal development. Top nations educationally demonstrate this principle with formal learning starting at around 7 years, allowing early focus on R-brain development. Normally, hemispheric specialisation occurs between 9-12 years, although some may show dominance later.

Dominance profiles assess eye, ear and hand laterality relating to the leading hemisphere, and providing information about learning styles, which fluctuate under stress (Sage, 2000). Sense efficiency depends on whether or not the eye, ear or hand is on the opposite side to the dominant hemisphere. For example, auditory input is most efficient when the receiving ear (e.g. L) is opposite the dominant brain hemisphere (e.g. R). Most people show a dominant hand, foot, eye and ear. If both L brain and R eye are dominant then vision is facilitated. The L brain controls R eye movements to optimise 3 and later 2 dimensional focus, tracking and peripheral vision. The same is true for R brain/L-eye dominance. If the L eye and brain dominate the person is homo-lateral, with vision less effective because of less eye movement control. People can be homo-lateral for vision, hearing or touch/feeling/position in space if the leading

eye, ear or hand is on the same side as the dominant brain. This causes less efficiency especially when stressed. Some people are cross-lateral, others homo-lateral or mixed (cross-lateral for eyes but homo-lateral for ears).

Table 2. Brain Dominance

Sage, 2000	Dominant Sense	Dominant Hemisphere	Preferred Learning Style
Cross-Lateral	R eye	L	Visual
	R ear	L	Auditory
	R hand	L	Verbal
	L eye	R	Visual
	Lear	R	Verbal
	L hand	R	Haptic-touch, feeling, space position
Homo-Lateral	R eye	R	Limited visual capacity
	R ear	R	Limited auditory capacity
	R hand	R	Limited communication
	L eye	L	Limited visual capacity
	L ear	L	Limited auditory capacity
	L hand	L	Limited haptic capacity

Eyes facilitate seeing & visual interpretation; ears-hearing, listening & memory; hands-oral, written & gesture communication

The L hemisphere indicates spoken and written language in the R hand. The R hemisphere specifies expressive movement and physical manipulation in the L hand. When both L or R hemisphere and hand are dominant communication is more limited. The following simple tests will show a range of performance amongst people to bear out the theory of brain dominance.

Dominance Tests

Eye: Look at an object through a paper tube. Which eye is used spontaneously?

Ear: Someone shouts your name. To which side do you turn?

Hand: Pick an object up from a surface. Which hand is used spontaneously?

Brain: Put your R arm out in front of you – level with the shoulder. Place your other hand on top of your R arm. Change arms and repeat. Which arm is the strongest against the pressing hand?

(The dominant brain hemisphere is on the opposite side of the strongest arm).

The research of Hanniford (1995) is relevant here. 2018 USA students in Denver and Hawaii were identified as *talented, normal* or with *special educational needs*. L-brain dominance was seen in 78% of the talented group, with R-brain dominance in the special educational needs one. In this study, those with strong verbal abilities and linear processing were more often labelled as talented. Others, with weaker verbal abilities and lateral processing were generally defined as needing specialist education. Linear dominant processors, usually L-brained, focus on details – in language on words, syntax and sentence structure. They are more adept at using logic in problem solving as in maths, and employing details in art, music, dance and sport. Music is taught in linear ways – starting with notes, timing and technique, so L-brain processing assists. If L-brain students do not develop R-brain capacities, they will find it difficult to access images, emotion, rhythm and flow to make music come alive.

It is suggested that L-brain linear processes are more positively reinforced in the UK system. Students with linear abilities are likely to have high self-esteem and experience less educational stress because work is geared in the way that suits them. R-brain lateral processors take in the overall picture, feel the emotional connections, access intuitive understanding and learn haptically, through interaction, movement and hands-on experience. In music, art and sport they access the overall view, effort and passion that are essential for

creativity. They prefer to approach learning through broad outlines, active exploration, play and feeling. If not using L-brains adequately, these students display difficulties in logical processing and dealing with detail.

Our current education system affects lateral R-brain processors, as it focuses on linear functions for acquiring language, literacy and numeracy, so some students learn to judge themselves as inadequate. Albert Einstein, the German physicist, was a lateral R-brain learner, with legendary academic failures.

"The words of language as they are spoken do not seem to play any role in my mechanism of thought.. (but) certain signs and more or less clear images which can be combined". (in Gardner, 1983).

When studying to be a speech and language therapist, we looked at brain waves of normal students and those with educational problems. The latter had less L-brain activation even for verbal tasks and significantly fewer shifts from one brain to the other for feats requiring different processing strategies. Teachers told us that these students had decreased learning and memory and increased attention and behaviour problems. Also, they showed higher levels of the stress hormones adrenaline and cortisol, delaying auditory development, and also resulting in the tendon guard reflex shortening leg calf muscles and locking knees. We were told to start therapy with calf muscle relaxation:

1. Hold onto a chair. Keep body upright with 1 foot (heel up) 20cm behind the other
2. Take a deep breath and when exhaling lower the heel of the back foot to the ground and bend the front knee forward. Repeat several times to release tendon guard muscles

This enhances both brain hemispheres and stimulates the corpus callosum (connecting bridge) necessary for integrated function. It carries 4 billion messages per second across 200+million nerve fibres linking the two hemispheres to allow full operational thinking. Students with language and learning difficulties show a thinner connecting bridge, so exercise helps to build contact (Sage, 2000 for detail).

4. DISCUSSION

Both Flynn (2011), Bratsberg, & Rogeberg, (2018) received wide press for their studies on the decline of language and thinking. Flynn's world research indicated this was worse in the UK than elsewhere, attributed to their narrow approach to education that was academically focused at the expense of personal and practical development. Kaczmarek (2018, 2023) has referred to studies completed for the World Thinking Project, suggesting that 1/3 of adults did not have the language and thinking levels to cope with their increasingly complex lives. The United Nations (2020), Mahon (2022), Di Caro (2021), Pavese (2021), Murnikov & Kask (2021) and Murnikov & Kask, (2021) have all shown the importance of prioritizing language and communication for better thinking. Multi-author books (Sage & Matteucci, Eds. 2022, 2204) show how technology is now preferred to talk, with experts discussing that present qualifications are not a true indication of potential. They all stress the need for better levels of language and thinking as intelligent machines take over routine procedures so that humans need effective intercultural communication competencies for working in a plural world. A recent engineering graduate in job interviews was told the companies were more interested in ability to think and communicate rather than his degree results. Krylov, (2024) shows how language teaching/learning is the tool for engineering students' cognitive development and stimulation of creative thinking. Iceland and Finland, who are at the top of indexes for peaceful, happy societies, put priority on language and communication for achieving this (Sage, 2025). Prioritizing language and communication as a subject of study and giving oracy prominence in active learning is seen in nations that lead the world educationally. Sage, in Class Talk (2000) showed how successful the teaching of narrative levels in lesson tasks was for the success of students in a Medical Research Council project to investigate why students who tested normally on intelligence tests were failing in school. Studies showed this was due to limited narrative language levels so that the processing and expressing of ideas in the more monologue language of formal education was a difficulty. Policy makers, parents and practitioners need to build more opportunities for talk at the narrative levels referred to above in order for language, thinking and communication are to improve. Thus, Sage and Gorzkowski are delivering a free online programme that addresses this issue in 2025 (rosemaryandchris.icm@gmail.com) are putting a free intercultural communication course on line as the miscommunications and misinterpretations of language and communication are seriously affecting human progress. However, it should be noted that the studies quoted

are using established tests to look at language and thinking, but it is possible that with visual input now more used than verbal in many contexts that humans are developing new competencies that are not yet being assessed. Nevertheless, there are many accounts, like the United Nations Report (2020). that indicate the importance of giving priority to language and communication in our global intercultural world.

5. CONCLUSION

Language integrates information processing principles for social and non-social uses, such as education and training. This involves the analysis of the contexts and nuances of communication exchanges. Language and learning models encourage the splintering of aspects, with the focus on components rather than the whole process. We experience many instances of words taken out of context to lose their meaning, and used to accuse people of something they did not intend or mean. Language represents incomplete descriptions of abstract behaviour and events, requiring *inference, reference* and *coherence* strategies. The greatest failure is in literal interpretation of verbal and non-verbal conduct, which is witnessed regularly today, and results in people conflicts.

Models of language relate to assessment and intervention in different ways. Medical ones focus on etiological and neurological language correlates and are useful theoretically but not for teaching. They encourage a "treatment" approach which does not help the self-esteem of those with linguistic and cognitive problems. Many auditory-processing models centre on discrete abilities, like auditory discrimination and sequencing, which may lead to working on these components at the expense of higher-level linguistic functioning. You often hear: "*He has auditory memory problems causing language delay*", or "*She has a visual sequencing issue producing a reading problem*", or "*They have an attention deficit disorder triggering disruptive behaviour*". The many cases of the latter clinically assessed have always had higher-level language disorders, which could be the cause of their disruptive behaviour. Research shows they would rather be viewed as *naughty* not *stupid* (Sage, 2000). Thus, inability to process narratives and produce them in listening, reading and writing activities was not identified. When recognised, these students went on to make good progress, as the real cause of their problems was then addressed. Also*, colour naming* is a common example of blind focus. This issue is pervasive in language problems, but it is wrong to assume that teaching emphasis will lead to progress.

When learning language, children use strategies for comprehension and explanation that are meaning-and content-oriented within a real setting. Around age 7 years, they begin to develop syntactic-structural strategies to deal with language out of the immediate context. They then become sensitive to sound and word order and recognise smaller units like connectives, articles and prepositions. Complex sentences will remain difficult until teenage years, when they are able to detect ambiguity, recognise similar meanings and deal with figurative language (see the appendix for examples).

This knowledge should influence educational planning and was highlighted in books many years ago (Class Talk, 2000, Lend us Your Ears, 2003, A World of Difference, 2004 - Sage). Children initially access lateral, global function, which develops and enlarges from around 7 years to enable the linear role dealing with structure and detail. The natural way they learn is through real, sensory experience, rich in movements, feelings and emotions. The UK starts alphabet and number recognition immediately children enter formal school at age 5 years. This would not be a problem if a strong experiential programme was followed, but the opposite happens. Students sit at desks and learn in linear fashion. They read books with simple vocabulary and sentence structures but limited images and emotions involved. Children like to scribble, draw and physically move for rhythm and flow, and if these needs were respected there may be less behaviour problems or mental stress issues amongst youngsters.

The UK YouGov (2021) Friendship study revealed the proportion reporting one or no friends has increased from 7% 20 years ago to 22% at the time of the survey. At university 20% of students claim to have no friends. One undergraduate, at a Russell Group university, revealed that she was the only English student in the class, and as no one spoke her language well she was isolated. The foreign students would only communicate in their mother-tongues. Telling someone with a foreign accent you cannot understand them is racial harassment according to UK judges. Commenting or criticising the way another regional or ethnic group speaks is now a breach of UK employment law. Language is the building block of friendship, but attitudes to speaking it are destroying societal integration. Unless we respect and value the national

language where we reside there will be problems in understanding one another. Standard English has been deemed elitist to encourage regional and ethnic accents and dialects, so diminishing the importance of this stock form. In the MRC studies, referred to earlier, it is a reason why students find communication challenging. A narrow educational approach, geared to passing standard tests for national and international comparisons, is a huge barrier to active learning - involving and so encouraging narrative and thinking development. Unless, there is a radical rethink the situation will worsen with dire consequences.

What does this information suggest? Real learning is not complete until there is some physical and personal expression of thought, with opportunities to apply knowledge. Most learning focuses on abilities to show what we know in factual tests, but is not always employed for real life. Speaking, writing, drawing, painting, modelling, computing, singing, music-making, dancing and sport are expressive forms to support and demonstrate knowledge. Building these abilities establishes neuromuscular routes that link with cognitive ones. Learning is not just in our heads but also in our bodies. Society separates the two, with physical development attaining brawn, and mental advance achieving brain. Language depends on intricate body and mind movements, expressing knowledge and facilitating thought.

It appears that education favours students who process linearly, take in information in an auditory and visual way, look at the teacher and re-state logically and coherently. Hannaford (1995), in the study discussed, found students with full sensory access (L-brained, R-eyed, R-eared & R-handed) made up only 15% of the test subjects. 22% of talented students had haptic and not verbal preference, in contrast to 89% of the educational needs ones, with 72% visually limited and not inclined to make eye contact. Tests for linguistic and logical/mathematical intelligences dominate, but Gardner (1983) theorised multiple intelligences which are neglected in assessments. Thus, we make it impossible for many students to be treated and educated equally. There are now fewer experiential opportunities like cookery, science and speaking events than were available in my grammar school. Another fact, in Hannaford's study, is that 75% of the teachers involved were L-hemisphere dominant – R-handed, R-eyed and so limited in auditory terms. They talk about details and are imperfect listeners - expecting students to look at them. We need to be much more aware of these factors, as experience suggests they may be less valued and understood today than previously.

As I write this, I have heard of two nurses leaving hospital jobs because effective exchanges and patient management had become impossible as the system ignores intercultural communication matters. When with undergraduate students recently, I noticed many were always on their phones, checking emails etc. while supposed to be listening to speeches on present society problems. Talking to them afterwards they demonstrated misunderstandings and misinterpretations of the content. UK Universities offer advice in their health and safety handbooks on how to walk downstairs, and remind that drawing pins can pierce hands, feet and posteriors. Does this indicate the "brain rot" that OUP has highlighted?

The Roman poet, Juvenal (55 – 127 AD) was famous for his biting descriptions of Rome life. He posed a question haunting discourse ever since: "*Quis custodiet ipsos custodies*? Who guards the guardians? He was referring to those legally appointed to manage the affairs of others, and pointed out that none of us can escape our flaws, biases, and preformed beliefs. Thus, those in power often ignore the true state of public affairs with no accountability. Two thousand years on, Juvenal's question remains unanswered. Government policies may be based on inaccurate knowledge with false claims made. In the last election, we were told that Britain has high literacy levels. This may be so for mechanical word accuracy, but comprehension levels do not match this (Durham Research, 2016). Recently, global league tables rank Britain in the top five for science. However, this is a subject focused on in the curriculum, whereas many other nations take a broader teaching approach to make comparisons suspect. The Director for the Organisation for Economic Co-operation and Development suggests Britain has made the slowest educational progress of the 38 OECD nations, because memorisation remains the main learning strategy in a narrow, exam driven culture (Schleicher, 2020). He says that education today is not about teaching people something, but helping them develop a compass to integrate personal, practical and academic competencies, with communication a priority.

Let us hope our elite governors take note! People we meet and talk with change the way we see the world, but misunderstandings hamper interactions. UK incomers frequently take bosses to court for racial discrimination when not intended. A lady from a non-English ethnic group took a manager to a tribunal for using the term "no biggie" (not important) in response to an email asking why she had not been invited

to a meeting. The manager indicated that it was not important for her to be present, but this was interpreted as race prejudice (Daily Telegraph, 9.12.24). An English member if the UK House of Lords has been suspended for admiring an ethnic minority colleague's hair braids and shortening the name in a private conversation of another, which for her was difficult to pronounce. Ignoring such examples prevents progress. Let us start valuing communication to reduce conflicts. Spencer & Petersen (2020) support the narrative l;anguage approach to learning for better thinking and decision-making.

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APPENDIX

Names for Sentence Parts

A Clause is a whole or part of a sentence, with a subject and predicate. "I hear" - "I" as subject and "hear" as predicate. The 2 types are dependent and independent.
-An independent clause makes sense by itself - "My dog barks loudly."
-A dependent clause cannot make sense by itself. "When I climb up," "Since the last time I contacted you," "After we had finished doing the washing," and "Now that he had left the train." Examples start with a word/phrase - *since, after,* and *now that*, called subordinating conjunctions.

A Conjunction links 2 clauses together. *And*, *but, or* are common ones, as well as many others.
-A coordinating conjunction links 2 independent clauses - in italics below:
- "I like peas, *but* I hate beans."
- "Should I go, *or* should I stay?"
- "We went running, *and then* returned home."

-A subordinating conjunction links a dependent to an independent one - in italics below:
- "*When* I gain a degree, I want to be a teacher."
- "Much has changed *since* our last meeting."
- "*After* finishing work, we planned to go for a drink."
- "What will he do *now that* his studies are completed?"

These elements are is needed to create any sentence, including complex ones.

Types of Sentence Structure

A simple sentence has 1 independent clause – identified by only 1 verb.
- This bag is heavy.
- Flowers grow in a garden.
- Do you like fish and chips?

A compound sentence is made of 2 independent clauses and a conjunction - independent clause + coordinating conjunction + independent clause. "My dog's name is Ronnie, and he is playful" can be "My dog's name is Ronnie. He likes to play." Examples:
- To be or not to be?
- I just ran for miles, and I feel relaxed!
- My dog's name is Ronnie, and he is playful.

A complex sentence is 1 independent clause, 1 dependent clause, and a subordinating conjunction. Complex sentences are assembled in 2 ways: 1) Subordinating conjunction + dependent clause + comma + independent clause. 2) Independent clause + subordinating conjunction + dependent clause. If you remove the conjunctions and turn it into 2 sentences, 1 clause will not make sense by itself.
- Even though she was stressed, she tried to put it to the back of her mind.
- My brother puts on a Liverpool shirt whenever he goes to a football match.
- If you want me to make biscuits, then I will bake chocolate ones.

A compound-complex sentence consists of at least 2 independent clauses and a dependent one. If there are at least 2 independent clauses and a dependent one, then it is a compound-complex sentence.
- If you let me, I will show how sentences are formed and teach you to master English.
- When he arrived at the station, he put down his suitcase and glanced around.
- As soon as I am ready, I will get the car out and fetch my friend waiting at the station

1. Alliteration – repeats consonant sounds at the start of multiple words/phrases
- She sells seashells by the seashore
- The cobblestones clatter with the chatter of clogs
- Bouncy babes bring blessings

2. Allusion – refers to well-known people, places, things or events.
- He fought as bravely as Colonel Beaton
- She searched for this elusive Holy Grail throughout her life
- If you turn back you will become a pillar of salt

3. Anaphora – repeats a word/phrase through multiple clauses/sentences to emphasise meaning
- Be happy, be loved, be free
- He tried to thank, tried to smile, tried to hug her but held back
- Stay here, stay there, stay anywhere, stay everywhere

4. Assonance – uses repetition of vowels, A, E, I, O, U for emphasis
- Sight of the bright, white light, heightens delight
- In the bosom of my home I often feel alone
- I confess, I am distressed about this dress, which is less than the best

5. Hyperbole – over-exaggerates to emphasise emotion or description
-I am famished so could eat the leavesof this tree
- He told her a million times to calm down
- My father is taller than the church spire

6. Idiom – is a common expression with a different meaning from its literal varying across languages
- She is the apple of his eye
- The ball is in your court now that we have a reply to go ahead
- Winning the raffle was the silver lining to the evening

7. Implied Metaphor – indicates a similarity between 2 entities without direct comparison
- He barked at her to keep still
- I galloped towards my friend who I spied in the distance
- We carefully orbited the hissing snake get bitten

8. Litotes – use understatements to make a point, often with double negatives
- His new car was not cheap
- It was not the worst decision that I have ever made
- I cannot say that I disagree with what he is doing

9. Metaphor – directly compares without comparatives like/as equating the 2 things to elicit a stronger connection and deepen meaning.
- My mother has a heart of gold
- The football captain was the shining star in the final match
- Our teacher is the moon guiding us through the dark to see the light

10. Onomatopoeia – uses descriptive words to sound/mimic the noise described to aid imagination.
- I bashed the alarm clock to stop it buzzing and waking everyone up
- The bonfire roared and crackled along with the fireworks
- The door-bell went ding-dong to announce someone there

11. Oxymoron – describes 2 opposite ideas for effect – often an adjective + noun
-The loud silence keeps me awake at night
- The cracked mug was painfully attractive
- Our stupid idea landed us in pool without a life support as we could not swim

12. Personification – attributes human characteristics to nonhuman things to be relatable.
- The bench squealed in pain as the axe slashed into it.
- As we climbed the mountain, the peak seemed to smile at us.
- My laptop argued with me and would not cooperate

13. Pun – words have similar sounds but different meanings to make a joke
- It rains continually in England because so many monarchs have reigned
- I never had to develop a photographic memory
- With this graph paper I can make a great plot

14. Simile – compares 2 unlike things using words *like/as/ than.* They rely on the audience's ability to create connections and make inferences about the objects, people, actions or concepts discussed:
-I am as busy as a bee
-They fought like cats and dogs
-Ronnie has a bark louder than thunder

15. Symbolism – uses a word or object to represent an idea, emotion or belief to make connections
- They gazed at the Union Jack with admiration
- The bride wore a spotless white dress
- Despite our excitement about the expedition, the brewing storm made us nervous

16. Synecdoche – is figurative language where a part of something represents its entirety
- He was behind bars for a year
- The boss said he would provide the bubbly for the party
- As a hired hand you can help us stack these chairs

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A 2019 Carnegie CEO Conference said communication was the top issue hindering work performance and relationships and was a priority to address. Sage 2020
Taylor (2011) found Practitioner Doctorates researching *within* rather than *on* practice had more impact on work progress than PhD/Professional models - enhancing communication and collaboration amongst workplace colleagues
Gawande (2011) found that over 50% of UK medical diagnoses were wrong due to miscommunication between doctor (many foreign) and patients to cost the UK billions
Professor Bozydar Kaczmarek (2022) reported from studies that one third of adults do not have the thinking and language to cope effectively with life
Beyond Z studies (Mahon, 2022) reported half of Gen Z lacked understanding of situations and people tolerance because of limited language and communication
7/10 Millennials and Gen Z participants prefer to communicate digitally, so reducing effective work performances and relations with others (Live person, 2023).