



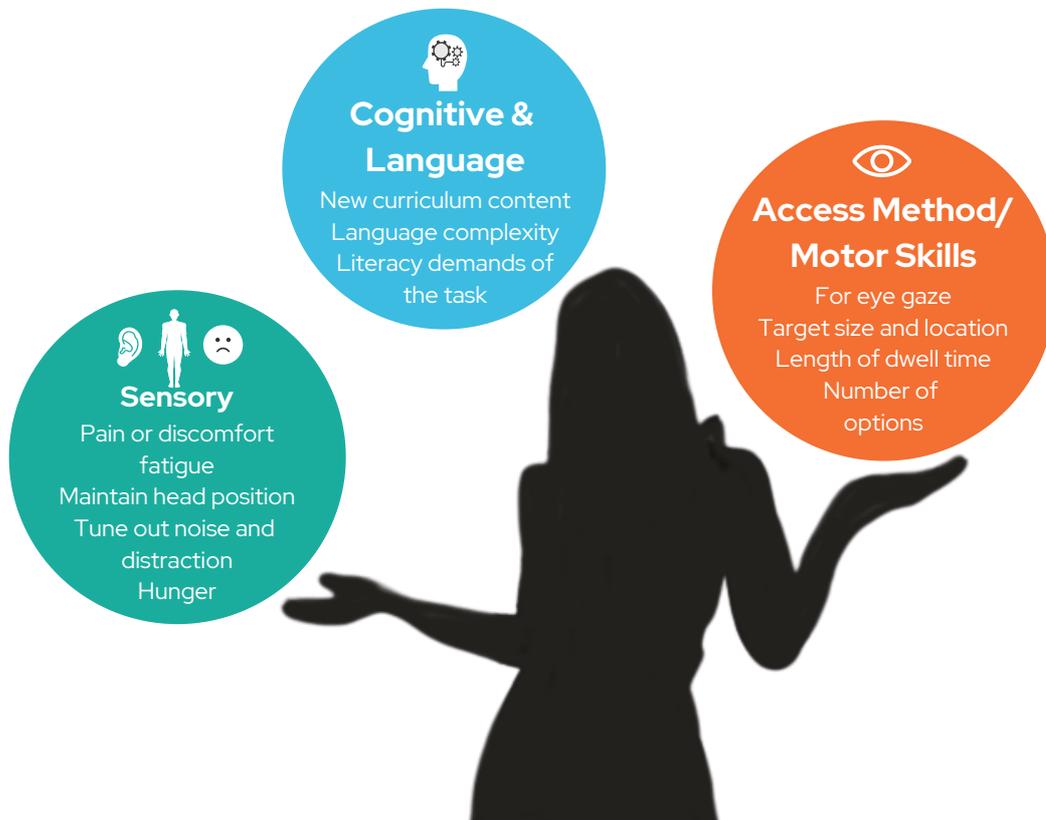
PARALLEL LEARNING

When selecting a task or activity for someone who is learning to operate an eye gaze device, it's important to consider the user's current eye gaze skills alongside the other cognitive, language and sensory demands of the task.

For many students with complex physical and sensory needs, they are needing to manage a whole host of skills.

This may include internal and external sensory experiences, cognitive understanding of the task and working on the motor skill that's required to respond to an opportunity or question.

'**Juggling**' all these areas at once can explain inconsistencies in performance we may observe.





For students new to using eye gaze, learning to use eye gaze technology, learning a new communication system at the same time results in a large learning load. Learning new symbols, the way the language is organised and how to create a message is a 'high' cognitive and linguistic load.

Parallel Learning is a concept used by Linda Burkhart, where the team considers cognitive, linguistic and sensory task demands and how to balance or juggle those while developing skills. Ways that we might do this include:

Reduce motor load for difficult cognitive, language and academic tasks.

Reduce cognitive load for motor learning tasks.

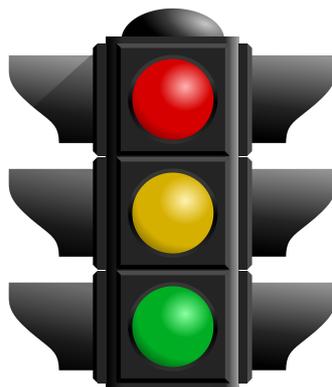
Teach electronic access (such as eye gaze) as a separate but parallel skill to language and academic learning.

We can use a traffic light analogy, discussed by Karen Erikson, to help think about how we can manage the learning load. Consider, 'what is the intended focus of this opportunity?'

Red – challenging or new

Yellow – moderate challenge or review

Green – limited challenge



When planning an activity, we need to consider our intended focus and reduce load in other areas. If one area is 'red' we ideally want to design the task, so the others are 'green'.

If working on a new or challenging eye gaze skill, keep the level of cognitive challenge low, use comfortable positioning and reduce distractions.

If introducing a new or challenging curriculum concept, consider the easiest access method for the student to use to contribute or participate and reduce sensory demands where possible.

Teach electronic access (such as eye gaze) as a separate but parallel skill to new language and academic learning.



EXAMPLES:

Student: Has just progressed to working on key 4: choosing independently using eye gaze.

Focus for activity: Wanting to practice eye gaze operational skill development.

Access method operational skills	Cognitive and Linguistic	Sensory
Access skills are new and challenging for the student, so would be a 'red'.	Considerations to reduce the cognitive demands: <ul style="list-style-type: none">• Practice using games, music choices or other recreation rather than complex content.	Considerations to reduce the sensory demands: <ul style="list-style-type: none">• Comfortable positioning• Select a time when less fatigued.• Reduce environmental distractions.

Student: An emergent writer, also working at key 3A: targeting using eye gaze technology.

Focus for activity: Wanting to allow them access to all 26 letters of the alphabet for independent writing, we are selecting a writing tool for the lesson.

Access method operational skills	Cognitive and Linguistic	Sensory
Considerations to reduce access demands: <ul style="list-style-type: none">• Providing a yes/no to accept/reject options presented during partner assisted scanning is an easier access method for this student currently. An alphabet flip chart allows the student to accept/reject letters of the alphabet.• An electronic eye gaze keyboard is a future step as access skills develop.	Writing is a challenging task so is 'red' for this student.	Considerations to reduce the sensory demands: <ul style="list-style-type: none">• Positioning which makes it easiest for the student to use movements for yes/no• Select a time when less fatigued.• Reduce environmental distractions.

Burkhart, L. (2016). Multi-modal communication and learning strategies for children who face significant challenges [Presentation handout]. <https://lindaburkhart.com/wp-content/uploads/2016/11/multi-modal-2-day-8-16-AGOSCI-and-ATANZ.pdf>

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