Moving from "engineering the environment for communication" towards building capable environments

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Short Abstract

"Engineering the environment for communication" - a familiar term first coined by Goossens, Crain and Elder in 1992 - remains a crucial element of good AAC support today. However, as many people with disability continue to experience significant internal and external stress and distress in their daily life, is something missing in the way this concept is being taught and implemented?

"Capable environments" - a term frequently mentioned in relation to positive behaviour support - may be less familiar to some in the AAC field. A capable environment is one in which people thrive. To thrive, people need to be supported in ways that realise their rights and support their physical, cognitive, neurological and relational wellbeing. Building capable environments is not simply about providing communication support and access. It means having in-depth knowledge of the underlying needs of all people, informed by neuroscience and human rights.

In this presentation we reflect on learnings gained in developing two new postgraduate courses at Curtin University, designed to improve capacity for building communicatively capable environments. The courses develop core knowledge and skills that all people in disability support roles should have, particularly in understanding universal needs to feel safe, connected, in control, regulated and valued. The courses explore what it means to support a person to be regulated, have good mental health and be in a space to learn the skills they wish to gain: this develops the knowledge and practical skills needed to build capable environments, beyond engineering the environment for communication.

Long Abstract

Within the field of Augmentative and Alternative Communication (AAC) many professionals, families and people with lived experience of using AAC would be familiar with the concept of "engineering the environment for communication", first coined by Goossens, Crain and Elder (1992, 1994). Many people, including leaders in our field, acknowledge that the moment they first heard of and understood what it meant to "engineer the environment for communication" was a profound moment of realisation that changed forever the way they supported and advocated for children and adults who were just being introduced to aided language AAC systems, or were early on in their learning of how to use these tools (e.g. Farrall, 2021; Porter,

2023). It is a concept that can seem both simple yet revolutionary and still leads those new to supporting children or adults who are beginning or developing their emerging skills using aided language tools to support their interactions to have their own "aha" moments regarding the way they provide – or need to provide – communication and language learning support.

For the purpose of this presentation let us quickly recap what it means to engineer the environment for communication: it means, at its most simple interpretation, that the environment – or people within the environment providing support to children and adults learning to use AAC modes and formats – recognise the fundamental importance of embedding appropriate AAC supports wherever communication will happen. Not only are the required supports physically embedded within the environments (literally "engineering" the physical environment ready for communication at any time) - the children and adults learning to use these supports are immersed within environments that are rich with models of their alternative modes of language being used by other people within their daily, ongoing, natural interactions, using a wide vocabulary for different reasons, at different times, with different people in different activities. This means that engineering the environment is much bigger than simply making changes to the physical environment in terms of the placement, visibility and reachability of the AAC tools. Rather, it also requires change to people – the supporters and communication partners – and perhaps also change to activities, or how the activities are structured - within the environment too (Foster et al, 2023; Gutke, 2020; Sheldon, 2015).

Without doubt, engineering the environment for communication remains a crucial concept for communication partners and AAC supporters – and yet, is there something missing in the way this concept is being shared and taught to those who strive to achieve it?

Providing access to robust communication tools and upholding communication rights through multimodal forms is certainly a primary step towards promoting and supporting the human rights and quality of life for all people. However, supporting human rights, quality of life and wellbeing is much, much more than simply having access to communication forms and robust language models. Communication is central to our internal wellbeing. It shapes and influences our neurology, our regulation, our ability to feel good and safe in all that we do in life. It shapes those unconscious underlying needs to be able to engage with people and our environment in ways that supports an aspirational life.

In addition to engineering communication environments, do we truly understand the role communication partners need to play when it comes to their capability for meeting people's underlying needs to feel safe, in control, connected, regulated and valued?

The concept of "capable environments" is one frequently mentioned in relation to positive behaviour support. More broadly, it is sometimes erroneously understood as being about building an environment that develops the capability of the individual person with disability. Perhaps this is the issue. Creating a capable environment is about creating an environment in which people thrive (McGill et al, 2014; BILD, 2020) and to thrive, people must be supported and engaged with in ways that not only realise their rights but also support their physical, cognitive, neurological and relational wellbeing.

Creating capable environments is not simply about recognising the need for communication support and access. It means having intricate and robust knowledge of the underlying needs of all people - informed by neuroscience and viewed through a human rights-based lens. This knowledge can then set the foundation for the mindset, approach and skills in meeting

underlying body and brain needs that communication partners require beyond supporting the learning of language and communication access.

Although engineering communication environments has been a focus for several decades now, many people with disability continue to experience significant internal and external stress and distress in their daily life. In addition, the people they have a form of relationship with or who support them, may not always understand the broader purpose of communication support in contributing to addressing underlying need and promoting wellbeing. Without such knowledge and therefore changes to approach, many people with disability continue to experience 'skills-based interventions' imposed upon them or at times communication supports discarded or poorly used.

In this presentation we reflect on our learnings from establishing two postgraduate courses designed to build communicatively capable environments. The courses support the core knowledge and skills that all people in disability support roles should have in understanding universal underlying human needs to feel safe, connected, in control, regulated and valued. The courses explore the intricate knowledge we all need, that forms our understanding of what it means to support a person to be regulated, have good mental health and to be in a space to learn the skills they wish to attain: this develops the knowledge and skills that underlie what it truly means to go beyond engineering the environment and providing robust access to communication to build communicatively capable environments.

References available on request. Full reference list does not fit within submission word limit.