

## Increasing communication by reducing the level of effort required

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### Executive summary

This study will explore how to increase communication in a pupil who presents with autism and a significant visual impairment. This was successful through reducing the level of effort required to communicate and enlarging the image to a visible size for the student. This demonstrates how simple, quick interventions can increase the variety and frequency of requesting for a student with a limited requesting repertoire, to enable them to become a functionally, communicative individual.

### Introduction

This case study is focused on a 17-year-old pupil who started at the Tram House School in February 2020. Prior to joining us, they were based in a special school setting supported by 2-to-1 male staffing. Team Teach procedures were used on a regular basis during escalations of behaviour. It was reported to us that the pupil had a PECS (Picture Exchange Communication System) book; however, he was not independent in using the system. It was also reported that no communication system was in place at home. It is key to note that the pupil is visually impaired, for both near and long-distance sight.

When this pupil joined the school after February half term, their PECS book came with them. It was noted (as in the previous setting), that the pupil would only use the book to request for food items that were highly reinforcing. When prompted to request for other items, their motivation for these items dropped and they would no longer want access to these. Our aim in the first 2 weeks of the pupil attending the school was to establish a functional method of communication for this pupil that would enable them to effectively communicate their wants and needs in a range of settings.

### Method

There is a range of research in the public domain suggesting methods of adapting PECS to visually impaired learners (Ganz et al., 2005; Parker et al., 2010; Ali et al., 2011). The research suggests that adaptations can be made in order for visually impaired learners to access PECS as a method of communication. Parker et al (2010) found that using 3D symbols attached to a communication book was effective in teaching a student to communicate. Furthermore, Ganz et al (2005) adapted the PECS phase systems to require the student to exchange a box with a duplicate of the item the individual was requesting inside. This was then faded out to using pictures successfully.

When applying this to the student in our setting, they were able to effectively communicate for highly motivating items (food items) but were unable to communicate their wants and needs for less motivating items (such as their fidget toy, blanket and toilet). The first step was to ensure all the pictures we were expecting them to communicate with were images of the actual items (not symbols) and were large enough for them to see with the visual impairment. Two pictures were placed on the front of the PECS book, one reinforcing and one non-reinforcing object; however, he was still unable to select a picture despite reaching for the item itself.

Due to this having no impact, a change of communication system was needed to reduce the level of effort required to request. Therefore, the large images of reinforcing items were moved to a communication book system (A4 sized) and the pupil was only expected to point at the item to request for it rather than remove the picture from the book and hand it over.

### Results

As shown in Figure 1, the student's ability to request dramatically increased after the change in communication book style and reducing the level of effort required to communicate. Previously, as shown, the total number of requests a day did not exceed 30 requests; however, once the level of effort was reduced, the number of requests outshone 30 and exceeded 60 requests a day, a dramatic increase in the number of requests made. There were also significantly more independent requests on the first 3 days the intervention was implemented. There is a lower number of requests on day 7 (10.03.2020), however, it is likely that this is due to an increase in behaviours that challenge that day, unrelated to his communication in this context.

Secondly, the variety of requests also increased as shown in Figure 2. Prior to the change in communication system, the pupil was only able to request effectively for 2 items; rice cakes and crackers. When other items were presented in the PECS book, the level of effort required to request for these items outweighed the motivation for them. After the level of effort was reduced and picture size was larger, they were able to request for on average 9 different items a day. As the pupil's interests expanded, different images were added to the communication book and the pupil was able to scan the array and select new images without any prompting.

## References

Ganz, J. B., Cook, K. E., Corbin-Newsome, J., Bourgeois, B., & Flores, M. (2005). Variations on the Use of a Pictorial Alternative Communication System with a Child with Autism and Developmental Delays. *TEACHING exceptional children plus: 1 (6): 6.*

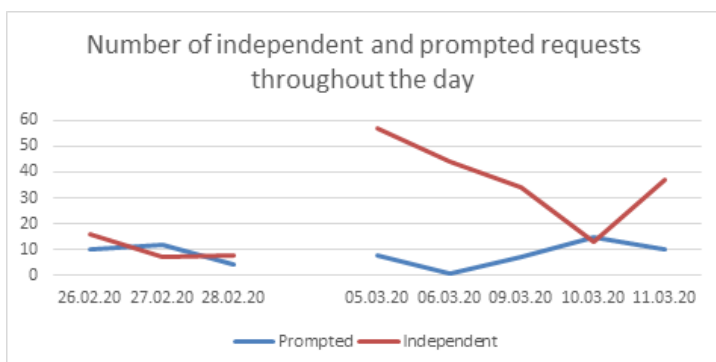
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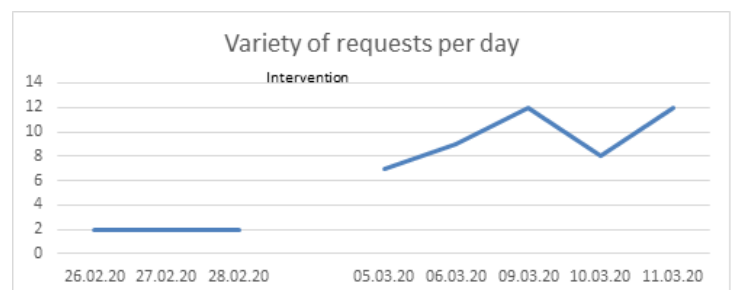
## Discussion

As demonstrated above, by making quick changes to the way a communication system is presented to a learner, it can enable them to be more communicative with their wants and needs and has a greater level of functionality. The pupil is now able to request for items that they previous were not motivated to request for. They are also able to request for items that are not present, for example, the guitar was put away in the cupboard and the pupil was able to request for this by pointing to the picture. This has given the student a voice to express more effectively what they want.

Since starting with us and since a communication method has been established, the learner is now able to work 1:1 with any member of staff and no physical intervention has been needed. They are much happier and appear more motivated to communicate. They are also able to scan through an array of up to 10 items and select the item they want. Further steps will be to encourage the student to independently retrieve their communication book in order to request for items.



**Figure 1:** A graph to show the number of prompted and independent requests made by the pupil in the first 3 weeks of schooling.



**Figure 2:** A graph to show the variety of requests per day