

## Increasing independence for individuals with autism through the use of visual schedules

Amy Sarrasin

### Executive summary

Difficulty with independence impacts the overall outcomes for individuals with autism (Hume, Loftin & Lantz, 2009). Promoting independence is an imperative skill to teach at a young age. Visual schedules are an intervention used to help individuals with autism to follow routines, transition between activities, reduce the dependence on others to complete activities and develop autonomy. Studies have demonstrated the effectiveness of visual schedules to increase independence for people with autism (Havlik, 2015, Hume, Loftin & Lantz, 2009). Furthermore, visual schedules are multifunctional and aid with functional living skills such as daily routines, following cooking recipes, teaching academic on task behaviour, play and social skills.

### Introduction

This case study discusses an adolescent in a Sixth Form class preparing for adulthood. She is a vocal learner who is very social and loves to greet her peers and Tutors. She is very happy attending school and is learning to independently make a variety of meals; she attends academic groups such as, Maths, English, PHSE and Art. Additionally, this learner also enjoys attending work experiences every week: she is learning a vocational trade, attending a café where she rips boxes, folds tea towels, and sorts the salt and pepper just to name a few of her duties. In addition to this, she attends a warehouse where her responsibilities include creating and folder boxes and sticking labels on the packages.

This individual struggles with reading without a visual or contextual clue, counting without a number line and displays prompt dependency. She will ask her tutors for permission or will wait for a gestural cue to complete a task (i.e. head nod).

The learner shows a great interest in all of her work experiences. While not attending her them she is learning to be independent at school by setting up and following a visual timetable to guide her through the daily activities.

### Methodology

When the individual in this case study arrives at school, she sets up her visual timetable with the help of her Tutor. She has a laminated timetable with three columns with the following: the time, activity and location. The laminated timetable resides in her personal clipboard which she carries with her throughout the day. On the back of the clipboard is a clear zippy wallet, where there are prefabricated activity tabs for the various activities which occur through the day and tabs of locations around the school. All the tabs stick on the timetable and can be changed for the following day. Each tab has the written word and a visual prompt as she is working on the prerequisite skills for reading.

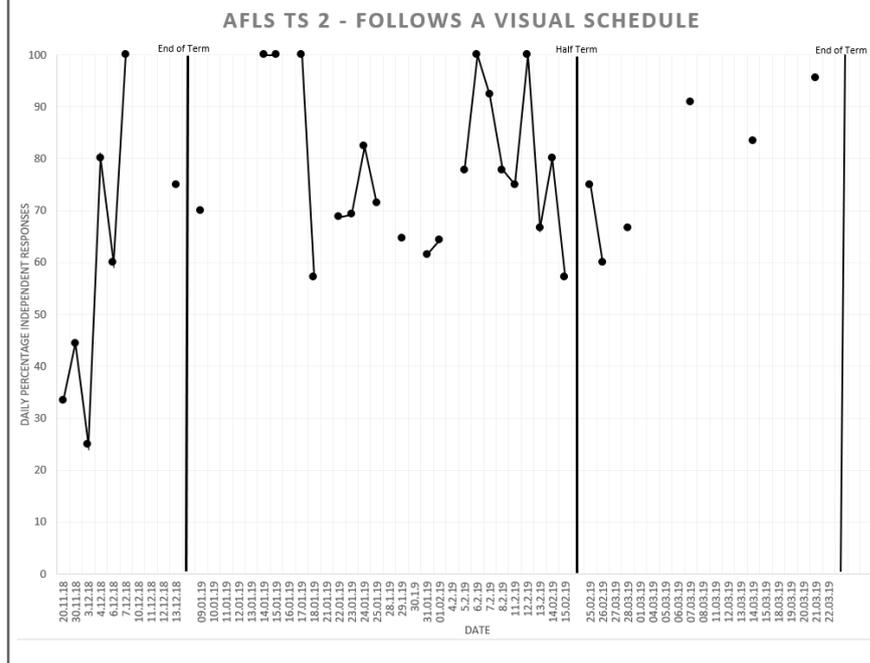
The Tutor will tell her which tab to look for and she will find the tab and put it on her timetable. She may at times require additional support for new tabs. Once the visual timetable is created, the Tutor guides her to the first activity and location by getting her to point to the picture. She will say the activity and start walking to the location. For example, if it says “gym,” she will proceed to go to her classroom, get her resources and head towards the gym. To provide more independence, the Tutor will provide her with their staff fob and follow behind. Once she is at the activity and location this is considered an independent response. If she errors (goes to the wrong location) then she is brought back to the previous location. She must then refer to her timetable and the response is taught errorlessly (a 0-delay prompt without making any errors).

### Results

In the initial three days of implementing the visual schedule, the graph in Figure 1 demonstrates on average that the student completed 33% independent responses, gradually increasing over the next few days. Following the first end of term she had a decrease in independent responses, before an increase to 100% for three consecutive days. The following day (18.1.19) her responses decreased to 57%. However, in the last three data points (7.3.19, 14.3.19, 21.3.19) it can be seen that the average independent responses had increased to 89% (Figure 1).

It is clear from the graph there are limitations, for example the variability with the data, however, there is a general increase in the subject's independent responses. There could be several

**Figure 1. Percentage of independent responses when following a visual schedule**



contributing factors to explain the variability. Nevertheless, the graph provides necessary information to demonstrate her independent responses are on average increasing. As stated by Havlik (2015), the benefits of visual schedules include on-task behaviour and facilitation with transitions. According to Dettmer et al. (2000), visual schedules are easy and inexpensive to implement and are a basic tool which provide positive results. Therefore, as the visual schedule continues this intervention can be duplicated in the individual’s various settings, including at home and at her work experiences.

## Conclusion and discussion

Currently the intervention demonstrates variability in the data and as a result no conclusive hypothesis can be made. Thus, the intervention needs further implementation in order to demonstrate stable data. In the future it is important to extend this intervention across different settings to promote generalisation. Generalisation is essential as it demonstrates that the individual has truly acquired the skill to be autonomous with her visual timetable across different settings she is attending and with different people. Moreover, despite this intervention being ongoing, this highlights the importance of promoting independence for individuals with autism and to lessen the need for support from others (Havlik, 2015, Hume, Loftin, & Lantz, 2009). As she is in Sixth Form it is essential that independence skills are the primary focus to prepare for her adulthood. Additionally, it is crucial to continue to develop independent skills not only for her but for all individuals with autism for their well-being, throughout their lifetime.

## References

Dettmer, S., Simpson, R.L., Myles, B.S., & Ganz, J.B. (2000). The Use of Visual Supports to Facilitate Transitions of Students with Autism. *Focus Autism Other Dev Disabil*; **15**(3): 163–169.

Havlik, K. (2015). Visual Schedules: A Practical Guide for Families. Retrieved April 9, 2019, from [https://ed-psych.utah.edu/school-psych/\\_documents/grants/autism-training-grant/Visual-Schedules-Practical-Guide-for-Families.pdf&usg=AOvVaw1HxT1wOebCcEtmf\\_F6rBVS](https://ed-psych.utah.edu/school-psych/_documents/grants/autism-training-grant/Visual-Schedules-Practical-Guide-for-Families.pdf&usg=AOvVaw1HxT1wOebCcEtmf_F6rBVS)

Hume, K., Loftin, R., & Lantz, J. (2009). Increasing Independence in Autism Spectrum Disorders: A Review of Three Focused Interventions. *J Autism Dev Disord*; **39**(9): 1329–1338.