



This project set out to see if the skills needed for catering can be shown to improve the manual dexterity of the students taking the course. Could dyspraxic students also benefit?



The ability to manipulate objects and think about the consequences of this has led to the creation and design of technology on which modern day society is based. Hand eye co-ordination is a skill which is essential in everyday life, from picking up an object to putting it down again, from putting a key in a lock to wiring a plug.



"What we can do with our hands, the way we manipulate objects and use tools and technology, shape all of who we are as a species and how we adapt to the world."



(Ward, C. as cited by Helmy, H. in interview for KBIA.)



(Edermann, B.

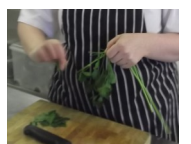
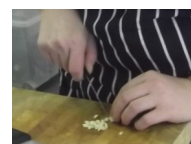
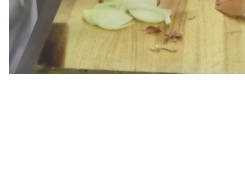
Et al. 2004, p.1) showed that after a five week period of cup stacking "significant improvements were noted for both hand eye co-ordination and reaction time"



The dexterity of gamers has been studied for over 30 years. Now [varied apps](#) are available chosen specifically to improve reaction time, precision and accuracy.



Students aspiring to be dentists should take up playing a musical instrument such as a flute or guitar to improve their manual dexterity [Indiana University](#) suggested .



Can catering skills improve dexterity?

WHY CATERING? In the kitchen **there are consequences** to poor hand eye co-ordination. Many cooking skills require careful hand eye co-ordination and as many involve knives and hot substances and surfaces. There is also a need for dexterity as people expect slick service.



Why don't we record a teaching session to discuss and reflect on the teaching ?

Two groups of L1 students were given a test and retest of dexterity to see if this improved. They were also given questionnaires to find out their motivation and perceptions. Knife skills was chosen as an appropriate focus and the teaching session recorded for one group. Included were 10 students with individual plans, (their difficulties included three with dyspraxic tendencies, four with concentration problems, five with short term memory difficulties and two with slow processing difficulties).

Recording for reflection is an excellent tool for improving teaching and standards [Prof A. Pollard](#) article in Atl Report May 2014 p26.

Conclusion :-

After several technical hitches on the recording, the session was discussed. The tutor found **it helpful**. The students who watched part of the video also found it **very useful**.

Good hand eye co-ordination requires sustained attention to detail. Those who found the dexterity test the most challenging were students who had difficulty listening to the instructions and keeping focused on the task. Those who took care and gained high accuracy scores were identified by tutors as students doing well on the course.

Chart for which students improved the percentage of accurate

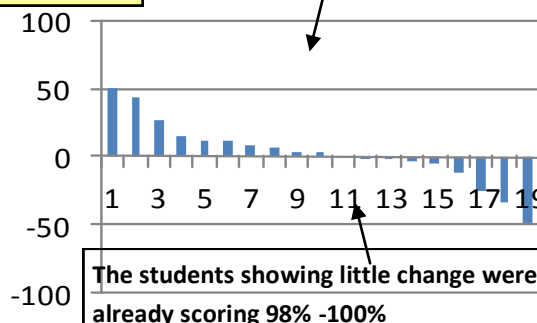


Chart to show the percentage change in accuracy for the **three dyspraxic students**.

The two dyspraxic improvers also completed more i.e. worked more quickly (not on graph).

Me? A dentist?



The results show that, in general, the dexterity of the **majority of students improved**, including the dyspraxic students. As well as **improving their accuracy** the students also **worked quicker** and increased the number of crosses marked correctly.

1st pie chart show that **only two students** thought they weren't quicker at preparing food.

2nd pie shows **most** students definitely felt more confident/competent preparing food.

3rd pie shows **most** students felt their general dexterity may have or definitely had improved.

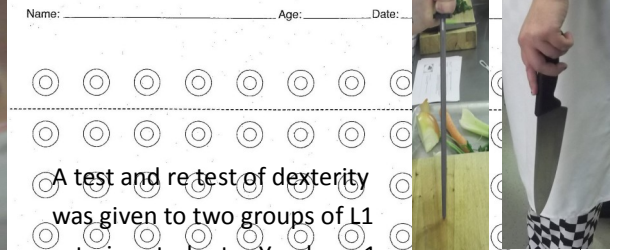
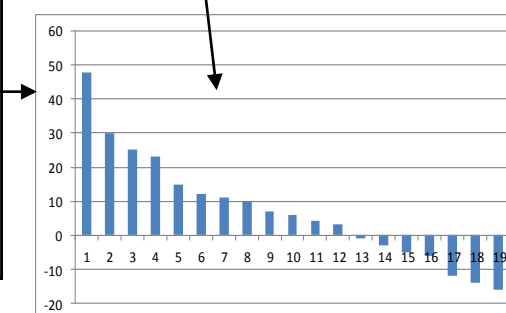
Next steps:-

A larger sample, taken over a longer time might show more definite improvement.

Could supporting students' listening and concentration skills help improve their dexterity?

The students who watched part of the video of the session found it useful. This reflection by students ideally would be explored further.

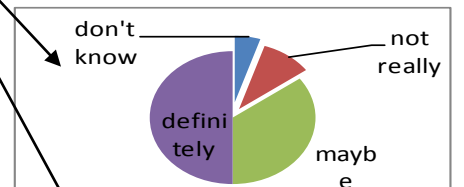
To show the difference in the number of crosses correctly marked. All these students also got quicker as well as marking more crosses accurately.



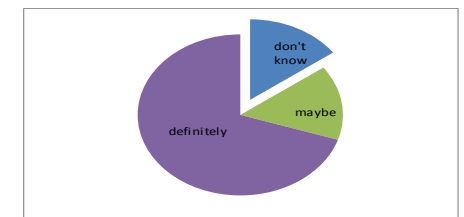
A test and retest of dexterity was given to two groups of L1 catering students. You have 1 minute to make as many crosses as you can inside the donuts. Lines must cross in the centre and not go past the outer circle, but they must reach the edge of the inner circle.

Subtest of DASH Test by
BARNETT, A. HENDERSON, S.E.
SCHEIB, B. and SCHULZ, C. Pub. London Pearson

Chart to show if students thought they were quicker at preparing food



Whether students felt more confident or competent preparing food



Students who thought their dexterity had improved

