

2. Interleaving: why it's good to mix things up!

One strategy for learning new material has been to practice one skill at a time, or learn one topic at a time before moving onto the next thing. Something like: "I'll get good at this first, and then I'll move on". At medical school, the equivalent to this may be that you learn neuroanatomy one week, then you cover neuropharmacology the next week and embryology the week after that.

This type of learning is known as "blocking," and because it seems so common-sense and easy to schedule, blocking is used in schools, training programmes and some medical school (at least this is how my medical school taught me back when I was studying).

However, there is an alternative strategy that you can use which has shown to give improved results. It is called interleaving.³

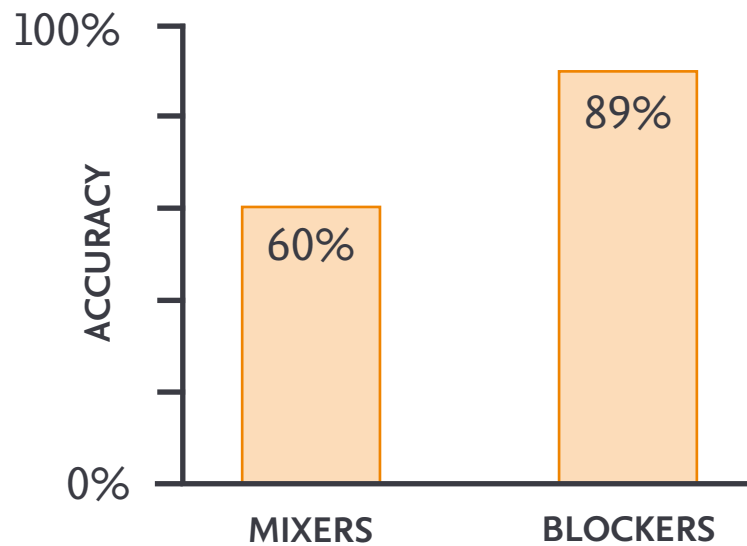
Where blocking involves practising one thing at a time before the next (e.g. learning topic A, before topic B, before topic C - forming the pattern AAABBBCCC), in interleaving you mix the several topics together (forming the pattern "ABCABCABC").

So blocking would be "AAABBBCCC" e.g. anatomy, anatomy, pharmacology, pharmacology, embryology, embryology. However, interleaving would be "ABCABCABC" e.g. anatomy, pharmacology, embryology, anatomy, pharmacology, embryology.

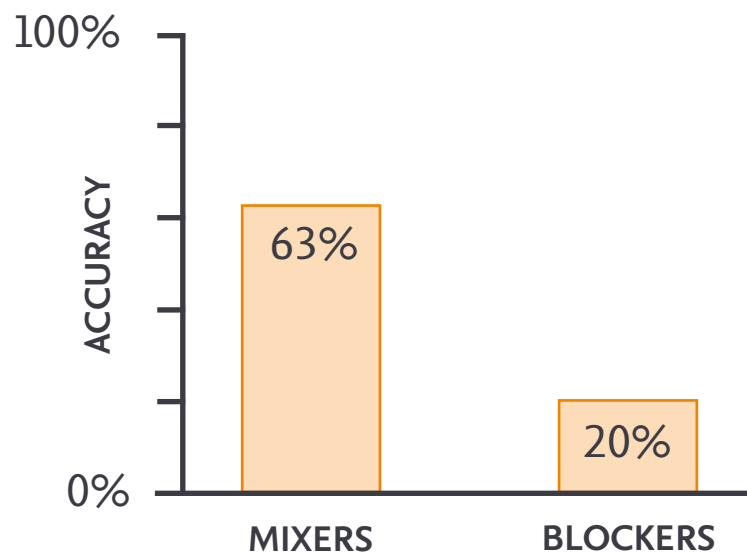
Switching between ideas during a study session and reviewing them in different orders can help!

The evidence to back this up is quite amazing.³ In one study, a group of students had to learn four types of maths problems. One group of students learned the four types of question in a mixed way i.e. using the interleaving method whereas the other group learned the four types of question together i.e. blocking. How did the different strategies affect their learning?

Initially blocking came out better;



However, when the groups were tested second time at a later date, the group who used the interleaving method, meaning that they mixed the material when learning were way better than those who had used blocking.



So, what does this mean for you? Mixing up the topics when learning may seem like it is a little harder as it can take a bit longer to learn the material. However, the added effort of mixing can generate better and longer-lasting results! It is important to note that when using the interleaving method, you shouldn't switch between subjects too often, it's all about getting the balance right.