



**O'level**  
**Foundation**  
**Week 3**

**The Write Tribe**

## COMPO PLANNING

### Composition Topic

Do standardised tests really reveal student knowledge?

Yes

No

Yes!  
Standardized testing  
do reveal  
student knowledge!

## 1. Tests help with knowledge retention

### DID YOU KNOW?

It takes about 21 Days to build a habit? Look at the grooves on the hill in the right. **The grooves on a hill that get deeper as more water flows down them.** When it rains with repetition and persistence, some of these grooves become deeper and the water descends mainly through them. Similarly, when we do something repeatedly over time, it becomes a habit. This is thanks to **NEURONS** in our brain.



### HEBB'S LAW

**'Neurons that fire together,  
wire together'.**

Effectively this means that if you do not use it, you'll lose it!

Standardized tests help students revisit what they have learnt, therefore, helping them with knowledge retention.

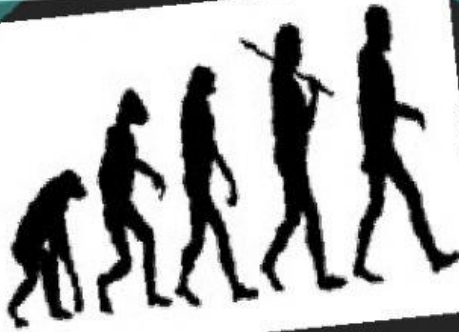
A 2006 study found that students who had mock tests before a high-stakes test remembered 60 percent of material, while those who only studied remembered 40 percent.

Additionally, in a 2009 study, eighth graders who took a practice test halfway through the year remembered 10 percent more facts on a U.S. history final at the end of the year than peers who studied but took no practice test.

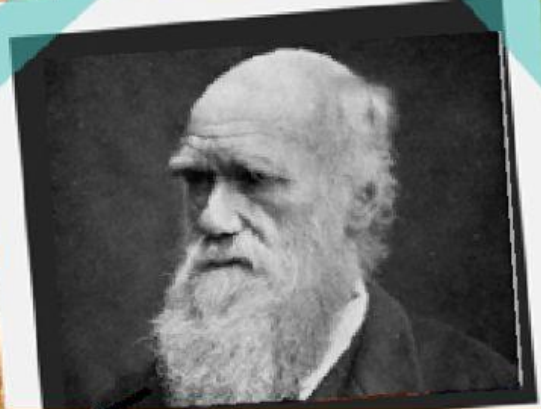


Yes!  
Standardized testing  
do reveal  
student knowledge!

## 2. Competition drives motivation



Survival of the fittest



CHARLES DARWIN  
Father of Evolution theory

### The Rival Effect

In 2016, Seiver conducted a study of professional archers to demonstrate the benefits of having a rival present in a competitive sport.

Archers whose main rival was present at the event scored significantly higher than when their main competitor wasn't present.

### Why some animals evolve and others go extinct?

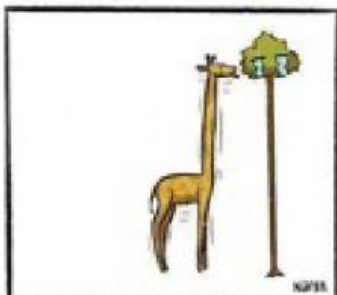
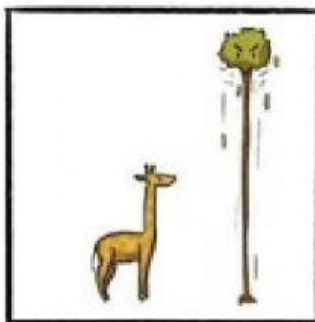
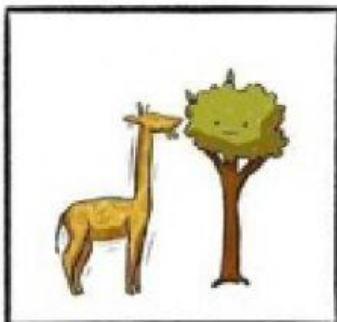
More the number of species, higher will be the competition for survival for the finite resources available (E.g food). Those who adapt best to their environment has a better chance to survive - not the strongest or the smartest but the ones most responsive to change.

Competition has driven us as a species to survive. It drives biological and psychological evolution.

Competitive nature of standardized testing brings out the motivation in students to become the best!

Yes!  
Standardized testing  
do reveal  
student knowledge!

## EVOLUTION



**CONCLUSION**  
GIRAFFES ARE  
VERY STUBBORN  
HORSES.

TWO TYPES OF MOTIVATION

## 2. Competition drives motivation

Winning a competition activates the reward centers in your brain and produces a rush of **dopamine** (the feel-good hormone) in the **hypothalamus**, the pleasure center of the brain. Once you experience this rush, you're motivated to experience it again and again, leading you to want to be part of a competition.

### Extrinsic Motivation

Behavior is driven by external rewards such as money, fame, grades, and praise



### Intrinsic Motivation

Engage in a behavior because it is personally rewarding, not for an external reward



Yes!  
Standardized testing  
do reveal  
student knowledge!

**3. Standardized  
testing is a useful  
tool to find areas to  
improve**

# THE WRITE NEWS

www.dailynews.com

THE WORLD'S FAVOURITE NEWSPAPER

- Since 1870

## STANDARDIZED TESTS ARE GOOD!



*It provides guidelines  
for curriculum.*

Standardized tests give teachers a structure of what needs to be taught. It is a practical and accurate way of evaluating what a student does or does not know across areas like math, reading, and writing.

Short, low-stakes tests help teachers gauge how well students understand the material and what they need to reteach. Tests designed for immediate feedback so that students and teachers can see students' areas of strength and weakness and address areas for growth.

lol i failed

lol me too



# EXAM

Yes!  
Standardized testing  
do reveal  
student knowledge!

## QUIZ TIME!

### 1. How many days does it take to build a habit?

- a. 20 days
- b. 21 days

### 2. What is Hebb's law?

- a. If you don't practice, you will forget what you have learnt
- b. Once you learn something, you will always remember it

### 3. What does Hebb's law state?

- a. Neurons that fire together, wire together
- b. Neurons that wine together, dine together

### 4. Who is the Father of Evolution?

- a. Charles Dickens
- b. Charles Darwin
- c. U.R. Mom

### 5. What motivation is this? I love reading for the sake of knowledge.

- a. Intrinsic motivation
- b. Extrinsic motivation



**6. Who has the best chance of survival according to Darwin?**

- a. The strongest
- b. The smartest
- c. The fattest
- d. The ones who adapt to change

**7. What motivation is this?** Mom said if I get A for my test, she will buy me a bicycle!

- a. Intrinsic motivation
- b. Extrinsic motivation

**8. What is The Rival Effect?**

- a. Having a rival demoralises us
- b. Having a rival motivates us to win

**9. What is the hypothalamus in the brain for?**

- a. pleasure center of our brain (reward center)
- b. responsible to trigger the fight or flight response

**10. Winning a competition produces dopamine (the happy chemical) in the hypothalamus, the pleasure center of the brain.**

- a. True
- b. False



**NO!**  
Standardized testing  
do NOT reveal  
student knowledge!

## 1. Standardized tests determine a child's future long before they are emotionally ready

### DID YOU KNOW?

Students in SOUTH KOREA study for 14 hours? Their society has a powerful focus on educational achievement. Results determine which universities students can get into.

### WHY IS THIS BAD?

The rational part of a teen's brain isn't fully developed and won't be until age 25 or so.

In fact, recent research has found that adult and teen brains work differently. Adults think with the prefrontal cortex, the brain's rational part. This is the part of the brain that responds to situations with good judgment and an awareness of long-term consequences. Teens process information with the amygdala. This is the emotional part.

### PSLE, O'Levels and A'Levels

are determining career paths for students long before they can rationally understand the consequences! A high-stakes test like A' Levels can determine the type of university, the kind of jobs and even the number of opportunities the student will get in the future.

Girls, Dr. Brizendine explained, mature faster than boys, and girls' brains are as much as two years ahead during puberty.

In fact, neuro-imaging shows that, early on, the typical teen girl has a stronger connection between the areas of the brain that control impulse -- the amygdala -- and judgment -- the prefrontal cortex.

It may not be until late adolescence or their early 20s that boys' brains catch up to their girl peers.



**IS IT FAIR TO TEST BOYS AT THE  
SAME AGE AS GIRLS?**





**NO!**  
Standardized testing  
do NOT reveal  
student knowledge!

## 2. Competitive nature of tests have increased suicide rates among youngsters

*"When you compare, it  
leads to despair!"*

People who have failed in prior competitive situations are more likely to find competition punishing and will try to avoid competition. Instead of motivation, it may trigger anxiety!

*STANDARDIZED TESTS may crush  
a person's motivation to learn*

**WHY?**

Just like the brain has a **REWARD CIRCUIT**, it also has a **PUNISHMENT CIRCUIT**.

Have you ever had food poisoning from a food stall before? Did you notice just seeing the stall again may make you feel disgusted?

The **Orbitofrontal cortex** and **Amygdala** ensures you don't make bad decisions again especially if it made you feel awful!

*Is competition even necessary?*

The brain's reward centers can be activated simply doing a difficult task. For those who don't enjoy competition, challenges may be a great way to experience the same brain-boosting effects of a competitive environment, without all the negative emotions that can come from competition.

**Intrinsic Motivation**

Engage in a behavior because it is personally rewarding, not for an external reward

