Led by Sarel van Greunen & hosted by The Answer Series

# THE CHAT:

The SAGS document can be accessed via this link.

https://www.ieb.co.za/assessment/high-schools/national-senior-certificate/nsc-subjectassessment-gu...

#### Comment

i feel that I am reteaching grade 7 work in the first term - so some kids are bored and others have no idea what we're talking about









#### Comment

If we move integers to term 3. We need to revisit Algebraic expression after we teach integers. So that we can do questions such as 2x-4x. and -2(x-3)

### Comment

it is also not easy teaching integers, we need a session on how to teach this topic

Comment: "If we move integers to term 3. We need to revisit Algebraic expression after we teach integers. So that we can do questions such as 2x-4x. and -2(x-3)"

Response to above comment: Couldn't have said it better

#### Comment

At a previous Government school, we had a sit down with Subject Advisors and they said you will teach according to ATPs no exceptions...

# Comment

i am in a government school and really only write external prelims and for the grade 9 the GEC project and exam. Otherwise I manage to get away with teaching in any order as i don't write any other external papers





Their argument is it makes it easier for a learner to move from one school to next if parents are relocated for work???

Comment: "i feel that I am reteaching grade 7 work in the first term - so some kids are bored and others have no idea what we're talking about"

Response to above comment: You can actually provide extension work together for them and allow them to do a lot of problem-solving from things like maths olympiads, tour de maths and other education systems. Having said that, the bored kids need to practice often. I always did a 180s test which made them practice their accuracy vs their speed of completing basic functions.

#### Comment

is it -1-3 or -1+-3 or is it -1+(-3), how we emphasize or how we teach can also serve as barrier to learners

# Comment

Comment: "i am in a government school and really only write external prelims and for the grade 9 the GEC project and exam. Otherwise I manage to get away with teaching in any order as i dont write any other external papers"

Response to above comment: We moved topics for GEC and got into such trouble when the department visited - sometimes our hands are so tied





# Comment

It seems that at gr 7 level, there is still a great deal of work that requires answer-only, so one of the things gr 8's struggle with, is anything that requires structure and several steps, so working with integers or algebra is such a challenge to them, because if they can't answer a question by inspection, they have no tools to assist them, and resist having to learn them. They go home and use a calculator to do homework rather than embracing being empowered by developing their own skills



# Comment

There is integration of integers in the topics expressions, equations and functions which then requires one to teach integers earlier

# Comment

Van Hiele levels of Geometry

#### Comment

I agree that Grade 10 Geometry feels like cognitive overload for students. Maybe the proofs should be gently introduced and tested. I am also afraid that this creates a negative connotation for Geometry for the students when they then learn Euclidean Geometry in Gr11.



Finishing Analytical Geometry in grade 11 works VERY well 😊



# Comment

The problem teaching Euclidean Geometry is that there is no foundation of Mathematical Logic laid for students to follow.

#### Comment

Yes. You have to teach logic explicitly. We do it in grade 9 already. It works well. They need time to get the concept of logic



# Comment

The Grade 10 Geometry is definitely problematic; I agree that it gives them a very negative experience which breaks their confidence. With there being very little focus on quadrilaterals in the Grade 12 papers, it feels like we should leave a lot of it out. I'm nervous to do so, though, because it could be assessed.

#### Comment

I use the same for Euclidean geometry and trig graphs using Geogebra

funny enough I used the same concepts and tested number patterns for my grade 10 and 11s as graphs and the girls were confused. So it's very important to link the two sections.





# Comment

We no longer teach Probability in grade 8 in government schools.

We now start it in grade 10





# Comment

ATP says so

# Comment

I think data handling is also not done in gr 8/9

### Comment

Transformations Gr 8/9

# Comment

How do you complete Gr 11 syllabus with all the Grade 12 topics added

good qu - saturday!

# Comment

We also talked about doing the sine, cosine, area rules in gr. 10 already and decided against it, Trig is already new in gr. 10, want them to become proficient in trig with 90 degree angles before adding the rules.



# Comment

I also feel the transformation in gr. 8 and 9 is very necessary, it help a lot with the parameters in functions in the later grades.

#### Comment

A few things that have alleviated some pressure for us ......

Algebra, Exp, Equations and Fractions solidly done by end of Gr 9 to save time in FET.

#### Geom

Gr 9 we look at quad properties Gr 10 numerical circle geometry Gr 11 proving and more complex questions This saves us time in gr 11 to do the below:

# **Finance**

In Gr 10 we do different compounding periods In Gr 11 we do timelines and basic FV and PV and OB In Gr 12 we do more complex questions of above. Our girls cope well with this.

# Stats

We do regression line in Gr11 as an investigation and keep questions simple for assessment. In Gr 12 when revising topic we do more complex questions.

This saves us a few weeks in Gr12. We are still open to more adjustments but happy with the results of the above.



- 1. Most students are not ready for algebra at the start of Grade 8. While many still won't be by June, six months will make a difference for most. Algebra is an abstraction.
- 2. The way algebra is introduced is critical. Many text books are poor. For a great approach refer to Tickey de Jager's wonderful book SIXMATHS. One needs to be very intentional about moving between concrete situations and abstract ones.
- 3. While time is always an issue, we believe that time spent ensuring decent foundations are in place in algebra, integers, ratio and proportion and fractions pay serious dividends later on.
- 4. Give students time to make sense of the rules, ideally to construct them themselves. e.g. exponents
- 5. I wouldn't waste any time in Grade 8 on Data Handling. It is boring and can be caught up later on.
- 6. I don't believe one needs to teach financial maths in Grade 8 at all.
- 7. There's significant benefit to trying to connect topics ensure we reinforce integers when solving equations. Practise solving equations in Geometry
- 8. Workbooks promote engagement and efficiency no need to draw axes, redraw diagrams etc.

Much appreciation in closing comments 🙌



