

AIMSSEC

Mathematical Thinking for the lower secondary classroom

We were very impressed with this book.

Preparation for each set of lessons is well set out under the headings

Teaching Strategy

Curriculum Content

Prior Knowledge Needed

Intended Learning Outcomes

And then there is a comprehensive list of Resources required. And all the resources are easy to find or make by a reasonably resourceful teacher. There is nothing that is very expensive or requires any special skills to make.

Following on from the introduction, there are Workshop Activities for teachers and then the Classroom Activities for learners.

All are easy for me to follow and I would have no trouble implementing them in the staffroom/classroom.

It was really good to see that careful attention is paid to different learning styles. Teachers are encouraged to make allowances for more than one learning style in their classrooms. This is something which is difficult to do as teachers are being asked to move away from the way they were taught which may be right out of their comfort zones.

The Classroom Activities are also very well set out and easy to follow. One hopes that teachers are encouraged to produce their own activities as well. I feel that there is a temptation for busy teachers to simply use what they have been given and not really engage with the material – a kind of ‘follow the numbers’ approach.

This being said, we think this book would be an invaluable resource in any lower secondary classroom, all the better if the teacher has been through one of your workshops.

Our main concern at PETS has been the language problem. In our programme we have assumed that most of the teachers we engage with are probably not English FL speakers. When we think of the learners who are trying to make sense of Mathematics (which is in effect another language) in a language which is not their mother tongue, taught to them by teachers in a language which is not the teachers’ mother tongue, it is no surprise that there are difficulties.

This means that the language we use is as simple as we can make it and it is necessary to explain a concept in several different ways. And we have translated all our work into Afrikaans. However, translating the work into isiXhosa (or any other African language), is very difficult. Many of the mathematical concepts do not seem to have an equivalent word or phrase.

Our programme is different from the AIMS programme in that it does not take teachers out of school to attend workshops. We have encouraged teachers to meet in groups on a regular basis to work through the online material. However, a real problem for us has been the sustainability of our programme. We want teachers to be self-supporting, to form their own learning communities and to lose their dependence on outside influences to keep them growing and learning. We would like them to take what they have learnt from our programmes and ‘spread the word’ to other teachers.

But without a mentor or facilitator, little work is done independently. Teachers wait for us to take the initiative. Perhaps this is a pipe dream?

It is clear that the teachers who developed the Learners Activities in this book will have gained far more than the teachers who merely use them. And so teachers must spend time developing their own lessons if they are to grow in understanding. How do we encourage teachers to be innovators and leaders? In this respect the CAPS programme is a retrogressive step as it takes all the creativity and initiative away from our teaching corps.

In order for the AIMS activities to be self-sustaining, one hopes that teachers who have completed the AIMSSEC programmes will take them back to their schools. In this regard, I think the Workshop Activities for the teachers would be very valuable for a group of well-motivated teachers with someone (presumably the person who has done the AIMSSEC Course) who is prepared to take the initiative as leader. Our experience is that without that one person (or group of people) the programme soon peters out. However with the right person it will go from strength to strength. Hopefully AIMS provides ongoing support and refresher courses for the teachers they have trained and checks in on them regularly.

We hope to have addressed the sustainability problem to some extent by going into partnership with E-classroom, a provider of free education content to teachers' schools and parents. E-classroom has a database of over 150 000 teachers who use it regularly, downloading lesson plans, lesson content, support material, worksheets etc., all of which is CAPS aligned. It might be worth AIMSSEC exploring this possibility as a means of distributing their excellent material more widely. E-classroom would certainly welcome any suggestions that AIMSSEC might like to offer.

Thank you for an insight into your very exciting programme. We hope you go from strength to strength.

Michael Rice

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