Re: Performance strategy of SQA. Feedback for Committee.

Introduction: I send these notes in as a genuine contribution to the committee for comments regarding the SQA and Education Scotland. I am an experienced classroom teacher with 15 years. Science -Biology and Chemistry. My background consists of first degree, research degree and working within industry, prior to teaching. The passion that drives delivery of science innovations is why I entered into the role of science teaching. Many students I have taught have continued in science. Previous pupils working as doctors, dentists, immunologists and more recently a girl has set her own business as a physiotherapist, two are employed as pharmacists. Local pupils also work in health centres and sports centres too. Teaching is a rewarding career.

Over the past 6 years the changes that have been brought by SQA and Education Scotland have been the most changeable ever within Secondary sector. The drive and passion has not been in front of pupils but trying to work through the bureaucracy. The implementation of these courses has caused many issues highlighted below;

Implementation of new National and Higher courses

Standard Grade and old Higher were robust courses which had stood the test of time. Their delivery had been thoroughly thought out and much time taken with implementation and planned delivery. Obviously the science courses needed updating to keep pace with the development. The changes brought about in recent years have not been a smooth transition. There are still many issues are yet to be resolved. The CfE Courses with multiple assessments have hindered the actual process of learning and teaching taking place in Scottish schools. I have been involved in development of National 4/5 and Higher at school level and tried to unpick my way through bundles of updates to the courses whilst they were being delivered. No real money has been spent of actually updating equipment which schools are very much in need of. I am still using equipment that was available for Standard Grade and Higher.

Much money has been spent on reprographics and the paperwork required due to SQA continually making changes to courses and assessments. During the first year of delivery I was only able to be a week ahead of the pupils as we were writing courses to the new standards and keeping pace with the new assessments. This
was very challenging and during 2013/14 I would say that many staff experienced a huge amount of pressure.

i) **Continuous SQA updates** since CfE courses were implemented. It soon became apparent that we had begun courses that would need to be reviewed and revisited many times prior to them being fit for purpose. SQA have expected that a busy classroom teacher is able to continually read the updates when in actual practice is not the case despite our best efforts.

ii) **Tri Course Classes** to manage. Combination classes of pupils at National 3, National 4 and National 5. These are *different courses* with *different Key Areas* in some cases and hugely different content, particularly in the science courses. Publishers have printed textbooks for National 4 and National 5 individually. This makes it strategically difficult to deliver. Teachers have had to manage classes where pupils are working in divided classrooms on different aspects. When time for study is available only the National 5 students have a final exam so it can be hard to motivate these in amongst National 4 students who do not need to sit the exam. Previously Standard Grade had one textbook and the work was much better organised into General and Credit level. ALL students were motivated to a final exam to achieve their potential. Now with National 4 being PASS/FAIL it can have an effect on some students who actually don’t want to face exams. I have known some students to say they are happy achieving National 4 as don’t want to do exams.

➤ This is a situation that the SQA courses have produced when there are combined classes. Neither Nat 4 or Nat 5 students benefit. Teachers are working hard for all students in the different courses but reaching burn-out more so than with the structure of Standard Grade.

iii) **Published course textbooks were not ready in time** for the first year of implementation. Students were exposed to using sections out of Standard Grade and Intermediate books depending on which key area was being studied at that time. The lack of published textbooks was still an issue for the implementation of the CfE Higher in 2015. I had ordered books but they did not arrive until September 2015 which was well into the session.

iv) **Lack or preparatory material prior to first set of exams** available on SQA website. Resources were produced by parent forums nationally as a bank of questions from Standard Grade and Int 2 were past papers (STEM net) were coupled together in a way that allowed pupils to practice. Model past papers for the National 5 exam were few and far between hence preparation lay at the feet of staff. Students new to the exams were working hard to make sense of what they were doing. I believe also that the first presentation of National 5 caused undue pressure on the students in a way that I had never encountered before. I spoke with Pupil Support
who also recognised that the pupils were looking drained and exhausted with what was being expected of them. It was a difficult time for all and this must be taken into account when looking at how SQA has performed. Health and Wellbeing of students and staff was, and still is, affected and has a negative impact.

v) **The huge increase of internal marking** required for National 4 remains a burden. Formal marking has always been within the working time agreement for the 35 hour working week. However it soon became apparent that the amount of marking was not able to be done within the working week. SQA did not seem to take into consideration the burden of marking and how many hours was allocated for each subject for each pupil at the different levels.

Currently in our school the formal marking has been to 70 hours. If a teacher has 3 classes then this is actually account for about an hour for each pupil for the full course.

Pieces of assessed work which make up the National 4 include;

a) Unit assessments- may include organising and issuing resits. There were mistakes in assessments on SQA secure and these needed to be reformatted and produced properly prior to students actually sitting the assessments.

b) Added Value Report which students may need to amend in order to reach the 100% pass mark (pre 2016). Marking of these has taken excessive time especially when students have had to modify them.

c) Experimental reports and re drafts as above. Redrafts required in order for 100%.

**National 4 is fully marked by staff in schools with no externally marked sections.**

The burden on workload for the formal marking has not been recognised by SQA until this point when staff have been under pressure now for a number of years.

National 5 and Higher also had more formally marked exam pieces than previous NQ courses and this also added to the marking workload. Did SQA ever audit the time marking would actually take?

vi) **Understanding Standards** meetings arranged by the SQA were a positive contribution but really a year too late. I attended in November 2015 when we had begun the Higher CfE course in June 2015. The meeting was very useful so this was a positive step forward by SQA.

However I would say it came a year too late as staff already exhausted by the previous years, and were now losing the heart to keep up. Staff were continually working hard together to share ideas and to double check we were on the right track.
vii) **Content rich but practical poor courses.** The Higher courses have such a huge content that there is little time to do more practical and analytical work. I had thought new CfE was about better experiences for students. However this is not really the case. We have the same equipment with perhaps a couple of specialised items. However SQA had not thought about actual time to do good quality practical work at Higher level.

viii) **Lack of equipment** often means we are limited in what we are exposing the students to. At our school Higher students are taken for a day to either Strathclyde or Glasgow University in order to carry out PCR technique as part of the Higher and Advanced Higher Biology course. **This is not sustainable solution as the trip takes a day out of school and affects other areas of curriculum.**

ix) **Impact of pupils having days out of school to complete course work.** I believe the number of days out of school has an impact for pupils and whilst enriching students the content of courses means that every hour matters. Again staff have to plan, manage and deliver this within a very tightly packed CfE curriculum. The impact of catering for students having days out is great and therefore although good on paper logistics of this does need proper overview and management. SQA perhaps have not looked at this impact.

x) **Problem Solving in Science**. I am also surprised of the decision by SQA to change the problem solving aspect in Science although I realise we are awaiting a further draft of the actual decision made for Biology, Chemistry and Physics. We in Science have been working hard on developing good quality numeracy skills from entry into S1 through to S6. Pupils at N4/N5 were improving their numeracy through problem solving in science. Analysing, Predicting Processing and Selecting as explicit examples have now been removed so we have had to modify the way we were working. However I feel this is a detrimental decision from SQA for the sciences. In my opinion Numeracy and understanding the skills Analysing, Predicting Processing and Selecting are very useful for students to be made aware of, particularly when looking at the various data handling that science questions have. Indeed Standard Grade was very good at making sure pupils gained an award in Problem solving.

I am very surprised to note the SQA decision on Problem solving work. I suggest this does have a review. This is not to the benefit of future science development and employers who recognise that good quality numeracy skills are essential for efficient problem solving. Science leads developments through problem solving.

I believe the issues in CfE Biology Chemistry and Physics have been very difficult to manage. CDT and other practical subjects have struggled to complete the internal marking of the course work.
The SQA rolled out the new National Qualifications without trouble shooting genuine pitfalls and are having to do this now. The workforce is tired largely due to the impact of SQA administration and bureaucracy.

Effective teaching needs effective and efficient strategies to work within. A clear framework and structure is requested from SQA that does not need to be changed every year. It is essential that the parliamentary committee are able to understand the impact that SQA, ES and CfE have brought to the nature of science teaching. I hope that the resultant changes to the current model will be positive for the learning and teaching experience for both students and staff. Many Thanks for allowing opportunity to offer these notes.