My name is Ian Pink. I have taught in Queensland state high schools for 25 years. You may notice a grey hair or three.

I ask that leave be granted to submit documents supporting my submission today.

I would like to thank parliament for asking for the views of classroom teachers. It is not often we are given that privilege.

This education debate has developed into two (2) opposing sides. Both sides claim to know what is best for educating and assessing children. Both are correct and both are wrong.

If anyone has missed the fact that the inquiry is about maths and science teaching only, you are now warned. The people involved in these subjects have by and large been trained in these areas and have a good understanding of data. If scientist A is presented with data from 20 other scientists, that definitively proves without doubt that matter is made up of atoms and NOT the green leprechauns they had thought then scientist A MUST CHANGE THEIR MIND AND ACCEPT ATOMIC THEORY.

POINT 1:

1.6

1.0.1

To the QSA and the supporters of the current system: the data you have been presented shows that a majority of submissions from teachers, parents and university staff say your system is causing problems. Accept this fact. It is real data.

What is the simplest change to make?

The simplest change to make is to return to marks and percentages for assessment. Why? They are easily understood by everybody. University submissions have shown how to use marks and percentages with criteria.

<u>POINT 2:</u>

To those opposing the current system. The data shows that a substantial minority agree with the current system and that cannot be discounted. Accept this fact. This is real data.

What is the simplest change?

The simplest change is no change. Keep the current system of school based, externally moderated assessment.

<u>POINT 3.</u>

A return to direct explicit teaching of very, very specific learning objectives. Also a change to how and when EEIs and ERTs are implemented.

<u>POINT 4.</u>

What support is there for Points 1, 2 and 3?

<u>A.</u> Daniel T Willingham Professor of Cognitve Science University of Virginia USA

When I read his 2 books I finally understood the big picture and I finally constructed in my mind after 5 years of research on educational theory:

- why the situation had developed and
- ▶ where we could go.

Reading his two books was career changing for me. The books are:

- 1 "Why students don't like schools"
- 2 "When can you trust the experts"

Also by reading his blog

http://www.danielwillingham.com/daniel-willingham-science-and-educationblog.html

and watching his you tube videos http://www.danielwillingham.com/videos.html His research shows and proves:

Laure V.

- ▶ Why the spiraling curriculum is wrong for most students
- ▶ Why learning science is so damned difficult for most students
- Why to teach students like they are mini me scientists and mathematicians won't work for most students.
- Why educational theory doesn't work when implemented into the real world of schools. (Stanley Pogrow also proves this point)
- **<u>B.</u>** After reading Willingham's books, his research reminded me of the work of Siegfried Engelmann and Douglas Carnine. It is known as Direct Instruction (DI) theory.

My friendly and supremely professional school librarian, (please keep funding these people) found an updated and extensively trialed (based on observing 45 000 different teachers in their own classroom) version of DI. DI is shown by Hattie to have a very positive influence on student outcomes. Project "Follow Through" also supports the efficacy of DI methods.

John Hollingsworth and Silvia Ybarra DataWORKS Educational Research USA "Explicit Direct Instruction"

http://www.dataworks-ed.com/about

From this book the final piece of the puzzle was in place. Using a very simple example they very clearly show the underlying problem with state-wide external exams and at the same time show why you must have very, very explicit learning objectives and not the weasel word objectives we have now based on Bloom's taxonomy.

- <u>C.</u> Also supporting my belief that state-wide external exams are not effective in assessing students came from reading the Assessor Reports that go with the VCE Physics papers. Also, do Universities have state wide exams for Physics?
- <u>D.</u> Also supporting my belief that very, very specific learning objectives must be given in the syllabus comes from reading the QSA state panel reports for

Physics and the submissions to this inquiry. The learning objectives must be so specific that there is no room to question their meaning or intent.

 <u>E.</u> Finally; reading two papers by Hung-Hsi, Wu.
Professor of Mathematics Emeritus University of California Berkeley

. . . is

- 1. "The Mathematician and the Mathematics education reform"
- 2. "The role of open-ended problems in mathematics education"

These brought home very vividly how a so called "good idea" from psychobabble research gets implemented into schools without any real thought or care. It gets implemented due to vanity. WOW! Look what my school is doing or WOW! Look what I am doing in my class. It is from the latest research. It does not work.

In conclusion; irrespective of our beliefs and the system we are given to teach, any person who gets up day after day and faces class after class of teenagers and tries to teach them any subject deserves respect.

Thank you again to Parliament for the opportunity for classroom teachers, parents, students and other interested parties to have their say.

Ian Pink Wednesday, July 10, 2013

"In schools it just isn't true that the people who can actually do their jobs get promoted until they find themselves, at last and forever, in the jobs they can't do. This is because the most difficult and demanding jobs in education are what industry calls "entry-level positions," teaching in classrooms."

Richard Mitchell