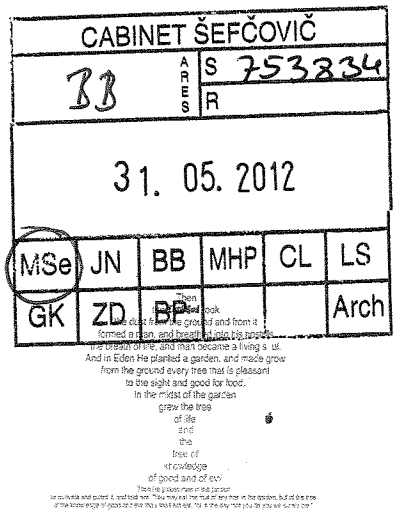

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Commissioner Maros Sefcovic,
Vice-President Interinstitutional Relations and Administration,
Brussels.

26th May 2012

Dear Commissioner,

You spoke with me briefly after your talk in Nuffield College on the 25th May. I had told you and the Reuters fellows that I had been a head of mathematics for twenty-five years at the British European School near Oxford, and I had become alarmed by the sense in the early 1980s that Europe had acquired a triumphant new feudal order to which people were no longer citizens but subjects.

At about this time I had also begun to realise that obliging my pupils to accept mathematics as a series of unconditional truths was forcing them into three divisions.

(This may be what your daughter has suffered recently. Please ask her whether she recognizes the following.)

The first division would consist of the few who understood the reasons. They would soon learn to become increasingly selfish, whilst regarding the others as stupid.

Anxious not to appear stupid, the second division, usually the majority, would learn to become being deceitful. They would also begin to believe that this is what society expects of them. In future they would be deceitful whenever this might appear necessary, whilst never admitting being responsible for their deceit.

The third division would soon despair of understanding or pretending and would be left feeling frustrated, cheated, and angry. They would be likely to form a future under-class, embittered and hating all authority.

I decided that this was not what I wanted for my pupils. Throughout my twenty-five years my senior pupils consistently achieved amongst the highest average marks in their Baccalaureate of all the European Schools. During this time, however, I stopped teaching them almost entirely. Instead I showed them how to learn.

By this time I had also begun to suspect that they must have been some connection between the development by the early Athenian Greeks of what we now call the early forms of mathematical argument and their development of democracy.

One day I asked an eminent classical historian if there had been a conscious connection.

"Well," he replied. *"Yes. You see, they were essentially the same. It was these simple but logical forms of argument, that could be learnt by anyone, which allowed democracy to succeed in Greece for nine hundred years.'*

I doubt very much if one hundredth of one percent of all mathematics teachers are aware of this connection. It is clearly a very real danger to all forms of overbearing and undemocratic government.

What has been far more surprising is how few academic educationalists want to admit this, and abandon an orthodoxy which has disappointed your daughter, damages millions of lives, and divides our societies into mutually distrustful, even mutually loathing groups. Democracy cannot survive such divisions.

In 1992-94 I joined with my German colleagues to co-direct a study funded by the Education Commission entitled *'Mathematikunterricht und demokratische Erziehung'*.

Basically, it proposed that learning mathematics via collective discussion at all ages in the classroom would increase young people's confidence and later their intelligent engagement in democracy. It is also, incidentally, hugely enjoyable and far more effective in learning mathematics and other scientific subjects. It is perfectly in accord with European traditions of openness and individual responsibility.

Our study was applauded by the Commission, but my German colleagues failed to persuade their countrymen to abandon their traditions. Although its schools are proving just as ineffective as others, our initiative died in Germany. There was no further encouragement from the Education Commission. It died in Europe.

I could tell you of some success. This approach is being used in Hungary to heal ethnic and cultural divisions. It is being taught to student teachers in the United States. I and my colleagues have been invited to address the Qatar Foundation and the Arab Thought Forum.

As you will be aware, in the past few years confidence in the future of the European Union has fallen catastrophically.

Here is a way to restore people's belief that the European Union is fundamentally democratic, whilst signalling the same determination to the world.

Here is also a way to dramatically improve our schools effectiveness in mathematics and science education, the happiness of our children in their schools, and our social cohesion.

I will be happy to suggest how to begin. I enclose some short texts to illustrate some of these points.

And remain, most sincerely,

Colin Hannaford,
Director.