Max Klein - The Educator

Teaching at Liverpool

David Joss

Max's Teaching Philosophy in quotes …
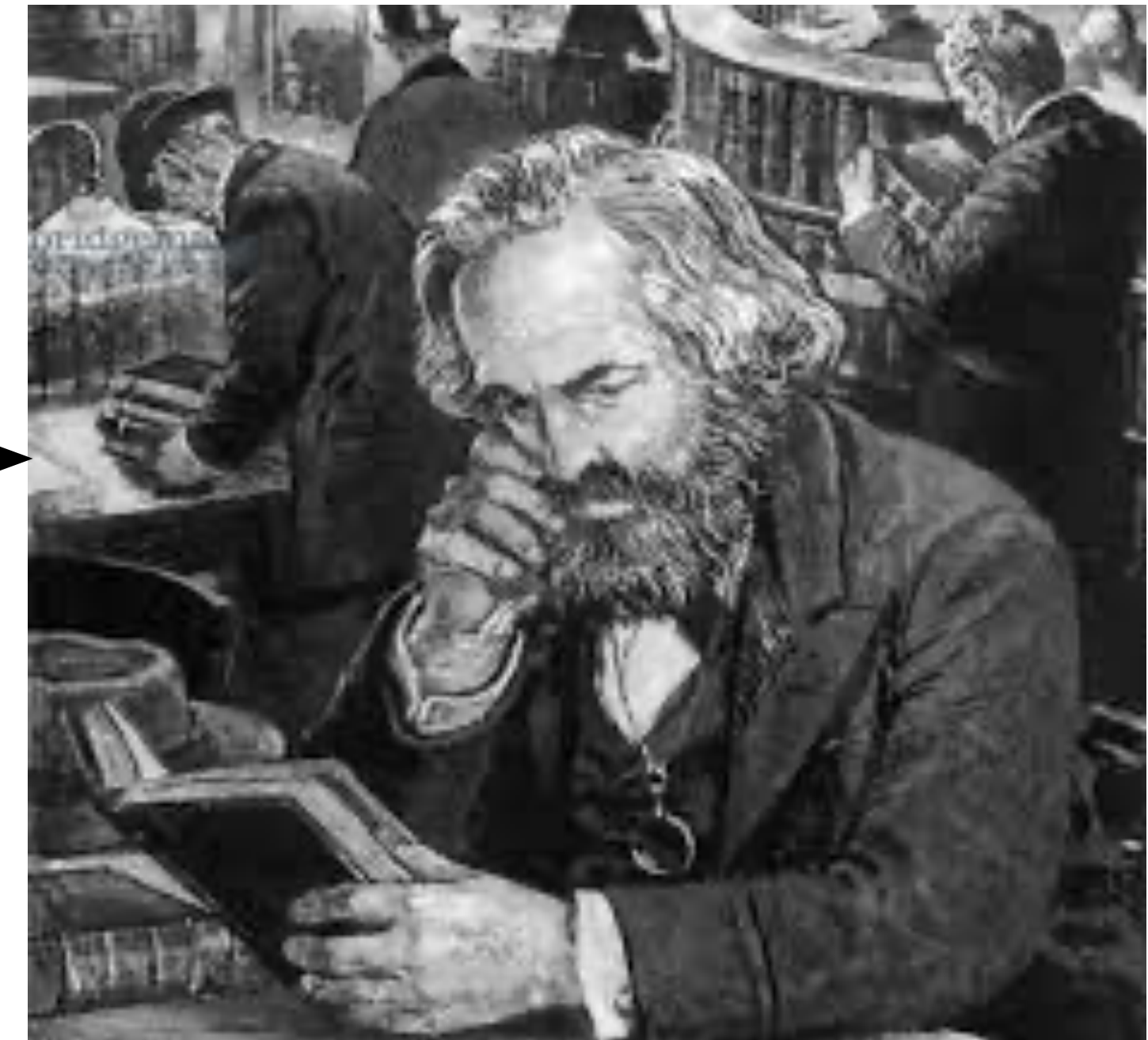
There is no learning without teaching.
       There is no teaching without learning.

John Wheeler (Line 1), Max Klein (Line 2).

Max's Teaching Philosophy in quotes …

There is no royal road to science, and only those who do not dread the fatiguing climb of its steep paths have a chance of gaining its luminous summits.

Karl Marx, Philosopher Capital Vol I, 1867 Preface - Remark to his french editor La Chatre.

Max's Teaching Philosophy in quotes ...

> *I see it as a crucial task to open the University not only to the intellectually (often socially) privileged but to all students who express a sincere interest in learning from us and later perhaps working with us.*

Max Klein, Fellow of the Higher Education Academy on the importance of culture and environment for learning and social justice.

Welcome to Liverpool

- Contributor to Open Days for prospective students.

- Max led the Welcome Week for several years.

- A dedicated academic advisor.

I came back to find visitors and parents thoroughly captivated and the current students talking about how wonderful Max was. He had provided one of the most engaging displays of the whole day and is, I am sure, the reason that we have recruited many of the applicants to the department.

Teaching

Max has contributed to several modules during his tenure at Liverpool.

- Mathematics

- Particle Physics

- Practical Laboratory

- Thermodynamics

- Statistical Physics

- Projects

- Doctoral Supervision

Mathematics

"There is no physics knowledge nor professional work possible in physics without mastering mathematics".

- Max led the Year 2 maths module for many years.

- Three strands of activity:

  - Careful derivations in real time.

  - Collaborative problem-solving classes.

  - Examination.

What the students said …

Max and David [E] are two lovely lecturers. Their lectures are really well made and portray the information well. I have thoroughly enjoyed this module so far.

The module is pretty well run, the problem classes are definitely challenging and they truly test your understanding. The midterm assessment was tough but fair.

The lecturers are very kind and helpful, you can tell they've taken time to prepare the module and want to help. The module has ran very smoothly and I like the hand written derivations Max does.

Teaching during the Covid Pandemic

- The UK moves into lockdown on 26th March 2020.

- The University switches to online teaching.

- Department changes teaching & assessment in response.

- Challenging time for students and staff.

- Social distancing requires teaching in small groups.

  - All staff have to take on extra teaching!

Tutorials for Online Teaching

- Max was asked to teach on the core modules

  - Year 1 Thermodynamics.

  - Year 3 Statistical Physics.

  What did the students say ? …..

What the students said …

Max Klein again is awesome his workshop lectures always start with a helpful sheet of notes from the week and he tackles each problem from the sheet (especially the harder problems).

He really explains the physics behind them and helps you to think about the problem in a different way to the way you may have thought before.

I think the module is delivered perfectly considered the COVID situation, hats off to Max Klein.

Postgraduates

Prof Max Klein and Dr Jan Kretzschmar, Berlin 2008.

Prof Max Klein and Dr Kevin Andre, Liverpool 2022.

A final word from one of Max's advisees.

Max acted as my academic advisor from first year through to third and was an incredible source of support the whole time, whilst also just being a great person to talk to.

During this time he helped support me through difficulties I faced both in and outside of physics, and also helped me gain a better understanding on several areas in particle physics and maths.

A huge congratulations to you on 50 years in particle physics, and thank you for everything you've done for me, the department and physics as a whole.