

Issues arising from presentations at Einstein-First Conference

(18-21 February 2020)

Thoughts and comments

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My experience includes:

- Physics degree
- Physics and science teacher in two countries
- Science curriculum officer
- School principal
- Senior education administrator
- School and program evaluation
- Leader/manager of several innovation projects, from school-based to national
- Researcher and university teacher in area of learning/teaching/assessment, including teachers' work and teacher learning
- Helping teachers, schools and other organisations to work more effectively

Issues

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1.

2.

3.

4.

5.

6.

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1. Comes later !
2. **Einsteinian Physics**

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2. **Einsteinian Physics FOR ALL**

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1. Comes later !
2. Einsteinian Physics FOR ALL
3. **Einstein-First inspiring new passion
and enthusiasm in teachers**

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1. Comes later !
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3. Einstein-First inspiring new passion and enthusiasm in teachers
4. **Focus on learning for UNDERSTANDING**

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1. Comes later !
2. Einsteinian Physics FOR ALL
3. Einstein-First inspiring new passion and enthusiasm in teachers
4. Focus on learning for understanding
5. **How to assess UNDERSTANDING of Einsteinian Physics**

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1. Comes later !
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3. Einstein-First inspiring new passion and enthusiasm in teachers
4. Focus on learning for understanding
5. How to assess understanding of Einsteinian Physics
6. **Valuing and respecting teachers and the other pressures on them**

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1. **So – what is number one?**
2. Einsteinian Physics FOR ALL
3. Einstein-First inspiring new passion and enthusiasm in teachers
4. Focus on learning for understanding
5. How to assess understanding of Einsteinian Physics
6. Valuing and respecting teachers and the other pressures on them

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1. **CHANGE MANAGEMENT**
2. Einsteinian Physics FOR ALL
3. Einstein-First inspiring new passion and enthusiasm in teachers
4. Focus on learning for understanding
5. How to assess understanding of Einsteinian Physics
6. Valuing and respecting teachers and the other pressures on them

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CHANGE MANAGEMENT

“The plan is to change education in the whole world” David Blair (2016) quoted by Magdalena Kersting (Day1)

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“Paradigmatic changes do not happen overnight” David Treagust (Day1)

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CHANGE MANAGEMENT

- Attending to all stakeholders, and others
- Different measures of success for different audiences
- Roles of and communication between partners and projects around the world
- Being aware and ready for possible opposition
- Quality of research so that it is convincing to many audiences
- Applying principles of 'learning for understanding' and 'assessing understanding' in research

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1. Change management
2. Einsteinian Physics FOR ALL
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4. Focus on learning for UNDERSTANDING
5. How to assess UNDERSTANDING of Einsteinian Physics
6. Valuing and respecting teachers and the other pressures on them