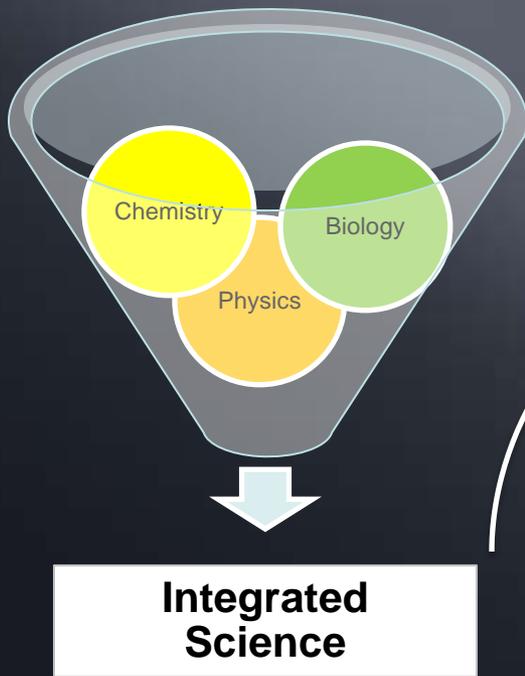


The Importance of Science Education as Global Challenge Answer: International Program on Science Education (IPSE) Curriculum Analysis

Arif Hidayat¹⁾, Rini Solihat¹⁾, Heli Siti HM ¹⁾, Diana Rochintaniawati¹⁾, Ari Widodo¹⁾

¹⁾International Program on Science Education (IPSE) - UPI

Introduction



Early Years
of Schooling

Problem: *Lack of teacher who have sufficient understanding of all science topics*

Problem: *science are taught as separate subjects*

Problem: *students have a little to develop a comprehensive understanding of science*

Effort to Solving those problem?

A **teacher education program** focus on *integrated science* is, therefore, **Urgently needed.**

Quality Education Study Community (2008) states that **key success of global society** is based on knowledge to create dynamic generator for economical improvement which is **started by strengthening education in science**

MoNE targeted that in the year of 2004 to 2009 there should be at least *one school that meet with an international standard school* in every single level of education located in every district

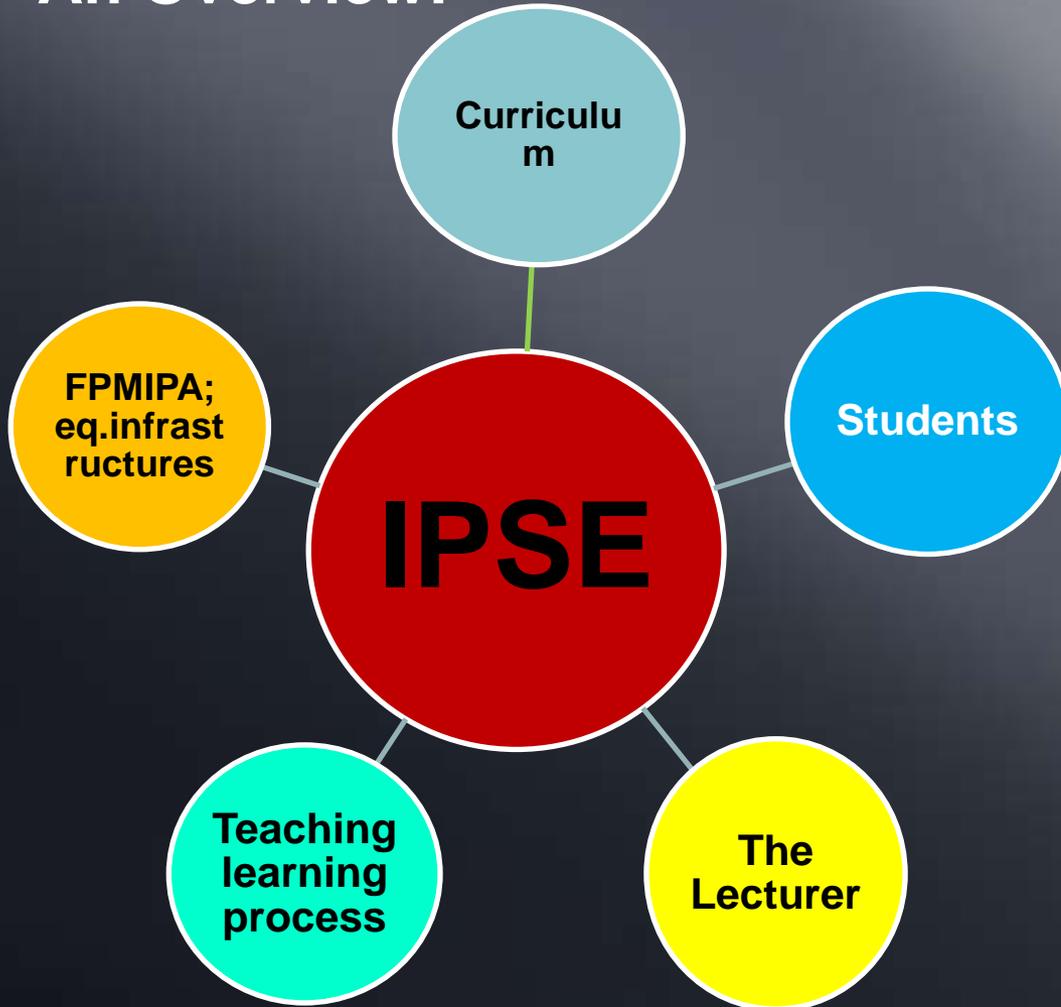
Ministry of Religious Affairs (MoRA) has also provided block grant to *Madrasah* for the similar purposes. In 2009 about *50 International School* has been established in West Java

Estimated that in West Java as many as **800 teachers** are needed to conduct science teaching in english

UPI has launched:

International Program for Science Education (IPSE)

An Overview:



Why
IPSE Curriculum ?

Curriculum ; Principal & Approach

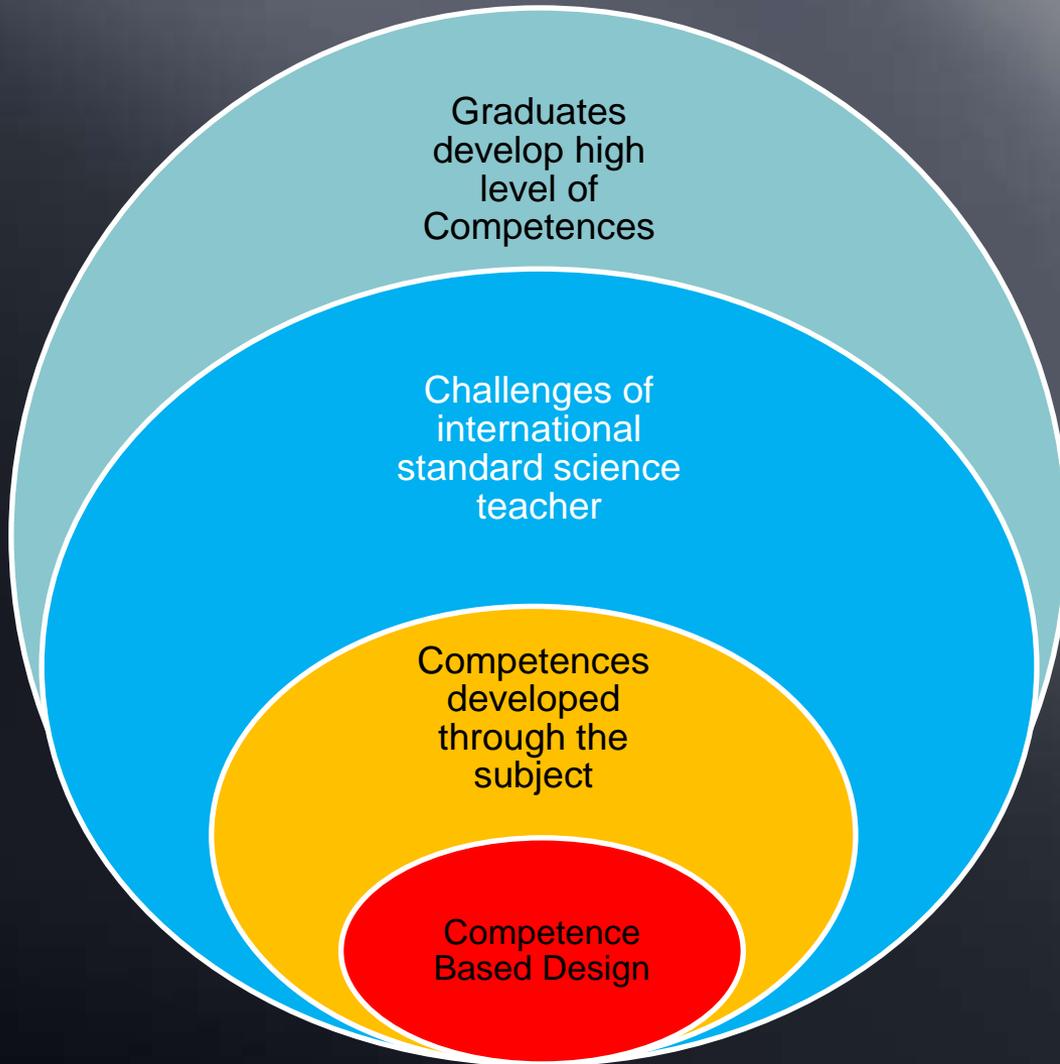
Target

Graduates
develop high
level of
Competences

Challenges of
international
standard science
teacher

Competences
developed
through the
subject

Competence
Based Design



The Curriculum structures a *balanced portion* between science education, physics, chemistry, biology, mathematics and ICT as followed:

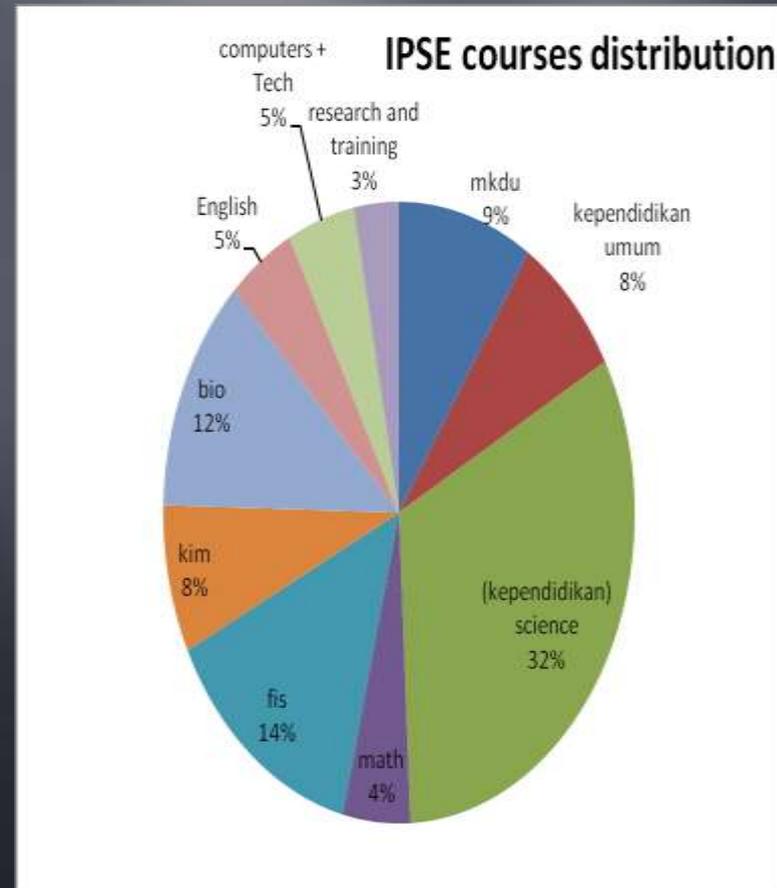
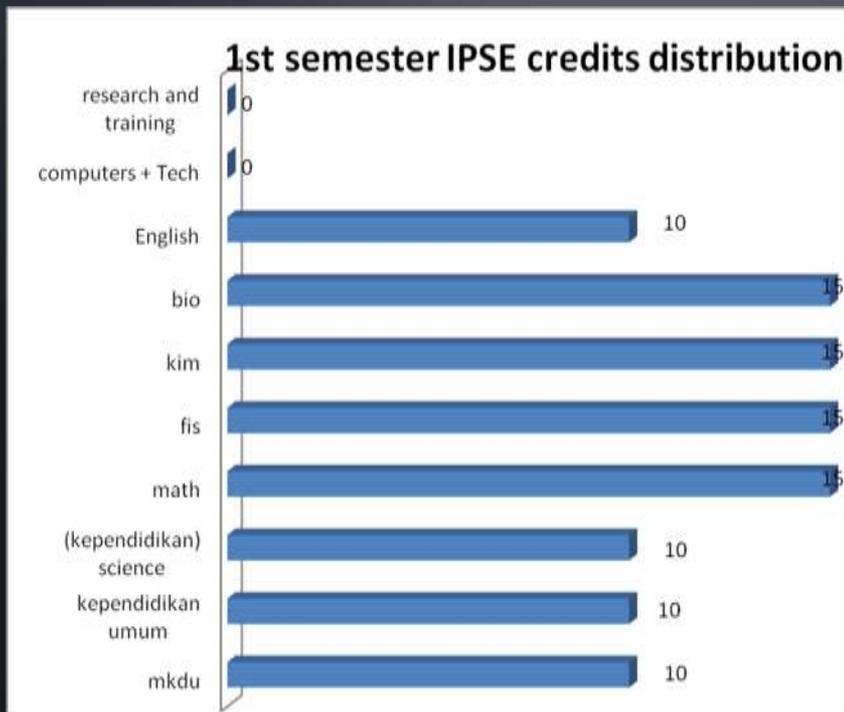


Figure 3. 1st semester IPSE credits distribution (as example)

Conclusion:

- IPSE curriculum analysis is hoped as other point of view that triggering TEIs (Teacher Education Institutions) to encourage themselves and to realize that science now is a more complex part of knowledge.

Thank You.....