



Asia-Pacific
Economic Cooperation



The 37th HRDWG-EDNET Meeting

Brief on Informatics and Data Science Education Reform for
Digital, Inclusive and Sustainable Society (InMside II)
(Japan, Malaysia, Thailand)

Agenda item: 6

Feb 2020, Malaysia

Advancing Free Trade
for Asia-Pacific **Prosperity**

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Objectives and relevance

Project Title

- **Informatics and Data Science Education Reform for Digital, Inclusive and Sustainable Society (InMside II)**

Objectives

- To build the capacity of curriculum developers to produce recommendations for their curricula reform, teacher training, with enlargement of the network.
- Focusing on junior high school.

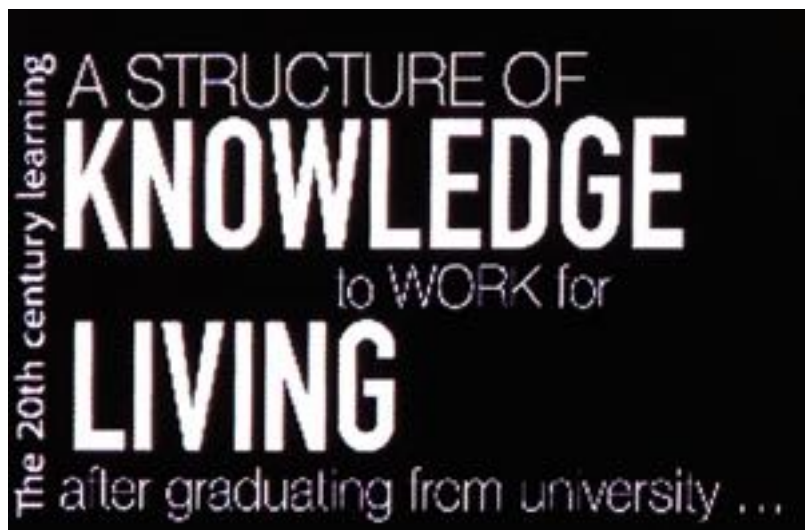
Relevance

- **Mission of HRDWG**
Develop 21th Century Knowledge and skills For All
- **Priorities of Malaysia**
 - 1) Inclusive Economic Participation through Digital Economy and Technology
 - 2) Driving Innovative Sustainability

Develop Humanity
without computer?

Develop Humanity

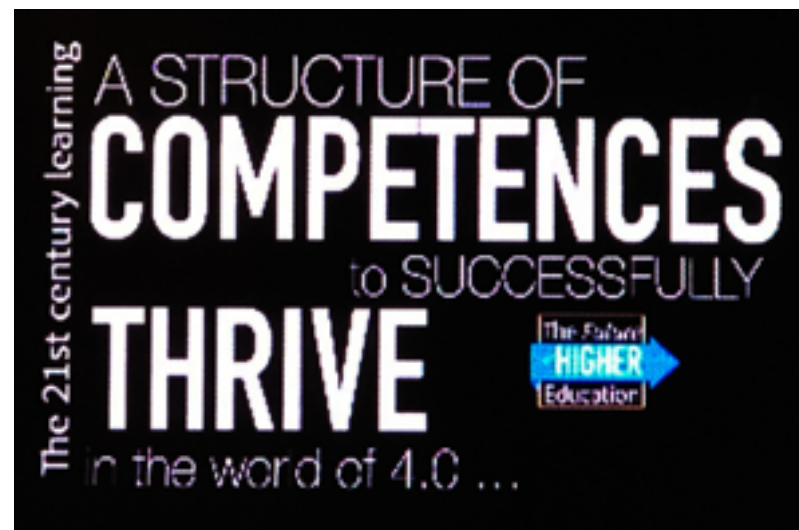
- Creativity
- Hospitality
- Management



Develop Digital
Competency with AI?

Develop Digital Competency

- Knowing what AI can and cannot



New issues for Junior high school:

- Robot
- Visible Programing
- Modeling
- Informal Statistical Inference

How many functions are these robots Performing?
How long do you think it took the candidates to have their
creepers to have these functions?



Colleen
Eddy, USA

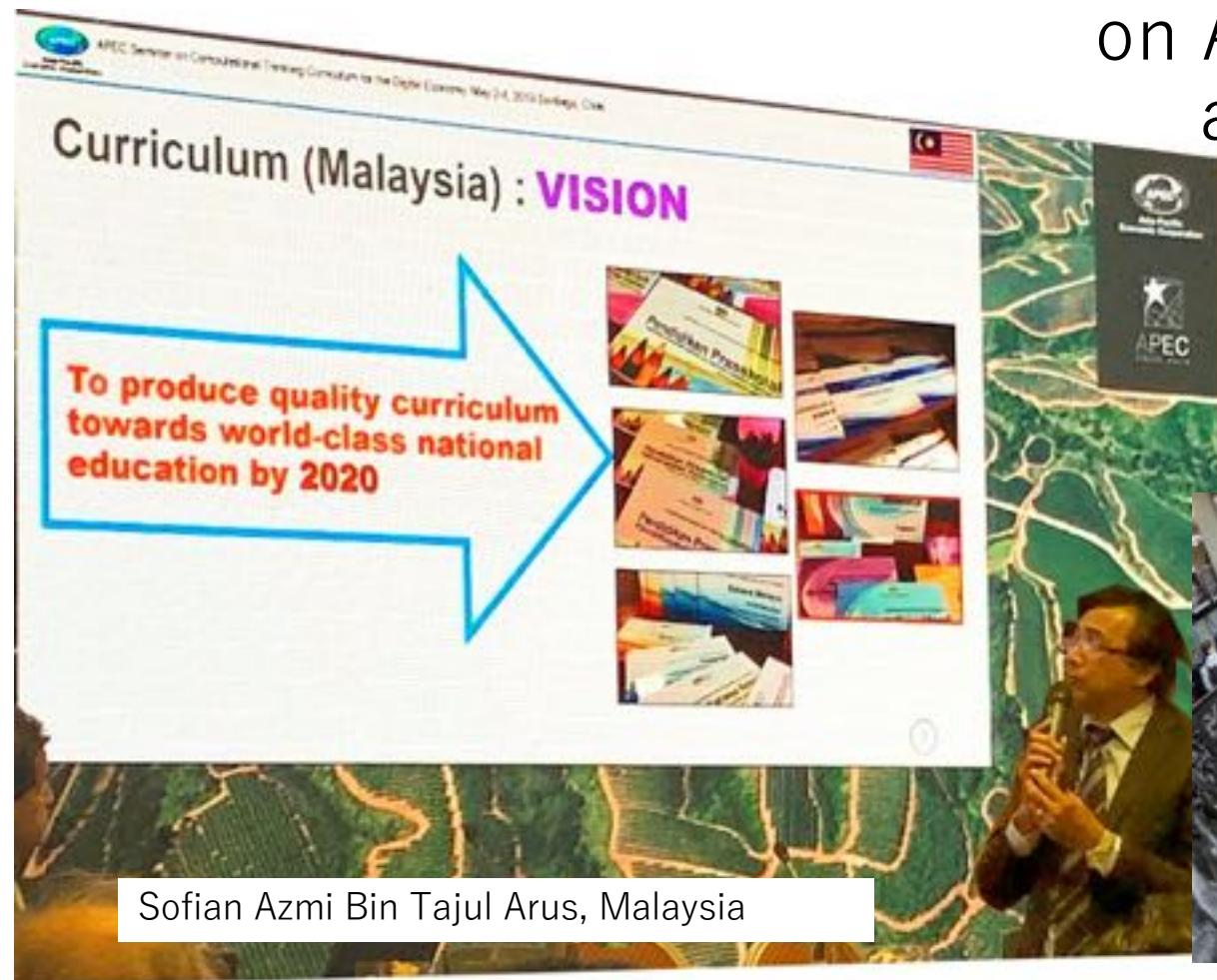


Roberto Araya,
Chile



Tan Hwee
Chiat Jun,
Singaporee

Curriculum specialists share the Vision for necessary competency on AI and Big Data Era at Junior Secondary School Level



Demands and Target

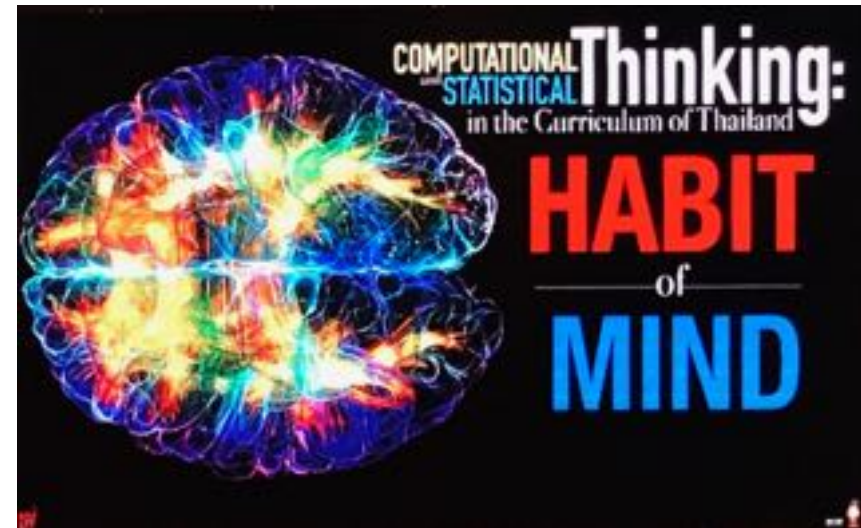


Demands of EDNET for 2030

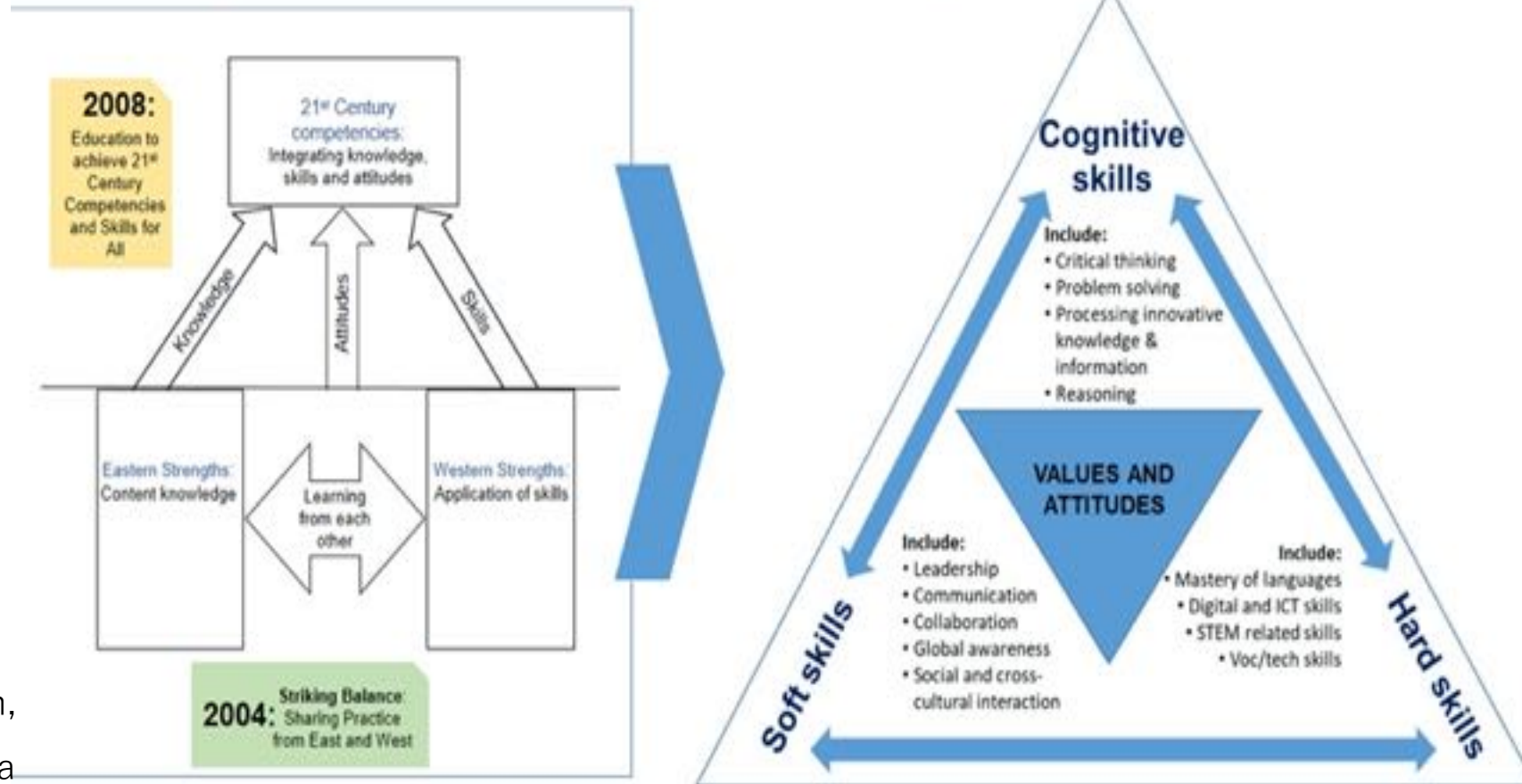
- Modernizing Education Systems
- Promotion of Science, Technology and Innovation in Education and pedagogical practice
- Development of 21st century competencies for work and entrepreneurship

Target of InMside (2019 (I): Senior Secondary,
2020 (II): Junior Secondary,
2021 (III): Primary)

- Training the curriculum specialists on Informatics and Statistics for their necessary curricula reforms on these demands.
- Developing Recommendation to APEC for their Curricula reforms
- Establishment of Curriculum Specialists Network



Revisiting APEC's 21st century skills and competencies framework



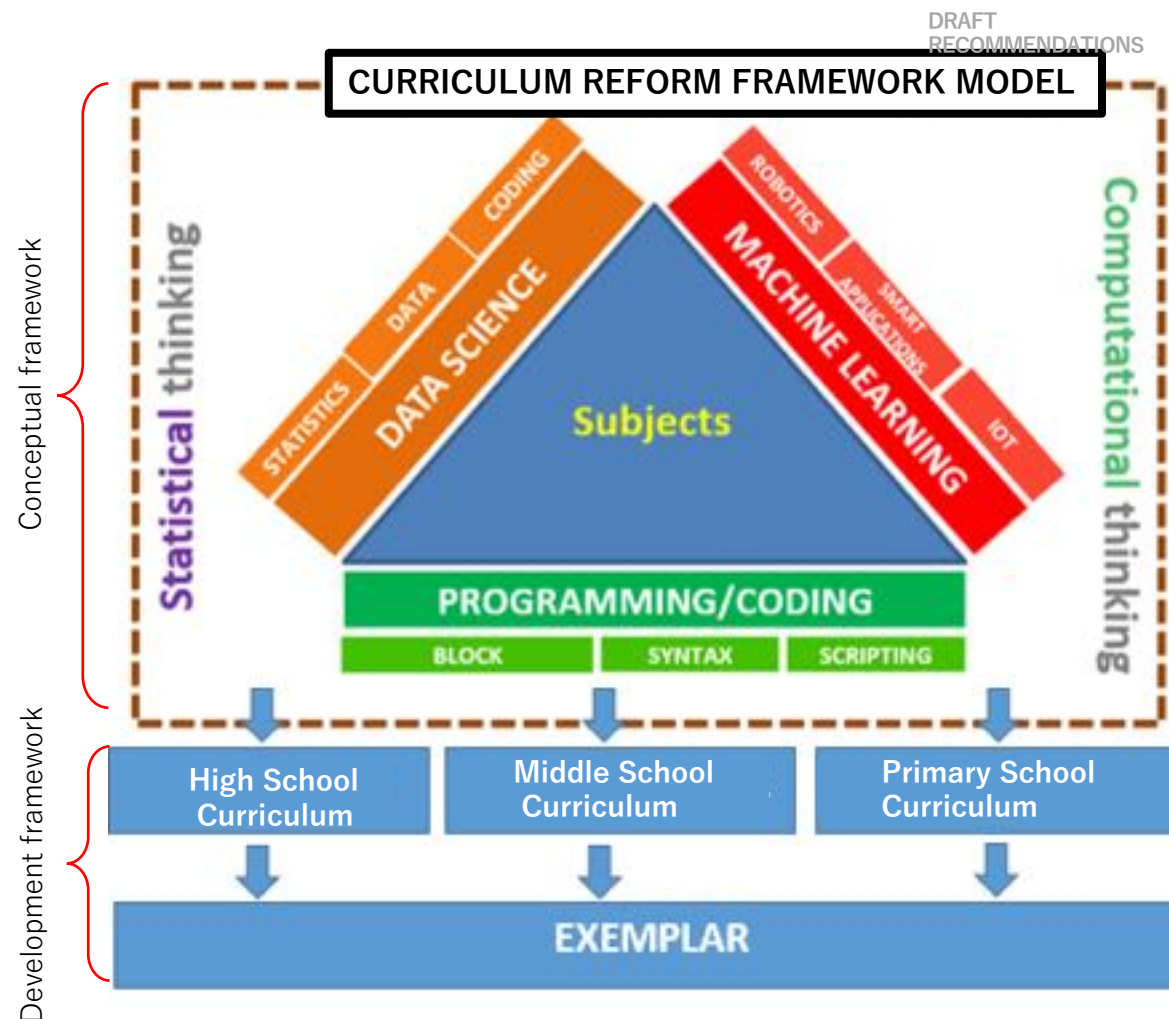
By Dr.
Habibah,
Malaysia

CURRICULUM REFORM FRAMEWORK

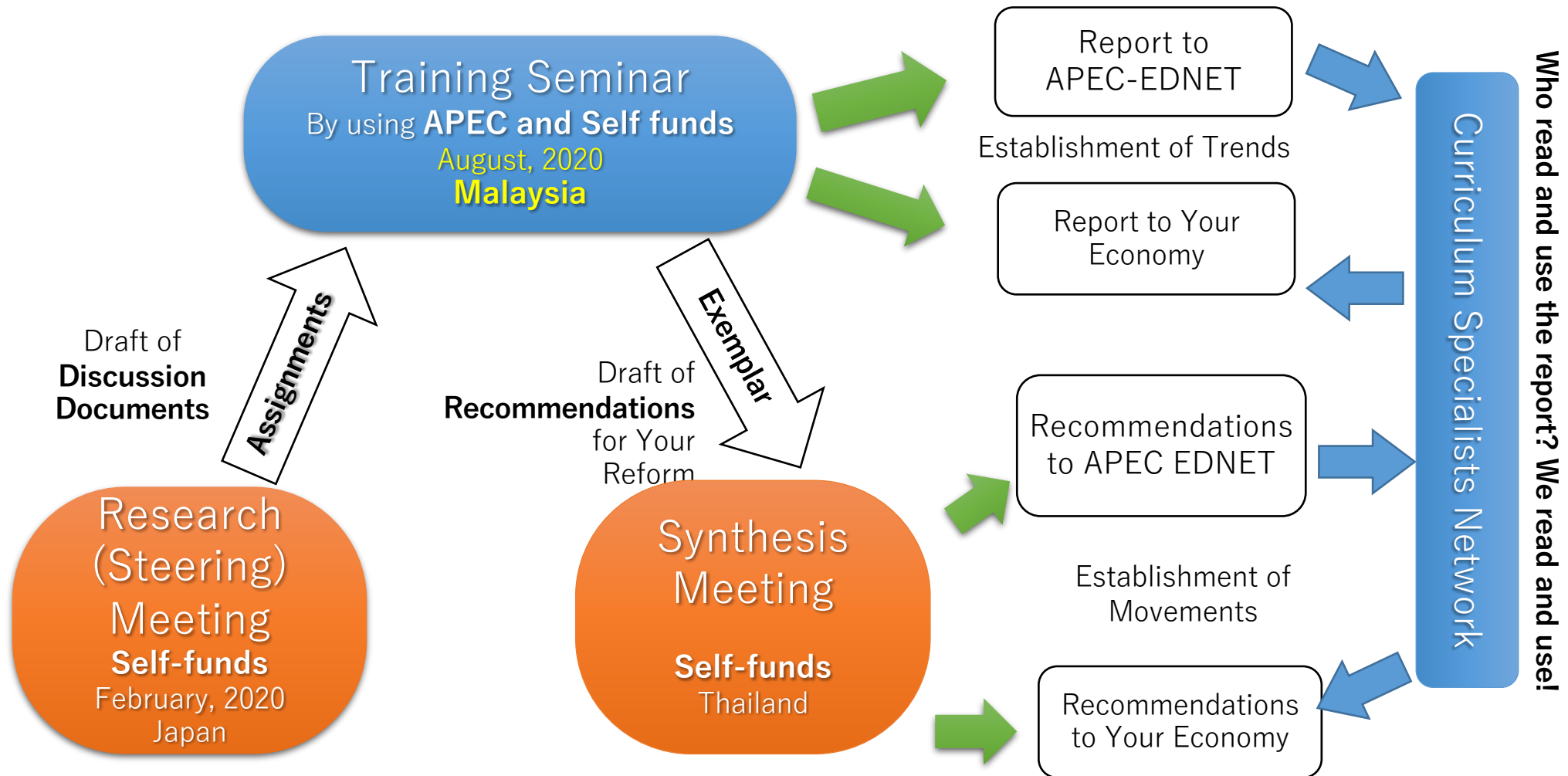
In order to materialized the new curriculum underlying the above said entities, a **Curriculum Reform Framework** model has to be established for the curriculum development process. This model will become the reference **implementation framework model** in carrying out the design process of curriculum formulation and implementation of the new curriculum proposed in each APEC member economies for high school, middle school and primary school respectively.

The propose curriculum reform framework is based on the following implementation framework model.

The framework is divided into two main layers which are the conceptual framework and development framework. The first layer is the conceptual framework which defines the important aspects to be addressed in the new curriculum based on the key elements underlined whether it becomes a subject-based curriculum, thematic, interdisciplinary or embedded across curricula. While it is also important for economies to decide on whether to adopt Standard-based Curriculum or Outcome-based Curriculum or Competency-based Curriculum.



Project Cycle (II)



Research (Steering) Meeting

Date: 11-12 February, 2020

Venue: Tokyo, Japan

Contents: Research the theoretical
frameworks for curriculum developers
on the issues and teacher training
modules for preparing the InMside II
Seminar in Malaysia

Training Seminar

Date: August, 2020 (to be confirmed and announced)

Venue: Malaysia

Contents: APEC economies' curriculum developers are invited to present the reform on informatics and Statistics curriculum for digital society. It includes keynotes and reports from economies, and plans their challenges for teacher training.

Synthesis Meeting

Date: November, 2020 (to be confirmed and announced)

Venue: Thailand

Contents: Elaborates the recommendations to APEC economies with models for teacher trainings, and enlarge the curriculum developers' network.

Thank you
very much!

