**Ministry of Education**
Pedagogic Secretariat
Science Division

# From discipline based curriculum to competencies based curriculum and big ideas

Gilmor Keshet, PhD, Director of Science Division, MOE


# Science and Technology

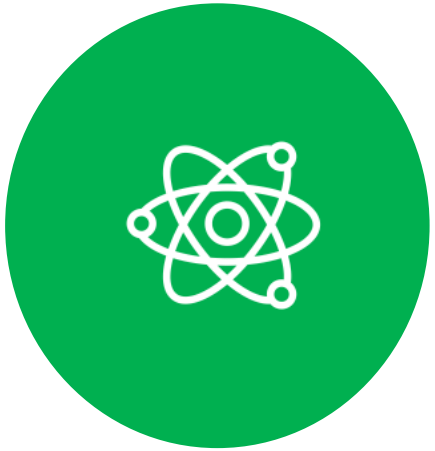
# Facilitating STEM education

## Pre-service Teacher training

New programs in Education Colleges submitted to the council for higher education that include engineering and technolgy

## In-service teacher PD

Professional development in physics for biologists and technology, engineering and Maker/FabLab



## Science and Engineering Fairs

In the school, municipality, district and national level

Learning in Science Museums in collaboration with Ministry of Science and Technology

## Learning materials

Teaching, learning and assessment

# Equal opportunities and representation


Science and engineering national fair

# The Future Graduate

## Knowledge - Competencies - Values

Core STEM competencies

# STEM competencies in “The future graduate” policy

Mathematical And Scientific literacy

Critical thinking

Digital literacy

Creative thinking

Social awareness

Self regulation

# Integrative STEM approach

## Interdisciplinary

and disciplinary knowledge

## Competencies

Core STEM competencies

## Problem based learning

Real world problems

## Ecosystem

Real world context supported by an ecosystem

## Digital learning

Tasks enhanced, modified or even redefined by digital tools.

## Equity

Equal opportunities and fair representation

Science capital and identity

Principles


# אגף א' למדעים

המזכירות הפדגוגית משרד החינוך