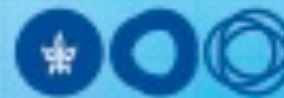




מל"מ
המרכז הישראלי לחינוך מדעי וטכנולוגי
ע"ש עמוס דה-שליט



משרד החינוך
המזכירות הפדגוגית
אנף א למדעים



תל אביב
UNIVERSITY תל אביב

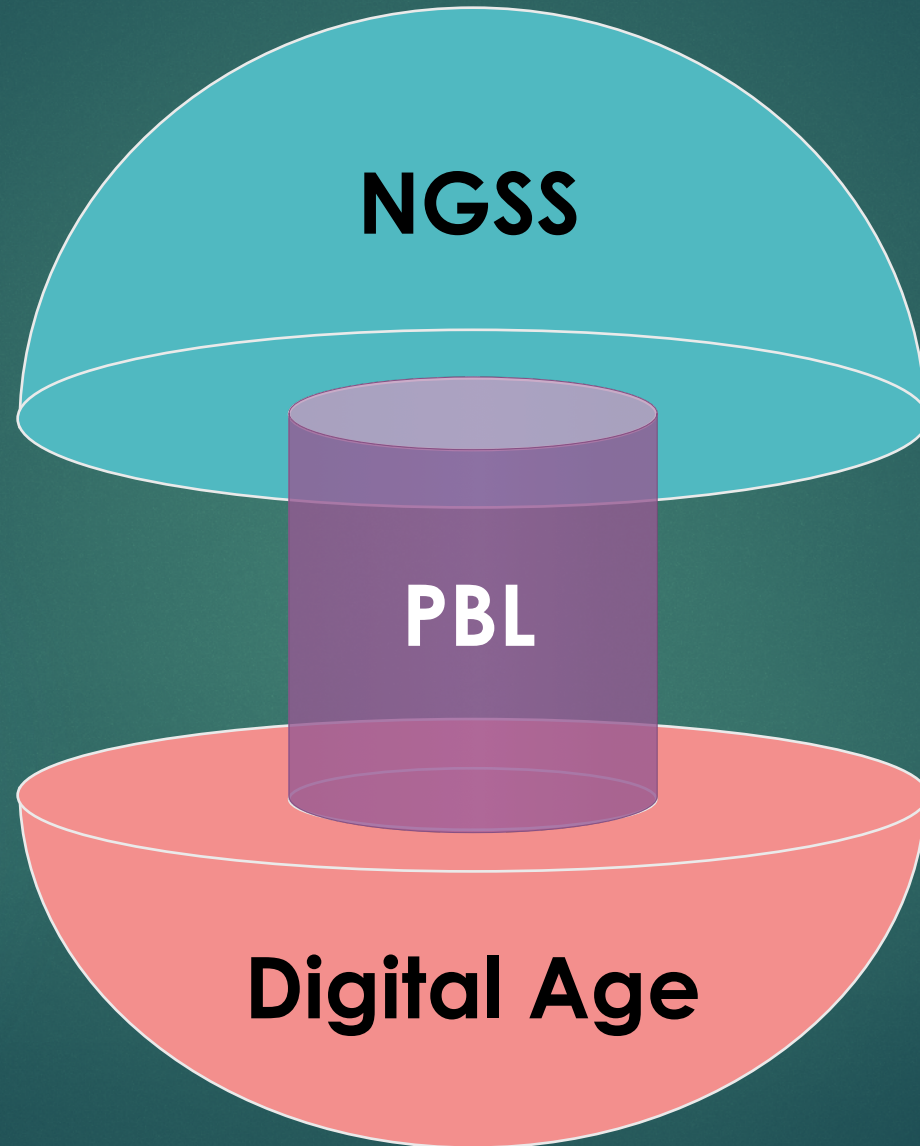
בית הספר לחינוך
המרכז לחינוך מדעי וטכנולוגי

PBL in Digital Age

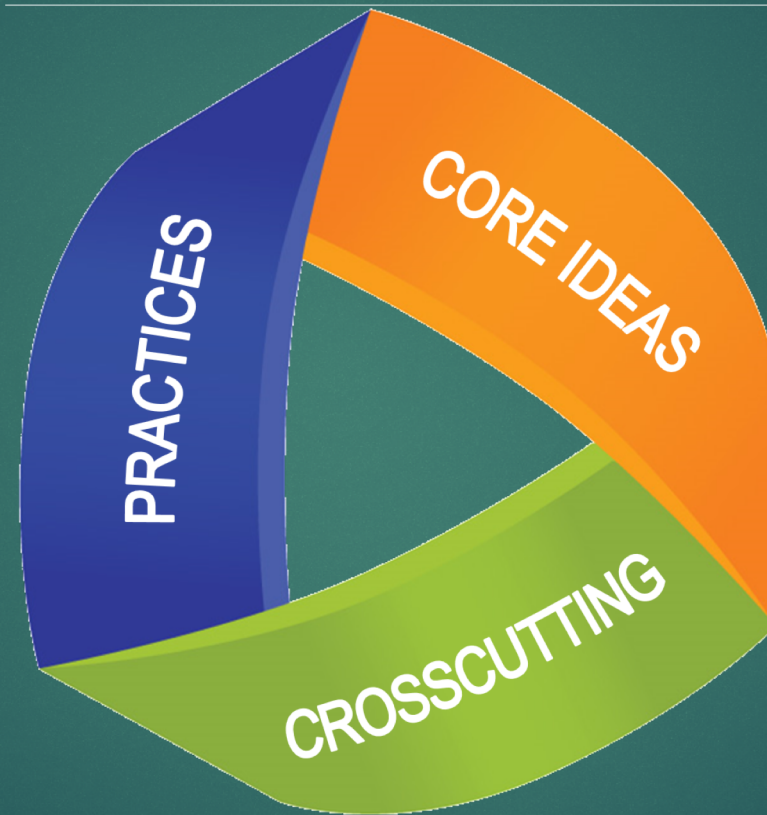
ILYA LEVIN

25.03.2018

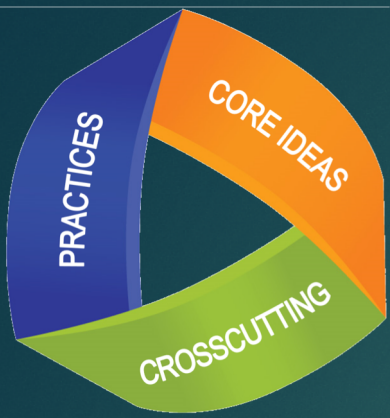
THE MAIN IDEA: PBL STANDARDS IN DIGITAL AGE



THE NEXT GENERATION SCIENCE STANDARDS (NGSS)



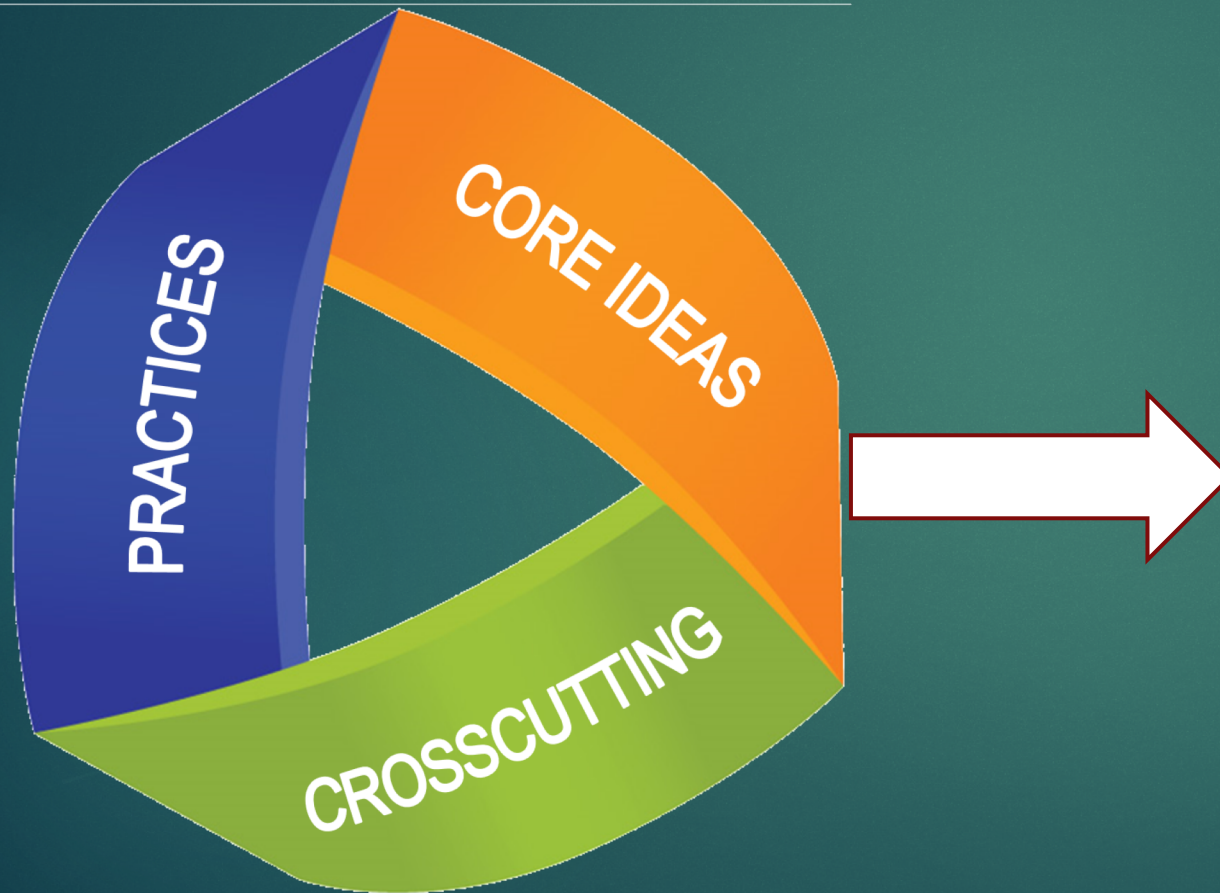
Three-dimensional learning



NGSS SCIENTIFIC PRACTICES

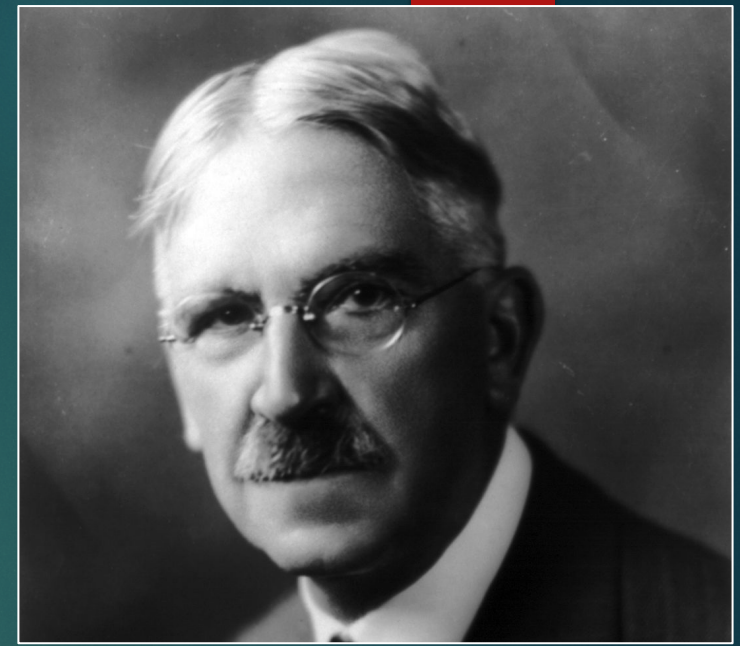
- 1 Asking questions and identifying problems**
- 2 Developing and using models**
- 3 Planning and carrying out investigations**
- 4 Analyzing and interpreting data**
- 5 Using mathematics and computational thinking**
- 6 Constructing explanations and designing solutions**
- 7 Engaging in argument from evidence**
- 8 Obtaining, evaluating, and communicating information**

PBL AS THREE-DIMENSIONAL LEARNING





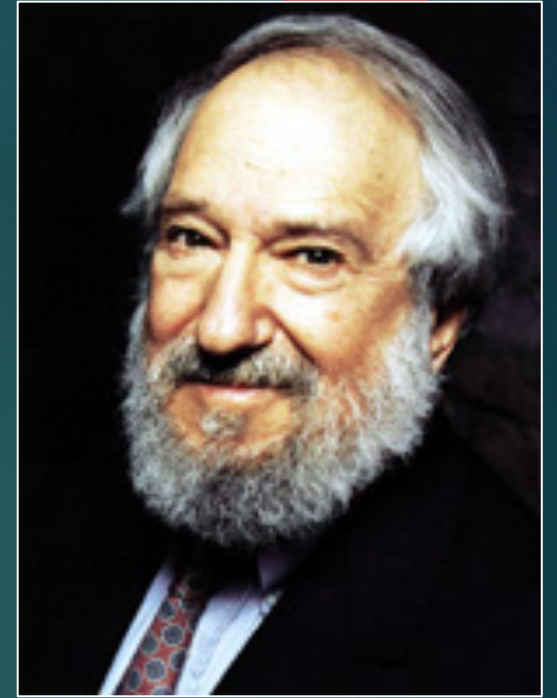
*“We only think when we
are confronted with
problems.”*
- John Dewey



In digital age:
Asking and investigating real-world questions
QUESTIONING BECOME MORE
POWERFUL THAN ANSWERING



*“The best learning
takes place when
the learner takes
charge”*
- Seymour Papert



In digital age
CODING BECOMES THE MOST POWERFUL
MEDIUM OF DEVELOPING THINKING. STUDENTS
INVESTIGATE IN OPEN ENVIRONMENTS



"By giving our students practice in talking with others, we give them frames for thinking on their own."
- Lev Vygotsky



In digital age:
Students and teachers are
interconnected. They collaborate to find
solutions and make sense of the data