

### Collaborative Problem Solving in Multi-Level Classes

Preparing Our Students for the 21<sup>st</sup> Century Workforce

#### www.floridaipdae.org

This training event is supported with federal funds as appropriated to the Florida Department of Education, Division of Career and Adult Education for the provision of state leadership professional development activities.



Welcome & Introduction

Presenters:

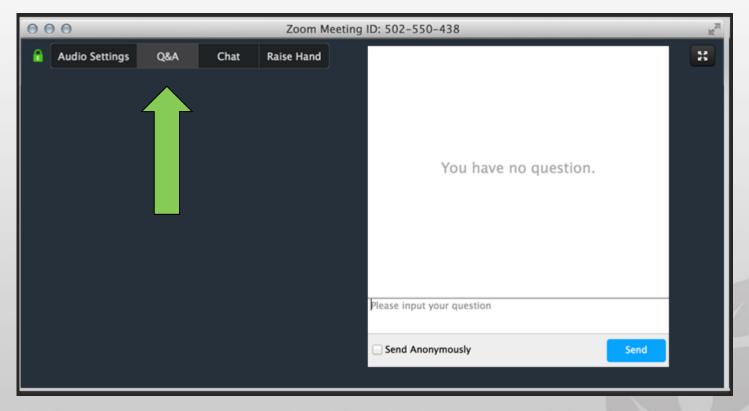
#### Jenna Moniz Pre-College Academic Studies

**Regina Turner** Co-presenter



#### Webinar Things to Remember

If you have a question, please type it into the Q&A option.



- Attendee microphones will be muted. You will be in listen only mode.
- Today's presentation is being recorded. It will be archived and available on the IPDAE website within 48 hours.



21st Century skills comprise skills, abilities, and learning dispositions that have been identified as being required for success in 21st Century society and workplaces by:

- Educators
- Business Leaders
- Academics
- Governmental agencies

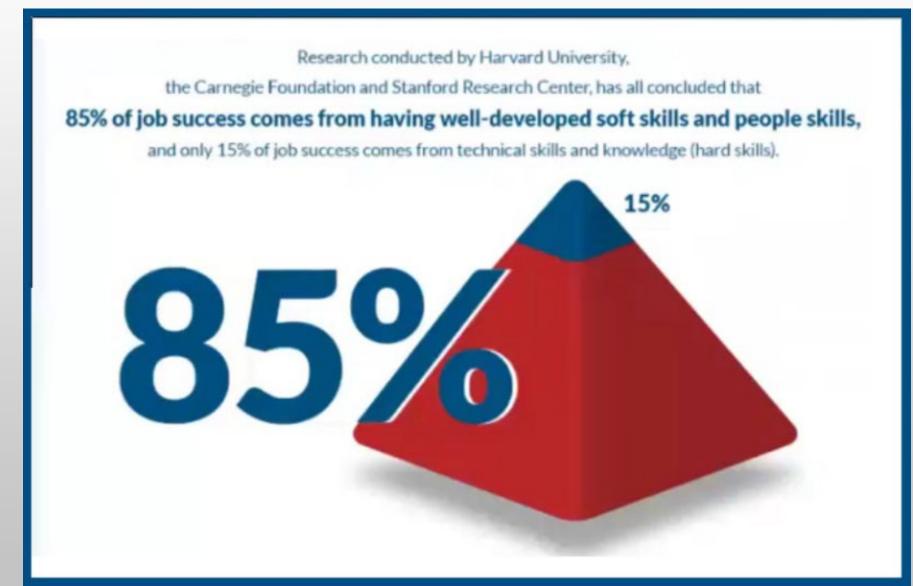




## The curriculum for the 21st Century student should consist of a systematic process by which the student develops both **hard skills** and **soft skills**.



#### 21<sup>st</sup> Century Learning Skills





Hard Skills vs Soft Skills

#### HARD SKILLS VS. SOFT SKILLS





#### Intelligence quotient vs Emotional quotient



An intelligence quotient (IQ) is a score derived from one of several standardized tests designed to assess intelligence and cognitive abilities. **"Hard Skills"** 



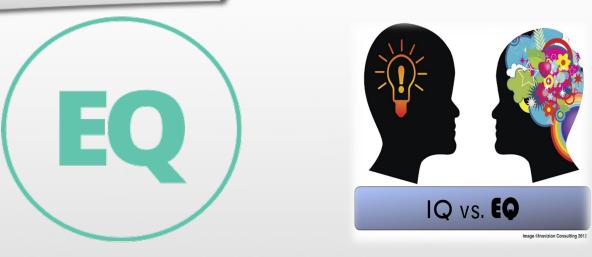
# Computer, Reading and Math Typing Speed Foreign languages Data Analysis Software Programming Certificates or Diploma First Aid

- Operating Machinery
  - Accounting
    - Graphic Design





#### Intelligence quotient vs Emotional Quotient



The capacity to be aware of, control, and express one's emotions, and to handle interpersonal relationships judiciously and empathetically. "emotional intelligence is the key to both personal and professional success" "Soft Skills"



#### Soft Skills that cannot be measured



#### - Patience

- Communicating Difficult Concepts
  - Work Ethic
    - Conflict Resolution
      - Teamwork
        - Flexibility
          - Empathy
            - Negotiation
              - Managing Stress





#### Workplace Skills

# Top 10 Skills and Attributes Employers Will Be Seeking in 2020



### Top 10 Workplace skills

2020

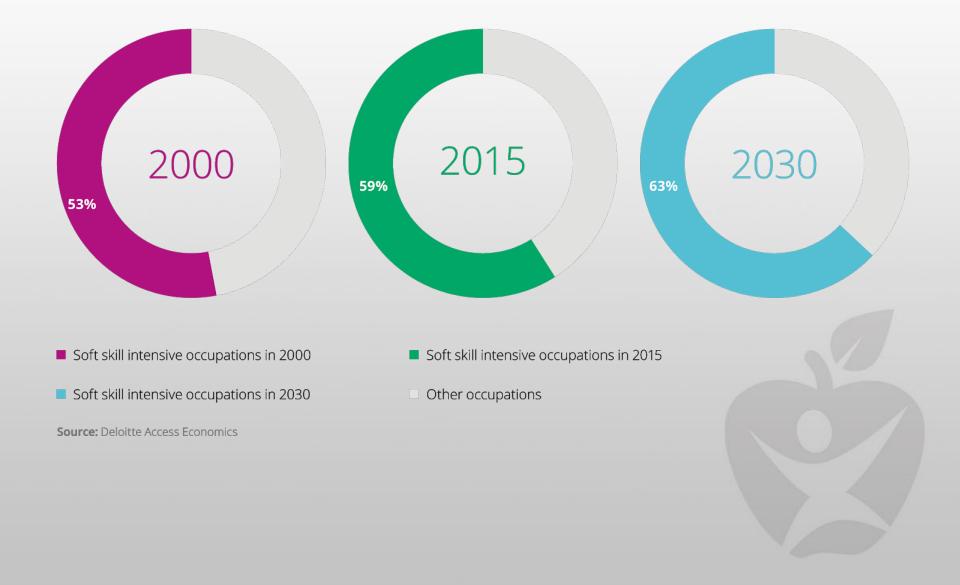
- 1. Complex Problem Solving
- 2. Critical Thinking
- 3. Creativity
- 4. People Management
- 5. Coordinating with Others
- 6. Emotional Intelligence
- 7. Judgement and Decision Making
- 8. Service Orientation
- 9. Negotiation
- 10. Cognitive Flexibility

#### 2015

- 1. Complex Problem Solving
- 2. Coordinating with Others
- 3. People Management
- 4. Critical Thinking
- 5. Negotiation
- 6. Quality Control
- 7. Service Orientation
- 8. Judgment and Decision Making
- 9. Active Listening
- 10. Creativity



#### Soft Skills Job Statistics Projections







# Why soft skills are so important?







#### Soft Skills

Balanced performance & decision making

EQ

Self awareness Motivation Self management Social skills Empathy

# IQ predicts **1-20%** of success in a job.

# EQ predicts **27-45%** of success in a job.



Soft Skills

# Soft skills take some time to develop, but are vital in ensuring that one is an absolute professional in the workplace which truly sets oneself apart from others.





# Hard skills get you the job, Soft skills push you to the top.





#### The 20<sup>th</sup> Century Skills Learning Model



Working together to reach a goal - putting talent, expertise, and smarts to work.

#### Communication

Sharing thoughts, questions, ideas, and solutions

#### Creativity

Trying new approaches to get things done equals innovation & invention

#### Critical Thinking

Looking at problems in a new way. linking learning across subjects & disciplines



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#### The 20<sup>th</sup> Century Skills Learning Model





20<sup>th</sup> Century Learning Model

## The 4 C's of the 21st Century Skills model are included in the top 5 workplace skills that will be sought most by employers in 2020



# Using Project Based Learning (PBL) as a method of teaching the 4 C's.







## What is PBL

- Project Based Learning (PBL) is more than just a teaching method.
- It's a revitalization of education for students so that they can develop intellectually and emotionally.
- By using real-world scenarios, challenges, and problems, students gain useful knowledge and skills that increase during their designated project periods.
- The project's proposed question drives students to make their own decisions, perform their own research, and review their own and fellow students' process/projects.



**The PBL Model** 



The role of the teacher/facilitator is to teach students key knowledge and understanding derived from standards.



#### The PBL Model



Students, however, have a voice and a choice of what and how they learn the information. As a result, learning is more engaging, challenging and meaningful.



#### The Scientific Method was applied to investigate the effect of air and water pollution and the health of living things.





### CCR Science Standards Assessed:

- I. Identify and refine Hypothesis for scientific investigations
- II. Identify and interpret Independent and Dependent Variables.
- III. Evaluate whether a Conclusion is supported or challenged by a particular Data or Evidence.
- IV. Express Scientific information on findings visually



The following Cross Curricular Standards from RLA, Social Studies and Math were also assessed.

- <u>CCR RLA : R.8.3</u> Evaluate the relevance and sufficiency of evidence offered in support of a claim.
- <u>CCR SS : SSP.3.c</u> Analyze cause and effect relationships and multiple causation, including source, corroborating or challenging conclusions with evidence.
- <u>CCR Math: Q.6.a</u> Represent, display, and interpret categorical data in bar graphs or circle graphs.



The process – Collaborating, Critical Thinking and Creativity





#### Communicating their results among peers











# SOFT SKILLS:

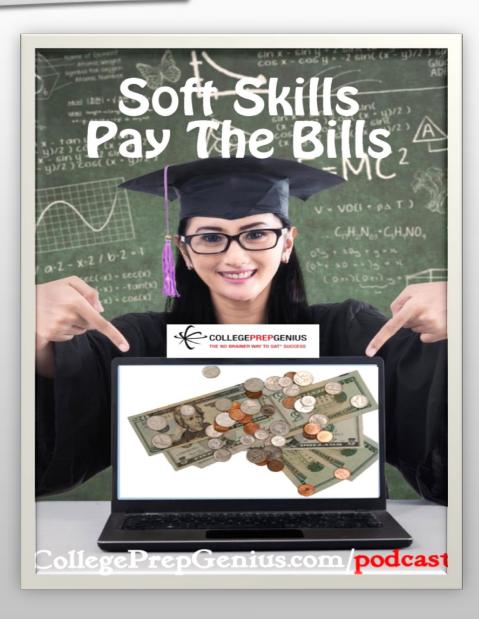
# A TICKET TO EMPLOYABILITY!





# Make sure you show off your soft skills right!













#### Questions & Anwsers



Feedback



# We Want Your Feedback!

Please respond to the displayed questions.



Thank You!



# Thank You For Attending!

