

WELCOME

Illinois STEM Elementary Resources



Agenda

- Purpose of today's webinar
- Introduction to ITEEA
- Presentation of STEM Resources
- Next Steps
- Questions



Purpose

- Learn about free STEM opportunities for elementary schools in FY21
- Develop an understanding of career and educational experiences by exposing students to Integrative STEM
- Partnership with the International Technology and Engineering Educators Association (ITEEA)



Introduction to ITEEA

ITEEA is a professional organization for the advancement of teaching Integrative STEM through innovation, design, and engineering.

Its mission is to promote K-12 technological and engineering literacy for all by supporting those who teach these subjects and the professionalism of those engaged in these pursuits.



Introduction to ITEEA

• On the webinar with us is ITEEA's Executive Director, Steve Barbato to go over the resources available to all Illinois Elementary teachers and how to access them.



ITEEA STEM Center for Teaching and Learning™ (CTL™)

Integrative STEM Education







What is Engineering byDesign™ (EbD™)?

"The Engineering byDesign[™] Program is built on the belief that the ingenuity of children is untapped, unrealized potential that, when properly motivated, will lead to the next generation of technologists, innovators, designers, and engineers."

ITEEA's STEM Center for Teaching and Learning[™] (CTL[™]) has developed the only standards-based national model for Grades PreK-12 that delivers technological literacy in a STEM context.

The model, Engineering byDesign[™], is built on the Common Core State Standards (High School and Middle School), *Next Generation Science Standards* (K-12), *Standards for Technological and Engineering Literacy* (*STEL* – ITEEA), *Principles and Standards for School Mathematics* (NCTM), and Project 2016 – Benchmarks for Science Literacy (AAAS). The PreK-12 program has been mapped to the Grand Challenges for Engineering.

K-12 Standards-Based The CORE							
PreK-2		EbD-TEEMS NxtGeN™	1-6 weeks				
3-6		EbD-TEEMS NxtGeN [™] (5th/6th grade capstone)	1-6 weeks				
6		Exploring Technology	18 weeks				
7		Invention and Innovation	18 weeks				
8		Technological Systems	18 weeks				
8-9		EfA Extension Units: Vertical Farms: Fresh Food for Cities Water: The World in Crisis	4-7 weeks per unit				
9		Foundations of Technology	36 weeks				
10-12	S	Technology and Society	36 weeks				
10-12	loice	Technological Design	36 weeks				
11-12	HS Choices	Advanced Design Applications	36 weeks				
11-12	±	Advanced Technical Applications	36 weeks				
11-12		Engineering Design (Capstone)	36 weeks				



EbD-TEEMS™

- Technology, Engineering, Environment, Mathematics, and Science
- PreK-6
- 20 Lessons in each grade band
 - From 20 minutes to 3 hours
 - Should be integrated into other courses for the integrated STEM experience
- Course length: 6-8 weeks



PreK	Our Living World						
К	A Home for All Seasons						
Grade 1	Can You Hear Me?						
Grade 2	From Nature To Me						
Grade 3	Natural Hazards	Integration and					
Grade 4	The Power of Solar	Articulation					
Grade 5	Our Water, Our World						
Grade 6	Our World and Me						



EbD-BUZZ[™] (LMS)

- Illinois is a EbD[™] Consortium State
 - Teachers have unlimited access to the Standard Edition (downloadable), without pre and post tests
- Schools may purchase EbD-BUZZ[™] access
 - Pre and post tests
 - Data analytics
 - Up to five teachers per building (more for additional fee)
 - Easily customizable
 - EbD-BUZZ [™] tech support (EbD-BUZZ [™] Support)
 - Complete a Consortium State Network Agreement



To Access EbD™ Curricula in Illinois...

https://www.iteea.org/Community/STEM_by_State/Illinois.aspx



ITEEA Includes two Downloadable Journal Subscriptions as Part of Your Membership.





Technology and Engineering Teacher Journal Link

The Elementary STEM Journal Link





• The Elementary STEM Journal

VOLUME 24

STEM FOR ALL!

Learning Opportunities: Inclusive

THE ELEMENTARY

- Feature articles with classroom tested ideas
- Books to Briefs section that connects literature with design briefs for classroom use
- Activities for use in Elementary STEM classrooms
- Teacher Features that highlight award winning elementary STEM educators
- Special features on differentiation, at-home learning, career connections, and more!



Elementary STEM Council Resources

- <u>STEMinars</u> focused on elementary STEM Topics
- <u>Awards</u> for achievements in Elementary STEM Education
- <u>Annual Grand Design Challenge</u>
 <u>Competition</u>
- Active social media network through Facebook

The Top 10 Ways To Incorporate STEM in Your Elementary School



Contact: Thomas Roberts, Ph.D. <u>thomasroberts85@gmail.com</u> Virginia R. Jones, Ph.D. DTE, <u>vjones@patrickhenry.edu</u>



Complimentary Membership Option to the ITEEA Elementary STEM Council



The Elementary STEM Council (ESC) promotes

technology and engineering education in the elementary school by supporting teachers with instructional materials and inservice monographs, workshops, and technology activity curriculum packages. If you would like to opt-in to this council, at no charge, simply add your name and email to this form. Click link below:

Complimentary ITEEA Elementary STEM Council "Opt-In" Form

IL Group Elementary Membership - ESC Opt In

In addition to your Elementary membership, ITEEA is offering a complimentary membership to the Elementary STEM Council (ESC), which promotes technology education in the elementary school by supporting teachers with instructional materials and inservice monographs, workshops and technology activity curriculum packages. If you would like to opt-in to this council, at no charge, simply add your name and email to this form:

Full Name				
Your answ	er			
Email Add	lress associa	ted with your I	ITEEA Account	
	er			
Your answ				

https://forms.gle/ZzXLdEvBBsgs3bEv7





EfE Director Registration Process

To activate, please supply ITEEA with the names of teachers to be enrolled in the State of Illinois membership.

<u>Download this spreadsheet</u> from Dropbox and complete the designated columns with teachers' information for each school. Any column with an asterisk (*) is **required**.

	А	В	С	D	E	F	G	Н	1	J	К	L
1	First Name*	Last Name*	Job Title	Grade*	School Name*	School District*	School Street 1	School Street 2	School City	School State ⁴	School Phone	Teacher Email*
2	John	Smith	Teacher	2	Smith Elementary School	Smith District	123 Smith Street		Smith	IL	(123)-456-7890	john.smith@smith.edu
3												
4												
5												
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After completing your spreadsheet. Follow this link to securely upload the teachers' information to ITEEA's membership server for account creation.

Allow 1-2 business days, after which all teachers (including yourself) will receive an email from <u>membership.sales@iteea.org</u> with login instructions and how to navigate the ITEEA website and its resources.

> ITEEA Membership Welcome to Your ITEEA Elementary Members... Wed 7/1 Dear Joe,







If an individual school wishes to sign up separately, instead of through its EFE, they may use the same process, using the same links provided previously.

An elementary teacher can receive their membership through their district or through their school but will not be duplicated if added twice.





Teacher Email Confirming Membership

Dear <Teacher Name>,

Congratulations on taking advantage of your ITEEA Elementary Group Membership provided by the Illinois State Board of Education! To log in and begin enjoying your membership, please go to <u>www.iteea.org</u> and use the following credentials:

Username: <Teacher Username>

Password: <Teacher Password>

Your Member ID: <Teacher Contact #>

Here are just a few of the things that you now have full access to:

- A complimentary electronic subscription (eight issues) to <u>Technology and Engineering Teacher</u> (<u>TET</u>), ITEEA's flagship publication.
- A complimentary electronic subscription (four issues) to <u>The Elementary STEM Journal (ESJ)</u>, ITEEA's award-winning and theme based journal for K-6 classroom teachers.
- Discounted <u>ITEEA conference</u> registration.
- Eligibility for Individual and program/school recognition.
- Eligibility for <u>awards and scholarships</u>.
- Insurance programs offered at discounted rates (ITEEA is a member of the Trust for Insuring Educators – TIE).
- ITEEA publications, product, and <u>Engineering byDesign</u>[™] course and unit discounts.
- Free job posting on ITEEA's Career Connections page

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If you have any technical questions or questions about your membership please reach out to us at iteea@iteea.org, we're here to help!

Welcome to ITEEA!



EFEs or School Admins will be able to add, delete, and edit the teachers under their group after the initial roster upload by signing into their ITEEA account and going here.

Manage Selected Company's Contacts

Add New Contact

Name	Email	
de la Paz, Kathleen (Katie) - Editor-in-Chief	kdelapaz@iteea.org	
Ejiba, Rose - Administrative/Accounting Assistant	rejiba@iteea.org	
Fleming, Joe - Website/IT	jfleming@iteea.org	
Hart, Nancye - Assistant Director, ITEEA STEM CTL™	nhart@iteea.org	
Novitski, Ryan	ryan.novitski@pgcps.org	



Questions

• Contact information:

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Steven Barbato

ITEEA Executive Director/CEO ITEEA@ITEEA.ORG 703-860-2100