President's Message

By Dennis Crowe, Technology Director, Gorham School Department

When I was asked to consider running for the ACTEM presidency, I hadn't recognized the need to write a regular article for the newsletter. I spent more time in high school English class worried about what my next one-liner would be than actually trying to pay attention in class! I have never considered myself a writer, so having to write a piece for the newsletters will be a chore, but we all do what we need to do. Three years as president, four newsletters a year. If my math is correct, and I have more chance of my math being correct then my verb tense agreement, that is 12 articles. Let's get started on number one.

Over the years, I've been very fortunate to attend many ISTE conferences and on many occasions, I have participated in the ISTE

Changing of the Guard: *New ACTEM Officers*

At the May 9th business meeting Dennis Crowe, Technology Director of the Gorham School Department became the seventh President of ACTEM. Dennis was a longtime middle school teacher and Technology Director in MSAD 6 for 22-years before moving to Gorham Schools in 2008. He also is a past president of NEISTE and has been an active in ACTEM for many years. Dennis brings a wealth of experience, leadership and also

> **DENNIS CROW ACTEM PRESIDENT**
>
> ACTEM is truly a strong and distinctive organization. I just hope your choice for president doesn't mess that up!

humor *(see president's message)* to the ACTEM board.

New to the ACTEM board this year is William Backman, Technology Director of AOS 92 (Waterville, Winslow & Vassalboro). Will was elected as the new ACTEM Vice President at the May 9th meeting. Will started at AOS 92 in 2007 and previous to that was the technology and systems person for Coastal Enterprises, Inc here in Maine. Will has a Bachelor's Degree from Haverford College in PA, and a Master of Education from Thomas College.

He is also an adjunct lecturer for the University of Maine Augusta

> **WILL BACKMAN, ACTEM VICE PRESIDENT**
>
> ACTEM was such a helpful and positive influence for me when I joined the K-12 community that I'm very happy to be given the opportunity to give back to ACTEM as the VP.

SURF'S UP!

Actem Business Meetings
All Members Welcome!

September 19th 2016
December 12th 2016
March 13, 2017
May 8, 2017

We meet from 9 - noon Mondays in Room 103A/B, 1st Floor, Cross Office Building, Augusta. Remote sites are generally available for these meetings. Check actem.org for meeting details.

SURF'S UP ACTEM '16 Back in Augusta!

Mark your calendars for the 2016 ACTEM Conference on October 13 and 14. This year Maine's premier education technology conference is moving back to the Augusta Civic Center, a familiar venue where ACTEM has a long tradition. The session proposals are in and the conference committee is building what looks to be an exciting, two-day program with something for everyone. Both days will offer some one-hour sessions and some three-hour sessions on topics of interest to teachers of all subjects at all grade levels as well as librarians, administrators, tech staff, and other specialists. The conference will include an extensive exhibitor area and exciting keynote speakers.

Both of this year's keynoters have recently published or are about to publish books that are sure to be popular with conference attendees. Thursday's keynoter is Jennie Magiera, one of the founders of the *Playdate* conference concept. She has penned a new book that is expected to be released this summer or early fall just

ACTEM '16 SURF'S UP!

(Changing of the Guard, from cover)

campus since 1999, teaching courses in Networking and Unix.

Deborah White is continuing on the ACTEM board as secretary. Deb has been at RSU 26 for twenty-five years and is currently teaching 5th grade at the Asa C Adams School in Orono. In past years she taught 1st, 2nd, multiage 1st-2nd and looping 1st-2nd. Deb has also worked as a Tech Coach for the PreK-5 staff and students at Asa C Adams School and has been an adjunct professor at UMAINE teaching courses involved with Assessment and Integrating Technology. Deb was awarded the The Kay L. Biter Vision Award for Excellence in PreK-2 Technology Education by ISTE in 2010.

> **DEBORAH WHITE, ACTEM SECRETARY**
>
> ACTEM does important work for all teachers in Maine. I am honored to be able to serve this group that strives to combine philosophy, pedagogy and access to lifelong learning for every one in our state.

> **ANDY WALLACE, ACTEM TREASURER**
>
> I am honored to serve on the ACTEM board, it's been inspiring to see the amazing growth of this group over the years. Our organization is so rich with information and helpful, resourceful people. ACTEM is truly one of a kind.

Andy Wallace of South Portland will continue on the board as the ACTEM Treasurer. Andy has been with the South Portland School Department for thirteen years. Prior to South Portland he was a librarian at Hall-Dale Middle & High Schools. When MLTI came along and the need for someone to guide the purposeful use of educational technology became apparent he was tapped to fill that role at Hall-Dale, which eventually led him back to his Alma Mater South Portland. Andy remains active in the library world, encouraging the Learning Commons model in the hopes of ensuring that school libraries and teacher librarians will grow in relevance in the face of budget cuts and the proliferation of technology.

in time for the conference. *Courageous Edventures,* according to Magiera, charts a course to "navigate around obstacles so everyone can find the courage to journey into the limitless possibilities of the unknown -- and discover their own version of classroom innovation." It can be pre-ordered from *Corwin Press*.

Carl Hooker, the founder of *iPadpalooza*, is Friday's keynoter, and he has recently released the first two books in his six-book Mobile Learning Mindset series. This series serves as a guide to implementing and supporting a mobile device initiative with each book focusing on one element of a successful program. Book 1: The District Administrator's Guide to Implementation is a handbook for district leaders to inspire and guide them through planning, implementing, and evaluating a 1:1 program. Book 2: The Principal's Guide to Implementation concentrates on the building-level leader's role. Future books in the series will focus on the roles of instructional coaches, teachers, parents, and the school's IT department. The Mobile Learning Mindset series is available from *ISTE*.

Both keynoters will also offer some sessions and may even be available for some book signing.

So save the date, spread the word, save your pennies, and plan to spend two days in Augusta learning and socializing with colleagues from across the state. *This year all sessions each day are available for one inclusive fee.* Early-bird conference registration for ACTEM '16 will be $100 per day for members and $120 for non-members. The 2-day early-bird full conference registration will be $175 for members and $195 for non-members.

(President's Message, from cover)

affiliate meeting that precedes the conference. It is a meeting where you can, among other things, find out what other state and regional affiliates are doing for their members. Also, over the past almost ten years I have been involved with New England ISTE, a group of representatives from the state affiliates of each of the New England States, who meet twice a year. In that time and with those many conversations I have come to a conclusion, and I know that I am probably biased,

I believe that ACTEM is a pretty unique organization, supporting the students and staff in the schools of Maine!

Many of those organizations have a state conference, but in many cases the conference does not provide the diversity that the ACTEM conference does and in all cases it is much more expensive. When I tell people from other states that we have a professional development program that reimburses our members for the cost of professional development up to $300, you can often see that people can't quite understand how that is even possible.

But what makes ACTEM unique is our membership. Need help with a problem, or you can't find the link to a DOE document that you need? Just ask an ACTEM member. This supportive nature is confirmed every day on the ACTEM listserve. I am always in awe that just about any question that is asked is answered within minutes. While occasionally the topics on the list can get a bit dicey, the list provides a great resource for our membership to support one another.

ACTEM is truly a strong and distinctive organization. I just hope your choice for president doesn't mess that up!

One down, eleven to go!

Nokomis Students Keynote Hawaii Tech Conference

Nokomis Regional High students Austin Taylor and Britney Bubar were the special guests at this year's Hawaii Island TechEd Collaboration Conference. (HITC) They were featured presenters at the Google in Education Summit in Honolulu, Oahu and were
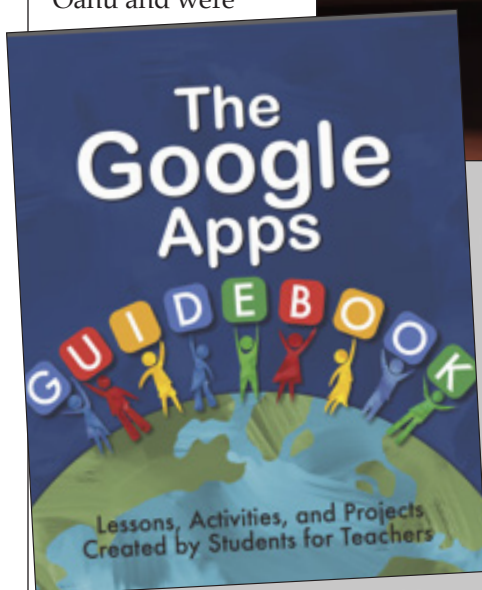
specifically asked to keynote the HITC event, the largest tech conference ever held on the Big Island with over 600 attendees. The girls talked about publication of their upcoming book, The Google Apps Guidebook: Lessons, Activities and Projects created by Students for Teachers as well as the work that they do with the Tech Sherpas.

Austin Taylor is a Junior and Britney Bubar is a Sophomore at Nokomis. All travel costs were covered by EdTechTeam and the conference. The conference was located at Kamehameha Schools Hawaii Campus on March, 29th, 2016.

Webinars: Web + (sem)inar

A seminar or other presentation that takes place on the Internet, allowing participants in different locations to see and hear the presenter, ask questions, and sometimes answer polls.
— Dictionary.com

Upcoming New England ISTE 2016
Free Webinars

June 7th at 7:00 PM
Online Math Tools for Challenged Learners, *Cheryl Oakes*

June 14th at 7:00PM
Curating Content the Right Way
Steven Anderson

Other Webinars
June 14th at 4:30PM
Courageous Edventures Webinar *Jennie Magiera* charts a course through the limitless possibilities of using technology in the classroom.

MLTI Apple Refresh Sees Return of Professional Learning Opportunities
by Jim Moulton

Schools involved in the 2016 MLTI Apple Refresh will be given the opportunity to participate in two professional learning programs that will sound familiar to those who have been involved in the Maine Learning Technology Initiative over the years. These include the re-introduction of Teacher Leaders through the MLTI Apple Refresh Teacher Leader (MARTL) program and direct support for Principals through the MLTI Apple Refresh Principal Academies. Both programs have a focus on improving learning opportunities for all students in the schools involved in the 2016 refresh.

MLTI Apple Refresh Teacher Leaders will serve as local models of innovative, purposeful, and effective users of Apple MLTI devices in support of teaching and learning in their classroom. They will also serve as communication portals between their school community and the Maine DoE Learning Through Technology Team and the Maine Apple team. Each participating school will be asked to identify one certified professional (teacher or librarian) as their MARTL.

MARTLS WILL:
• Serve as a local role model of effective and innovative use of Apple MLTI devices in support of teaching and learning.
• Be provided connection to a facilitated PLN, invitation to 1 two-day statewide and 2 one-day regional MARTL meetings annually, and direct connections to the MARTL facilitation team.

- Be provided opportunities to engage with innovative learning experiences from across Maine and beyond for themselves and for their students.
- Encourage effective engagement with Apple MLTI Professional Learning opportunities.
- Seek out and share stories of effective, innovative, and purposeful uses of the Apple MLTI Solution within their school.

MLTI Apple Refresh Principal Academies will be opportunities for the principals of MLTI 2016 Refresh schools to gather and grow their knowledge and skills around leadership in relation to more effectively leveraging their 1:1 Apple implementation. The MLTI Principal Academies will serve as a connecting point between the schools' local work, the Maine Apple team, and the vision and expectations of the Maine DOE Learning Through Technology Team

MLTI PRINCIPAL ACADEMIES WILL BE AN ANNUAL EVENT WHICH WILL:
- Provide opportunities for participants to reflect on their professional work through facilitated engagement with resources such as the Eight Elements for Success and the Leadership for Learning iTunes U course.
- Provide opportunities for participants to increase their awareness of the capabilities of the Apple tools their teachers and students have access to.
- Provide opportunities for participants to engage with Apple Professional Learning Specialists and ADEs who can speak directly to participants' leadership responsibilities. These professional learning opportunities will highlight innovative and purposeful utilization of technology in helping to achieve local goals.
- Encourage effective engagement with Apple MLTI Professional Learning opportunities for their schools.

Pictured R to L: Audrey O'Clair (Maine), Julie Willcott and Tanya Arvith (Montreal & Florida).

- Connect participants in a leadership-focused PLN for ongoing support towards fully leveraging their schools' involvement in Apple MLTI.

Planning is underway for these two programs, and schools participating in the 2016 Refresh will be contacted with additional information during the summer. Identification of MLTI Apple Refresh Teacher Leaders will happen in fall of 2016 with activities planned for the 2016-2017 school year. The first of the MLTI Principal Academies will happen in summer 2017.

#GAFESummmit Montreal – Future Ready Schools
by Julie Willcott

On April 29th, Audrey O'Clair (@audreyoclair) and I (@willcottjulie) traveled from central Maine to the GAFE (Google Apps For Education) Future Ready Summit in Montreal for two days of professional learning. As Jason Markey (@JasonMMarkey) stated in his keynote, Change Favors the Connected School, future ready means student centered. A future ready school must be both agile and empathic. The summit was an opportunity to hear from, and be inspired by, thought leaders on the creation of future ready schools.

Audrey and I divided up sessions over the two days so we could reap the most benefit from this event. Audrey attended sessions on iPads and early learning as well as on design thinking. She created a collection of tools and resources which can be accessed at http://padlet.com/audrey_oclair/qtdkofk1fatp.

On the first day, I attended a session by featured speaker, Maine's own Kern Kelley (@kernkelley), on the use of Google Drive for student portfolios in RSU #19. It was great to get insight on what the development of student portfolios can look like within a school system. My additional takeaway from this session was three things we must teach our students: 1) when to keep your work private, 2) how to collaborate with friends, and 3) what to publish for the world.

The Tech Sherpas from RSU #19 attended the summit to assist participants, demonstrate the double robot, and work in a Maker Space with Jessica Loucks (@JLenore24). As Jessica pointed out, in Maker Spaces we can celebrate creation, applaud completion, and showcase "in progress".

I attended several other sessions by Jessica. One session was on using

My Maps on Google Drive. With My Maps, students can easily create map experiences by linking names, descriptions, and media to physical locations. The maps can be developed collaboratively. There were lots of inspirational ideas about how My Maps might be used in the classroom - for example, as an alternative to "what I did on my summer vacation", an enhanced "plan a trip" math assignment, and for amazing storytelling across the curriculum.

My "wow" session was on Photospheres. Using the (free) Google Streetview app on a mobile device, it is possible to create 360 degree immersive images in less than 15 minutes. Using storyspheres.com, the photospheres can be hotspotted to include audio and to link to other photospheres. Students can now create and virtual reality experiences that further their learning in previously impossible ways.

Other sessions I attended were Building a Culture of Innovation with Jason Markey. Key takeaways from this sessions included reminders that we should begin learning with 'the why"; we should focus on the one (student) in the 1:1 classroom; and we should give permission to struggle. I also had the opportunity to hear from Eric Lawson (@elawson1977) on Add-Ons for Docs, Sheets, and Forms; I left that session with a list of tools to

incorporate into teaching.

It was great weekend in an awesome city. Thank you, ACTEM, for supporting my participation in this professional learning opportunity.

Julie Willcott is an innovative teacher of secondary/post-secondary science including chemistry, physics, sustainable agriculture & forensics in central Maine. She has been a member of ACTEM since 2013 and regularly presents at the ACTEM annual conference.

Perloff Family Foundation Announces Delivery of 60th 3-D Printer

ELLSWORTH, Maine – The Perloff Family Foundation, in partnership with the Maine Community Foundation, is pleased to announce delivery of its 60th 3-D printer for use by schools and nonprofits in Maine. Located in classrooms and STEM (Science, Technology, Engineering and Math) labs, these resources are now readily accessible to students and teachers in large and small schools across the state.

Regarding this milestone, David Perloff notes: "Maine was an innovator in providing classroom computing via its Maine Learning Technology Initiative. Our strategy has been to build on this initiative, using 3-D printing and state-of-the-art coding to encourage and enable more students to experience and benefit from the engineering de-

This is a selection of 3-D-printed boats crafted by students at the Edmunds School in Dennysville, Maine. Students created boats and masts, modeled on their laptops with web-based design software. Sails were made from card stock, small weights were used to trim the boats. Students raced their boats over a two-meter course and computed velocity before and after making adjustments.

sign-build process."

According to Science Teacher David Winski of Edmunds School in Dennysville, Maine, having a 3-D printer on site for use by students has given them the opportunity "to connect science, math and engineering in new and creative ways." Winski adds, "This resource, along with the classroom robotics provided by the Perloff Foundation, offers our students state-of-the-art learning opportunities in our small Downeast Maine school."

In addition to K-12 programs, 3-D printers have been provided to the Bangor-based Challenger Learning Center and Maine Robotics, a nonprofit that serves the growing needs of Maine's educational-robotics community.

This is David and Sandy Perloff's 17th year of grant making in Maine. Their goal is to provide funding that encourages teachers who are committed to planning, taking risks, and achieving timely results. They engage with teachers and students through school visits to provide support and encouragement for projects they fund.

To learn more about all grant opportunities, please visit www.

perloffgrants.org .

With offices in Ellsworth and Portland, the Maine Community Foundation works with donors and other partners to improve the quality of life for all Maine people. To learn more about the foundation, visit www.mainecf.org.

options this year. Have you heard of Cardboard and want to check it out? A class set of Cardboards will be available to experience virtual reality apps. The EdTechTeam Toolbox will also be on site. Demos will be ongoing throughout the conference, including a Sphero, BB8, and a Double Robot.

Ed Tech Team Maine Summit

The 4th Annual GAFE Summit will be held August 18-19 at Yarmouth High School in Yarmouth Maine. This year the focus in on literacy to promote student learning in K-12 and higher education. If teachers in your district are learning to use Google Tools for the first time or are interested in learning more about how to integrate the Google Tools into their practice, this conference is the perfect starting place. Many sessions are classroom focused taught by teachers. For districts that are using Chromebooks, there are sessions specifically for teachers using the Chromebook in the classroom. In addition, two Deep Dive workshops will be offered the day before the conference - GET Authorized Bootcamp and Admin Console Technical Retreat for Chromebook Management.

There are some exciting new

Another new feature will be Breakout EDU. This rousing game style of learning creates ultra-engaging learning activities for people of all ages. Games (Breakouts) teach teamwork, problem-solving, critical thinking, and troubleshooting by presenting participants with challenges that ignite their natural drive to problem-solve. Standard Breakout EDU kits can be used to run multiple games, and new challenges are being created daily.

Register now https://me.gafe-summit.com/2016 for this action-packed learning event open to anyone who is interested in finding out more about leveraging Google Apps for Education. Whether you are starting out or have been using GAFE for awhile, this conference is an inspiring opportunity to learn both new and engaging learning ideas using technology to support student learning.

Microsoft K12 ESS Licensing through ACTEM

Microsoft Enrollment for Education Solutions (EES) subscription licensing program is available through ACTEM. The price of this subscription licensing is based on an annual count of people (FTE's) for either the school or district. ACTEM negotiated state-wide pricing for at the 1,000 FTE level. We may not have a district large enough in Maine to qualify for that pricing level. Last year ACTEM achieved over 1700 FTE's state-wide in our first year offering this program.

The next price break is the 3,000 FTE level. There are a few districts interested in adding this licensing for their district so we may be able to reach this level. If we can achieve that then everyone benefits with better pricing for both small and large schools or districts. Two options are available: **Option A** Micro*soft Office Only*: Includes Office Pro Plus, FREE Office 365 and 365 Pro Plus for all staff and students. **Option B** *Desktop Bundle* which **Option B** Microsoft OS, Office Pro Plus, server CALs plus FREE Office 365 and 365 Pro Plus for all staff and students. *NOTE: Office 365 Pro Plus allows for the installation of any version of Office (including iPads) on up to 5 devices per user; the devices can be personal or school devices.*

We have the base requirement of a minimum 25 FTE's to be part of this program. You may elect FTE's at either the School or District level for licensing (District level licensing would cover Central Office staff in the FTE count).

Microsoft EES licensing provides assured coverage for desktop platform products through one annual count of employees, the ability to add additional products as needed, student licensing options, and the benefits of Microsoft Software Assurance.

For more information please visit the following web site: http://www.edline.net/pages/ACTEM/674420708140780082/Software/Microsoft/Microsoft_EES

PROFESSIONAL DEVELOPMENT
The Challenge:
Status Quo

ON AVERAGE TRADITIONAL TEACHER PD HAS ONLY A 10% TRANSFER RATE INTO INSTRUCTIONAL PRACTICE

Populations, initiatives, and school programs across the country and around the globe vary. However, many schools and districts share common challenges around student engagement and instructional practices. Ultimately, these challenges center around ensuring student success, and on a national level there are some sobering realities:

- Half of students are disengaged. This is one of the factors that leads to an average of 5,000 students dropping out of school each day.
- When a school loses a student, there is a financial impact. On average, schools lose over $12,000 of funding per lost student.
- Recognizing that teachers are key to reducing this cycle, consider this: Typical professional development has a real cost of $6,000-12,000 per year, per teacher. However, most teacher PD only has a 10% transfer rate into instructional practice.

That means that not only is PD costly and time-intensive, but isn't doing what it needs to in order to impact students.

HOW DO YOU BREAK THE CYCLE?

The key to effective and impactful change is…Teachers. By shifting the way that teachers participate in professional development, a profound change can occur in the classroom. Outcome-based, embedded professional development increases the transfer rate to 95%, and should directly impact student engagement and retention.

This type of shift in the approach to PD also directly aligns with the Every Student Succeeds Act (ESSA) new definition of PD – that it must be "sustained (not stand-alone, 1-day and short-term workshops), intensive, collaborative, job-embedded, data-driven, classroom-focused".

READY TO MAKE THE SHIFT?

Atomic Learning works with schools to deliver relevant instructional practices and teaching strategies focused on student success. If you've only known us as how-to technology training, you will be surprised to learn about all that's new.

Our ongoing commitment to supporting students, teachers, and staff has lead us to focus our efforts on building a system to help break this cycle. The result is our new hoonuit online learning framework.

LearnIt. Learn from Best Practices

hoonuit
Online Learning Framework

DoIt. Apply your Learning
ShareIt. Collect and Get Feedback
ProveIt. Document your Progress.

The Atomic Learning team is hard at work building out upcoming learning resources to follow this exact model, which are designed to:

- Reach teachers and students where they are at, in their moment of need
- Leverage outcome-based learning to ensure teachers and students learn what they need
- Provide activities to allow users to apply learning to their life/classroom
- Encourage learners to connect, get feedback, and learn from others
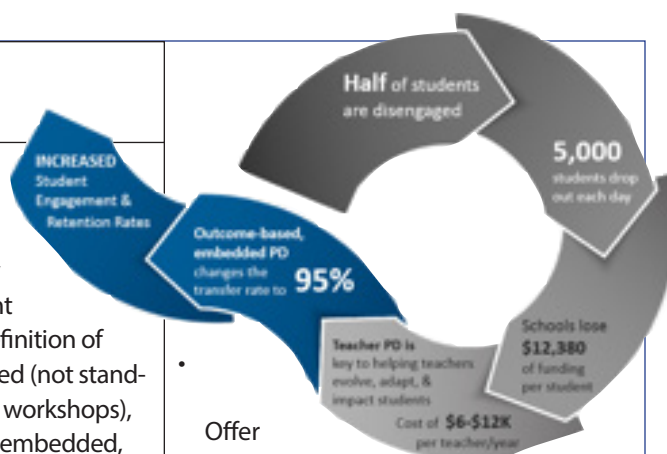
- Offer a way for teachers, staff, and students to document learning

HOW DOES THIS FRAMEWORK ADDRESS A SCHOOL DISTRICT'S CORE NEEDS?

Some examples, include:
- Providing individualized, self-paced learning around critical topics
- Facilitating a flipped PLC model
- Creating opportunities for flipped workshops
- Mapping to key initiatives
- Tying into CEU/PLU documentation
- Aligning to classroom observations

WE ARE COMMITTED TO MAKING A POSITIVE IMPACT ON STUDENT SUCCESS. WHO'S WITH US?

Register for a virtual Product Summit to explore who we are, how we've changed, and get a sneak peek into where we are heading. www2. atomiclearning.com/ACTEM Feel free to reach out directly, by contacting: Kim Fusco, Education Sales Consultant, Atomic Learning
Email: kfusco@AtomicLearning.com
Toll Free: 866-259-6890 ext. 155
Cell: 320-360-0463
www.AtomicLearning.com

All of sources for the statistics mentioned above can be found in our recent blog post: http://blog. atomiclearning.com/break-cycle-teachers-are-key

Pro AV Systems
NEW ENGLAND'S LEADING AUDIO VISUAL INTEGRATOR

Since 1999, Pro AV Systems has been in the business of providing thoughtful and future-proof solutions for the K-12 classroom and beyond. Pro AV Systems was started by husband-and-wife team Kim and Les Bishop, after they saw a clear need for an Audio Visual integrator in New England who focused on innovation, design-engineering and, most importantly, customer service. By focusing on these fundamentals, Pro AV has evolved from their home grown enterprise into the large, full-service AV powerhouse that services all of New England today.

Classroom Solutions

Each year, Pro AV Systems focuses on providing best of breed products and services for K-12 classrooms throughout the state of Maine and all over New England. While products are constantly changing and the education market is always evolving to introduce a new pedagogy or teaching style, the message remains the same: the technology should be able to work with the instructor to enhance the lesson, not take away from it or create unnecessary work for the instructor in trying to learn a new system. Teachers only have a finite amount of time and a full plate at that – so we at Pro AV Systems understand the importance of training on systems that we implement, giving the schools something simple to adopt and most of all, always providing a way for schools, teachers and administrators to contact us with questions or concerns, regardless of the scale or scope of the project. There's a lot of talk these days about interactive projectors, interactive whiteboard solutions and software packages, and it's our job at Pro AV Systems to help you understand the options and how they relate to your teachers and school.

"I wanted to thank [all of you at Pro AV Systems] for a job well done with our latest issues here at the IMRC. Every one of you has been a pleasure to work with, very patient and attentive to our needs. We will be contacting you in the future for any of our A/V needs."

Duane Shimmel
Faculty Classroom Technology Consultant
University of Maine Orono

Commitment to Education

We at Pro AV Systems are committed to pushing the boundaries of education – we live in the towns we do work in, our children attend the school systems and we want to see the entire community as a whole benefit from the technology. We support the educators of Maine, and throughout New England, at shows, during events and throughout community involvement. We've hosted events inside and out of our office, sessions at ACTEM, webinars and live stream events; we've been at ISTE supporting the school system and learning about all the great new things on the horizon for education; and we've even volunteered and donated to our communities.

Our Product Lines

Pro AV Systems takes pride in representing and installing best-of-breed products, which we vet and test for quality before bringing them to our customers. Through the support of our manufacturers, we offer some of the lowest prices, best service and warranty support, and quickest turnaround times in the industry. As one of New England's largest AV dealers, our certified professionals understand the ins and outs of the products we represent, and have the ability to troubleshoot, repair, and program the systems we install.

Pro AV Systems
NEW ENGLAND'S LEADING AUDIO VISUAL INTEGRATOR

Video Displays • Audio Systems • Control Systems • Interactive Systems • Digital Signage • Video Conferencing • IP Streaming • Sound Masking

DESIGN   SALES   ENGINEERING   INSTALLATION

PRO AV SYSTEMS 17 PATRICK DRIVE, SUITE 1, WESTBROOK, ME 04092 [P] 207.370.6050 [F] 207.854.9703   **proavsi.com**

Hold the Dates! Leveraging Learning 2016

November 9 & 10, 2016
From the Leveraging Learning Planning Committee

PLANS ARE UNDERWAY FOR LL2016 IN AUBURN, MAINE!

Once again the clear focus is effective use of iPad in Elementary Grades, but there are a couple of changes worth noting.

CHANGE #1 is that LL2016 is moving to two full days - same amount of learning time, but rather than running noon on a Wednesday to noon on Friday, this year's event will run from 8:00 AM on Wednesday November 9 to the end of the day on Thursday November 10.

CHANGE #2 is in the design of sessions. This year all sessions will be designed in a uniform way in an effort to assure the ability of participants to actively use what they learn at LL2016 when they return to their classrooms.

Below you'll find a description of the session design model, as well as an example of how this might play out at LL2016 using Auburn Kindergarten Teacher Mauri Dufour's work with QR Codes and video instructions as an example.

At LL2016, each session will…

1) Be built around a recognizable classroom challenge that is valid for both the presenter/presenting team and the participants, such as: "There

> **KIM TILTON**
> **KINDERGARTEN TEACHER**
> **YOUNG SCHOOL, SACO**
> **LL 2015 PARTICIPANT**
>
> This was such a powerful event! I came in with the viewpoint of a parent not wanting my son to be "plugged in" all day with all this "screen time." I'm leaving seeing the capabilities of iPad as a tool and the direction to go as I begin. I love having the resources, explanation of the apps, time with experts, networking and team time! I'm so excited to start!

just isn't enough of me to go around! My kids need help at various times and at various levels, and I simply feel that I can't provide the individual support they each need. I need more of ME!"

2) Provide through words and modeling an example of how the presenter or presenting team has leveraged iPad in meeting this perceived need, such as: "I've used QR codes and my private EDU youtube channel to create a "virtual me." Now, when the kids have those routine questions that are a big part of any classroom reality, they can get those answered by the "virtual me," providing me the time I need to personally, in real time, answer the questions of those kids who really need me NOW!"

3) Provide facilitated work time during which the participants can take the steps needed to go back into their classroom and integrate the practice into their own professional toolbox. In doing this for this example they might: Register for a private youtube channel; Create a brief instructional video in Explain Everything or via the camera app; upload the video to their private youtube channel; identify the persistent URL for that video; create a QR code using that persistent URL; Share that QR code via e-mail or posting on their classroom web site.

In this way participants will leave the session not only with theory, but having practiced the skills independently and having created something of real use to their students and to themselves.

Here are some of the real-world challenges that proposed sessions will both address and provide class-

room-based solutions for.

- Students at all levels struggle with solving math word problems, often trying to skip the initial
- steps of understanding and planning and then not reviewing their work after…
- Creating literacy-based media projects which use the iPad as a necessary tool in an authentic way…
- …how to successfully integrate digital literacy into the curriculum.
- Consistent opportunities for reflection in the classroom can be a challenge to design and
- implement and even more difficult to sustain.
- So many needs, not enough time - Differentiation in a digital world…
- A focus on promoting conceptual understanding of mathematics and the incorporation of the
- 8 mathematical practices pose a challenge for classrooms.
- They did the work, now what?
- Monitoring the learning of all students during instruction…
- Using iPads to build community between educators, learners and families...
- How can we challenge and involve all kids and their different learning needs?
- How do I include Science-STEM-STEAM learning in my iPad classroom?
- How do we share the learning in the classroom with families?
- I hear so much about Design Thinking, but have no idea how to put it into practice with my
- learners.
- I am torn between the need to provide opportunities to play, with the focus on the amount of
- academic learning that is required. Are play and learning mutually exclusive?

Please visit the LL2016 web site at institute2016.auburnschl.edu for more information. Early Bird registration (with reduced cost) opens on June 1.

Gorham Middle School Hosts *The GOOGLE Expedition Pioneer Program*

By Terri Dawson

On April 29, 2016 Gorham Middle School Students in grades 6-8 experienced 3D virtual field trips that immersed them in environments and brought abstract concepts to life while giving students a deeper understanding of the world beyond the classroom.

Although nothing replaces taking a bus for a field trip, Google Expeditions (currently in Beta) provides an opportunity for supplemental learning. The integration of virtual reality into classrooms is a brilliant way to journey to places such as; The American Museum of Natural History, The Great Barrier Reef, The White House and The Great Wall of China.

Our students traveled to these exotic locations using a Google Cardboard viewer. (There have been more than 5 million Cardboard viewers shipped since Google announced them in 2014.) Two Google facilitators arrived on Friday April, 29th with everything needed to travel such as; tablets for teachers, Google Cardboard viewers and phones for every student. Teachers selected an Expedition and the entire class virtually "leaped" to the location as the teacher facilitated the journey and spoke to the content the students were viewing as well as what was already embedded in the Expedition. Terri Dawson filled out an application on the Expeditions website and was notified soon after that Gorham was chosen to participate in the Beta program.

The trips are collections of virtual reality panoramas, 360° photo spheres, 3D images and video, some include ambient sounds with annotated details of points of interest, and even questions that make it easy to integrate into the curriculum already used in our schools.

It was a great experience for our school and we look forward to having the Expeditions App become available to the public in the very near future. *Scan the QR Code to see a one minute video of our Google Expedition at Gorham Middle School.*

NEW Adobe K-12 School Site License

Adobe is now offering Creative Cloud for Education Device Licenses through a new licensing option -- the Adobe K-12 School Site License.

This offering is available for primary and secondary K-12 schools only. The Adobe K-12 School Site License allows a school to install Creative Cloud for education device licenses on at least 100 school-owned or school-leased computers.

FEATURES

• Device licenses for each computer, rather than each user, with rights to install on one computer per license
• Complete set of Creative Cloud desktop applications (Online services are not included)
• Scalable software deployment for a single school site
• Minimum purchase of 100 licenses with the ability to cover more computers at the time of purchase.
• Designed for an individual school - this site license offers a web-based Admin Console that makes it easy to centrally manage and deploy licenses.

• Your school has the flexibility to use licenses for in-classroom deployment or at home on teacher-owned machines.

• Your educators can access the Adobe Education Exchange for free professional development, teaching resources and peer-to-peer collaboration to help them get up to speed on Creative Cloud apps

ACTEM pricing on this K-12 School Site License is $24.50 per license or $2,450 for the minimum 100 licenses per building. *(Note: This is a 12 month subscription license.)*

Any school needing more than 12-13 individual Adobe Creative Cloud Device licenses is now better off purchasing the 100 licenses under the Adobe K-12 School Site License plan at $2,450.

Link to informational PDF on the Adobe Creative Cloud Site License -- at actem.org, look for the purchasing link, then choose software/adobe. Please contact the ACTEM Office if you have any questions about this new licensing option from Adobe.

ACHIEVE

Last Call for Nominations!

The ACHIEVE award is presented to a nominated teacher, technology integrator, librarian or administrator. ACTEM presents two sizable awards,

- **$2,000 for the award winner**
- **$1,000 for the school where they are employed.**

Nominations are being accepted now through the end of June, go to actem.org, choose the Resources link, and then the Technoloagy Educator Awards. Nominate a colleague for the ACHIEVE award today!

Free School Supplies for Ruth's District Members

Ruth's Reusable Resources is a "free store for teachers" where the shelves are stocked with businesses' unwanted surplus supplies, new and slightly used.

School districts and individual schools pay a yearly membership which allows most school employees to shop for donated items for free. Items available will vary from week to week but one will usually find notebooks, paper, crayons, markers, art supplies, office supplies, books and furniture such as tables, desks, chairs, filing cabinets etc.

Computers, printers, monitors, laptops and other related equipment is available to all schools throughout Maine and New England for a minimal handling fee (currently $10-20 for Windows 7 CPU's and $5 for 17" LCD displays. Membership is not required.

Over the years, more than 750 companies through out the country have donated to the center. Currently, 3R's has 165 district and individual school memberships. This provides free teaching materials for 14,000 teachers.

The center will be closed for the summer months of June and July. It will reopen in August 15. 2016. Schools interested in more information should visit the center's website at www.ruths.org.
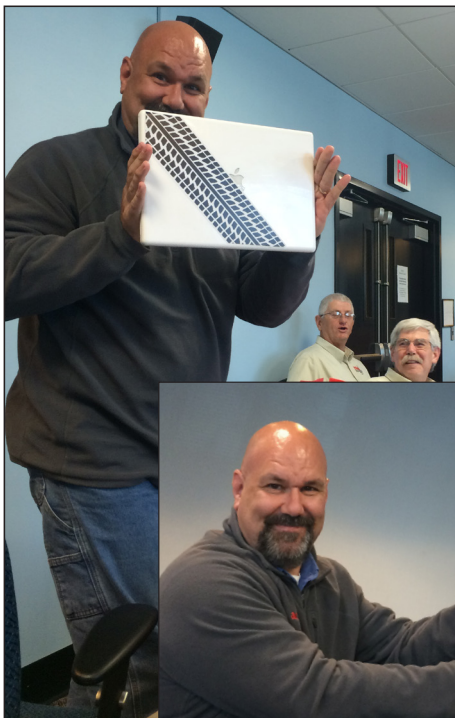
Thank You Michael & David!

MICHAEL RICHARDS

Michael Richards has been on the ACTEM board for the past eight years, first as Vice-President and then the last four as our president. Michael's tenure as President came to an end at the May 9th business meeting and leadership transferred to newly elected president, Dennis Crowe.

Michael's day job is the Director of Technology for the Wells-Ogunquit CSD where he was involved with a major renovation project at Wells High School in recent years. Michael was always able to find time for ACTEM even as a busy Technology Director. There is an enormous amount of behind the scene work on behalf of the association that any ACTEM President performs and Michael juggled his family and work life plus performed these tasks exceptionally well.

Just before term Michael's term began, Craig Dickinson, the former ACTEM Business Manager, announced his intent to retire in 2012. Crystal Priest, ACTEM Past-President, and Michael needed to hire a new business manager/executive director at beginning of his term. This was a big change for the association and resulted in ACTEM having an office and meeting space for the first time. Previous to this the ACTEM business manger worked out of their home.

During his tenure as ACTEM President Michael provided focus for association as cool calm, insightful leader. He instituted the spring Mini-conference to offer our members additional PD opportunities beyond our fall conference. He instituted Pizza & Tech meetings to provide a forum for the technical staff in schools to meet and reach another group of our members. Michael would always bring our focus back to our mission of enhancing education in Maine through the use of technology as we discussed any new items for ACTEM involvement. His leadership led to the growth of ACTEM and several prosperous years for the association.

DAVID BRIDGES

David Bridges is also leaving the ACTEM board after serving as Vice-President for the past four years. David is the Technology Coordinator for RSU 68 in Dover-Foxcroft. He also has served ACTEM admirably over these past four years.

David, in addition to his VP role, was a valuable member of the conference planning committee and was always one we could count on to help with the many details to make our event successful. He also was able to join other members of the board on our annual trip to the NEISTE vendor summit at Gillette Stadium in Foxborough, MA. It was always a standard joke that David would come to southern Maine with "paved roads and traffic lights" for the annual NEISTE trip.

David's background was actually not from the education field before he took the Technology Coordinator position in RSU 68. Having a wife that is a teacher would always provide the classroom perspective to David's work at his district. David is a shining example of a young Technology Director that puts education first in his daily work.

Unfortunately David is actually leaving education at the end of this school year and is taking a technology position with a local credit union. The credit union's gain is education's loss. We sincerely hope that David will find his way back to education in the future.

If you want something done ask a busy person and both Michael & David always found the time for ACTEM in their busy schedules. They got it done!

Thank you David & Michael and best wishes for the future!

DOE District Learning Technology Plans

The Learning Through Technology Team (LTTT) at the MDOE has posted updated District Learning Technology Plan guidelines: http://www.maine.gov/doe/mlti/techplan

The updated guidelines reflect the LTTT's ongoing work to remind educators and policy makers that student learning needs to be at the center of education technology efforts. The Learning Technology Plan Guide is built around the Maine Learning Technology Framework: http://maine.gov/doe/mlti/framework

As promised since fall, districts who participated in the BrightBytes survey are finding that the new Learning Technology Plans are greatly simplified with BrightBytes four customized reports: Learning and Teaching; Leadership; Professional Learning; and Learning-Focused Access.

The DOE
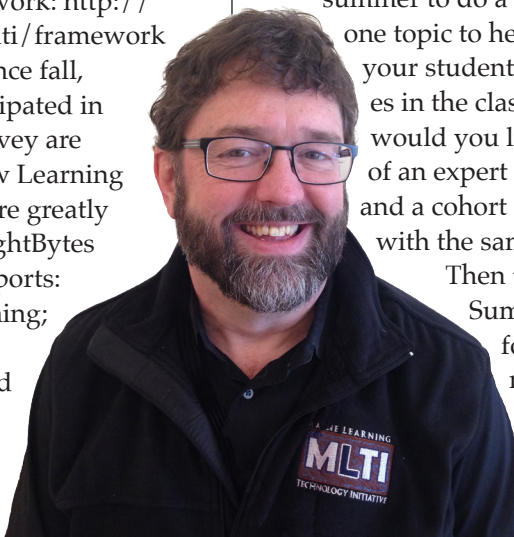
person responsible for tech plans resigned last summer and, together with other open positions, LTTT has been short staffed since. The LTTT apologizes for the delayed work around tech plans (and other programs). Districts that submitted 2015 tech plans have recently been notified of their approval. LTTT is aware that some submitted plans and approvals likely got misplaced in the transition. If a district believes that they already submitted a plan, but have not heard from LTTT, they should contact Mike Muir (mike.muir@maine.gov).

MLTI SUMMER INSTITUTE 2016

How would you like the time this summer to do a deep dive into one topic to help you leverage your students's MLTI devices in the classroom? How would you like the support of an expert in that topic and a cohort of colleagues with the same interest? Then the MLTI Summer Institute is for you! http://maine.gov/doe/mlti/professional/institute/

The Institute will be held July 26-28, at Thomas College in Waterville, Maine. Special guests include Lucy Gray and Gary Stager. Lucy's opening keynote is titled, "The Highly Connected Global Educator." Gary will deliver the Wednesday evening keynote: Making, Love, and Learning. Both Lucy and Gary will be leading strands, as well.

Rather than a collection of breakout sessions, participants of the MLTI Summer Institute choose one strand to work within for the 3 days. Strands include:

- Exploring Instructional Uses of YouTube - Lucy Gray
- Do The Real Thing - Modern Meaningful Project-Based Learning - Gary Stager
- Computational Thinking: A Cross-Curricular Approach - Ruben R. Puentedura
- Using Technology Tools to Create Resources to Target Critical Mathematics Content and Practices - Pam Buffington and Peter Tierney-Fife
- Teaching with GIS: Introduction & Practical Strategies for the 21st Century Classroom - Erin Towns
- Introduction to App Development with Swift - Tim Hart
- Multimedia Digital Storytelling - Ann Marie Quirion Hutton
- Reaching All Learners - Lindsey Carnes

FOSSed 2016

By David Trask

The ALL NEW FOSSed 2016 (we changed the name back from TechnologyTeacher.me) is shaping up to be the best ever! It's our 14th YEAR! Lots of new topics, sessions, and presenters!

As the world of technology changes...so do we! One important thing hasn't changed much though...the price. Thanks to the fine folks at Gould Academy, we've been able to keep the price of the conference low again this year. Yup! That's right! Just $399 includes

EVERYTHING! The conference, your room, your meals, and even the banquet! ($365 for off-campus

participants) You'll get a chance to immerse yourself in the experience that is FOSSed.

Come, join us this year! Learn all about new hardware, MLTI, Google Apps, Open Source, Deployment strategies, new teaching ideas, 3D printing, and other new technologies and how they can translate into better learning for your students as well as substantial money savings for your schools!

Education SUPERHIGHWAY

COMPARE & CONNECT K-12

Education SuperHighway is the leading non-profit focused on upgrading the Internet access in every public school classroom in America. We believe that digital learning has the potential to provide all students with equal access to educational opportunity and that every school requires high-speed broadband to make that opportunity a reality.

Education SuperHighway analyzed the prices that school districts are paying across the U.S. for WAN and Internet access and identified the average cost within the lowest price quartile (Cost per Mbps is calculated using monthly costs). The low-price quartile became our pricing targets, averaging $3 per Mbps for Internet access and $750 per connection for a 1 Gbps WAN connection.

Because of the work of Networkmaine (previously MSLN), Maine schools pay a yearly fee based on their student population. When we travel to conferences in other states, they are very jealous of the Internet connectivity we have here in Maine.

Thank you Networkmaine!

Maine K-12 Broadband Connectivity

98% of school districts provide more than 100 kbps/student for bandwidth

In July 2014, the Federal Communications Commission (FCC) established the connectivity goal of 100 kbps per student today and 1 Mbps per student by 2018 in order to support digital learning in all school districts in America. To meet future demand, the typical school district will need to grow bandwidth at least threefold.

2014 Goal — 2018 Goal

> 100 kbps

98%	of schools have the fiber connections needed to meet bandwidth targets
41%	of school districts pay less than $3 per Mbps for Internet access
50%	of school districts pay under $830 per connection between schools

UPCOMING EVENTS

June 21-24 Gould Academy Field Guide: A Design Thinking Experience - Bethel https://fieldguide.gouldacademy.org

June 22-24 Innovating Learning with Technology – Yarmouth: https://www.smore.com/m7rsf - Follow up September 24, October 22

June 21st MooseCamp: Dover-Foxcroft, ME - http://moosecamppbe.weebly.com

June 26-29 ISTE 2016 Conference - Denver, CO https://conference.iste.org/2016

June 29 - July 1 (FOSSED) – Gould Academy http://www.fossed.com

July 12-15 Constructing Modern Knowledge - Manchester, NH http://constructingmodernknowledge.com

July 26 -28 MLTI 2016 Summer Tech Institute – Thomas College Waterville http://www.maine.gov/mlti/events/institutes

August 1-5 Technology for Innovation in Education - Tilton Academy Tilton, NH https://sites.google.com/a/tiltonschool.org/t4ie

August 1-4 Campus Technology 2016 - Boston, MA http://events.campustechnology.com/Events/CT-Summer-Educational-Technology-Conference/Information/HOME.aspx

August 4-6 Scratch Conference - MIT Cambridge, MA https://scratch.mit.edu/conference

August 18-19 Google Apps Maine Summit - Yarmouth HS http://me.gafesummit.com

August 24 -25 York GAFE Peak Conference – York https://sites.google.com/a/yorkschools.org/gafe-peak

October 13-14 ACTEM 2016 Conference - Augusta Civic Center http://www.edline.net/pages/ACTEM/MAINEducation_Conference

MLTI Professional Development Apple Solutions http://maine.gov/mlti/events/apple.shtml

HP Solution http://maine.gov/mlti/events/hp.shtml

UMaine Courses: Non-degree registration information https://umaine.edu/graduate/apply/cert-nd-app-info/

Master of Education in Instructional Technology https://online.umaine.edu/graduate-degrees/master-of-education-in-instructional-technology/

Certificate in Classroom Technology Integration https://online.umaine.edu/graduate-certificates/classroom-technology-integrationist/

NEW Certificate in Instructional Design https://online.umaine.edu/graduate-certificates/graduate-certificate-instructional-design/

ALSO...

Tech Sherpas - http://www.techsherpas.org/ Tuesday 3pm

#EdChatME https://twitter.com/hashtag/edchatme, Mondays 8:30-9:30pm

About Time and Beyond: http://www.abouttimeandbeyond.com/ First Thursday at 3:30pm

ISTE 2016
JUNE 26-29
DENVER