

Introduction to Discovery Education Unitedstreaming

Discovery EDUCATION™

Solutions for Districts
What We Offer ▾ Who We Are ▾

Free Resources
Teachers ▾ Parents ▾ Students ▾

Community Blog
Conversations & Connections

Watch Sparks Fly In Your Classroom - Register Now

Events 📅 Latest Updates ▾

Discovery EDUCATION™ | MATH TECHBOOK™

Problems Worth Solving

$3.16 \times 10^{-5} \text{ W/cm}^2$

Techbook™ Digital Textbooks Streaming Plus Professional Development Community (DEN) Engagement Programs



Kate Hartig

For the next 30 days, you may use this login/password :
Towson416/trial416 [no longer active; query for access at:
[Discovery Education](#)

As future Instructional Designers, we will be considering the AECT domain for Utilization which focuses on matching learners with specific materials, preparing them for interacting with those materials and providing guidance during engagement.



We wear lots of hats

As technology coaches we are modeling the design and implementation of a technology-enhanced learning experience and a strategy for equitable access to the content.



AECT

We are also considering how teachers may need to personalize learning activities to address individual student learning styles while promoting digital citizenship. Meanwhile we are taking into account that students need to learn research and information skills, the think critically, and apply existing knowledge to generate new ideas.



[UDL](#)

[TPAC](#)



[Teacher](#)



[Student](#)



Each link takes you to guidelines to consider.



[Coach](#)



[AECT](#)

Discovery Education and UDL

The screenshot shows the Discovery Education website interface. At the top, there is a blue header with the Discovery Education logo on the left, a search bar in the center with the text "Enter Keyword(s)" and a "SEARCH" button, and user navigation links on the right: "Kate Hartig", "My Admin", "Help", and "Logout". Below the header is a dark navigation bar with a home icon and "My DE Services" dropdown, followed by "My Content", "Builder Tools", "Classroom Manager", and "Professional Learning".

The main content area is titled "Welcome" and features a large banner image of the Earth from space with the Discovery Education logo and the text "Interactive Course Universal Design for Learning". To the left of the banner is a vertical navigation menu for "Universal Design for Learning" with the following items: "Welcome", "Step 1", "Step 2", "Step 3", "Step 4", "Step 5", "Quiz", and "Certificate of Completion". A "next" button is located at the bottom right of the banner area.



Towson416/trial416

And unitedstreaming considers UDL

**We want students to think critically, evaluate information,
and express themselves creatively and clearly.**

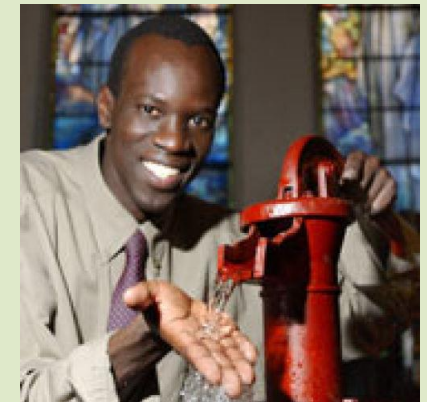
But we also want them to be
kind and understanding.

They need to find a place in
the world and to be happy.

And they should be able to
make this complicated world a
little better for themselves and
for everyone.

Example: Students raise funds for Water for
Sudan.

Learn about Salva Dut, South Sudan, and
water; plan fundraiser and communicate
event; invite media and complete fundraiser;
and work to communicate results.



We want to meet all the needs of our students.



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Techbook™ Digital Textbooks Streaming Plus Professional Development Community (DEN) Engagement Programs

This rich media database helps meet the needs of educators and students in the 21st century by providing Visually rich digital resources which are accessible, valid, and diverse.

Discovery Education meets UDL

To provide *Multiple means of Engagement*



Visit with Ruby Bridges



Towson416/trial416

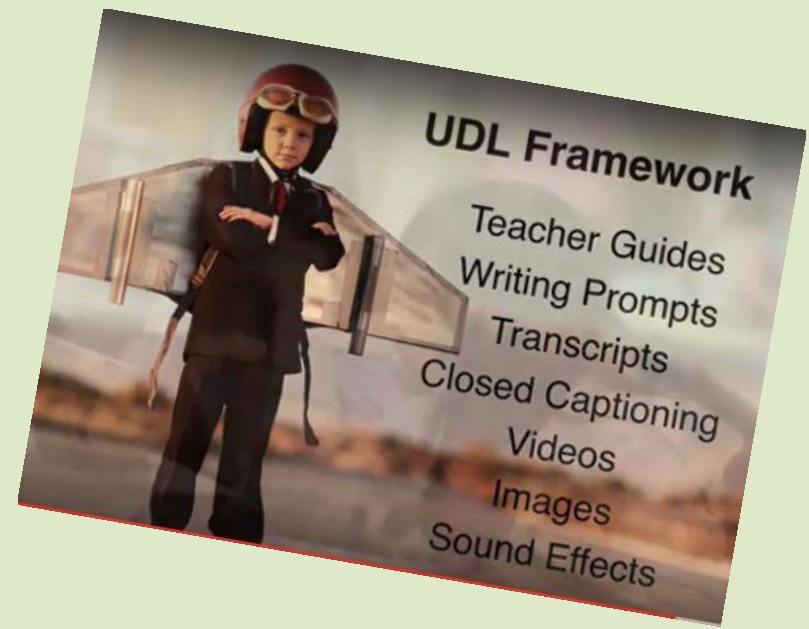
Watch examples of strategies of engagement:



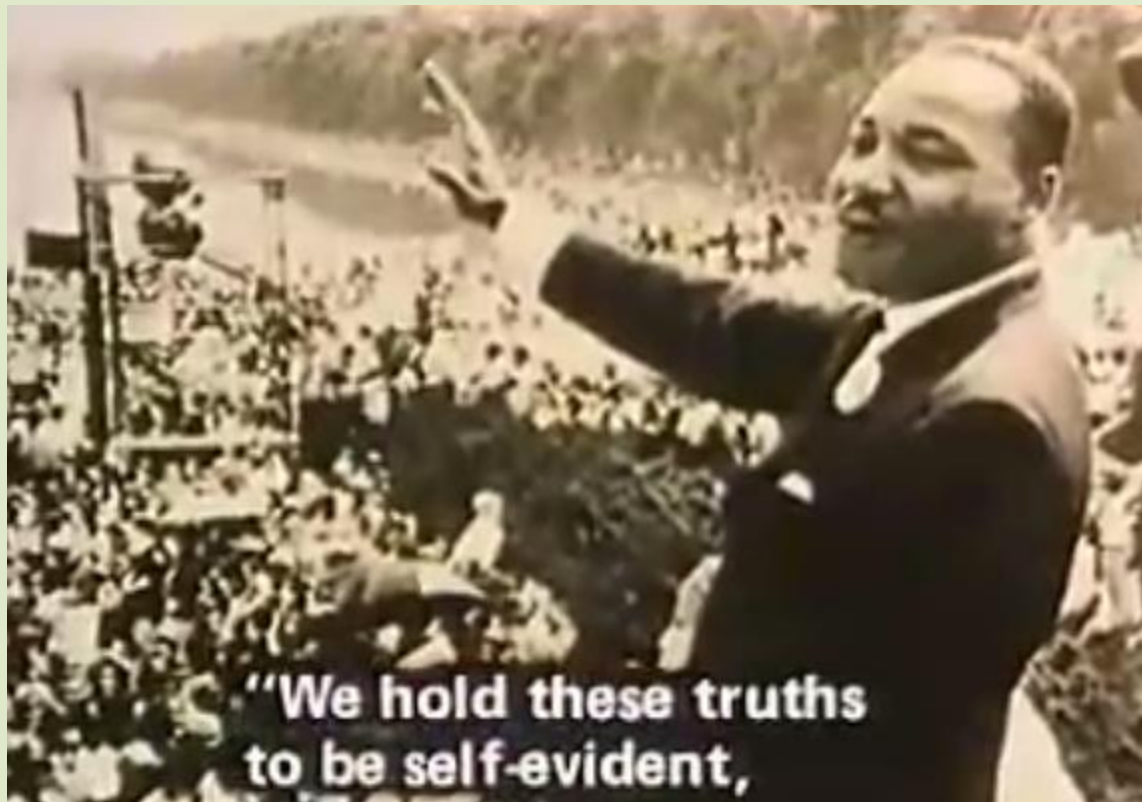
Towson416/trial416

Discovery Education Unitedstreaming

Provides ideas and visuals for
Multiple means of Representation



Closed captioned “I had a dream” speech



Discovery Education Unitedstreaming

Provides opportunities for
Multiple Means of Expression

How do you feel when you view this picture?



Japanese men on bus to internment camp (Image)

Writing Prompt



Board Builder

Strategies to enable student means of action and expression

The website has opportunities for students to show what they know. The [AEIOU](#) strategy may help English language learners as it provides a visual and then opportunities to write or talk about what they are experiencing.



Simple instructional strategies that incorporate digital media in meaningful, effective, and practical ways.

A-E-I-O-U



As students, particularly language learners, are developing their ability to interpret information, it is important that we provide multiple paths for them to express what they see, know, and wonder about content being covered. Jim Cummins' research featuring the four quadrants of scaffolding students from [BICS to CALPS](#), combined with an instructional strategy like A-E-I-O-U, allows learners of all levels to contribute to the conversation.

Towson416/trial416

Board Builder

This tool can help students to gather and present information in a poster-type format similar to padlet or glogster. Teachers can use it to build as well.

The screenshot displays the Discovery Education Board Builder interface. At the top, there is a navigation bar with the Discovery Education logo, a search bar, and user options like 'Kate Harrig', 'My Admin', 'Help', and 'Logout'. Below this is a secondary menu with 'My DE Services', 'My Content', 'Builder Tools', 'Classroom Manager', and 'Professional Learning'. The main workspace is titled 'Board Builder' and contains a board titled 'South Sudan stories'. The board features several content elements: a chart titled 'SOUTH SUDAN' with 'AVERAGE PERSON' and 'AVERAGE SOUTH SUDANESE' sections; a text note about South Sudan's independence in July 2011; a note about the book 'Long Walk to Water' by Linda Sue Park; a yellow sticky note with a URL; a video player showing a scene with people; a map of Africa with a play button; and a blue document icon. The interface includes editing tools like 'Edit', 'Preview', 'Print', 'Save', 'Share', and 'Assign'.

For Teachers: Professional development

The screenshot shows the top navigation bar with 'My DE Services', 'My Content', 'Build Tools', 'Classroom Manager', and 'Professional Learning'. A red arrow points to 'Professional Learning'. Below the navigation is a header 'Welcome to Your Professional Learning' and a menu with 'Learn & Lead', 'Strategies & Resources', 'Events & Experiences', and 'Connect with DE'. The main content area features a large teal banner with the text 'BEGIN YOUR LEARNING HERE' and 'Grow and learn with other Discovery Educators by using these resources to develop your practice and connect with others.' Below this is a 'Start Now' button and a photo of a hand holding a tablet. Further down are two news items: 'Upcoming Discovery Education Enhancements' and 'Celebrate Community at ISTE 2016'. At the bottom, there are four columns of links categorized by 'Learn & Lead', 'Strategies & Resources', 'Events & Experiences', and 'Connect with DE'.

The logo features the letters 'SOS' in a stylized teal font, with a blue wave-like shape inside the 'O'. Below the letters are three teal dots and three blue dashes. Underneath the logo is the text 'Spotlight on Strategies'. Below the logo is the tagline 'Creative, research-based instructional strategies, designed by educators' in white text on a blue background.

Towson416/trial416

Is the site credible?

Valid source of rich media information for research and educational curriculum support.

Opportunities for viewing and critique: Old newsreels and posters can demonstrate how people spoke and acted in the past and detail multiple perspectives.

Citation information helps students to give credit for the photographs, text, and videos.

Access the Highest Quality Content Available

Discovery Education conducts ongoing reviews of all content in the Discovery Education media library. To assist in the process and ensure impartial review of materials, Discovery Education also works in partnership with external content experts across curriculum areas, including teachers, curriculum supervisors, and district-level administrators.

1. Content Appropriateness

All content in the Discovery Education library is first reviewed for its appropriateness to the K-12 curriculum. Programming reflects and is connected to state, national, and international standards in core-curricular content areas and incorporates exemplary instructional methodologies and approaches.

2. Content Accuracy

Materials are reviewed to verify accuracy of content and ensure that content is up-to-date.

3. Age/Grade Appropriateness

The database is keyed to concepts and content appropriate for specific grade levels. The language of the programming is both age- and grade-level-appropriate.

4. Representation of Diverse Populations

Programming must represent a diversity of cultures and abilities and represents both sexes fairly.

5. Production Quality

Discovery Education includes only content with the highest overall production quality.

Curriculum applications:

Subscription database may be available at your school – best kept secret? Trials are available.

Initial staff development experience will help teachers to learn the new website and begin to feel that it is useful to them.

If administrators see that it is being used by teachers, they will be convinced to purchase it.

Curriculum standard links continue to be developed.

The screenshot shows the top navigation bar with links for 'My DE Services', 'My Content', 'Builder Tools', 'Classroom Manager', and 'Professional Learning'. A red arrow points to the 'Professional Learning' link. Below the navigation is a large banner with the text 'Welcome to Your Professional Learning' and a sub-header 'BEGIN YOUR LEARNING HERE'. The main content area features a large teal box with the text 'Grow and learn with other Discovery Educators by using these resources to develop your practice and connect with others.' and a 'Start Now' button. Below this are two smaller promotional boxes: 'Upcoming Discovery Education Enhancements' and 'Celebrate Community at ISTE 2016'. At the bottom, there are four columns of content: 'Learn & Lead', 'Strategies & Resources', 'Events & Experiences', and 'Connect with DE', each with a list of links and resources.

My DE Services | My Content | Builder Tools | Classroom Manager | Professional Learning

Welcome to Your Professional Learning

Learn & Lead | Strategies & Resources | Events & Experiences | Connect with DE

BEGIN YOUR LEARNING HERE

Grow and learn with other Discovery Educators by using these resources to develop your practice and connect with others.

[Start Now](#)

Upcoming Discovery Education Enhancements

Throughout the summer, new content, tools, and functionality will be released to all Discovery Education products to help drive deeper student engagement and increase the accessibility of all resources. | [Learn more](#)

Celebrate Community at ISTE 2016

Discovery Education invites you to celebrate the 11th birthday of Discovery Education Community at the International Society for Technology in Education 2016 Conference in Denver, CO | [RSVP today](#)

Learn & Lead

Make the most of your Discovery Education experience

FOR LEARNING

- [Step-by-Step Guides](#)
- [Interactive Modules](#)
- [DE in Action](#)

FOR LEADING

- [DEN Trend Report](#)
- [Ambassador Program](#)
- [Take 5](#)

Strategies & Resources

Find ways to bring digital resources into your classroom!

STRATEGIES AND RESOURCES

- [Spotlight on Strategies](#)
- [Virtual Field Trip Archives](#)
- [Lively Lessons](#)
- [STEM Camp](#)
- [Content Collections](#)
- [Educational Partners](#)

SERVICE-SPECIFIC RESOURCE LIBRARIES

Events & Experiences

Attend online and in-person community-driven events.

- [Calendar](#)
- [Day of Discovery](#)
- [PD Session Check-in](#)
- [Academies](#)
- [DE Course Catalogue](#)

Connect with DE

Build your own personal learning network and stay in the loop.

- [Community](#)
- [Discovery Education Blog](#)
- [Connect via Social Media](#)
- [Weekly Update](#)
- [Contact Us](#)

Accessibility

This resource can meet needs for visually impaired, hearing impaired, and English language learners in the multiple means of representation seen in the “narrow my results” sidebar.

Students can select media with close captioning and transcripts. Teachers may print up the transcript of text from the video where it is available, or students may follow along.

Students will need a unique username to access the site, but the password can be made the same. Students may also use a single code to sign in.

Each student will need a unique email address to receive a username and passcode. The school site administrator will still need to provide the username/password information if the student forgets.

The image shows a search results page for the keyword "flag day". On the left is a sidebar titled "Narrow My Results" with filters for SERVICE, SUBJECT, GRADE, and MEDIA TYPE. Under MEDIA TYPE, there are checkboxes for View, Full Video (1), Image (10), Video Segment (5), Read, Event (6), Teach, Content Collection (1), Assess, and Quiz (1). Below this are VIDEO DETAIL filters for Closed Captioning (5), Editable (6), and Primary Source (3). At the bottom of the sidebar are RELATED MATERIALS, including Teachers Guide (2). The main search results area shows 1-20 of 24 results. The first result is an EVENT titled "Flag Day" with 1,709 views and a STUDENT license. The second is a CONTENT COLLECTION titled "Flag Day" with 565 views and a CC license. The third is a VIDEO SEGMENT titled "The World's Largest Flag" with 7,499 views and a CC license. The fourth is an IMAGE titled "Flags at Chinese New Year's Day parade" with 3,618 views and a STUDENT license. Each result includes a thumbnail image, a title, a brief description, and metadata like grade levels and view counts.

Technology Implications:

High bandwidth is optimal for streaming.

But if the school has issues here, the videos can be downloaded and played on the individual computer.

The school filtering system can safely include Discovery Education media.

Saving the media from year to year may be an option for teachers; they may use the “save content” feature to save on the site, or download to the school server.

The students may login to use the site at home.

For students who may not have a computer or connectivity at home but do have a phone, the website and its media is accessible from smart or android phones. Transcripts, where provided, may be printed out for student use.

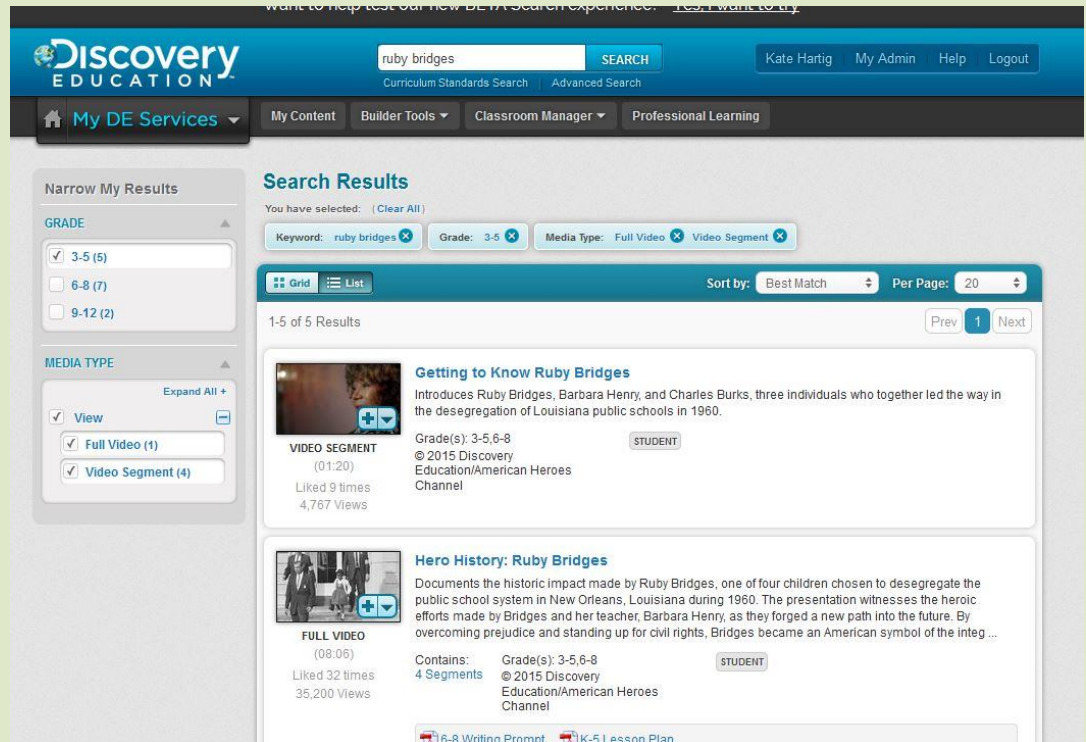


Is it difficult to navigate?

Students will need to remember that sometimes they must broaden or narrow their search to get the results they want. Search terms should be spelled correctly, unlike *Google* and other search engines, which may suggest search words or correct spelling.

Discovery Education Unitedstreaming provides educational material that is meant to be valid and objective. By selecting the grade level, the resources are age appropriate.

Teacher resources may also be available.



The screenshot displays the Discovery Education search interface. At the top, the Discovery Education logo is visible, along with a search bar containing the text "ruby bridges" and a "SEARCH" button. Below the search bar, there are navigation links for "My DE Services", "My Content", "Builder Tools", "Classroom Manager", and "Professional Learning". The search results are displayed in a grid view, showing two results for "ruby bridges". The first result is a video segment titled "Getting to Know Ruby Bridges" with a duration of 01:20 and 4,767 views. The second result is a full video titled "Hero History: Ruby Bridges" with a duration of 08:06 and 35,200 views. Both results include a "STUDENT" tag and a "Like" button. The interface also features a "Narrow My Results" sidebar with filters for "GRADE" (3-5, 6-8, 9-12) and "MEDIA TYPE" (View, Full Video, Video Segment).

Discovery Education Unitedstreaming

It is versatile enough to provide ways to engage your students at the beginning of the lesson.

It provides visual cues to complex words presented in content reading.

It provides short videos to enrich and extend learning in the classroom.

It allows students research information in a variety of media.

Its board builder tool allows a means of creative expression as students research a topic. Teacher-provided writing prompts allow students to express themselves in writing with site content choices.



**Want to enliven a content
lesson?**

33

Want to teach research skills with digital media?





Want to set your students in motion to think critically and imaginatively about their research?

[Classroom](#) - [Register Now](#)



Let's try Discovery
Unitedstreaming

See the screencast



View steps for downloading and streaming a video.

Review ways to make the media more accessible to students.

See one way to enable students to express their ideas after research with a board builder.

Discover ways that ***Discovery Education Unitedstreaming*** offers resources for teachers' strategy building.

Partial Bibliography

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Appendix

UDL meets Discovery Education Unitedstreaming

Engagement

As you plan to provide multiple means of engagement, ask yourself, "Why is this content important for students to know?" Use one of the SOS Strategies as a hook to your lesson or a way to keep students engaged with the content.

Representation

In order to provide multiple means of representation, consider using the following:

1. Video: Bringing video into the classroom is an engaging way to present information, and, by using the closed captioning feature and the transcripts, you can meet a variety of learning styles.
2. Closed Captioning: When showing the video, be sure to put on the closed captioning feature. This will be useful for all students, as research shows that having closed captioning on not only helps those who are visual learners but all students. The closed captioning feature allows you to pick the font, color, and other features.
3. Transcript: For those students that might have challenges writing down a lot of notes, consider providing the transcript, so they can underline or highlight important elements.
4. Songs: Download the song lyrics or showcase the words using a projector. Have students stand and move around a bit while they sing the lyrics of the song "I Am Stegosaurus." Students can pretend they are dinosaurs and make movements in place while singing the song. This is a great technique for students that have difficulty sitting still.

Expression

In order to provide multiple means of expression, you could use another SOS strategy, along with other activities to allow students to show what they know.

One instructional approach that supports expression is the SOS strategy A-E-I-O-U. This strategy allows students to express what they see, know, and wonder about the content being covered and ensures that all students can participate and contribute to the conversation.



ISTE Standards for Coaches

2. Teaching, learning, and assessments

Technology Coaches assist teachers in using technology effectively for assessing student learning, differentiating instruction, and providing rigorous, relevant, and engaging learning experiences for all students.

- a. Coach teachers in and model design and implementation of technology-enhanced learning experiences addressing content standards and student technology standards
- b. Coach teachers in and model design and implementation of technology-enhanced

research-based best practices in instructional design when planning technology-enhanced learning experiences

- g. Coach teachers in and model effective use of technology tools and resources to continuously assess student learning and technology literacy by applying a rich variety of formative and summative assessments aligned with content and student technology standards
- h. Coach teachers in and model effective use of technology tools and resources to systematically collect and analyze student achievement data, interpret results, and communicate findings to improve instructional practice and maximize student learning

3. Digital age learning environments

Technology coaches create and support effective digital age learning environments to maximize the learning of all students.

- a. Model effective classroom management and collaborative learning strategies to maximize teacher and student use of digital tools and resources and access to technology-rich learning environments
- b. Maintain and manage a variety of digital tools and resources for teacher and student use in technology-rich learning environments
- c. Coach teachers in and model use of online and blended learning, digital content, and collaborative learning networks to support and extend student learning as well as expand opportunities and choices for online professional development for teachers and administrators
- d. Select, evaluate, and facilitate the use of adaptive and assistive technologies to support student learning

- c. Evaluate results of professional learning programs to determine the effectiveness on deepening teacher content knowledge, improving teacher pedagogical skills and/or increasing student learning

5. Digital citizenship

Technology coaches model and promote digital citizenship.

- a. Model and promote strategies for achieving equitable access to digital tools and resources and technology-related best practices for all students and teachers
- b. Model and facilitate safe, healthy, legal, and ethical uses of digital information and technologies
- c. Model and promote diversity, cultural understanding, and global awareness by using digital age communication and collaboration tools to interact locally and globally with students, peers, parents, and the larger community



ISTE Standards for Teachers



International Society for
Technology in Education

ISTE Standards Teachers

Effective teachers model and apply the ISTE Standards for Students (Standards•5) as they design, implement, and assess learning experiences to engage students and improve learning; enrich professional practice; and provide positive models for students, colleagues, and the community. All teachers should meet the following standards and performance indicators.

1. Facilitate and inspire student learning and creativity

Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments.

- Promote, support, and model creative and innovative thinking and inventiveness
- Engage students in exploring real-world issues and solving authentic problems using digital tools and resources
- Promote student reflection using collaborative tools to reveal and clarify students' conceptual understanding and thinking, planning, and creative processes
- Model collaborative knowledge construction by engaging in learning with students, colleagues, and others in face-to-face and virtual environments



2. Design and develop digital age learning experiences and assessments

Teachers design, develop, and evaluate

- Design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity
- Develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress
- Customize and personalize learning activities to address students' diverse learning styles, working strategies, and abilities using digital tools and resources
- Provide students with multiple and varied formative and summative assessments aligned with content and technology standards, and use resulting data to inform learning and teaching

3. Model digital age work and learning

Teachers exhibit knowledge, skills, and work processes representative of an innovative professional in a global and digital society.

- Demonstrate fluency in technology systems and the transfer of current knowledge to new technologies and platforms

- Communicate relevant information and ideas effectively to students, parents, and peers using a variety of digital age media and formats
- Model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning

4. Promote and model digital citizenship and responsibility

Teachers understand local and global societal issues and responsibilities in an evolving digital culture and exhibit legal and ethical behavior in their professional practices.

- Advocate, model, and teach safe, legal, and ethical use of digital information and technology, including respect for copyright, intellectual property, and the appropriate documentation of sources
- Address the diverse needs of all learners by using learner-centered strategies providing equitable access to appropriate digital tools and resources
- Promote and model digital etiquette and responsible social interactions related to the use of technology and information
- Develop and model cultural understanding and global awareness by engaging with colleagues and students of other cultures using digital age communication and collaboration tools



ISTE Standards for Students



International Society for
Technology in Education

ISTE Standards Students

1. Creativity and innovation

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.

- Apply existing knowledge to generate new ideas, products, or processes
- Create original works as a means of personal or group expression
- Use models and simulations to explore complex systems and issues
- Identify trends and forecast possibilities

2. Communication and collaboration

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

- Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media
- Communicate information and ideas effectively to multiple audiences using a variety of media and formats
- Develop cultural understanding and global awareness by engaging with learners of other cultures
- Contribute to project teams to produce original

3. Research and information fluency

Students apply digital tools to gather, evaluate, and use information.

- Plan strategies to guide inquiry
- Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media
- Evaluate and select information sources and digital tools based on the appropriateness to specific tasks
- Process data and report results

4. Critical thinking, problem solving, and decision making

Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

- Identify and define authentic problems and significant questions for investigation
- Plan and manage activities to develop a solution or complete a project
- Collect and analyze data to identify solutions and/or make informed decisions
- Use multiple processes and diverse perspectives to explore alternative solutions

5. Digital citizenship

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.

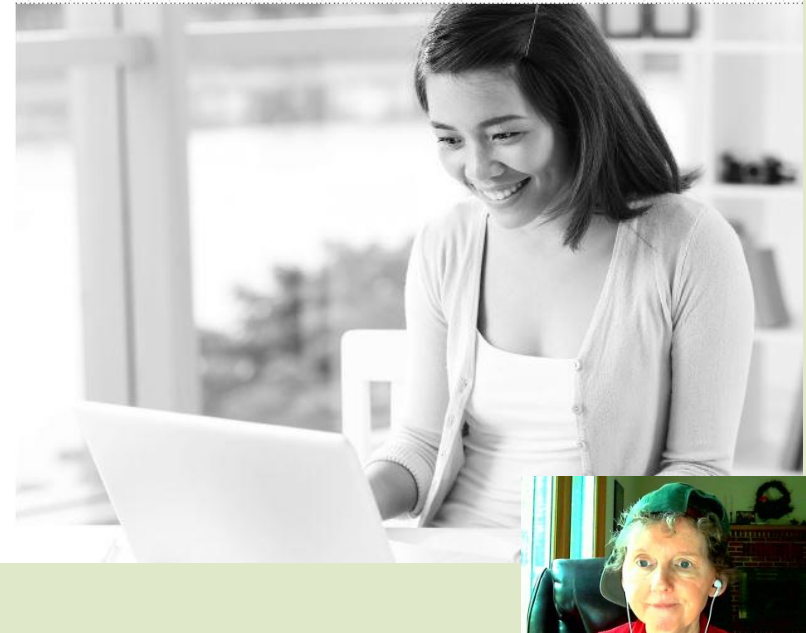
- Advocate and practice safe, legal, and responsible use of information and technology
- Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity
- Demonstrate personal responsibility for lifelong learning
- Exhibit leadership for digital citizenship

6. Technology operations and concepts

Students demonstrate a sound understanding of technology concepts, systems, and operations.

- Understand and use technology systems
- Select and use applications effectively and productively
- Troubleshoot systems and applications
- Transfer current knowledge to learning of new technologies

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Thank you for viewing

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