

Module 1

Examining Leadership Behaviors and Standards

In this module, you examine the critical role leaders play in integrating technology into instruction. You also reflect on your beliefs and review the ISTE Essential Conditions and NETS-A (National Educational Technology Standards for Administrators) as you explore strategies for leveraging technology to support educator practice and student learning.

Essential Question

How can educational leaders support teacher effectiveness to improve student achievement?

Module Questions

- What leadership behaviors do you believe are essential in supporting technology integration?
- What are the national standards for administrators, and what essential conditions are necessary to support effective technology integration?

Module Objectives

In this module, you:

- Identify the leadership behaviors that impact student achievement when technology is integrated into the classroom
- Understand the significance of the ISTE NETS-A standards as a resource for leaders
- Understand the importance of leaders modeling the use of technology for teaching and learning
- Understand the relevance of the ISTE Essential Conditions and how they can assist leaders in effectively leveraging technology to support educator practice and student learning

Tools

- Internet Browser
- Resource CD
- *Visual Ranking Tool*
- NETS-A Essential Conditions Template
- Google* Documents

Module 1

Examining Leadership Behaviors and Standards

Examining Leadership Behaviors and Standards

Activity 1: Previewing ISTE Standards

As an educational leader, your role in promoting, modeling, and supporting effective practices for technology integration practices is essential to the overall success of teacher practice and student achievement. To gain a better understanding of ISTE NETS-A and Essential Conditions, preview the standards prior to the *Visual Ranking* activity.

In this activity, you preview the standards as a whole group. Later in this module, you have time to access and preview the standards on your own. To access the standards, use your Resource CD. The ISTE NETS-A standards are located in the *Forum Tools* folder.



Activity 2: Learning through Ranking

This activity provides a framework for examining leadership behaviors that promote, model, and support effective technology integration. In the upcoming steps, you use an online ranking tool to sort specific administrator behaviors in order of importance to you in your current leadership role.

Step 1: Introducing the Visual Ranking Tool

The *Visual Ranking Tool* is a free online thinking tool from Intel® Education designed for ranking and comparing lists. The interactive tool facilitates discussion and fosters the development of 21st century skills, such as collaboration and critical thinking, as lists are created and evaluated. *Visual Ranking* can be used in a variety of ways—to make a simple list of ordered events; to create an evaluated list to aid in decision making; or to analyze, compare, and discuss complex lists with others.

Team ID: Team1

Project Name: Impact of Inventions

Prompt: Which inventions had the greatest impact on peoples' lives? Rank the inventions from the greatest impact to the least impact.

View: Project Description

The screenshot shows the Visual Ranking Tool interface. At the top, there are three icons: a floppy disk (save), a hand (move), and a double-headed arrow (swap). Below these icons is a list of inventions, each with a small arrow on the right side, indicating they can be moved or ranked. The list includes:

- Immunizations
- Automobile
- Printing press
- Light bulb
- Refrigerator
- Telephone
- Television
- Clock (mechanical)
- Personal computer
- Airplane

Examining Leadership Behaviors and Standards

Intel Education created *Visual Ranking* as a free resource for students and teachers. Students can work on their rankings from home or school, and they can compare their ideas with students located in distant classrooms. No special software is needed to use *Visual Ranking*—just the Internet and a free plug-in (Adobe Flash Player*).

Note: More information on the *Visual Ranking Tool* and professional development opportunities for your teachers is available in Appendix A.01 and Appendix B.01

Leader Behaviors Supporting Effective Technology Integration

The following leader behaviors have been selected from the NETS-A standards as they relate specifically to technology integration. In this activity, you use *Visual Ranking* to categorize and compare leader behaviors used to support effective technology integration. Review the following table before moving on to Step 2.

Leader Behaviors Supporting Effective Technology Integration

Inspire and facilitate among all stakeholders a shared vision of purposeful change that maximizes use of digital-age resources to meet and exceed learning goals, support effective instructional practice, and maximize performance of district and school leaders (Ia)

Advocate on local, state and national levels for policies, programs, and funding to support implementation of a technology-infused vision and strategic plan (Ic)

Model and promote the frequent and effective use of technology for learning (IIb)

Provide learner-centered environments equipped with technology and learning resources to meet the individual, diverse needs of all learners (IIc)

Promote and participate in local, national, and global learning communities that stimulate innovation, creativity, and digital-age collaboration (IIe)

Allocate time, resources, and access to ensure ongoing professional growth in technology fluency and integration (IIIa)

Lead purposeful change to maximize the achievement of learning goals through the appropriate use of technology and media-rich resources (IVa)

Recruit and retain highly competent personnel who use technology creatively and proficiently to advance academic and operational goals (IVc)

Ensure equitable access to appropriate digital tools and resources to meet the needs of all learners (Va)

Promote, model and establish policies for safe, legal, and ethical use of digital information and technology (Vb)

Step 2: Logging On

To begin using the *Visual Ranking Tool*, follow the steps to log on to the *Visual Ranking* site and sign in:



1. Go to the *Visual Ranking Tool*: www.intel.com/education/visualranking

intel Visual Ranking Tool : Analyzing and Evaluating Information

Home » About Intel » Education Home » K12 Tools

Overview and Benefits Try The Tool Project Examples Instructional Strategies Workspace

Making a list is usually straightforward and requires little thought. But when it comes to ordering and prioritizing items in that list, higher-level skills of analysis and evaluation are put to use. The *Visual Ranking Tool* brings focus to the thinking behind making ordered lists. Students identify and refine criteria as they assign order or ranking to a list. They must explain their reasoning and can compare their work with each other in a visual diagram. This tool supports activities where students need to organize ideas, debate differences, and reach consensus.

The tool and related resources are available for free, from any computer that is connected to the Internet. Students may work on their lists at home or at school, and can even compare their ideas with students located in distant classrooms.

Sign-In
Teacher Workspace
Student Log-In

Quote to Note
"The exercise of ordering your favorites...ranking one a level higher than another, and then articulating why you chose the way you did requires a depth and clarity of consideration and comparison that

Overview and Benefits >
Learn more about the features of the *Visual Ranking* resource. Read what the research literature says about the learning opportunities in making, ordering, and comparing lists.

2. In the Sign-In box, click **Student Log-In**.
3. Type your Teacher ID, Team ID, and Password (provided by your facilitator), and then click **Sign In**.

Students - Bookmark this page!

Teacher ID:

Team ID:

Password:

Sign In



Note: You might want to write down your Teacher ID, Team ID, and Password on Overview vi so you can revisit your ranking later.

4. On the Student Workspace page, find the *Visual Ranking* Projects table.
5. Click the project named, **Leader Behaviors for Effective Technology Integration**.

Examining Leadership Behaviors and Standards

6. View the *Visual Ranking* project that contains the list of 10 leader behaviors.

Note: The leader behaviors are shortened to accommodate the tool.



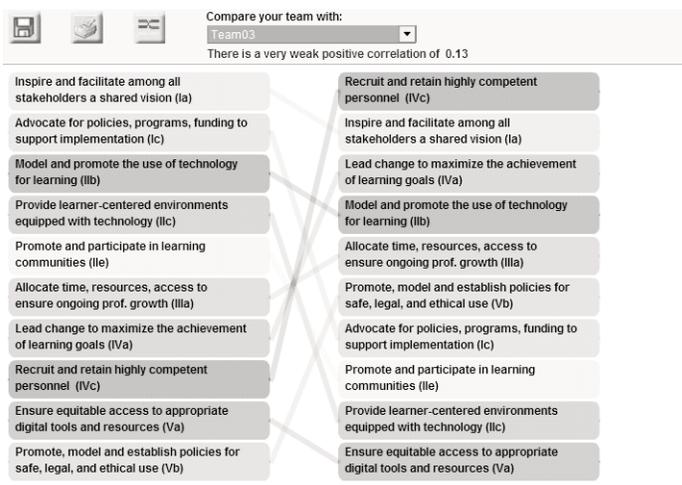
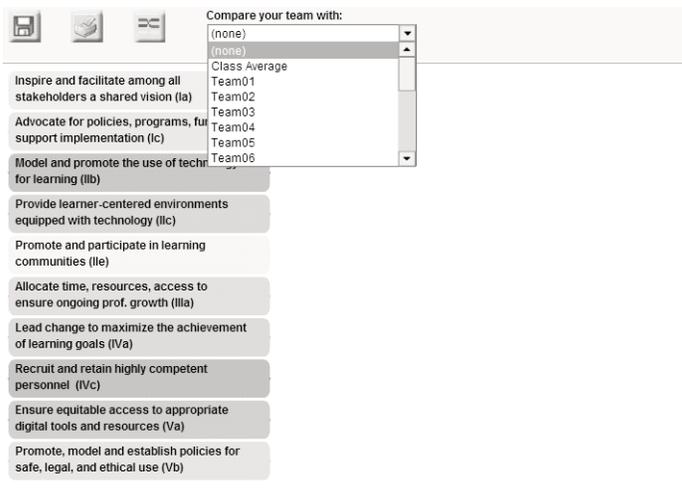
- Inspire and facilitate among all stakeholders a shared vision (Ia)
- Advocate for policies, programs, funding to support implementation (Ic)
- Model and promote the use of technology for learning (IIb)
- Provide learner-centered environments equipped with technology (IIc)
- Promote and participate in learning communities (IIe)
- Allocate time, resources, access to ensure ongoing prof. growth (IIIa)
- Lead change to maximize the achievement of learning goals (IVa)
- Recruit and retain highly competent personnel (IVc)
- Ensure equitable access to appropriate digital tools and resources (Va)
- Promote, model and establish policies for safe, legal, and ethical use (Vb)

Examining Leadership Behaviors and Standards

Step 4: Comparing and Discussing Rankings

In this step, compare and discuss your list with a partner. This will help you experience the true power of the tool, which comes from comparing rankings and discussing rationales.

1. Click the **Compare** button to display the *Compare your team with* drop-down box.
2. Click the *Compare your team with* box, and select a Team ID. You can also compare your list with the group average.



3. When comparing lists, lines connect like factors to visually represent how the lists compare. Notice that information about correlation between the two lists appears in the toolbar below the *Compare your team with* box. The correlation number tells how closely the two lists compare. A +1 correlation indicates a very strong positive equivalence between lists, and a -1 correlation indicates a very strong negative equivalence between lists.

Examining Leadership Behaviors and Standards

4. Point to any red triangles attached to items in the lists and read the comments.



5. Discuss your rankings. Review and reflect on the following questions:

a. What factors did you consider when evaluating the behaviors?

b. Why might others rank the behaviors differently?

c. What made one behavior more important than another?

d. Why is the highest ranked behavior so important?

e. What are the implications to you, your teachers, and your students?

Share some of the reasons that impacted how you ranked the behaviors. Write down any ideas you may want to share with the entire group.

Examining Leadership Behaviors and Standards

Activity 3: Understanding Standards for Administrators

This activity helps you to better understand the leadership behaviors that lead to promoting and supporting effective technology integration. In this activity, you explore the International Society for Technology in Education (ISTE) National Educational Technology Standards for Administrators (NETS-A). These standards and performance indicators identify the core knowledge and skills that administrators need to know about technology integration.

Step 1: Reviewing the ISTE NETS-A

As you review the ISTE NETS-A standards in this step, consider the standards you identified as being most important to you in your *Visual Ranking* project for leadership behaviors. Read through the standards, and then select one near the top of your ranked behavior list and explore its components.

ISTE NETS for Administrators

Educational Technology Standards and Performance Indicators for Administrators

I. VISIONARY LEADERSHIP—Educational Administrators inspire and lead development and implementation of a shared vision for comprehensive integration of technology to promote excellence and support transformation throughout the organization.

Educational Administrators:

- A. Inspire and facilitate among all stakeholders a shared vision of purposeful change that maximizes use of digital-age resources to meet and exceed learning goals, support effective instructional practice, and maximize performance of district and school leaders.
- B. Engage in an ongoing process to develop, implement, and communicate technology-infused strategic plans aligned to a shared vision.
- C. Advocate on local, state, and national levels for policies, programs, and funding to support implementation of a technology-infused vision and strategic plan.

II. DIGITAL AGE LEARNING CULTURE—Educational Administrators create, promote, and sustain a dynamic, digital-age learning culture that provides a rigorous, relevant, and engaging education for all students.

Educational Administrators:

- A. Ensure instructional innovation focused on continuous improvement of digital-age learning.
- B. Model and promote the frequent and effective use of technology for learning.

Examining Leadership Behaviors and Standards

- C. Provide learner-centered environments equipped with technology and learning resources to meet the individual, diverse needs of all learners.
- D. Ensure effective practice in the study of technology and its infusion across the curriculum.
- E. Promote and participate in local, national, and global learning communities that stimulate innovation, creativity, and digital-age collaboration.

III. EXCELLENCE IN PROFESSIONAL PRACTICE—Educational Administrators promote an environment of professional learning and innovation that empowers educators to enhance student learning through the infusion of contemporary technologies and digital resources.

Educational Administrators:

- A. Allocate time, resources, and access to ensure ongoing professional growth in technology fluency and integration.
- B. Facilitate and participate in learning communities that stimulate, nurture and support administrators, faculty, and staff in the study and use of technology.
- C. Promote and model effective communication and collaboration among stakeholders using digital-age tools.
- D. Stay abreast of educational research and emerging trends regarding effective use of technology and encourage evaluation of new technologies for their potential to improve student learning.

IV. SYSTEMIC IMPROVEMENT—Educational Administrators provide digital-age leadership and management to continuously improve the organization through the effective use of information and technology resources.

Educational Administrators:

- A. Lead purposeful change to maximize the achievement of learning goals through the appropriate use of technology and media-rich resources.
- B. Collaborate to establish metrics, collect and analyze data, interpret results, and share findings to improve staff performance and student learning.
- C. Recruit and retain highly competent personnel who use technology creatively and proficiently to advance academic and operational goals.
- D. Establish and leverage strategic partnerships to support systemic improvement.
- E. Establish and maintain a robust infrastructure for technology including integrated, interoperable technology systems to support management, operations, teaching, and learning.

Examining Leadership Behaviors and Standards

V. DIGITAL CITIZENSHIP—Educational Administrators model and facilitate understanding of social, ethical, and legal issues and responsibilities related to an evolving digital culture.

Educational Administrators:

- A. Ensure equitable access to appropriate digital tools and resources to meet the needs of all learners.
- B. Promote, model, and establish policies for safe, legal, and ethical use of digital information and technology.
- C. Promote and model responsible social interactions related to the use of technology and information.
- D. Model and facilitate the development of a shared cultural understanding and involvement in global issues through the use of contemporary communication and collaboration tools.

Now that you have explored the standards in greater depth, the next step is to view the ISTE Essential Conditions and consider how they correlate to leader behaviors that support effective technology integration.

Step 2: Using the NETS-A Essential Conditions Template to Rate Progress

The ISTE Essential Conditions serve as a framework to assist you in effectively leveraging technology to support educator practices and student learning. The focus is on the importance of your personal needs or goals for moving forward with your plan of action for successfully leveraging technology integration into teaching practices and student learning. In this step, you access and review the NETS-A Essentials Conditions Template.



1. Insert and open your Resource CD.
2. Open the Start_Here file.
3. Click the **Start the CD** button.
4. Click **Forum Tools**.
5. Click **NETS-A Essential Conditions Template**.
6. Using the **NETS-A Essential Conditions Template** and the scale provided, click a condition in the navigation bar to begin indicating your level of progress.
7. Think about your school's or district's current level of progress with integrating technology into teaching and learning as you begin to rate your level of progress.

Examining Leadership Behaviors and Standards

Activity 4: Effectively Leveraging Technology

To ensure that integration of technology is occurring, educational leaders must support productive systems for learning and administration. In this activity, participants discuss questions specific to leadership behaviors that leverage technology to support effective integration. An online collaborative Web tool is used for participants to share information with each other.

Step 1: Reviewing the Questions

Each group is assigned one of the following questions:

- a. How can you shift priorities and time to support integration of technology into instruction?
- b. What evidence will you accept that integration is occurring, keeping in mind that use and integration are separate?
- c. What helps a leader move to higher levels of comfort and knowledge relative to technology integration?

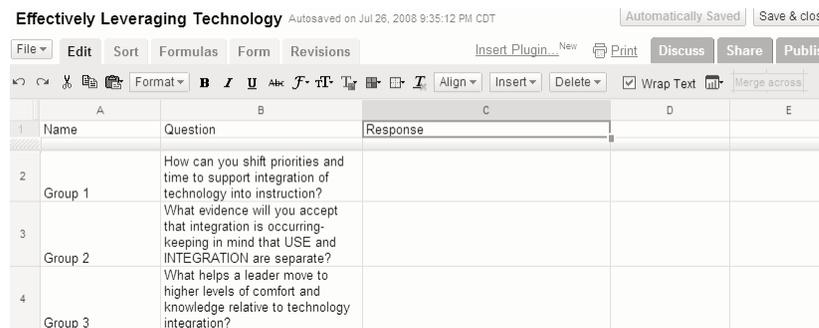
Step 2: Discussing the Questions

After the groups are formed, work with your group to explore your question:

1. In your group, assign a scribe to take notes and a reporter to share the groups' ideas.
-  2. Log on to Google* Documents at <http://docs.google.com> or use the TinyURL* provided by your facilitator.

Note: Your facilitator configured a spreadsheet in Google Documents and granted rights to all participants to view and edit it.

3. Open the **Effectively Leveraging Technology** spreadsheet.



| | A | B | C | D | E |
|---|---------|--|----------|---|---|
| 1 | Name | Question | Response | | |
| 2 | Group 1 | How can you shift priorities and time to support integration of technology into instruction? | | | |
| 3 | Group 2 | What evidence will you accept that integration is occurring-keeping in mind that USE and INTEGRATION are separate? | | | |
| 4 | Group 3 | What helps a leader move to higher levels of comfort and knowledge relative to technology integration? | | | |

4. Discuss your assigned question. Have your scribe record your group's response in the spreadsheet.

Examining Leadership Behaviors and Standards

Step 3: Sharing Your Information

After recording your group's response to your question in the online spreadsheet, share your group's information with the whole group. Discuss your group's findings as well as the firsthand experience participants shared using a collaborative Web tool.

Use the lines below to note ideas or thoughts you want to revisit later.

Activity 5 (Optional): Revisiting Your Ranking

Once you have reviewed the ISTE Essential Conditions and the NETS-A standards, revisit your original leadership behaviors ranking. Open your *Visual Ranking* project and think through any changes you may want to make. If you closed the Internet browser that you used for your original ranking, follow the steps below to log on to *Visual Ranking* and revisit your ranking. If you are already logged on, begin at step 7 below.



1. Go to the *Visual Ranking Tool*: www.intel.com/education/visualranking

2. In the Sign-In box, click **Student Log-In**.

3. Type your Teacher ID, Team ID, and Password.

Note: You may have recorded your login information on Overview vi.

4. Click **Sign In**.

5. On the Student Workspace page, click **Leadership Behaviors for Effective Technology Integration** in the *Visual Ranking* Projects table.

6. View the *Visual Ranking* project, which contains the list of 10 leader behaviors that you ranked in Activity 1.

7. Click and drag items to move them to new locations.

8. To modify any of your previous ranking rationale, double-click an item, edit the text in the Comments box, and click **OK**.



9. When you finish revising, click **Save**.

You can use the lines below to make notes before you modify your ranking online.

Module 1 Summary

Review the critical role leaders' play in integrating technology into instruction. Reflect on your own beliefs as well as the ISTE Essential Conditions and NETS-A standards that will help you move forward with effectively leveraging technology to support educator practice and student learning.

Essential Question:

- How can educational leaders support teacher effectiveness to improve student achievement?

Key Points:

- Leadership behaviors impact student achievement when technology is integrated into the classroom.
- The ISTE NETS-A standards and performance indicators identify core knowledge and skills leaders need to know about technology integration.
- Leaders play a pivotal role in determining how well technology is used in their schools.
- The importance of leaders modeling the use of technology for teaching and learning have a positive impact on teacher practice and student achievement.
- The ISTE Essential Conditions are key to helping leaders effectively leverage technology to support educator practice and student learning.