Let’s explore how a middle school social studies classroom might use the Visual Ranking Tool to consider the impact of invention on improving human lives. The students are studying the Industrial Revolution and have read about the contributions of Henry Ford and Thomas Edison.

The teacher wants students to engage in thinking about the meaning of progress and improvement in human endeavor. She wants to get the students talking about what they know and understand about progress.

Follow along with the teacher as she sets up a new Visual Ranking project and implements the project in her classroom instruction. Learn how to use the tool to promote higher-level thinking skills by challenging your students’ ideas.

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Navigate the Visual Ranking Tool

First, the teacher becomes familiar with the Visual Ranking Tool. She practices setting up a test project and learns how to navigate to the various pages.

1. Log in to the Teacher Workspace using your Intel® Education Login ID and Password.
2. Explore the features and tools found in the Teacher Workspace. Consider setting up a test project to become familiar with the Visual Ranking Tool.

Your Login ID and password information for the Visual Ranking Tool Teacher Workspace is the same as your Intel® Teachers Engage Community.

Visual Ranking Tool is an educational tool that helps students understand the impact of invention on improving human lives. It is designed to promote higher-level thinking skills and encourage students to engage in meaningful discussions about the contributions of historical figures such as Henry Ford and Thomas Edison. The tool provides a user-friendly interface that allows teachers to set up projects, add images, and rank items, enabling students to explore various aspects of the Industrial Revolution and its impact on society.

Integrating the Visual Ranking Tool into your classroom instruction can help students develop critical thinking and analytical skills. By setting up projects related to the Industrial Revolution, you can encourage students to think about the significance of inventions and innovations, and how they have shaped the world we live in today.

To get started with the Visual Ranking Tool, follow these steps:

1. Log in to the Teacher Workspace using your Intel® Education Login ID and Password.
2. Explore the features and tools found in the Teacher Workspace. Consider setting up a test project to become familiar with the Visual Ranking Tool.

This tool is designed to enhance the teaching and learning experience, making it easier for educators to engage students in meaningful discussions and activities. By using the Visual Ranking Tool, you can create a dynamic and interactive classroom environment that promotes the development of essential skills.

Please note that the content provided is an excerpt from the tutorial and does not cover all the features and functionalities of the Visual Ranking Tool. For more detailed information, please refer to the official documentation available online.
Create a List of Items for Ranking

Next, the teacher introduces her students to the activity and prompts students to brainstorm a list of inventions that have improved peoples’ lives.

She begins the activity with higher-level discussion questions:

- What is progress?
- What are the benefits and costs of what we create?
Following the discussion, students brainstorm a large list of inventions. The teacher guides them in consolidating the list to a manageable size of 8-10 items.

1. Pose discussion questions that students will use to generate items for ranking.
2. Guide students to brainstorm a manageable list of approximately 8-10 items. Lists with more than 12 items are difficult to sort.
3. Sort the list alphabetically to ensure that students are not influenced by the order in which items appear.
4. Note: Avoid changing the list items after a project has started.

**Set Up a New Project**

After brainstorming ideas with her students, the teacher sets up a Visual Ranking project in the Teacher Workspace.

1. In the Teacher Workspace, under Manage Projects, select Set up a new Visual Ranking project.
2. Create a project name, project description, and prompt for students.
3. Create the list to sort, with each item on a new line.
4. When you are finished, click Continue.

**Teacher Workspace:** Your Projects

You are signed in as lisax.j.fisher@intel.com | Sign Out | Your Teachers Engage Community

Manage Projects
- Set up a new Seeing Reason project
- Set up a new Visual Ranking project
- Set up a new Show Evidence project
- Delete existing projects

To set up a new project, begin here.
The teacher recognizes that visual imagery enhances learning retention and helps students with cognitive processing. She also wants to create a learning environment that supports all types of learners through multiple input modes. Using the built-in image library, the teacher adds images to each item in the list.

1. After entering all of the new project information, click Continue to navigate to the image library.
2. Start typing an image search item in the Tag Filter box. As you type, notice that image tags will be suggested for you.
3. Click on the desired image tag from the list of results. Your search results will be displayed below the image tags.
4. To select an image, click and drag the image thumbnail to the matching list item, then drop it into place.
5. If you cannot find what you need in the image library, or if you have a specific image that you wish to use, scroll down to the bottom of the screen and click Manage Image Library.
6. Use the Browse button to select the image you wish to upload.
7. Enter 3-5 tag words that describe your image, separated by commas. This will make it easier to locate your image using the search feature.
8. Accept the terms and conditions, then click *Upload* to add the image to your Personal Image Library.
9. View and manage your personal images by clicking on the *Manage Personal Images* tab.
10. Return to the search page, where your tagged image now appears in the image library. Click and drag the image thumbnail to the matching list item, then drop it into place.
11. When you are finished adding images, click *Submit*. 
Set Up Student Teams

Next, the teacher divides her class into student teams and assigns each team to the project.

1. In the Manage Project Teams page, select Add New Student Teams.
2. Teams can be added individually or by creating multiple teams at once.
   a. To add teams individually: Enter a Team ID, the names of each team member, and a password.
   b. To create multiple teams at once, click Create a set of new teams to launch the Teacher Workspace: Tool Wizard. Enter the number of teams and a Team ID.
3. Click Submit to create the student teams.
4. A confirmation message will indicate when the student teams have successfully been created.
5. Create additional teams, if needed, or click Done to return to the Projects page.
6. When the project and teams are set, share the login information with students.
Update and Edit Student Teams

The teacher learns of several students who will be out of town on the day this lesson is planned. She rearranges her groups to accommodate these students who will complete the project together during a make-up session.

1. On the Manage Project Teams page, click on any Team ID to:
   a. Change the Team ID
   b. Update team members
   c. Change the team password
2. When you are finished, click Submit to return to the team management page.
3. Click Done to save your changes and return to Your Projects page.
Teacher Workspace: Manage Project Teams

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Project Name: Impact of Inventions

Teams currently assigned to this project:

<table>
<thead>
<tr>
<th>Current Work</th>
<th>Team ID (Click to Edit)</th>
<th>Team Members</th>
<th>Team Password (Click to Edit)</th>
<th>Date Changed</th>
<th>Unassign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review</td>
<td>Team01</td>
<td>Student A, Student B, Student C</td>
<td>*****</td>
<td>9/15/2012</td>
<td></td>
</tr>
<tr>
<td>Review</td>
<td>Team02</td>
<td>Student D, Student E, Student F</td>
<td>*****</td>
<td>9/15/2012</td>
<td></td>
</tr>
<tr>
<td>Review</td>
<td>Team03</td>
<td>Student G</td>
<td>*****</td>
<td>9/15/2012</td>
<td></td>
</tr>
<tr>
<td>Review</td>
<td>Team04</td>
<td>Student H</td>
<td>*****</td>
<td>9/15/2012</td>
<td></td>
</tr>
<tr>
<td>Review</td>
<td>Team05</td>
<td>Student I</td>
<td>*****</td>
<td>9/15/2012</td>
<td></td>
</tr>
</tbody>
</table>

Click on the Team ID to change the team name, update team members, or change the team password.

Unassign checked teams

Rank a List of Items

After students receive their login information from the teacher, they navigate to the Student Workspace. Student groups discuss their preferences for the order of an item in a list and agree to move items from their original ranking to new positions in the list.

1. Students enter their Teacher ID, Team ID, and Password in the Student Workspace, and then click Sign In.
2. All active projects assigned to that team will appear in the Student Workspace. To select a project, students click on the project name.
3. To move an item in the list, click and drag it up or down, then drop the item in the desired location.
4. After an item "lands" the items below it shift down.
5. Students can use comments to explain their reasoning for each item’s position. To add a comment, double-click on any item. A comment box appears with an outline color that matches the color of the item.
6. Click Save to save the comment. A white callout icon indicates that a comment has been saved for that item. Students can roll over the icon to read the attached comment, or double-click to edit.
7. After successfully adding a comment, students should save their work.
Students log in to the Student Workspace using their Teacher ID, Team ID, and Password.

All active projects assigned to the team will appear in the Student Workspace, along with the project description and prompt.
Project Name: Impact of Inventions
Project Description: In this project, you will consider how inventions have improved people’s lives. You will research several inventions and use the Visual Ranking Tool to evaluate the impact of these inventions. Then you will compare your ranking with your peers.

Prompt: Which inventions had the greatest impact on people’s lives? Rank the inventions from the greatest impact to the least impact.

1. To compare lists with another team, students click the Compare button.
2. Choose a team for comparison from the drop-down menu.
3. A visual display of colored lines clearly shows the similarities and differences between lists.
4. Students can also view comments about why another team ranked one item over another. Roll over the white speech bubble icon to view comments attached to an item. If no icon appears, then a comment has not been created for that item.
5. When comparing teams, correlation can be shown between the two lists. Note: The correlation feature can be turned on and off.
6. Students click the *Show Report* button to preview and print a report of their correlation and comparison details. Students can also copy this image and use it in a presentation.
7. Remind students to save their work often when making changes to their rank order or adding comments.

**Assess Student Work**

While students are working, the teacher logs in to the Teacher Workspace where she can review and comment on any team’s work. The project comment feature supports open-ended communication between the teacher and students. Teachers can use this feature to prompt further thinking by posing a question, or students can use it to document a conclusion about their work.

1. In the Teacher Workspace, locate the project that you would like to review and click on the Student Teams.
2. This will open up the Manage Project Teams page, where all teams currently assigned to the project are listed. To select a student team for review, click *Review* under the heading *Current Work*.
3. Scroll to review student work and comments.
4. After reviewing a team’s work use the comment feature to add questions, comments and other feedback.
5. When you are finished adding comments, click *Update Comments* to add the comments for the team to review.
6. A team’s work can be compared with the class average, or another team’s work, by using the *Compare* button. Note: When teams average the same ranking for list items, the items display together with a black outline.
7. The comparisons can be used in a class or small group discussion. Encourage teams to look for comparisons that have both strong and weak correlations.
8. The *Show Report* button shows a print version of the work, including the comments on each ranked item. The two rankings that are being compared also appear in the report version.
9. Student work reports can be printed using the Print Page button. Work can be printed for a future class discussion or student portfolio assessment.

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### Discuss the Results

When all students have ranked the invention list and explained their reasoning, the teacher leads a closing discussion about the results. From the Teacher Workspace, she displays the comparison of a few different teams and the comparison of one team to the class average.

She asks teams about correlation—did any team find another that was a close match? Did they find a correlation close to +1? Or, did they find any team that was very opposite with little correlation, close to -1?
Conclude the Activity

The teacher ends the day's activity by having each team use the Show Report feature to print their ranking and comments. She will have each team use this report to prepare for small-group discussions about what is progress and improvement in the course of human history. Later, these reports will be collected for each student's assessment portfolio.
## Visual Ranking App

The bell rings before students can finish their discussion about the list of inventions. One student volunteers to research it after school. On the bus ride home, he uses his smartphone to get more information. Using the Visual Ranking App, he logs in to the Inventions project on his phone and updates his team’s ranking. He creates a comment to explain his thinking and saves his work.

In addition to the web version of the Visual Ranking Tool, a mobile app version of the tool gives students an opportunity to continue their work outside of the classroom.

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**Visual Ranking Tool**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Airplane</td>
<td>This is where student teams write their reasons why they rank an item, explaining their thinking.</td>
</tr>
<tr>
<td>2</td>
<td>Automobile</td>
<td>Comment boxes help others understand why an item is ranked below or above another.</td>
</tr>
<tr>
<td>3</td>
<td>Electricity</td>
<td>When students are asked to explain and justify their ranking, they will develop criteria for their evaluations.</td>
</tr>
<tr>
<td>4</td>
<td>Immunizations</td>
<td>Students in teams must discuss and agree on how they will rank items. Comments will help teachers (and other teams) understand each team’s conclusion.</td>
</tr>
<tr>
<td>5</td>
<td>Light Bulb</td>
<td>When students get to the items in the middle of the ranked list, it becomes more important (and more difficult) to explain why items are above or below their neighbors.</td>
</tr>
<tr>
<td>6</td>
<td>Personal Computer</td>
<td>Comment boxes allow students to share their judgments with others, comparing and contrasting.</td>
</tr>
<tr>
<td>7</td>
<td>Refrigerator</td>
<td>A team’s criteria for how they ranked items will be revealed in their comments.</td>
</tr>
<tr>
<td>8</td>
<td>Steam Locomotive</td>
<td>Often students change their minds and their comments as they compare their lists to their classmates. They have to reassess their conclusions and revise.</td>
</tr>
<tr>
<td>9</td>
<td>Telephone</td>
<td>A weak correlation to the class average will cause a team to defend or possibly reassess their ranking.</td>
</tr>
<tr>
<td>10</td>
<td>Television</td>
<td>The report outlines the students’ work and can be printed for future class discussion or portfolio assessment.</td>
</tr>
</tbody>
</table>

The report lists each team’s comments. It can be printed by clicking on the Print Page button.

A copy of the lists that are being compared is included in the report, along with teacher and student comments.

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Downloading the Visual Ranking App

1. Links to the Visual Ranking App download locations are available from the Student Login Page for the Visual Ranking Tool.
2. You may be required to create an account for the app store you choose. Once you have logged in to your app store, type Visual Ranking App into the app search box. Follow the on-screen directions to download the app to your device.

Using the Visual Ranking App

1. Students launch the app from their mobile device.
2. Enter the Teacher ID, Team ID and Password, and then select Login.
3. All active projects assigned to the student’s team will appear in the application. To select a project, students choose the arrow that appears to the right of the project’s name.
4. The Project Name, Description, and Prompt appear above the list items. To hide this text, select the minus button next to the Project Name.
5. To move an item in the list, click and drag it up or down, then drop the item in the desired location.
6. Students can use comments to explain their reasoning for each item’s position. To add a comment, select an item and a text box will appear.
7. Select OK to save the comment and return to the item list. A white callout icon indicates that a comment has been saved for that item. Students can click the icon to read or edit the attached comment.
8. After successfully adding a comment, students should save their work.
9. To compare lists with another team or compare against the class average, students select the Compare button.
10. Choose a team for comparison from the drop-down menu.
11. A visual display of colored lines clearly shows the similarities and differences between lists. A correlation score also indicates how closely the two teams ranked their items.
12. To turn off the compare feature and return to ranking items, select the Compare button again.
13. Students can respond to teacher prompts or communicate with the teacher using the Comments button at the bottom of the screen. Click the plus sign to view previous entries, click Add Comment to create a new comment or start a new discussion.
14. Save your work.
15. Select the Return button to return to the project list.
The Visual Ranking App is designed to provide a Student Workspace on mobile devices. Teachers must use the web-based version of the tool to create and edit projects or manage student teams.

Log in to the Visual Ranking App.

Remove a project from the listing.

Return to the Login screen.

Click the arrow to select a project.