THE MAIN IDEA
current education book summaries
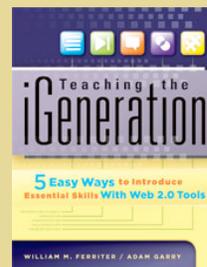
Teaching the iGeneration: 5 Easy Ways to Introduce Essential Skills With Web 2.0 Tools
By William M. Ferriter & Adam Garry (Solution Tree Press, 2010)

S.O.S.   (A Summary Of the Summary)

The main ideas of the book are:

⇨ This book shows how digital tools can be used to promote higher-order thinking and 21st century skills.

⇨ It builds a bridge between what kids know about technology and what teachers know about good teaching.

Why I chose this book:
I liked that this book does not advocate introducing technology for technology's sake. Instead, the focus is on teaching five important 21st century skills -- information fluency, persuasion, communication, collaboration, and problem solving – first and foremost, and *then* introducing new technology to help enhance those skills.

I also think the reproducible sheets, all of which are available free online at go.solution-tree.com/technology, are extremely helpful in showing teachers how to structure digital projects. For teachers who are less savvy about technology, this helps to demystify the process.

Note that while the target audience is middle and high school, I think the technological tools are easily adaptable by elementary school teachers (my younger daughter's first grade teacher introduced her to blogging as a way to differentiate writing instruction in his class!)

Special This Month! THE MAIN IDEA has a separate pdf with workshop ideas and professional development suggestions for the less tech-savvy leader to learn more about technology and introduce it to teachers.

The Scoop   (In this summary you will learn…)

√ *How digital tools can enhance the instruction of 21st century skills – information fluency, persuasion, communication, collaboration, and problem solving*

√ *An overview of popularly used digital tools such as wikis, blogs, content aggregators, asynchronous discussion forums, and more*

√ *How you can use the reproducible handouts in the book (and available free online) for <u>all</u> aspects of a digitally-based project: organizing the technological logistics, teaching students the important 21st century skills, and evaluating the quality of the digital project*

√ *Suggestions from The Main Idea for learning more about technology yourself and supporting the integration of technology throughout your school – See the additional technology PD workshop from The Main Idea*

Introduction – The iGeneration

iGeners – the term used to describe students born after the early 1990s – are easy to spot. They are continually plugged in, constantly texting, playing games on their Xboxes, viewing digital images, communicating instantaneously in various forms, and much more. While their parents may use the Internet to gather information, they use it to gather *together*.

However, there is a concern that although the minds of iGeners work fast, they may not think as deeply or as accurately as we would like. iGeners have been called 'The dumbest generation' and 'infosnackers.' They are intimidated by reading longer passages and are often bored in school. The content of the TV they watch and the games they play have caused adults to call them 'intellectually bereft.' Furthermore, the gap between the achievement of American students and their international peers continues to widen.

At the same time, teachers know that to be successful, students need to develop 21st century skills such as: thinking critically, persuading peers, and presenting information in an organized and convincing fashion. In fact, the Partnership for 21st Century Skillls – an organization of business and educational leaders that have outlined a powerful vision for 21st century education – has outlined three primary skills that students will need:

1. Creativity and innovation   2. Critical thinking and problem solving   3. Communication and collaboration

Although these are presented as new skills for the new century, many argue that these higher-order thinking skills have been around since Bloom's Taxonomy. Most educators are already familiar with these higher-order skills. The authors are not suggesting that educators completely change their classroom practices to make way for 21st century skills and digital tools. Rather, the goal of the book is to show educators how to use new digital tools to facilitate the type of authentic and higher-order learning that educators have promoted for decades.

iGeneration students are excited about digital learning. They enjoy communicating and working in teams. However, despite the millions of dollars spent on digital tools, use of technology has been mostly ineffective because teachers use them more often for *noninstructional* purposes such as word processing and PowerPoint presentations. However, if we can use the new tools to teach the kinds of higher-order thinking skills we value, then we can get students more invested in their learning and raise achievement. This book focuses on five enduring skills that all students should develop in the 21st century but that have also been a core part of educating students for decades: (1) information fluency, (2) persuasion, (3) communication, (4) collaboration, and (5) problem solving. Each chapter that follows *first* describes how to teach students these important 21st century skills and *then* outlines how digital tools can be used to *enhance* those skills.

Two important notes: first, because technology quickly becomes outdated, you can find updated resources at go.solution-tree.com/technology that are potentially as valuable as anything in this book. Also, any time a handout is mentioned in the summary, it *also* can be downloaded for free from this website. Second, in the book the authors present a variety of sample projects that show how different digital tools can be used. A number of these projects focus on global poverty since students are often interested in fairness and injustice, however many contentious topics would work. This summary focuses on the *skills*, not the specific projects.

Chapter 1 – Information Fluency

One thing has not changed in classrooms – *information* remains at the center of instruction. Students still create written reports and position statements, have powerful conversations in class to fine-tune their thinking, and study the content of different subjects. What is different with the current generation is *how* they access this information. Rather than sifting through card catalogs, books, and encyclopedias, they have a great deal of online content at their fingertips. There are trillions of webpages on the Internet and a search of almost any topic yields thousands of results. Today's students face a few unique problems: there can be *too much* information and, because anyone can post online, information can be inaccurate or biased.

If we want our students to be successful in today's world, one of the core skills we need to teach them is *information fluency*. To prepare them to interact with online content in a productive way, we need to teach them the following four skills that comprise information literacy: (1) how to search efficiently, (2) how to identify reliable information, (3) how to organize the online resources they find, and (4) how to collaborate around online content and take advantage of the benefits of the collective intelligence that is produced by working in a group. Below are some digital tools and strategies to teach students these skills.

1. Searching Efficiently
Because of the vast quantity of information online, the first step is to teach students how to search *efficiently*. Many students already know how to search online for topics they are familiar with. However, this often breaks down when they are searching for new, often academic information, particularly when they don't have the background knowledge. Students enter terms such as *volcanoes, World War II,* or *famous mathematicians* and are bombarded by too much useless information. A traditional solution is to brainstorm subcategories of topics to research, but now you can introduce your students to a *digital* solution: the **Google Wonder Wheel**. This online tool helps students with little background on a topic to narrow down topics into subcategories of related websites. If the student

types in *World War II*, for example, this tool creates a web with subtopics such as *Pearl Harbor, Holocaust, World War II causes, World War II timeline,* etc. Then the student can click on one of these subcategories and see websites related to it, or generate a *new* web of even more specific sub-subcategories. See pp.32-33 or go.solution-tree.com/technology to get a Wonder Wheel worksheet to lead students through this process. Remember that all handouts mentioned in the summary are available at this website for free.

2. Rating the Reliability of Websites
Even when students can narrow down a topic, how can they tell which websites provide reliable information? We can teach them to ask four questions to judge the reliability of a website. You can use the handout called "Spotting Websites You Just Can't Trust" on pp. 35-37 to introduce students to these four questions:

> 1. *Does the information on the website make sense?* Teach students to use their common sense.
> 2. *What kinds of sources does this website link to?* Responsible website authors include links to sites as proof of their claims. If there are no external links, students should be suspicious.
> 3. *Can I find any evidence of bias on this website?* Look for emotionally loaded words.
> 4. *What does the fine print say?* Read the fine print ("Disclaimers," "Terms of Service," "FAQs") to protect yourself.

3. Organizing Information
Content aggregators – also called feed readers – are free Web applications that help users organize the websites they would like to follow. Users just copy and paste the websites they want to follow and they receive updates when the websites have changed. Teachers can organize collections of websites around a certain topic for their students to use in their research. They also can use aggregators to monitor the websites students are finding for their research. Users also can use these tools to see what websites others who are studying the same topic have found. Some common feed readers are ***Google Reader, Netvibes***, and ***Pageflakes*** which also has a version for teachers (teacher.pageflakes.com). See the step-by-step online-only handout "Using Feed Readers to Organize Student Thinking" to help teachers design resource pages for student study groups.

4. Collaborating Around Online Research
An important skill for students today is to learn how to work *collaboratively* around research. There are several web-based research practices that help foster collaborative work: social bookmarking and shared annotation tools.

Social Bookmarking – Social bookmarking is a way for students to share their collections of websites (their bookmarks) they have found on a certain topic. They can also see the collections of websites their peers have collected as well. ***Diigo*** (diigo.com) and ***Delicious*** (delicious.com) are two common social bookmarking sites. To make social bookmarking a successful collaborative experience, it helps for teachers to assign specific roles for group members. Below are a few examples:

> **Original Thinkers** – They search for websites connected to the topic of study and bring these to the group.
> **Connectors** – They are on the lookout for secondary themes. If the group is studying prime numbers, they suggest Euclid.
> **Reliability Cops** – They determine which websites can *not* be trusted (see the previous section on reliability).
> **Johnny Opposites** – They make sure the websites collected represent a wide range of views.

Shared Annotation – Students are particularly motivated by the shared annotation features of social bookmarking sites like Diigo. They can see the notes and questions written by others in the margins of the articles and essays they are reading and this adds value to the research experience. In order to learn to write quality annotations, students need to be taught the following skills:

> <u>Spotlight key content</u> – Make sure to read the whole passage and *then* comment on it, use age-appropriate language, and have a reason for highlighting the section you've chosen.
> <u>Respond to peers</u> – Do not simply include your own comments, but read and respond to the comments of others. Use sentence starters like *This reminds me of… I think this connects best to…*
> <u>Ask questions</u> – A conversation can't continue without good questions. Model good sample questions.

The authors also introduce some specific roles for each group member listed on pp. 28-29 and see the online resources for more handouts about both social bookmarking and shared annotation on pp. 32-47.

Chapter 2 – Persuasion

Persuasion is one of the five key skills students need in the 21st century and using digital tools to teach this skill is a perfect match. Because of the Internet, today's students have more opportunities to get their opinions out into the world and to really affect change. Through the use of blogs, podcasts, and video programs, students can develop a great deal of influence and awareness. However, just because they have *access* to tools that allow them to be heard does *not* mean they will be influential if they do not know how to create a message worth listening to. Students need to learn how to effectively articulate their points of view. For this reason, the chapter first outlines ways to teach students how to craft an effective argument. Only then do the authors introduce a very accessible digital tool used for written persuasion: the ***blog***. Note that the chapter focuses on a project in which students write open letters to world leaders, but the summary will focus on the skills and digital tools used to develop students' skills in persuasion. However, in order to fully engage students it is important to find a controversial topic to draw them in such as global poverty in a social studies class, child obesity in a physical education class, budget cuts in an arts class, or the role of statistics in influencing people in a math class.

Teaching the Characteristics of Effective Persuasion

Before jumping into blogging, students need to learn what makes written persuasion effective. Below are some criteria of effective persuasion and convincing evidence – both of which are necessary in creating a powerful argument in a blog.

Characteristics of Effective Persuasion
1. **A respect for other people's views** – Showing an appreciation of various viewpoints helps in convincing others. You can use the handout "Recognizing Different Perspectives" (on p.62 and free online) to help students develop this skill.
2. **A willingness to sustain conversations** – Silencing opponents is rarely effective. The best arguments come from carefully listening. See the handout "Collecting and Respecting Different Perspectives" on p.64 to help students with this.
3. **An ability to accurately, and civilly, describe sources of disagreement** – It is effective to learn to disagree agreeably. Use the handout "Exploring Misguided Arguments" on p.66 to help students develop this skill.

Characteristics of Convincing Evidence
1. **Statistics** – In persuasive pieces, statistics are very powerful because they make an abstract argument more concrete.
2. **Star Statements** – Quotes from experts, leaders, and celebrities lend credibility to a persuasive piece.
3. **Stories** – Stories show the impact of an idea on individuals or communities and provide concrete examples.

There are three useful handouts to help students learn to identify what makes evidence convincing. "An Introduction to Convincing Evidence" (p.67) provides a website with persuasive pieces and asks students to find examples of statistics, star statements, and stories. "Evaluating Persuasive Letters" (p.68) provides two sample letters and asks students to evaluate the effectiveness of them based on the criteria above. The final handout (p.69) helps students begin to collect their own evidence and determine whether each piece of evidence is a statistic, star statement, or story.

Structuring Classroom Blogging Projects

An important benefit of using a digital tool like blogging to teach about persuasion is that it motivates students because they have a real audience and their ideas have the potential to affect real change. They are more likely to research carefully, write clearly, and proofread thoroughly because they are publishing with a real purpose to a real audience. Once students have learned and practiced what makes a persuasive piece effective, they are ready to share their opinion with a wider audience through one of the most popular tools for sharing opinions: blogs. There are a number of free blogging services that are easy to use, but teachers must carefully plan for classroom blogging projects to ensure their success. Below are some tips.

Tips for School Blogging Projects
1. **Post all content on *one* classroom blog** – Monitoring 50 blogs is impossible so use one blog that everyone can post to.
2. **Encourage students to read and comment on others' blogs** – It is helpful to read other models of persuasive writing and practice writing effective blog comments. To teach this to students, see the handout "Leaving Good Blog Comments." (p.74)
3. **Promote student blogs to parents and colleagues** – Send links to pieces you are proud of to help students get feedback.
4. **Emphasize the importance of quality writing** – Because it's easy to publish online, students get careless and often don't take the time to craft polished entries and comments. Reinforce the idea that quality writing lends them credibility.
5. **Name and train student editors** – Let students help with poor writing or technical questions to help with numerous entries.
6. **Use pseudonyms** – It is best to keep students safe. Do not mention the school's name or your name either.

Teachers may be wary of blogging projects. These can fail if the focus is on the technology rather than the skills or when students must write about dull topics. There are more handouts and online resources to help teachers successfully structure a blogging project.

Chapter 3 – Communication

While our schools are almost completely text-driven, the moment students leave school they are surrounded by visual images. To prepare them to communicate in the 21st century we can no longer ignore images and video as a medium for communication. While the last chapter focused on the skill of writing effective messages, this chapter covers the potential power of video communication through the use of new media tools such handheld cameras, video editing applications, and online video and image collections. In order for students to be able to influence their audience using this new media, they need to learn the best ways to communicate key ideas through images. Just like in the last chapter, they need to *first* learn a skill that has been around long before the technology – how to tell a powerful story. As the brothers Chip and Dan Heath describe in their bestselling book *Made to Stick: Why Some Ideas Survive and Others Die*, the key to creating a persuasive argument is to tell a memorable story. They cite the example of a story told in the late 1960s that evil people were putting razors into Halloween candy. Although untrue, this affected the behavior of millions of people. They write that effective stories have the following five characteristics: (1) **simplicity**, (2) **unexpectedness**, (3) **concreteness**, (4) **credibility**, and (5) **emotion**. Students need to learn these five criteria before they create their own visual stories.

Structuring Storytelling Projects That Use New Media

The modern storyteller needs to learn to use new media for two reasons: there has been an explosion of media content and people's brains have become wired for visual content. In the first decade of the 21st century there has been a dramatic increase in people's engagement with and access to visual content through websites like **YouTube, Hulu, Truveo**, and **Clicker** (online video warehouses) as well as gaming and video-sharing websites like **Flickr**. iGeners have definitely been affected by this explosion and are often more at ease with communication through images than text. Now they need to learn how to use the criteria for powerful stories and apply that to creating powerful digital images and videos.

Telling Stories with Still Images – It might be useful to start with a **PowerPoint** project since many students are comfortable with this tool, it only requires simple technology, and most students have had little formal instruction in this media. They often create poorly organized, difficult to follow, and distracting slides. Instead, they need to learn the following three characteristics of memorable PowerPoint slides:

   (1) Use powerful images as backgrounds
   (2) Include memorable catchphrases
   (3) Make it visually appealing

There are several handouts (pp.99-107) that have students look at actual PowerPoint slides and evaluate them with the above criteria as well as a PowerPoint Slide Scoring Rubric. There is also a handout to help them create their own influential digital images.

Digital Storytelling

After students have had some experience with still images, they are ready for digital storytelling which involves using images, music, narrative, and voice. This is not only a vital skill, but it is also exciting because it is more similar to the storytelling iGeners are surrounded by every day. Furthermore, this type of storytelling requires that students interact with the content on a much deeper level and use higher-order thinking skills than more conventional storytelling. To start with a simpler digital storytelling project, teachers can create *digital kits* – folders of curriculum-based images, sounds, and narratives – students can use to practice creating influential visual messages without having to spend hours digging through content online or taking actual video themselves. There are handouts in the book (pp.108-114) that help students create powerful videos that are organized clearly. Students also will need to learn editing skills such as the ones below. Note that there are online-only handouts to help introduce these skills:

   • The ability to import content from external sources
   • The ability to "storyboard" video content
   • The ability to add background music tracks
   • The ability to record voice narration

The last step is for students to share their final products with the world. You might want to try the more education-friendly **TeacherTube** or **blip.tv** which has not yet been blocked by many school districts, unlike YouTube.

A Word About Creative Commons

It is important to teach students that images, music, and video have the same copyright protections as text. Students are often much less careful about citing sources with multimedia projects than with written ones. To teach them to use multimedia content responsibly, introduce them to Creative Commons, a nonprofit that provides an online warehouse of creative content that the authors have chosen to share freely with others. Students can look through these warehouses (such as commons.wikimedia.org, morguefile.com, flickr.com/creativecommons, and garageband.com) to find content for their multimedia projects.

Chapter 4 – Collaboration

Educators and families have been skeptical about social networking because they see these sites as providing nothing more than opportunities for gossiping and cyber-bullying. The result of these concerns has been an absence of the use of digital opportunities for students to communicate in school. While these fears are reasonable, we are missing the opportunity to use online communication to enhance our students' skills in collaborative communication. In fact, there are four characteristics of online communication – that are *different* from face-to-face communication – that actually provide unique benefits to students. These four traits are:

   1. **Persistence** – Electronic communication is permanent and can be viewed days or weeks later. No one is left out of a digital conversation.
   2. **Searchability** – Students' thoughts and ideas become instantly searchable.
   3. **Replicability** – The content of digital conversations can be easily copied and pasted.
   4. **Invisible audiences** – Speakers traditionally know their audience, but this is not the case with digital conversations.

These four traits of online conversations – persistence, searchability, replicability, and invisible audiences – provide numerous benefits. For example, because of the anonymous nature of the conversation, historically marginalized students tend to participate more in these conversations because they are less likely to fear ridicule. Shy students also can spend more time crafting their thoughts. Furthermore, these online conversations allow for higher-order thinking because students can spend time wrestling with topics, reflecting on them, and returning to their positions later. This challenges their thinking. Finally, students are often more motivated by online conversations since this mirrors the way they communicate with friends outside of academics.

Traditional Socratic Seminars and Collaborative Communication Skills

Just like in the other chapters, if we want to build the collaborative communication skills of our students, we first need to teach them those skills before engaging in the technology. To do this, teachers can use Socratic Seminars – an idea that is thousands of years old – to introduce these skills. In a Socratic Seminar one set of students sit in a circle discussing a text while another set of students sit outside of the circle as silent observers noting certain ideas and behaviors. In order to promote collaborative dialogue – the type of dialogue in which participants create shared knowledge – students must be introduced to the following skills:

> *Engaging silent students* – Successful collaborative discussions see silent students as missed opportunities and draw them in.
> *Making conversations safe for everyone* – To prevent domination of the discussion, assertive students must also learn to ask questions, build on their peers' ideas, and elicit thinking from others.
> *Asking good questions* – Students must learn to ask the kind of questions that challenge peers to think differently.
> *Correcting inaccurate thinking* – Students must learn to challenge inaccurate information with direct evidence.
> *Working through disagreements* – Students need to learn to embrace discord and disagree with ideas, not people.

There are a series of handouts in the book (pp.139-146) and online which provide role-plays for students so they can reflect on and practice the skill above so they can successfully engage in collaborative discussions.

Structuring Collaborative Communication Online

The characteristics of Socratic seminars translate very well into the digital worlds that our students inhabit. Students are used to questioning each other, collaborating, collectively exploring, and having the authority to control the direction of an inquiry. For this reason, it is easy to bring Socratic seminars to the online world as a means of developing collaborative communication. There are a number of media tools teachers can use to structure both asynchronous (non-simultaneous) and synchronous (real-time) digital conversations. To continue discussing topics from class, teachers can set up asynchronous digital forums through *Ning* (ning.com), *Blackboard* (blackboard.com), and *VoiceThread*. To hold synchronous digital discussions, *Skype* and *Dimdim* are useful. Some teachers turn to microblogging and instant messaging applications such as *Chatzy* and *Twitter*. The most successful digital forums are extensions of Socratic seminars in class. Remind students of the directions as well as the quotes, comments, and questions that sparked conversation in the classroom. The role of the teacher is the same online as in class: ask provocative questions, model appropriate discussion language, and highlight important contributions. Make sure you have a clear topic, and a clear start and end time. The goal is to have class discussions spur online thinking, and online discussions lead to even more productive conversations back in class. Below are some suggestions to help teachers successfully structure these types of collaborative conversations.

Steps to Successfully Structure Asynchronous Conversations

Introduce students to specific comment types – You can use the handout on p.148 to introduce students to the different types of comments they can make such as *starter comments, kicker comments, pushback comments,* and *answering comments*.

Share characteristics of positive comments – Share actual samples of comments so students can learn how positive interactions move the discussion ahead and negative comments shut it down. See the handout on p.150.

Provide students with feedback – There are several rubrics you can use (p.152 and p.154) to give students feedback on their performance in an online asynchronous conversation to let them know how they are doing and to hold them accountable.

Select a service to host asynchronous conversations – Make sure you can control the privacy settings, use a wide variety of content (not just text, but multimedia content as well), and can have several different strands of conversations. The best free online tool to set up asynchronous conversations is VoiceThread. Users can interact around video clips, images, documents, charts, and more.

Think through technical issues – In order to make sure you are following the school or district's policies and procedures, consult with the technology services department and see the checklist of issues to consider on pp.157-159.

Steps to Successfully Structure Synchronous Conversations

Using the Internet provides a tremendous opportunity for students to extend their conversations beyond their local peers and to connect with students in other countries. There are few steps to help you successfully structure these conversations.

Capacity and permission – Make sure your school's technology has the capacity to host these conversations. Also find out what procedures you must follow when conducting real-time conversations with students abroad and what permission is needed.

Select the right application– For individual or small group discussions, you can use Skype which only requires a webcam. For larger, more formal interactions where students use PowerPoints or desktop sharing you may want to use a webinar application like Dimdim to create online meeting rooms. If you are intimidated by the technology, try *TodaysMeet* for ease of use.

Additional technical questions – After choosing an application, you still need to think through the technical considerations such as whether your students will need individual accounts. Take a look at twelve of these questions to consider on pp.160-63.

Finding partners – There are many teachers interested in pairing their classes with students abroad. You can find a match by using *ePals*, the *Skype in Schools* wiki (skypeinschools.pbworks.com), or see lists of interested classes posted by respected bloggers at snipurl.com/sfapo and snipurl.com/sfatm.

Preparing students for the conversations – Before students begin real-time discussions of controversial issues, it is important to teach them to be open-minded, challenged, and be willing to think together. Use the handouts on pp.164-173 to prepare students for the content of these challenging conversations and for the technological issues as well.

Chapter 5 – Problem Solving

Collaborative Problem Solving
In schools, students are rarely asked to solve the type of higher-order problems they will confront in the 21st century. Most often they are asked to solve Type 1 and Type 2 problems as described below:

Type 1 problems – The easiest to solve because the problem and solution are clear. For example: 5 x 4.

Type 2 problems – The problem and answer are clearly defined, but not readily apparent. For example, "If Johnny has eight slices of pizza and sells each for two dollars, how much will he earn?"

Type 3 problems – The problem and range of solutions are not clearly defined and have no clear or correct answer. For example, "Can you design a futuristic house that is aesthetically pleasing because of its geometric design?"

Type 3 problems require content knowledge and are best solved by collaborative groups. As James Surowiecki argues in *The Wisdom of Crowds*, when working to solve complex problems, individual experts are consistently outperformed by groups. Because of this, a number of businesses have turned to *wikis* as an electronic means of collaborative problem solving. Wikis are helpful when groups want to co-produce knowledge in a way that allows individuals to work at different times. Wikis are a great way to inspire people to work with others around motivating content toward a meaningful and shared outcome. Because our best lessons motivate students to interact collaboratively around stimulating content, wikis are a natural fit for the classroom.

Structuring Classroom Wiki Projects
Wikis can be a disaster for elementary, middle, or high school teachers who don't know what good wiki work looks like. To help teachers with this, below are four characteristics of quality wiki projects. The handouts on pp. 203-207 provide actual links to student wikis and give teachers practice evaluating these wikis based on the four characteristics below.

1. Accurate content – Teachers fear that students will share inaccurate information. However, wikis are a perfect tool to teach students about judging the reliability of online sources.

2. Deep linking – Wikis become a higher-order learning activity when there is evidence that students have read, synthesized, and evaluated a variety of other resources. There should be links to these other resources as evidence of this.

3. Evidence of group revision – Wikis are designed for collaboration and the page history button will show the group's previous versions. Group revision can be a challenge for students not used to making meaningful edits on each other's work.

4. Quality presentation – As with any other writing done for class, writing should be expected to meet age-appropriate norms for grammar, punctuation, and spelling. The numerous revisions of wiki pages provide a natural opportunity for proofreading.

As with other digital projects, teachers should introduce a defined set of roles for student participation. These are the kinds of roles that wiki users naturally use, but students may not be familiar with these roles. The handout on pp.208-10 will help teachers introduce the roles, and below is a brief description of those roles:

Link Layer – Reviews every link on the group's wiki pages to ensure quality
Flow Master – Pulls together contributions from various students to ensure the voice is unified and the organization is clear
Spelling Cop – Checks every word in the final product
Discussion Starter – Starts conversations to organize the group
Captain Spit-and-Polish – Ensures the content is professional and interesting by including images, video, and other formats

Once students are aware of the characteristics of good wiki work and know the defined roles for participation, it is time to implement a classroom wiki! The handouts on pp. 211-218 include a checklist to make sure you are ready to implement a wiki and a scoring rubric to evaluate the student work. Below are some other suggestions for successful implementation.

Start with <u>one</u> classroom wiki – Rather than having each student create a wiki, keep it simple.
Model wiki pages around Wikipedia pages – This will give students a model of the end product.
Give students structures and content – A blank wiki is intimidating. Consider giving students page templates with a table of contents, a few sample pages to refer to, a collection of supporting materials, and step-by-step directions for using a wiki.
Use wikis to enrich and remediate – Wikis offer an opportunity for differentiation.
Use RSS feed readers to monitor changes – To monitor new contributions, use an RSS feed reader (discussed in chapter 1)
Name and train student editors – Like with other digital projects, this will help with the vast quantity of revisions.

Professional Development Suggestions from The Main Idea
The best way to introduce the ideas from this book to your teachers is to use the <u>handouts</u> throughout the book and *free online*. This way they can experience firsthand what their students will need to go through or practice evaluating student work. For example:

Chapter 1: Information Fluency – Have your teachers use the handout called "Spotting Websites You Just Can't Trust" on pp. 35-37 to practice using the four criteria to judge the reliability of a few sample websites. Then they can lead students through this later.
Chapter 3: Communication -- Have teachers practice using the handouts on pp.99-107 to look at sample PowerPoint slides and evaluate them using the criteria provided. Also have them practice using the PowerPoint Slide Scoring Rubric.
Chapter 5: Problem Solving – Have your teachers use the handout on p. 203 to look at an actual student wiki (carbonfighters.pbworks.com – about global warming) and practice evaluating it based on the four criteria presented in the handout.