

Chapter 1 : How to Teach Inferencing | Clutter-Free Classroom

Introducing the Concept. To students, the phrase "making inferences" often means little or nothing. When teaching inference, it is important to explain to them why making inferences can be so important in the process of understanding what you've read.

Table of Contents Section 1: This section serves as an introductory tutorial on four inference strategies: In this section you will Draw on your past experiences with inference strategies. Explore the research, principles, and classroom phases behind four inference strategies. Examine a range of classroom applications that demonstrate the different ways inference can be used to deepen student thinking. Experience a model lesson using the Inductive Learning strategy. You, being the defensive driver that you are, know reckless driving when you see it and decide to move to the right lane and allow the SUV to pass. The SUV barrels past you, and you breathe a sigh of relief. Part of what makes you a good driver is your ability to infer. Inference is what thinking adds to what we know, read, or learn. Speaking scientifically, we might say that inferential thinking always involves gathering information, developing hypotheses, and drawing conclusions. As you can see, inference is a perfectly ordinary human capacity. In fact, many teachers identify inference as one of the most challenging of all academic skills to teach. They note that inference feels abstract and difficult to model, design lessons around, and assess. But teach inference we must, because inference is a "foundational skill"â€”a prerequisite for higher-order thinking and 21st century skills Marzano, So what does inference look like in the classroom? What kinds of inferential thinking are required for success in school and beyond? Review the examples and respond to the questions that follow on page 5. How would you design a simple experiment to test your ideas? Then explain the central message of this poem in one sentence. What does the element iridium have to do with the extinction of the dinosaurs? Here are some clues to help you figure it out: Iridium is an element that is rare on Earth. High concentrations of iridium have been found in Italy, Montana, and Mexico. Iridium is common in objects from outer space, such as meteors and asteroids. The K-T boundary is found worldwide, and it is rich in iridium. Nearly all dinosaur fossils are found below the K-T boundary. What tentative hypotheses can you generate? Examples of Inference in the Classroom continued Activity: Thinking About Classroom Inference What do these examples have in common?

Chapter 2 : Teaching Inference as a Reading Strategy | The Science of Learning

Have students practice creating inferences as well as identifying them by issuing an Inference Challenge. You could do this orally, but it would make a terrific writing assignment. Basically, an Inference Challenge is another way to teach, "Show, don't tell."

Amy Mezni Wednesday, July 19, No Comments Inference is an important skill for students to learn in order to really dig deep into a text. People use inference every day to make sense of the things people say and do. Students use inference all the time, but they need some guidance in learning how to use the strategy with a text. We observe people, places, and things every day. For example, we notice that flowers are blooming or a dog is barking. An observation is simply noting what you see, hear, or smell. People constantly make observations, both consciously and subconsciously. These observations help people make predictions. For example, if you walk outside and see dark clouds coming, you might predict it will rain later. People use observations to predict possible future outcomes and events. Inferences are things we think are true based on what we already know. If you walk through your front door and smell pizza, right away you assume someone is making pizza for dinner! If we see a boy wearing a uniform and carrying a glove, we infer that he plays baseball. Prediction and inference are similar, but they have key differences. It is important that students understand how to do both while they read. If students make a prediction while they read, they will usually find out if their prediction was correct by the end of the text. Also, an inference can be about the past, present, or future, but a prediction is usually about the future. Teaching Inference How can we teach students to make inferences about their reading? We also want them to be able to apply this skill to courses that use nonfiction texts, such as science and social studies. Therefore, students need to have an easy way to remember how to make an inference. Teaching students the following steps can help them make inferences: Question - As students read a text, they should form a question about what they are reading. This question can be about character, the setting, the plot, or anything else related to the text. Text Evidence - After formulating their question, students should review the text to find evidence that would help them answer their questions. Prior Knowledge - Students should think about what they already know about the topic that would help them determine the answer to their question. Conclusion - Students should form a conclusion based upon what they learned in steps Keep in mind that there is not one correct answer or inference - there can be many! Use a Familiar Subject If students are just learning to make inferences, teachers should select subjects that are slightly unfamiliar to students, yet not completely new. Students should have some background knowledge that they can activate to make an appropriate inference. For example, if the class previously studied a science or history topic, the teacher might want to use something related to that for practicing inference. Make Inferences about a Photograph Teachers may want to introduce inferencing with photographs and illustrations. Thinking about a visual and "guessing" is more familiar to students. Every time they watch a video or read a picture book, they see visual images. In a science or social studies class, students could be shown a photograph and asked to make observations about the image. Teachers should keep a list of all of the observations students have. Once students run out of ideas, look at the list and model making an inference from what they already observed. Use a Think Aloud Teachers should model the thinking involved in making an inference. I wonder why she sent it? The teacher should then make observations. She seems really happy. Oh, I see the kitten has a ribbon around its neck. I bet she got a kitten for her birthday! In the book he sees an image of the flag with thirteen stars and decides to find out why. The student reads the text, looking for text evidence that would help him answer the question. He thinks back to a lesson they had about American symbols and remembers what he learned about the flag. Using both the text and his background knowledge, he can infer why the flag had thirteen stars. Mentor Texts for Inference Again, teachers may want to start teaching inference with photographs or illustrations. However, there are a number of picture books that work well for teaching inference. *Cows That Type* by Doreen Cronin Inference may be hard for some students at first, but with enough practice, they will be able to understand and use this strategy effectively. Are you interested in other reading strategies? Click the links to go to my other blog posts.

Chapter 3 : Making Inferences & Predictions in a Story: High School Lesson Plan

Inference is an important skill for students to learn in order to really dig deep into a text. People use inference every day to make sense of the things people say and do.

CFC , instruction , reading Tuesday, March 13, Students need to know how to make inferences and draw conclusions. Making inferences is a very important skill for them to acquire, but we seldom reflect on why it is such an important skill. Making inferences is important because it teaches students to critically combine the vastly different skill sets of empathy, experience and observation. This post will share several ideas for inferencing lessons, provide titles of books that teach inferencing and explain why inferencing is such a crucial skill. When it comes to making inferences we usually only consider how important it is with regard to reading comprehension, but the ability to make inferences and draw conclusions has many valuable applications for learning math as well. Schema background knowledge and observations, and I always like to include empathy in that as well How to Teach Inferencing: A few years ago I was reading the book Dear Juno to my class and the focus skill for the week in our reading curriculum was inferencing. It ended up not only being the most effective way I ever taught inferencing, but also one of the most fun activities I then did year after year. I started by making a list of staff members I wanted to include. I invited all of their former teachers and classroom aides, the principal, specialist teachers and other staff members they know well and come in contact with often to participate. I sent each of them a letter explaining what I was doing along with an envelope and a piece of stationary for them to write on. The letter asked them to each write my class a note that told the students a few interesting things about themselves. I asked them to put the note in the envelope along with 3 objects that would give us clues about who had sent the envelope to us. I created an envelope too. It was addressed to the class, but had a question mark in the upper left hand corner. One of my 3rd graders spotted it in the morning during math workshop. I told them they would need to wait until after lunch to see what it was all about. Click to access these inferencing activities. The waiting drove them crazy. There excitement was elevated when they spotted a second letter on the board next to the first. I opened the envelope and took out the first item I asked, "What does this object tell us about the person who sent the letter. I had written about how we would be working on inferencing, explained what inferencing was and promised that they would be getting more mystery mail throughout the week. After I modeled the first one whole class, I gave each student a recording sheet. I opened the second envelope and revealed the first object. They illustrated and labeled it onto their recording sheets. We repeated that and then they made their own written inferences. The excitement level in my classroom was through the roof every time a new letter appeared. It was so fun for me to see how quickly their skills developed. By the third envelope the quality of their inferences was so much higher than when we opened the first. A movie ticket stub had them inferring the sender was over the age of 18 because it was rated R. This was such a motivating activity. They were quickly throwing around the word "inference" and begging for more. The next morning I found 6 envelopes on my desk that some of the students had made at home. I totally heart when learning is so exciting that the extend upon lessons on their own at home. When considering teaching about, or introducing inferencing activities, here are a few ideas to help learn this skill: To show students that they have an already-ingrained ability to make inferences A teacher returns a graded quiz, all of the students look happy except one, who quietly begins to cry. They infer, based on their experiences and knowledge that the quiz grade of the unhappy student was not a good one. They would instinctively know why! Click on each amazon affiliate link to read descriptions.

Chapter 4 : A Four Steps of Teaching Inferencing to ELLs | ELL Strategies | Empowering ELLs

How to Teach Inferencing In this Article: Guiding Students through Making an Inference Teaching Inferences with Activities Teaching Inferencing as a Reading Skill Community Q&A The ability to make inferences is a foundational critical thinking skill.

The Lemonade Stand 8: There are so many fun ways to teach students how to infer during reading. It requires some higher order thinking skills, so it can be difficult for students to grasp. I have some ways and ideas to make teaching making inferences super fun and engaging! I like to kick off the unit with a Pixar short film. I actually show one to kick off each day of the unit as an attention grabber. They are super quick, fun, and get the students thinking. This is a great one to use, but there are tons more out there that would work. As with every new concept, I always make an anchor chart for us to refer to all throughout the unit. I introduce inferences with this chart, and then I have the students talk about it. I then chant the parts of how to make an inference with a motion for each part and have the students echo me. We do this a lot! After about a week of doing that, they will know what an inference is for the rest of the year! You can just randomly ask them during the year, and they can use the terminology and everything. That is the first book I use as a read aloud for my students to practice making inferences. Make sure they have not read it before. If someone has heard it, tell them to keep what happens a secret! This book is perfect for making inferences. I use it first because there are always students who have read it before, so I like to use it for the whole group introduction. As I am reading the book, I am completing one of these graphic organizers, modeling how to properly make an inference and record my clues and schema. Students are filling one out with me on their clipboards at the carpet. You could even make an anchor chart you fill out by sharing the pen, but I like to use one of these to make them familiar with the format. I use these all throughout the unit. We then made these scary Miss Swamp craftivities! During my inference unit, I like to incorporate lots of different books and read alouds. These are some of my all time favorites. Chris Van Allsburg may be my favorite author. His books are so mysterious and amazing! So much inferring is required! The following day, I start releasing a little more independence. We, of course, repeat over and over what it means to make an inference using whole brain strategies. We do another story and craftivity and then they participate in a cooperative group activity. If time is an issue for you, you could have them do this during small group instruction or even during centers. It would also be a great early finisher activity students could easily grab and work on. I create 3 or 4 case files like the one below and fill each with graphic organizers and a book or passage. Students read the book or passage inside and complete the graphic organizer together. The first time I do this unit, I like to use all picture books. When I do this unit again, I might vary it with other books and passages. The great thing about my inference pack is that you can use it over and over throughout the year. There are too many activities to fit in one week. I like to put a question in which they have to infer in the file. It gives them a purpose and keeps them focused. Students wear these little name badges while working. They fit in a name badge holder or you could just paper clip them to their shirts. I always like to incorporate craftivities into my comprehension units. We make pigs for Piggie Pie and teddy bears for Corduroy. When we work on inferences again and throughout the year, we make flap books, mini-booklets. I like to add variety to the different activities that we complete. At the end of each lesson, I try to do some sort of exit ticket to check their understanding. I may read a short passage or story and ask them an inferring question about it. They write their inference on a slip of paper and clip it up. Last year, I had a board for exit tickets. Each student had a clip for their exit ticket. It was quick and simple. I have actually done some of these activities for observations, and my administrators always really love it! I have gotten great scores because of the rigor, pacing, and variety of activities and assessments. I hope this helps you out and makes teaching inferences easier and more fun for you and your students! If you need any of these inference activities, click the pic below. Fall has definitely been in the air! I went with some teacher friends to the Nashville GoNoodle meet-up. It was so fun! Go Noodle has been a lifesaver in the classroom, so it was really fun to see the people behind such an amazing site. So many fun booths and yummy food. It definitely made me excited for fall!

Chapter 5 : How to Effectively Teach Inference To Students - TeachingIdeas4U by Amy Mezni

The teaching of inference skills is extremely important to our students. It is a higher order skill that is essential for students to develop to afford them access to the deepest levels of comprehension.

The trick is to help kids learn how to do it with text. Here are some suggestions for helping your students to learn this skill. It is not stating the obvious stating the obvious: Here are some fun suggestions for demonstrating this idea: Come to school in a T-shirt from an event such as a charity run, concert, or theater performance. Ask the students what they can infer from your clothing choice. Ask the principal or another administrator to come into your classroom at a time that looks unexpected to your students. Have a short, whispered conversation off to the side, during which you point at the fire alarm in your room and then look at your watch or any other scenario that makes sense. After the administrator leaves, ask the students what they think the two of you discussed. Have a student stand in front of the class and ask what the rest of the students could tell about him if they did not already know him, just by looking. For example, his eyesight is not very good he is wearing glasses. He likes the Seahawks he is wearing a Seahawks T-shirt. He walked in some mud on his way to school there is some mud caked on his shoes. Use pictures Picture books are, of course, a wonderful source for pictures that can be used for inference. They make a terrific bridge from pictures to text. Before you read the text, ask the students what they can learn from the pictures. Comics are another great source for inference pictures. Cut or block out the captions and speech bubbles, and have your students discuss what they see. If you are looking for a great inference warm-up, you might want to check out my Inference Pinterest Board. Ask questions Ask inference questions while reading aloud from both literature and nonfiction selections across the curriculum. Teach students to use inference questions when reading independently. What is my inference? What information did I use to make the inference? How good was my thinking? Do I need to change my thinking? Make it a challenge Have students practice creating inferences as well as identifying them by issuing an Inference Challenge. You could do this orally, but it would make a terrific writing assignment. Create a character who is very smart without actually saying he or she is smart. Write about a very cold afternoon without saying that it is cold. Write about an old car without saying that it is old. Write about somewhere that is scary without saying that it is a scary place. Make it fun Coming up with inferences is a bit like solving a puzzle or a mystery. Try reading one to the class as a warm-up or when you have a few extra minutes. These would be great for independent learning at a computer station.

Chapter 6 : Teaching Inferences (With Free Mini Lesson)

How to Teach Inference May 31, With the Common Core Standards in place, students are being asked more and more to use critical thinking skills to analyze literary and informational text.

Marzano Thinking and reasoning processes—such as problem solving, decision making, and the like—have been identified as legitimate and even necessary 21st century skills. Inference is one of those foundational processes. Teachers can foster this awareness in a variety of ways. For example, if elementary students are reading a story about two children walking alone through the forest, the teacher might ask them to predict what will happen next. One student might report that "something bad is probably going to happen. Rather, students are filling in information that the story has not yet revealed. The teacher might pause and ask, "Given that the sun is a source of heat, what conclusions might you make about seasonal changes on Earth? As students offer various conclusions, the teacher would point out that they are presenting their own opinions; the answers are not found thus far in the video clip. Again, the students are making inferences. Four Questions to Pose Teachers can use a simple process to guide students in analyzing the effectiveness of their inferences. It involves posing four questions drawn from what researchers call elaborative interrogation. What is my inference? The first question helps students become aware that they have just made an inference—that is, that they have just filled in information that was not directly presented to them. Students might make two types of inferences. Default inferences are automatic assumptions. The elementary student who predicts that "something bad is probably going to happen" to the two children walking in the woods has most likely read other stories about lost children and assumes that the plots will be similar. A second type of inference is a reasoned inference, a conclusion that we make about a topic on the basis of available information. The science student who concludes that winter occurs when the Earth is farthest from the sun and summer occurs when it is closest to the sun is making a reasoned inference. She knows that the closer you are to a source of heat, the warmer you will feel and that the farther away you are from the source, the colder you will feel. She reasonably, but mistakenly, concludes that the elliptical orbit of the Earth explains its seasons. What information did I use to make this inference? Consider the default inference the student made about the lost children. Answering this second question makes the student aware that, on the basis of his familiarity with other stories, he has created a rule that he now uses. How good was my thinking? With default inferences, the teacher simply asks students to consider other possible premises: What are some other things that might happen? In the case of the science student, her thinking was valid. However, as the teacher guides the student in examining her thinking—by asking her to explain her thinking and then pointing out misconceptions or missing elements in her explanations—the student comes to understand that she was operating from a flawed premise. Thus the tilt, rather than the shape of the orbit, is the stronger influence on seasonal changes. Do I need to change my thinking? The final step in the process is for students to consider possible changes in their thinking. The elementary student who has made the inference about stories with lost children might be alert for different patterns in story plots in the future. The science student might become more aware of the need to consider additional facts before coming to a conclusion when examining physical phenomena. Stepping into Higher-Level Thinking Making inferences is the foundation to many of the higher-level thinking processes that we want students to use more effectively in the 21st century. Although all students make inferences quite naturally, teachers can use strategies like these throughout the curriculum to help them become more thoughtful in their inferences. Interactions among elaborative interrogation, knowledge, and interest in the process of constructing knowledge from text. *Journal of Educational Psychology*, 96 3 , To contact Marzano or participate in a study regarding a specific instructional strategy, visit www.

Chapter 7 : Teaching Inference – Literacy Ideas

But here's the good news - even before you teach a single lesson, your students already know how to infer! For example, if one of your students enters the classroom crying, the majority of your students will immediately infer that a) their classmate is upset and b) he might want to be comforted.

Or try the following making inferences activities that can be used anytime and with any text. **Be Highlighter Heroes** This is a baby step in a long process of teaching inferences. For this activity, give students a notecard with an inference that you made after reading one section of a book. Then give students a photocopy of that section of the book and highlighters. When they find them, they become highlighter heroes! **Build an Inference Web** A spider is a great metaphor for this activity. Explain to students that every author weaves a web of clues throughout a story. Give students a piece of paper with a spider web drawn on it along with 4-5 sticky notes. First, ask them to make an inference about the text. Direct them to write it on a sticky note, and place it in the center of the web. Then ask them write clues from the text that support the inference on the other sticky notes. Place the supporting sticky notes around the outside of the spider web. Start by holding up one item the students will need for your next lesson. Ask them to make an inference about their next activity based on the item you hold up. Continue to introduce items to your students into the next lesson. After your students have correctly inferred what the next activity will be, take the time to discuss which item led them to make the correct inference. **Want More Ideas Like These?** This post is part of a part series. In each post, we share ideas for making comprehension strategy practice more engaging. [Click here](#) to see tips and activity ideas for the other reading comprehension strategies. Join to [Download](#) Enjoy instant access to this resource plus thousands of mini-lessons and activities when you become a Premium Member.

Chapter 8 : Helping Children Learn to Infer - The Curriculum Corner

Students look through these books, encourage them to tell the story of what is happening in the book. Also, ask students to infer how the characters are feeling.

Goal The goal of this article is to help ELs develop their ability to make inferences by sharing a language scaffold. **Research Suggests Academic Language** There is a clear distinction between social and academic language Cummins, Social language is most often learned through social interactions and is highly influenced by context. Because of the nature of social language, it is developed rather quickly and without much direct instruction. Academic language, however, requires direct and explicit instruction because of its abstract, decontextualized nature. Academic language often assumes that the reader already has the context and background knowledge to access the text and concepts. For ELs to be successful at school and in their future workplaces, they need to be proficient in both social and academic language. It is the ability to create a thought or opinion that can be supported by the text. **Why Teach Inferencing** One reason to teach inferencing is that students are required make them during in-class and national standardized assessments. However, it also develops ELs critical thinking skills. Marzano suggests that it is a foundational skill that is a prerequisite for critical thinking. Additionally, it is used across content areas. For example, ELs need to both make inferences about communities they are studying in a humanities class and draw conclusions about the data from a lab experiment in science. ELs, despite their language status, can still think critically. They may need to express it in their strongest language or with limited English, but they can be encouraged to think deeply and critically. **Past Practices** When I started my career, I never explicitly taught inferencing, but rather would ask students questions after they read a text. My questions would be inferential in nature, but students did not seem to have a way to answer them. They simply guessed at answers without going through the process of using textual evidence to support their claim. **What Teachers Can Do: A Guide for Teachers**, I now use a scaffolded approach to help students master inferencing. Her book was incredibly helpful in developing strategies to support all students – including ELs – because she shared practical strategies that are easily implemented. Although I did read the book from cover to cover, I could easily flip to a chapter, quickly read it, and then applied the strategies the next day. **It Says – I Say** So Beers utilizes a three-part structure to help internalize the process of making inferences. She breaks a complicated task into manageable units of thinking. **Create an inferential question** Inferential questions require searching for answers that are not explicitly stated in the text but can be reasonably supported by textual evidence. After reading a text, I ask ELs inferential questions about the ideas presented. This step in the process honors the central pillar of close reading: This step also helps ELs learn the value of re-reading, which is a habit proficient readers possess. A detail from the coral reef article that ELs can use as evidence to form their claim is: When you look at the chemistry of the oceans, the carbon dioxide is already making a measurable change. It reacts with seawater and turns into carbonic acid, and has made the oceans 30 percent more acidic than they were before the industrial revolution Harris, If you are working within the Common Core Standards and want to learn more about close reading, the definitive go-to expert is Dave Stuart Jr. In other words, students are gathering textual-based evidence. In the excerpt above, ELs might say: Based on the sample question for the coral reef article, a response might be: To be healthy, coral reefs need the amount of carbon dioxide to be at a certain level. Too much CO₂ can cause the water to be too acidic. If too much CO₂ is a bad thing, then too little might also be harmful for the coral reef. CO₂ has to be at a particular level for the coral reef to be healthy. Below is a video of me teaching inferencing to ELs. As you can tell, it is a difficult task to teach and took about 5 minutes with lots of scaffolding. This step makes it implicit that to understand complex texts, ELs must return to re-read it. ELs can learn academic skills. Inferencing is an essential academic skill and life skill. Structures and scaffolds can be used to teach ELs to acquire academic skills. **Next Post** Thank you for spending time reading this post. I hope the information will be helpful in supporting your ELs to master the skill of inferencing. Please leave comments and questions below. The Visible Literacy series consists of articles about reading, writing, and vocabulary. This article concludes the articles about reading instruction.

My next two posts will be about writing instruction, and I will share a routine to help students talk collaboratively about the text to construct meaning and analyze its ideas and concepts. This routine simultaneously teaches students to be close readers and to be effective, receptive communicators. If I was asked to teach pre-service educators only one structure, it would be this process. Free Download Beers, K. What teachers can do. Language Development and Academic Learning. A Guide for Administrators. Board of Regents of the U of Wisconsin System. Retrieved November 12, 15, from <http://www.wisconsin.gov/education/academic-learning>: A research-based framework for teaching English language learners. Educational Leadership, 67 7 , Middle years programme language acquisition guide. Research on academic literacy development in sheltered instruction classrooms. Language Teaching Research, 15 3 , 153-160

Chapter 9 : Teaching Inference - Educational Leadership

Why teach inference? Inference is a "foundational skill" and a prerequisite for higher-order thinking and 21st century skills (Marzano,) Inference skills are used across the curriculum, including English language arts, science and social studies.

This anchor chart includes phrases students might use to begin their inferences. One aspect of inferring while reading is using the skill of inferencing to determine the meaning of new vocabulary words. Ideas and suggested texts for this skill can be found here: Inferencing to Determine the Meaning of New Words. After working on using inferencing to determine the meaning of new words, we moved onto using photo prompts. You will find these prompts and activities here: Inferring From Photo Prompts. These can be a good introduction to using inferencing. Here are some books we like: Students look through these books, encourage them to tell the story of what is happening in the book. Also, ask students to infer how the characters are feeling. You might want to sit these at a literacy center and have students complete a graphic organizer that shares their inferences. Put an object in a bag and give the students 5 clues about your object. After each clue, allow students to guess what your object is. Explain to students that they are making an inference each time they guess based on what you are telling them. What Can You Infer? Print our story cards and laminate. Place these cards at a center along with copies of the Inference Recording Page. At the center, students choose a card and make an inference about what is happening. Organizer for students to complete with the books. The first book we like to read with our class. We model how to complete the organizer. Then, we place the other books at a center for students to complete independently. For younger students, you might choose to read the other books as a read-aloud before having students complete the center. During this unit, we do a great deal of modeling making inferences in class. Inferring is a skill that is often difficult for students. Because of this, many days of guided practice is important. We like to use this Inferencing Graphic Organizer. In front of the class, we model making a prediction. We then record the evidence that helped us make the prediction. As we read on, we place an x in the final column if our prediction was incorrect or a C if it was correct. If the prediction was neither confirmed or proven to be false, we leave the final column blank. Here are some of our favorite books that we use in our rooms to practice making inferences: This book is a collection of poems. They are perfect for inferencing lessons. Students use their background knowledge to infer what animal each poem is about. These are also great poems for encouraging students to act out!