

# INFUSING EXPLICIT INSTRUCTION IN CRITICAL THINKING SKILLS INTO SECONDARY SCHOOL HISTORY

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Arguments between people, neighbors, governments, happen all too frequently in this world -- and they have a tendency to stir up our emotions and even to turn violent when the stakes are high. But there is another sense of “argument” in which the enterprise of arguing becomes elevated to the level of reason. People, perhaps just as frequently, but in more thoughtful moments, try to convince others to accept ideas or do certain things by offering them *reasons* for accepting those ideas or doing those things. To be more precise, they offer reasons which are presented as *compelling* in support of specific views and courses of action. What they are engaged in is offering what we also call “arguments”, though now as an intellectual enterprise. And just as human history is peppered with arguments of the former sort, arguments presented to convince people to do things, from voting for someone in an election, to using or not using nuclear weapons in a conflict, often have a profound impact on shaping the course of human history.

This is not only true of what we consider human history, but also of our own personal histories. Did that automobile ad convince you to go and look at that new Steria? Did the reasons offered by the salesman convince you to buy it? Arguments, even in this intellectual sense, have their impact on action too, hopefully for the good. But it doesn't always work out that way.

Unfortunately, all too often the arguments that convince people to do things that shape history are not very good arguments, and they should not have convinced those people to do what they did, if those people had exercised more careful thought. Should George III have listened to the counsel of his hard-liners about the revolt in the American colonies? Maybe just a little more reflection would have revealed this counsel to involve not such good arguments. And maybe the brutal consequences of thinking they were good arguments could have been avoided. And should I have listened to that car salesman? He sounded convincing, but now, on reflection, his reasons were maybe not such good reasons.

Alas, like that Steria that keeps breaking down and has overextended my budget, that's the past and, like T. S. Eliot's "time past", what might have been remains in time present and time future always behind the closed gate to the rose garden that we never did, nor ever will, enter. Those decisions, based on accepting certain arguments, once made, and their consequences played out, are irrevocable, no matter what we should have done had we thought more carefully about the situation.

How can we minimize this? How can we, in effect, minimize history repeating itself in this way?

There is a powerful approach to bringing an emphasis on thinking into school classrooms that can be the basis for not only helping students develop skill at argument analysis and evaluation, but also help them develop a range of other important thinking skills, both critical and creative, that can impact on the rest of their lives. The approach is what I and my colleagues call *Thinking-Based Learning* – an approach which involves, at its core, infusing direct instruction in procedures that make our thinking more skillful into regular content instruction (Swartz, *et al*, 2007). This is an approach that both can be and has been practiced by teachers across the curriculum and grade levels.

### **1. Studying the Dynamics of 1776**

John Kavanaugh teaches 8<sup>th</sup> grade American history. He has been doing so for 32 years. But his teaching style has evolved during this period. He has modified his teaching, in fact, from a teacher-oriented mode in which students take notes on his lectures, to a student-centered mode of instruction in which he facilitates active thinking by his students about what they are learning. He has been focusing this month on the roots of the American Revolution. The textbooks the students are using give accounts of the major incidents that surrounded the firing of the first shots at Lexington and Concord, in Massachusetts: the Stamp Act, the Boston Massacre, the Boston Tea Party, the Declaration of Independence. They have also been reading about some of the heroes of the period: John Adams, Benjamin Franklin, and George Washington, for example.

But Mr. Kavanaugh is aware that what the students find in their textbooks merely skims the surface and often projects a kind of patriotism that obscures the actual dynamics of the period they are studying. One of the things he wants his students to appreciate that they don't get from their textbooks is the circumstances of the ordinary people who lived in the Colonies at that time, and the social dynamics of this period. So he has gone beyond the mere use of the textbook and has supplemented the resources he uses with some primary sources: diaries from ordinary people written in the years 1774, 1775, and 1776; firsthand accounts of everyday life in cities like Boston and Philadelphia; newspaper accounts of ordinary and extraordinary events of the day; and many others. What they find is not the monolithic opposition to Britain that many textbooks lead students to think existed in 1774, 1775, and 1776 but rather a population that was divided with regard to open opposition to the British, loyalty to them, and a distancing lack of concern one way or the other. And they find that amongst the 13 colonies there is no unified position about their relationship to Britain.

Mr. Kavanaugh has developed an educational plan for this unit of study that will start here but eventually take students to a deeper understanding of the political dynamics in the Continental Congress and the development of the Declaration of Independence. His plan is to expose students to the arguments that were advanced in the Congress in favor of and against declaring independence, give them a sense of how these arguments impacted on the resultant declaration of independence, and expose them to the complex political dynamics at the time. He is especially concerned to help them answer the question: Patriotism aside, were the arguments that convinced the members of the Continental Congress in Philadelphia to support independence, and thereby dramatically reshaped the course of history, really good arguments? Was this a rational decision or one of political expediency?

Mr. Kavanaugh recognizes that for this to succeed he should first help students develop skill at the kind of thinking needed to effectively and skillfully analyze and evaluate arguments. This involves a cluster of critical thinking skills that he recognizes that they have not yet been introduced to. He cannot just ask them whether John Adams' arguments were good

arguments, or whether Mr. Pinckney of Virginia had better counter-arguments, if they don't really know what an argument is let alone how to evaluate it. So he plans a basic start-up lesson on these critical thinking skills. This involves simpler arguments used in the ongoing debate to try to convince the population in the colonies to either remain loyal to Britain or seek independence. Thus he will infuse instruction in skillful thinking – in this case the specific types of thinking needed to skillfully analyze and evaluate arguments -- into his content teaching like so many other teachers have done. The instructional techniques he will use will be techniques he has learned himself through staff-development programs in which he has been exposed to similar lessons developed and taught by other teachers, many of whom teach in other curriculum areas and at other grade levels.

## **2. Analyzing Arguments**

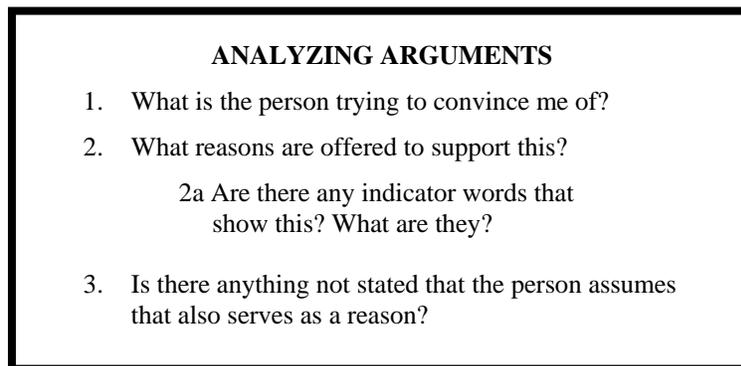
Mr. Kavanaugh says to his students “Let’s go back to 1775 and 1776 as if you were there, and let’s start thinking with ordinary colonists about where they will stand in this ever darkening confrontation between the Colonial leadership and the British authorities. And let’s do this by listening to – and taking seriously – what they are saying to each other. But first, let me ask you: Have you ever been in a position in which you are not sure what to do and some of your friends have tried to convince you to do one thing and some of your other friends another? See if you can remember such incidents and jot down one or two of them on a piece of paper.”

Some students are initially at a loss, but Mr. Kavanaugh prompts them by asking quickly and before they complete the activity what a few examples are. A few students respond with examples that involve what to do with their time (“Where should we go this Saturday afternoon? Some of my friends want me to go to the mall with them but my best friend has tried to convince me to go over to her house and listen to some of her new CDs”) and purchases (“They want me to get my parents to buy a skateboard so that I can join them skateboarding but my Mom says that that’s too dangerous”). After a few minutes he says: “In all of your examples there should be something that some of your friends, or your parents, are *trying to convince you to do*, and they should be doing that by giving you some *reasons*. Work together in pairs for a few minutes, share one of your examples with your

partner, and see if the two of you can extract and state what the other person or persons were trying to convince you to do, and then what the reasons were. Write these down separately using those words: “What they try to convince me to do:” and “Their reasons:”

After they do this Mr. Kavanaugh says: “What you have all just done is to extract an *argument* that your friends or your parents used to try to get you to accept doing something. This is not an argument in the sense of a fight between two people, but rather a statement of something that is offered to get you to think about a situation and decide to do it yourself. This list of questions to ask will help to guide you in extracting an argument from a text.”

Mr. Kavanaugh writes the following on the board:



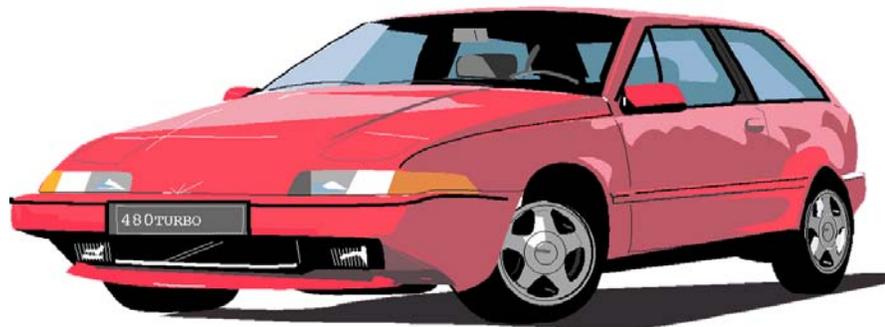
**Figure 1**

He then says: “What the person is trying to convince you of is what is called the “conclusion” of the argument, and what is offered to support the conclusion, as I just said, are the reasons offered. Sometimes the conclusion comes first, sometimes last, and sometimes there are indicator words like “therefore”, “so”, and “because” that give us clues about what the conclusion is and what the reasons are. Take a few minutes to unpack the arguments you’ve identified and write them down using this guide. Then I will ask you to tell us about some of the arguments you have uncovered.”

What Mr. Kavanaugh has just done is to *make explicit a strategy* for one of the kinds of skillful thinking that he wants to teach his students to use when they are confronted with an argument. This is the first step in the kind of direct instruction in skillful thinking he is providing as he infuses teaching this kind of skill to his students into his content

instruction. This is an important step in teaching students any of the important types of skillful thinking that should be incorporated into a curriculum. When students learn this strategy and we teach to make asking and answering these questions a habit in engaging with argument they will have internalized this particular thinking skill into the way they think. This is one of the basic goals of this kind of lesson (Ennis, 2001; Beyer, 2001).

But Mr. Kavanaugh has to do much more than introducing this strategy explicitly – in the form of what I call a “Thinking Strategy Map” -- to his students to accomplish this. For it to become a habit students must also practice using it. In fact, Mr. Kavanaugh wants to give his students a little more practice pretty quickly before asking them to go back to the history they are studying to analyze some of the arguments that people were using for loyalty and for independence in 1775/6. He says: “You know, arguments are all around us, though it may not seem so. For example, take a look at these.” He then shows three PowerPoint slides. The first one is a bold-printed newspaper headline saying “UNEMPLOYMENT IN THE UNITED STATES INCREASED IN APRIL”, the second one an advertisement for a car that looks like this



The sleek exterior of the 2006 Steria attracts more than its share of admiring looks, and its powerful 1.6 Turbo engine prompts “wow”s from testdriver’s and owner’s alike. Yet it’s the price which makes people stop and think.  
**Beauty has never been this affordable.**

**Figure 2**

The third one is an excerpt from a newspaper editorial in opposition to requiring students to wear school uniforms.

“Get together for a minute or two in your pairs again and see if you can tell me which one or ones of these is an argument and why. Use the thinking strategy map I just put on the board,” he says.

It is easy for the students to see that the newspaper headline is not an argument. The editorial is clearly an argument. At the same time some of them identify the advertisement in Figure 2 as an argument, also, and explain its conclusion as “Go and buy a new Steria.” They discuss the fact that sometimes the conclusion of an argument doesn’t have to be stated explicitly, but is easy to extract from the words, images, and context (in this case an advertisement). But the revelation that has the most impact on them is that *advertisements are arguments* and that when you use the thinking strategy map for reasons and conclusions to extract the argument it is much easier to think about whether you should be influenced by the advertisement. He writes the argument they extracted on the board as:

1. The sleek exterior of the 2006 Steria attracts a lot of attention.
  2. Test-drivers say “Wow” when they hear that the 2006 Steria has a 1.6 liter Turbo engine.
  3. The 2006 Steria is beautiful.
  4. The 2006 Steria is affordable.
- THEREFORE:** We should go and buy a 2006 Steria!

### 3. Loyalty or Independence?

Now Mr. Kavanaugh is ready to return to the work they are doing in American history. He tries to make the transition as seamless as possible. He says: “Now let’s look at some other arguments.” He hands out the following excerpt from Thomas Paine’s *Common Sense*,\*\* a tract written in 1776 to try to convince ordinary colonists to support independence from Britain, though he does not yet tell them of its source and the purpose of *Common Sense*.

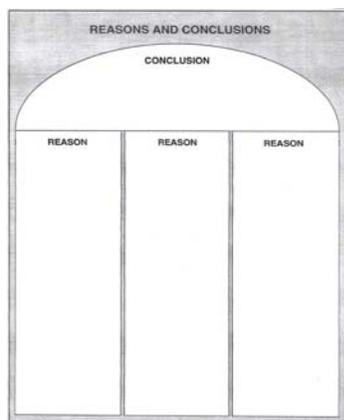
## **INDEPENDENCE !**

I challenge the warmest advocate for reconciliation, to show, a single advantage that this continent can reap, by being connected with Great Britain. I repeat the challenge, not a single advantage is derived. Our corn will fetch its price in any market in Europe, and our imported goods must be paid for, buy them where we will.

Any submission to, or dependence on Great Britain, tends directly to involve this continent in European wars and quarrels; and sets us at variance with nations, who would otherwise seek our friendship, and against whom, we have neither anger nor complaint. It is the true interest of America to steer clear of European contentions, which she never can do while by her dependence on Britain she is made the make-weight in the scale of British politics.

Every thing that is right or natural pleads for separation. The blood of the slain, the weeping voice of nature cries, 'tis time to part. Even the distance at which the Almighty hath placed England and America, is a strong and natural proof, that the authority of the one, over the other, was never the design of Heaven.

Is there an argument here? If there is let's use this graphic organizer now to record it based on the strategy on the thinking strategy map for reasons and conclusions." He gives them copies of this graphic organizer (Swartz & Parks, 1995).



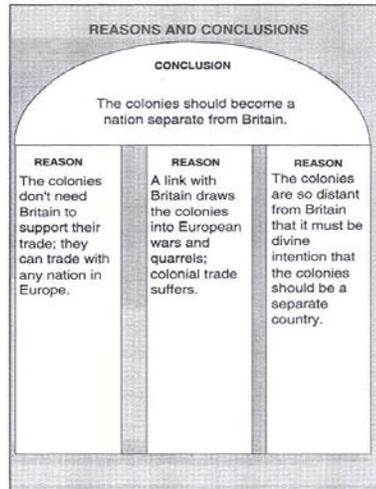
**Figure 3**

Mr. Kavanaugh has now transitioned into the second major part of this infusion lesson: *guiding the students in practicing this type of skillful thinking by thinking about some aspect of the content they are studying in the regular curriculum.* He has borrowed this particular graphic organizer from the work of other teachers who have used it successfully in their own reasons-conclusions lessons. Its effectiveness in impressing a structure for this kind of thinking that represents the thinking strategy map and its usefulness in giving students a place to download their thoughts so that they can go back and reflect on them without misremembering them are important factors in Mr. Kavanaugh's use of such graphic organizers himself.

To make this work efficient Mr. Kavanaugh has set the students into small groups of four with the task of "breaking out" the argument that is in this text. In this context he asks them to make sure that they practice one of the important types of thinking behaviors that enhances following a strategy like the reasons/conclusions strategy: *listening seriously to what their fellow students are saying* so that they have a good productive exchange in their groups that builds interaction by all of the students. This is one of the important "habits of

mind” that the school has asked all of the teachers to incorporate into their teaching to enhance the students learning the types of skillful thinking that will be taught them (Costa & Kallick, 2000; Perkins, 2000).

Figure 4 is one result from one of the student groups (Swartz & Parks, 1995):



**Figure 4**

But now Mr. Kavanaugh faces a challenge. This is not unexpected, but nonetheless careful teaching is required from Mr. Kavanaugh to meet this challenge. Some of the students now say things like: “So – this is pretty good. It supports independence from Britain and sounds right. If I was there I would certainly accept it.”

Mr. Kavanaugh responds: “Let’s be careful here. It’s never a good idea to accept an argument without listening to another point of view. Maybe a person on the other side will point out things that we’ve overlooked that makes us more hesitant about accepting the first argument we hear. Notice that up to this point I have asked you only to figure out *what the argument in this passage is*. To *evaluate it* we will need to develop another strategy that takes us beyond just finding out what the reasons and conclusions are.”

He continues: “So here is how we can start. I want you to make believe that you are back there in 1776, that you are not sure which way to go on this issue, and that you have decided to suspend your judgment until you hear both sides of the case, like in a courtroom. So hold off and try to get into this spirit. Remember the habit of mind we called being

open-minded? That's what I want you to practice here. Now let's look at what someone who supports being loyal to the British said, Charles Inglis, a minister.\*\*

## LOYALTY !

It is time to put aside those hatreds which have pushed Britons to shed the blood of Britons. By a declaration of independence only the sword will be able to decide the quarrel. War will destroy our once happy land. By a Reconciliation with Great-Britain, Peace - that fairest offspring and gift of Heaven - will be restored.... Agriculture, commerce, and industry would resume their wonted vigor. At present, they languish and droop, both here and in Britain; and must continue to do so, while this unhappy contest remains unsettled.

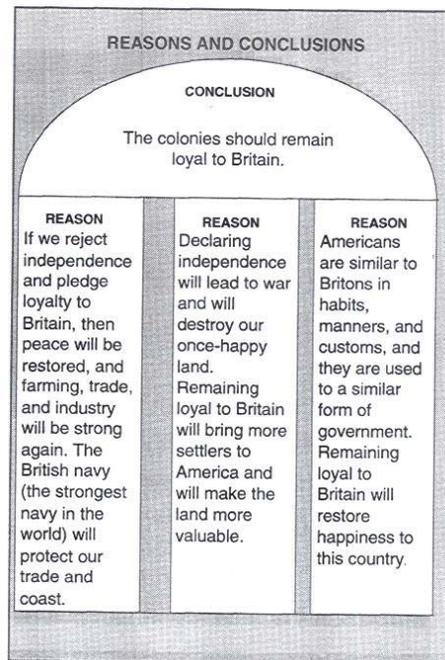
By a connection with Great-Britain, our trade would still have the protection of the greatest naval power in the world.... Past experience shows that Britain is able to defend our commerce, and our coasts; and we have no reason to doubt of her being able to do so for the future.

Whilst connected with Great-Britain, we have a bounty on almost every article of exportation; and we may be better supplied with goods by her, than we could elsewhere.... The manufactures of Great-Britain confessedly surpass any in the world - particularly those in every kind of metal, which we want most; and no country can afford linens and woollens, of equal quality cheaper.

When a Reconciliation is effected, and things return into the old channel, a few years of peace will restore everything to its pristine state. Emigrants will flow in as usual from the different parts of Europe. Population will advance with the same rapid progress as formerly, and our lands will rise in value.

“Here's another blank graphic organizer. Use it to break out the argument in this passage,”

Mr. Kavanaugh says. Figure 5 is an example of one of the student results:



**Figure 5**

#### 4. Evaluating Arguments

“How can we decide which argument is the one that we should accept? They obviously both can’t be good arguments. That would lead us to a contradiction. Who thinks that the Thomas Paine argument for independence is a good argument?” Most students raise their hands. “Who thinks that the Charles Inglis argument is a good argument?” A few students raise their hands? “Is anyone not sure?” A few students raise their hands also. “So does the fact that *most* students chose Thomas Paine’s argument mean that they are right?” The students agree that this doesn’t make them right. “The majority could be wrong. Get together in your pairs again and let’s see if you can come up with some ideas about what you have to find out about an argument that will convince you that it’s a good argument. In fact, let’s go back to the argument you extracted from the automobile ad.”

Mr. Kavanaugh refers to the argument that the students extracted about the car that is still written on the board. “For this to be a good and convincing argument it should turn out that what is said in (1) – (4) is enough to make it reasonable to accept the conclusion – that you should go and buy a Steria. So let’s see if that’s right. Let’s think about it and ask ourselves *is there anything else that we need to find out before we accept the conclusion*, or is this enough? Work together in pairs now for a minute or two and see if you can come up with one or more things that you think you would need to know before you went out to buy a Steria. Write them down. If you can’t think of any, well, maybe this is a good argument.”

Interestingly enough each pair of students comes up with at least one thing that they think they need to know before they accept the conclusion about buying the Steria. Here are some samples:

(1) “All those “Wow”s are one thing, but I would also want to find out how many miles per gallon this car got. Gas is expensive. If it has high mileage per gallon I don’t care how many “Wows” there are about its looks and initial cost, I would probably want to stay away from it.”

(2) “How do they know what test drivers say when they hear about the engine. Maybe the salesman is just making this up to make the car sound good. I would want to find out how he found out that they say “Wow”. And also, does saying that

always mean something good? Maybe they were saying, “Wow – that’s not such a big engine for a car like this.”

(3) “This is information about the car, its engine, and its cost. I would also want to know about the interior. Maybe it’s really uncomfortable, maybe not. Before I bought a car like this I’d want to find this out.”

Mr. Kavanaugh recognizes these as thoughtful comments. Two of these say that even if what the advertiser says about this car is true they would want to find out some other things before they accept the conclusion ((1) and (3)). They would want to find out also if there *were any disadvantages* of having this car. The advertiser doesn’t say anything about the gas mileage, for example. If the car got low gas mileage, needed constant repair, or generally only lasted about a year without serious problems, then even if it did have those features the ad says it has they still might not want to buy it. So this argument, they said, does not convince them.

This is very astute. It speaks to what is usually called the *validity* of the argument. These students think that the information in the ad is not sufficient to convince them that they should buy the car. They think the argument is *invalid*. In discussion some of the other students who heard this said “Oh yes – as it stands now it’s like a murder trial in which the only evidence is that someone saw the person near the scene of the crime. There would be much more that a juror would need to find out before he could say that the defendant was guilty”. Mr. Kavanaugh wrote “*Even if the information offered as reasons is accurate, is there anything else we need to find out before we are convinced of the conclusion? If so, what?*” on the board.

The other group reported that they would want to find out if the reasons given were really true (#2). This is also very astute. Mr. Kavanaugh was delighted at this. This speaks to whether the argument, *even if valid*, is *sound*. If the reasons given were not true then the argument would be no better than the reasons were. In this case just because someone tells you these things, or they appear in an ad, does not make them accurate. The person could be making a mistake, or even be deliberately deceptive in order to get you to buy the car. So even though the argument might be valid it should not convince us. It could be an *unsound* argument. He writes on the board: “*Is there anything else we need to find out to determine if the reasons are accurate? If so, what?*”

Now Mr. Kavanaugh has both criteria for a good (a sound) argument and it is in the words of the students! He says: “This suggests to me that if you answer “No” to both questions you are saying that the argument is a good one – what is given is acceptable and it is enough to make it reasonable to accept the conclusion. Both are needed to make an argument sound and convincing. Is that right?”

Mr. Kavanaugh tries to stain out these two factors so that this is absolutely clear to his students. “Let’s make this idea into a thinking map for *evaluating arguments*, because that’s what we are now doing. We are asking not just *what is the argument*, but *is it a good argument*. Here’s a thinking map for evaluating arguments. How does this sound?”

**Skillfully Evaluating an Argument**

1. What is the argument?
2. Is there anything else we need to find out to determine if the reasons are accurate? If so, what?
3. Even if the information offered as reasons is accurate, is there anything else we need to find out before we are convinced of the conclusion? If so, what?

4. Based on the answers to these questions is the argument convincing, unconvincing, or uncertain?

**Figure 6**

Now let's see if we can make a graphic organizer for this task so you can write down your answers to these questions." This is what the class develops based on the thinking map in Figure 6 (Swartz & Parks, 1995):

| ARGUMENT EVALUATION CHECKLIST  |  |
|--|--|
| 1. Is there anything you need to find out in order to determine whether the reasons are accurate?              | YES <input type="checkbox"/> NO <input type="checkbox"/> |
| 2. If so, what information do you need to find out?  |  |
| 3. Given that the reasons are accurate, is additional information needed before you can accept the conclusion? | YES <input type="checkbox"/> NO <input type="checkbox"/> |
| 4. If so, what information do you need?  |  |
| An argument should be convincing only if you answer "NO" to questions 1 and 3 above.                           |  |

**Figure 7**

### 5. Loyalty or Independence Again

Mr. Kavanaugh now asks his students to work in small groups again using this graphic organizer for both the Thomas Paine argument and the Charles Inglis argument. He asks half the class to work on one and half on the other, and he makes sure he asks them to make a final judgment about whether the argument they are working on is convincing. Figure 8 is the result (Swartz & Parks, 1995).

| ARGUMENT EVALUATION CHECKLIST<br>THOMAS PAINE'S ARGUMENT   |   |
|--|---|
| 1. Is there anything you need to find out in order to determine whether the reasons are accurate?              | YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>   |
| 2. If so, what information do you need to find out?  | How do we know that we can sell our corn in any market in Europe if we gain independence? Could we be neutral if Britain went to war with France and we were still a British Colony? If I couldn't answer the first two questions, I would want to make sure that Thomas Paine was a reliable source of information before accepting his reasons as accurate. For example, what is Thomas Paine's reputation in reporting facts accurately?                 |
| 3. Given that the reasons are accurate, is additional information needed before you can accept the conclusion? | YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>   |
| 4. If so, what information do you need?  | Even if all of the information Thomas Paine gives us is true, could there be more important benefits of remaining loyal to Britain? For example, maybe British goods are inexpensive for colonists compared to their price in independent countries. Maybe, as Charles Inglis says, the British navy will protect us if we are attacked. I would want to know that there are not any additional benefits like these before I found the argument convincing. |
| An argument should be convincing only if you answer "NO" to questions 1 and 3 above.                           |   |

| <b>ARGUMENT EVALUATION CHECKLIST</b><br>CHARLES INGLIS' ARGUMENT  |   |
|---|---|
| <b>1. Is there anything you need to find out in order to determine whether the reasons are accurate?</b>  | YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> |
| <b>2. If so, what information do you need to find out?</b><br>How do we know that farming and trade will be the same if we are loyal to Britain? If we declare independence, is war the only alternative? Could we negotiate? If I can't answer these questions, I would want to make sure that Charles Inglis was a reliable source of information before I believed his reasons. Maybe he makes things seem nicer than they are in order to convince us. How do we know he doesn't? What is his reputation? |   |
| <b>3. Given that the reasons are accurate, is additional information needed before you can accept the conclusion?</b>   | YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> |
| <b>4. If so, what information do you need?</b><br>Even if what Mr. Inglis says is true, could there be something worth fighting for that we would lose if we remained connected with Britain? I read about taxation, for example. How much of a burden was that? Would there be other burdens that Mr. Inglis doesn't tell us about? I would want to make sure there weren't before I felt that his reasons were good reasons to accept his conclusion.   |   |
| An argument should be convincing only if you answer "NO" to questions 1 and 3 above.  |   |

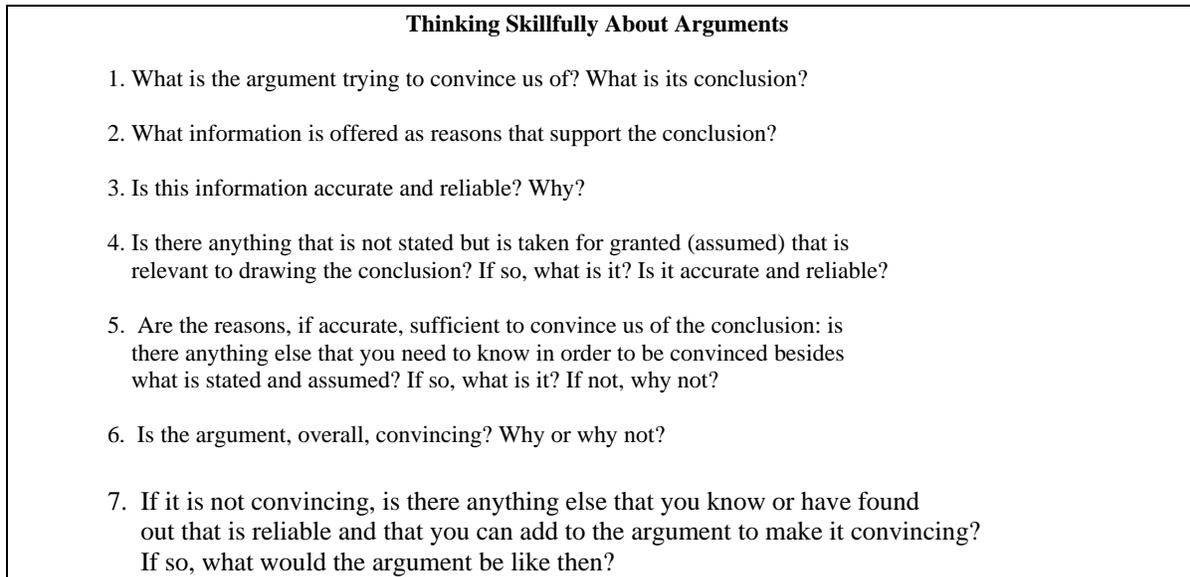
**Figure 8**

It is at first startling to the class that they think that neither argument is a very good one. How can that be? They discuss this. Then one of the students says:

“I see!! If an argument is a good one that means that we should accept the conclusion as accurate and true. But if it is not a good one that doesn't mean that the conclusion is false. All that means is that the person offering the argument hasn't given us many good reasons for thinking it is true. Maybe there's a better argument that some else can develop that will show better that the conclusion is true. So if it's a bad argument that doesn't mean that the conclusion is false. Maybe we should go and buy a Steria. It's just that the argument in the ad doesn't yet give is good reasons for doing that! Hey, that's neat!!!”

And that's a pretty neat comment!! Mr. Kavanaugh is delighted at this because he now asks the students in each group to take a few days, to go and read more, consult the internet, and so on, and see if they can answer the questions they have put on their graphic organizers. If they can, he says, then they should try to formulate better arguments than either Thomas Paine or Charles Inglis one way or the other about the question of independence. He considers this an important research/writing extension of this lesson, but is satisfied now that he has completed two of the three parts of this lesson that he set out to teach infusing direct instruction in argument analysis and evaluation into the study of history.

He finishes this part of the lesson by combining the two thinking maps into one to post on the wall of his classroom. Figure 9 is now what he will use in subsequent lessons.



**Figure 9**

## **6. Thinking About The Thinking We Did When We Analyzed and Evaluated These Arguments**

“Let’s stop thinking about these arguments now and let’s think about our thinking” Mr. Kavanaugh says to his students. He proceeds to do something by now familiar in their classroom: he prompts them to go “up the ladder of metacognition”. This is an extremely important transitional component in this lesson. It is what will facilitate his students’ using this type of skillful thinking again and again in his classroom.

“The ladder of metacognition” is a descriptive noun that my colleagues and I use to describe a series of metacognitive prompts that starts with identifying the kind of skillful thinking that was the focus of the lesson, then moves to describing the steps in the process (Swartz, *et al*, 2007), then to evaluating the strategy used, and finally to either reiterating or modifying the strategy as a plan for doing this kind of thinking again. He discusses the first two of these with the whole class, but asks the students to pair up to evaluate whether they find this an effective way to deal with arguments, and then to share their insights. Finally, he asks the students to develop their own plans for analyzing and evaluating arguments based on this activity and discussion. The purpose of this is for each to

develop a plan for analyzing and evaluating arguments that they can use when they next need to do some argument analysis and evaluation.

That won't be too far off. In the very next class they will turn to the arguments used by members of the Continental Congress in 1775 and 1776 to try to convince each other that they should declare independence or remain a British colony. Do these fare any better than Thomas Paine's and Charles Inglis' arguments? This has yet to be seen. But now the students will be armed with two powerful techniques – those involved in skillfully analyzing arguments and in skillfully evaluating them – that they didn't have before, and they will be able to use two important graphic organizers to aid their thinking as they engage in these processes.

### **7. Making Good Thinking Stick.**

Mr. Kavanaugh has even more ambitious plans for his students' use of these techniques of skillful thinking. As they progress through the study of American history and they encounter more episodes in which arguments pro and con on an issue played a significant role in the unfolding of that history he will ask them to use the same thinking techniques to delve deeper into these controversies. He will do this, for example, when they study the ratification of the US Constitution , going to war with England in 1812, and the issue of doing away with slavery in the South as it was hotly debated in the 1830s. In some of these engagements he will try to steer his students to think about some of the broader issues that are recurrent themes in American life and that surround these controversies, like those relating to morality and the rule of law that arise with regard to slavery. As he does this he will gradually withdraw the scaffolding he has provided to support his students' use of these techniques and steer them to guiding themselves more and more. When his students on their own recognize the interplay between arguments and historical happenings that they are studying and take it on themselves to figure out what the arguments being offered are and whether they are sound, Mr. Kavanaugh will be a happy man!

Mr. Kavanaugh believes that as his students further practice these techniques and use these tools as they study history they will be ready to make the transition to using these in their lives outside of school. To aid them in doing that, though, he has already started to think about supportive transfer activities that he can engage them in to facilitate this transition. But that is a matter for another day.

He goes away from this lesson feeling that it has been a great success as a starter. Not only has he helped his students learn much more deeply about the reasons for the American Revolution, but he has engaged them in developing, using, and understanding a strategy that will, he is sure, shape their own personal histories more productively than they would be shaped without this. To him the full potential of infusing instruction in thinking into his content teaching is within his and his students' grasp.

This is education as it should be!!

May 26, 2008

### NOTES

\*\* Excerpt abridged to accommodate available space.

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**THE END**