

Content-Based Instruction: A Shell for Language Teaching or a Framework for Strategic Language and Content Learning?

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Introduction

I'd like to make the case today that most of us are in the position to endorse one of the most basic premises of content-based instruction (CBI) and that's making a dual commitment to language and content learning. Whether we teach in settings where we have predominantly content-learning objectives, on one end of the CBI continuum, or predominantly language-learning objectives, on the other end of the continuum, or somewhere in between, I think that we can all use content-based instruction as a framework for language *and* content learning rather than use content, as some of us do, simply as a shell for language teaching. What's somewhat surprising, I have to admit, is that as committed as we TESOLers are to our students' successes, many of us continue to devise our curricula around discrete skills, even though our students have very well-defined integrated-skills needs. And some of us devise our curricula with little attention to subject matter, even though our students have pressing or about-to-be- pressing content-learning needs. So I'm thinking it's time to make a change. For some of us, the change might be really just a matter of fine-tuning, but for others it might be a larger change. Over the course of the next 35 minutes or

so, I'd like you to think about the settings in which you work, the materials that you write, and the ways that you can better meet your students' needs and move them towards improving both their language and content knowledge simultaneously.

At this point, you might be asking yourselves why I'm taking such a strong stand about content-based instruction. It's fairly simple: as students master language, they are able to learn more content, and as students learn more content, they're able to improve their language skills. When we hold our students accountable for *both* language and content learning, think about what we're able to accomplish. Think about what our students are able to do when leaving our classrooms. First of all, we send them out as more knowledgeable citizens of the world. I'd prefer to send a student out of the classroom able to talk about rainforests than relative clauses *any day of the week!* Ok? But besides that, when we send our students out of the classroom with enhanced language abilities, critical thinking skills, and collaboration skills, we send them out with the ability to apply knowledge to real world problems and we send them out with enhanced self-confidence and motivation. Put all those pieces together and what do we have? Essentially we're preparing our students to be life-long learners, and that's what we want to do. These are some of the reasons why I'm a strong advocate of CBI.

But I have other reasons for being a supporter of CBI. Equally impressive at the grass-roots level are the students and teachers I've seen working within content-based frameworks around the world. Close to home, I think of intensive English program students who become so motivated when studying within a content-based framework even though it's so different from what they're accustomed to at home. I think of two students in particular who changed their declared majors to astronomy – not because of this incredible Hubble spacecraft photo that showcases over 118 galaxies. I think they changed majors because of an extended instructional unit on astronomy that we had in our intensive English program. In the same setting, students are consistently coming to my office and asking me for more to read. It's like a teacher's dream-come-true! In what other type of instructional setting does this happen on a regular basis? I can't think of any other setting in which students have the confidence and the motivation to share newly learned knowledge with their classmates and others in poster sessions. I remember two students who actually left class on Tuesday, with straight, black hair and who returned to class the very next day with new outfits and perms. Why? Because they wanted to impress their audience; they were participating in a public debate as part of a culminating event in a thematic unit on civic education. I simply can't forget that incident because we could hardly recognize those two students when they walked into the room. They were motivated to share their new knowledge with others. It was exciting.

Not so close to home, but equally impressive, are students around the world who are engaged in content-based instruction, leaving class with more content knowledge and better language skills. I'm thinking of students and teachers, for example, in Tunisia who are supplementing the national curriculum with an exploration of themes of interest, such as the effects of mining in their region, in student-made videos that they share with other English language students. I also think of vocational EFL students all over Italy, from the southern-most parts of Sicily to the northern-most parts of the country, who are involved in extended content-based projects that involve meaningful language and meaningful content that matters to them. I think in particular of English for marble carvers (I know this seems a little odd; maybe Italy is the only place in the world where can you train students in English to become marble carvers) but I also recall students studying English in

other areas as diverse as tourism, dental technology, and electronics. CBI is helping them to understand their vocational areas as well as improve their English language skills. And then I think of a San Francisco classroom, a kindergarten room, that gradually transformed itself into an Amazon rainforest in response to a year-long integrated curriculum on the theme. All of these students (and many more) – in different locations, of different ages, with different motivations for studying English – are thriving while improving their language. And they're leaving classes as more knowledgeable citizens of the world. I also think of the teachers in CBI contexts who are working so hard to bump up their knowledge, to bump up their knowledge in areas as diverse as photosynthesis, civic education, the history of Egypt, art, architecture, and nursing, stimulated by the challenge – and no one would say that this is easy – but also stimulated by the challenges that their students face in learning both language and content.

Of course, the goal isn't simply to integrate content and language teaching and learning – I wish it were that simple. As we all know, CBI is founded on important principles, but really *its success depends on the details of its implementation*. And that's what I'd like to focus on today. I'd like to focus on select details of its implementation.

- First, I want to focus on [*sound teaching practices*](#) that lend themselves to the natural integration of language and content.
- Second, I'd like to focus on [*methods for promoting the acquisition of content*](#) and, of course, when we promote the acquisition of content, we're setting up students to improve their language skills as well.
- Third, I'd like to focus on [*techniques for incorporating levels of complexity*](#) into instruction.
- And finally, I'd like to explore [*approaches for building curricular coherence*](#).

Why have I chosen these four topics? Well, number one, it seems to me that these four areas are points upon which all of us can build to improve our curricula, the materials that we write, and the tasks that we devise for our students. I also think that, as a set of four, they haven't been explored as extensively as other aspects of CBI in our TESOL literature. And finally, I'm thinking that a commitment to these four areas, in combination, will help us move beyond using content as a shell for language teaching. It seems to me that, in combination, these factors create the conditions where content learning leads to language learning, and the reverse, where language learning leads to more content learning. So let's start with sound teaching practices as my first major area.

Sound Teaching Practices that Lend Themselves to the Natural Integration of Language and Content

CBI teachers are in a very fortunate position because they can draw on a lot of sound teaching practices to enhance both content and language learning. Some of the most successful classrooms that I've observed share eight characteristics. I'd like to go over these characteristics

with you. As I go through them one by one, I'd like you to think about the extent to which you have been able to bring these components into your classrooms, or into your material-writing activities, or into the tasks that you devise for your students, to promote content and language learning.

Sound Teaching Practices that can be Integrated into CBI Classrooms

1. Extended input, meaningful output, and feedback on language and grasp of content
2. Information gathering, processing, and reporting
3. Integrated skills
4. Task-based activities and project work, enhanced by cooperative learning principles
5. Strategy training
6. Visual support
7. Contextualized grammar instruction
8. Culminating synthesis activities

So let's start. What I've seen in these successful classrooms is a commitment to *extended and sustained input, meaningful output, and feedback on both language and grasp of content*. I've also seen students engaged in *information gathering, processing, and reporting* as a three-way process. If you think about it, this three-way paradigm really represents the essence of mainstream academic environments. And it works so easily in content-based classrooms. I've also seen the *natural integration of skills* where, for example, students read to write, where students listen to a mini-lecture in order to make sense of a reading, where students are interviewing classmates and then writing up the results of their data collection. I've also seen *meaningful task-based activities and more extended project work*, combined with collaboration skills and enhanced by cooperative learning principles, that create a wonderful community of learners. I've also seen a long-term commitment by teachers to *strategy training*, where teachers are not teaching isolated learning strategies but rather training students to become strategic learners. This approach works so well in settings where we're committed to content learning. And then, of course, we often talk about *visual support* – the use of graphic organizers, for example, like Venn diagrams, simple time lines, and bar graphs – that teachers use and students use to enhance content and language learning. Teachers are using visual support to introduce thematic units, to help students make sense of dense texts, and to guide students in seeing text structure and discourse organization to become better readers. And teachers are also using graphic organizers to assess students' learning as a form of alternate assessment. I've also seen *contextualized grammar instruction* in these classes. People often ask, "Well where's the grammar in CBI?" It's there! And it's contextualized. Adult students really appreciate it. Younger learners benefit from it. These grammar activities are often a direct outgrowth of the texts that students are producing and also the texts that students are processing. And finally, I think this is really most important in content-based classes, the most effective CBI classes are those where teachers incorporate *culminating activities in which students synthesize information from multiple sources* to display their knowledge in written and spoken ways. And what you see with these synthesis activities is a real sense of pride and accomplishment on the part of our students and that is priceless, really.

These eight teaching practices – I'm hoping that you've been thinking about the extent to which you've been able to bring them into your classrooms – are actually quite common in the

field, but they're not always present in combination. And it's *in combination* that they allow us to integrate language and content learning effectively. But what they don't do, for the purposes of today's presentation, is actually illustrate the conditions that are necessary to help our students learn content and, at the same time, improve language. So I'd like to move on to my next major area, which will address methods for promoting the acquisition of content (and language).

Methods for Promoting the Acquisition of Content (and Language)

You might wonder why I have *language* in parentheses here. I have not done so to minimize the importance of language, but, as you know, in TESOL discussions, we usually talk about how to promote language. Well, I'd like to talk about how to promote the acquisition of content because when we do that, simultaneously we're going to be helping our students master language. When we make a commitment to promoting the acquisition of content, these are the conditions that need to exist:

- We need to make sure that our learners consider [input from a variety of sources](#) representing diverse perspectives on related subject matter.
- The second condition is that we need to guide our students in [revisiting input](#) for different purposes.
- And finally, we want to make sure that our students have many opportunities to [synthesize knowledge](#) that originates from multiple sources.

I call these "details of implementation." These details are important enough to discuss each one in turn. Let's start with exposure to input from various content sources.

Exposure to Input from Various Content Sources, Representing Diverse Perspectives

We all know – this is now a given in the field – that we need to strive to bring interesting and relevant content into our classes. We all agree with that. And if the content is not interesting to our students, we need to figure out how to make it interesting, right? That's one of our challenges. But we also need to expose students to content that stems from a variety of sources, representing a range of perspectives and a range of genres. It seems to me that a single reading, a single chapter, or a single videotape, even in combination, as interesting as they may be, is simply not enough. A single source of content doesn't create the conditions that are needed to move students towards learning content and, at the same time, improving their language skills.

I like to think of content in the broadest way possible. Imagine that we're exploring a unit on the civil rights movement in the United States. This is what I'd hope to see. I'd hope to see primary and secondary readings. I'd hope to see videos and lectures and interviews. I'd hope to see visuals in the form of maps, charts, graphs, and bulletin board displays. I know that some of you are going to say, "But I don't have a bulletin board in my classroom." How about in the

corridors of your schools? I've seen it – I've seen it work in Morocco, it can work in all sorts of places. How about field trips as a source of content? And the use of community resources, if possible. What makes content-based instruction so much easier for teachers (and students) these days is the use of the web. The web gives us access to all sorts of content resources that weren't available before.

I also like to think about content as sources of *positive tension*. Is that an oxymoron? I think it is. But I still think it's something that we need to think about. What I mean by positive tension **is the tension that comes from different perspectives on the same theme**. Some years ago I wasn't calling it positive tension; I was simply referring to it as tension, which was a big mistake. I was talking with some teachers, actually they were en route to a TESOL convention, and they were passing through Flagstaff, Arizona, on their way to the conference. I was talking to them at a teacher training workshop about the need for tension in the classroom. And they were all nodding with approval. "Yes, we know what you mean. We, too, like to bring tension into our classrooms; we give pop quizzes, we ask difficult questions, and we put students on the spot." When I heard that, I decided, "I've got to come up with a new term for this!" And it's *positive tension*. What am I talking about? I'm not talking about something that creates fear, apprehension, or anxiety. I'm talking about something that's very positive. **It results from the thoughtful consideration of multiple perspectives, different but complementary views, and opposing viewpoints.**

Let me describe an instructional unit on the Hopi Indians of Northern Arizona, which was developed at my university, to illustrate the value of positive tension. In this unit, students were exposed purposefully and systematically to a range of perspectives originating from multiple sources full of tension, but it was positive tension. The tension resulted from students considering views such as these: traditional vs. nontraditional Hopi views; the perspectives of young vs. elderly Hopi, U.S. vs. tribal government viewpoints, scholarly perspectives with facts and statistics vs. personal interpretations from Hopi guest speakers, historical vs. contemporary viewpoints, and written, oral, and pictorial depictions. Think about what you can do with such varied perspectives in class!

As we all know, few published materials contain such variety and few published materials contain the potential for conflicting positions. Thus, it then becomes our responsibility to supplement the materials that we are using, and I think such efforts are best coordinated with our colleagues because it's an awful lot of work for one person to broaden the scope of the input that we bring into class. Just think of the tasks we can craft when we have positive tension and varied content resources. We can ask students to compare and contrast, to evaluate, to take a stand, to make judgments, to discover biases, to identify contradictions...the list goes on and on. Activities such as these are really motivating, they involve lots of language, they help to consolidate content learning, and think of the elaboration. Activities like these encourage so much elaboration, which is going to recycle language, and also recycle content.

At this point, you might be asking yourself, "Well, how much content is enough? I've only got so much time!" There is no one single response to this question because our teaching contexts are so different from one another. So I'd like to pose a different question, and that would be "What would an instructional unit look like that has enough content to promote content learning and lots

of language learning?” Imagine a middle school unit on meteorology, focusing on weather patterns and among other topics, the relationships among evaporation, condensation, and precipitation. If you can’t imagine teaching this content, fill in the blank with the content that you might bring into class. This is what we’d want to see in a unit with enough content.

- The first condition is time. We’d need enough time for the introduction of multiple sources of new information.
- Second, we’d need to bring in tasks that guide students in considering newly learned information in relationship to already introduced perspectives on the same theme. You can see the connection between these first two conditions. You’ve got to have enough time in order to introduce students to new information and then ask them to relate it to something that they’ve already considered.
- We also want to incorporate tasks that help our students make explicit connections among different concepts, facts, and perspectives, from within one text, but also across numerous texts. Such activities require students to look back at texts that they have already considered. And maybe these tasks will inspire students to look forward, as well.
- We also want to make sure that students have multiple encounters to pertinent vocabulary (like evaporation, condensation, and precipitation, you can fill in the blanks with the pertinent words for your thematic unit). Why? Because being knowledgeable and conversant about a content area means being familiar with the key vocabulary and the concepts associated with it.

Having said all this, it’s important to remember that having varied content isn’t all we need to promote content learning. Interestingly, I’ve seen it time and time again, teachers sometimes inadvertently go to extremes and actually bring too much content into their classrooms, because they are so excited about a video they’ve seen or excited about a reading or a chart or a graph that they’ve found. We can’t overload our students. We need to find that proper balance. We know when we’ve brought in too much content when we don’t have time to guide our students in revisiting the content for different purposes or exploring language in different ways. This brings me to my second subpoint, which involves making a commitment to revisit content and language for different purposes, a very important condition for promoting content and language learning.

Revisiting Input for Different Purposes

The learning of content, just like the learning of vocabulary, requires multiple exposures. We can encourage students to revisit content and recycle language in many ways; we just have to be thoughtful about the ways we devise our classroom tasks. I’ve come up with just five examples for revisiting content. I’m sure that there are many more ways to do the same.

Techniques for revisiting content for different purposes

- Report (e.g., in a jigsaw activity, in a written report)
- Reexamine (e.g., by re-reading with a different goal in mind)
- Repeat (e.g., in a dictation, dicto-comp, role play)
- Reformat (e.g., in a graphic organizer)
- Review (e.g., for a quiz, an oral presentation, an interview)

These are common activities. We probably all incorporate such activities into our classrooms already. But we should think about what we're doing in terms of how our activities help students consolidate both their content and language learning. We can ask students to *report* what they've learned, let's say in a jigsaw reading activity. We can ask students to *re-examine* content by re-reading a passage, or viewing a video a second time. But that isn't enough – we need to ask them to re-read or re-view with a different purpose, a different goal. Let me give you an example. Imagine an instructional unit on energy, in which students watch a video for the first time, and we ask them simply to generate a list of the energy types that are introduced in the video. At the end, they've got a list: nuclear, fossil fuel, wind, thermal. The second time around, students could be asked to watch the video to identify the pros and cons of each energy type, or they could be asked to watch the video a second time to confirm understanding, to look for biases, to find strengths in the argument, to find contradictions, to personalize content, or maybe to connect with previously introduced content information. Think about the ways in which you get students to revisit content.

Let me go back to my list of ways to revisit content. We can ask students to *repeat* content in a different mode, for example, with a dictation. We can ask students to *reformat* information by either filling in or creating a graphic organizer of their own. And, of course, we all ask our students to *review* content, for quizzes or for oral presentations. Let's think about these fairly common activities that we often bring into our classrooms. Think about the ways in which they contribute to the learning of content and the mastering of language. What we need to do here is to find the proper balance between plentiful (and varied) content, with positive tension, of course, and opportunities for revisiting that content.

Synthesizing Information that Originates from Different Sources

My third subpoint – related to helping students acquire information and at the same time extend their language abilities – involves taking the time to design extended tasks that require students to synthesize information from different sources. It's not that easy to synthesize. But we need to guide our students in this important task. Think of what happens when we ask students to synthesize.

- They need to:
1. ask critical questions,
 2. find recurring patterns,
 3. look for relationships,

4. make important connections,
5. draw conclusions, and then,
6. pull it all together in a brand new entity.

The task might result in a written report, it could be an oral presentation, it could be a theatrical or video production. I love poster sessions – it could be a poster session. These days it could be a website. I just learned how to make a webpage myself so I’m not quite ready to guide my students in that direction, but I’m almost there. Synthesis tasks require students to be actively engaged and guide them in consolidating content learning and using and recycling language in meaningful ways.

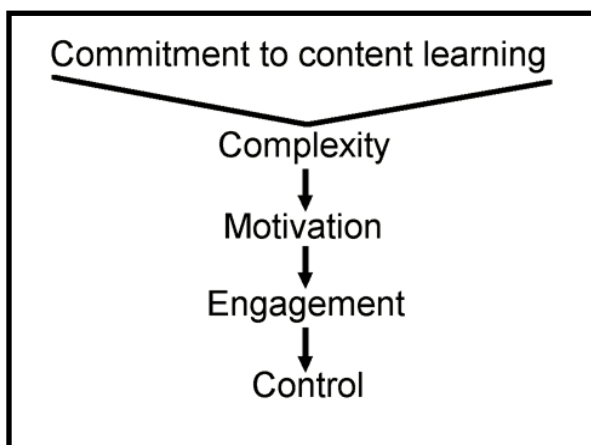
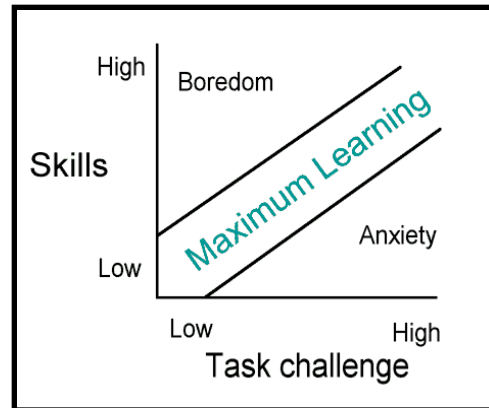
Possible Culminating Synthesis Tasks		
Written reports	Oral presentations	Debates
Graphic organizers	Theatrical productions	Video productions
Poster presentations	Projects	Web-page sites

So let me just summarize this second part of my talk. How can we promote the acquisition of content in our classes and simultaneously assist our students in mastering language? Let’s make sure that students consider input from a variety of content sources representing diverse perspectives on related subject matter with, of course, positive tension. Let’s ask our students to revisit input for different purposes. And, finally, let’s make sure they have an opportunity to pull it all together, to synthesize knowledge that originates from multiple sources. It seems to me that a commitment to this three-way orientation makes it fairly straightforward to move beyond using content as a shell for language teaching.

Techniques for Incorporating Levels of ‘Positive Complexity’ into Instruction

Let me move now to my third major area, and that is techniques for incorporating levels of complexity into instruction. And I think you already know what I’m going to tell you. It’s *positive complexity*, just like positive tension. Another way to maximize language and content learning in our classes is to **sequence our instructional units** – and the texts and tasks within them – **so that each unit is manageable but more challenging than the previous one**. We want to keep upping the ante. We all need to think about the extent to which we build positive complexity or positive challenge into our curricula. It doesn’t take much time in the classroom, and for those of you who are newcomers to the field, you’ll see it within a few days. It doesn’t take much time to realize that when we match high skills (that would be linguistic skills and cognitive skills) with low challenge,

we witness boredom in our classrooms. And when we match low skills with high challenge, we're witness to unproductive anxiety. And what we don't want is boredom *or* anxiety in our classrooms. This phenomenon has been described beautifully by a University of Chicago professor named Csikszentmihalyi (1997) in his theory of flow. And in this theory of flow, it is suggested that what we need to do is find **the proper balance of challenge (task challenge) and linguistic and cognitive skills to move our students forward**, in our case, forward in mastering language and learning content.

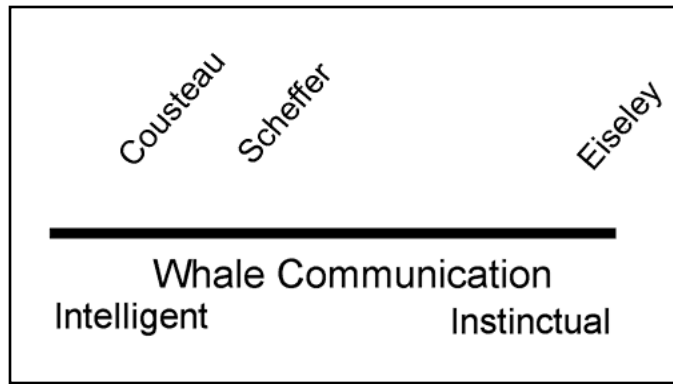


In one sense, the incorporation of complexity into our instruction is a direct outgrowth of a commitment to the acquisition of knowledge. Think about it. Without lots of content, it would be hard to increase task complexity. And without some degree of complexity, it would be hard to build motivation, and stimulate real engagement with learning. It would be hard to help students understand and recognize that they control real and interesting information. Put all those pieces together and you can see that we're creating a very vibrant learning atmosphere for our students.

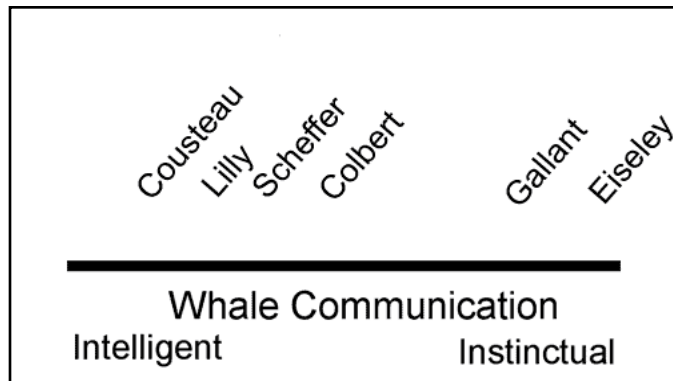
So what would we see in a curriculum that commits itself to increasing levels of complexity? We'd want to see tasks that require students to re-invest language skills, cognitive skills, and content knowledge to negotiate new information and meet new challenges. A curriculum without much content doesn't give us much leverage. And so we need to make sure that we build a curriculum with enough content because it will give us the leverage to devise such tasks. We also want to bring in opportunities for progressively more complex problem-solving tasks. What I mean by problem-solving tasks are tasks in which students resolve contradictions, make connections, rank order items, or build cases for the stands they take. Without content that's varied, and without the potential for some sort of opposition (or opposing viewpoints), it would be really hard to accomplish this.

I'm going to share with you an activity that was a smashing success at our university. Imagine a unit on animal communication, in which students consider researchers' views on the nature of whale communication, whether it is due to intelligence or instinct. This is what would happen.

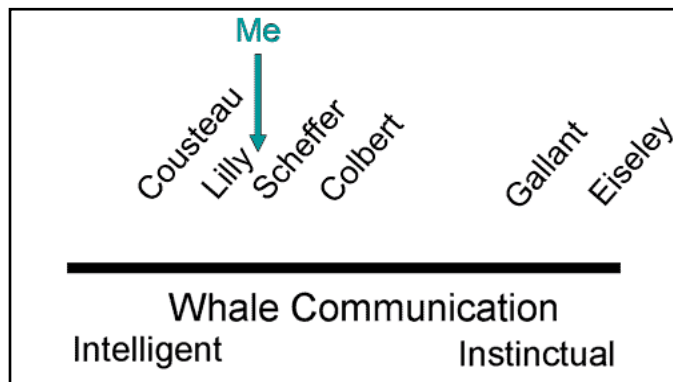
We'd give students a text and the simplest graphic: A line, a simple continuum – with 'intelligent' on one end and 'instinctual' on the other. We'd ask students to consider three different researchers' stances on whale communication and we'd ask them to plot these views on a simple line graph, like the graph you see to the right.



Then we'd ask students to consider a set of competing perspectives and ask them to integrate them onto their line graph. You could alter this approach slightly to have an effective jigsaw activity. Group A would plot the stances of three researchers, and group B would plot the views of the other three researchers. Then you'd put the students together and they would have to negotiate and create a line graph.



Finally, we'd ask students to take a stand by aligning themselves with one researcher or another, defending their viewpoints with information gained from their texts. You could do activities like this! The activity wouldn't be complex for us to orchestrate, but think of the complexity involved for the students and the language that's being used. And think of the content that's being reinforced and elaborated upon. A lot of learning would be taking place.



Let's return to our techniques for incorporating complexity into instruction. Remember, every time we up the ante, every time we put our students in the position to try something out that's a tad more complex, we need to bring in carefully orchestrated teacher modeling, coaching, and scaffolding to guide students in solving problems, in negotiating new information, and in meeting new challenges. So let's not abandon our students. Every time we up the ante, every time we give them a new challenge, let's help them succeed.

Approaches for Building Curricular Coherence

My final area of discussion today is the role of curricular coherence. We really need to work on building curricular coherence. We can help our students further in both learning language and consolidating content learning by building coherent curricula. We all know – we’ve all been students, so we remember – that when information is presented in a coherent fashion, it’s easier to learn, it’s easier to remember, and it’s easier to call up when we want to use it. Content-based instruction lends itself so nicely to thematically organized materials, which represents one step in the right direction. But I think the larger challenge moves beyond those thematic units. We want curricular coherence, we want coherence within and across instructional units, within and across texts and tasks. I’d like to introduce three possible approaches for building curricular coherence. We don’t want to look out on our classrooms and see our students scratching their heads, thinking ‘How do we get here from there?’, ‘How did we get from point A to point B?’ The goal here is to pull it all together. We want to create a sense of seamlessness. So let me go through three possible ways to create curricular coherence.

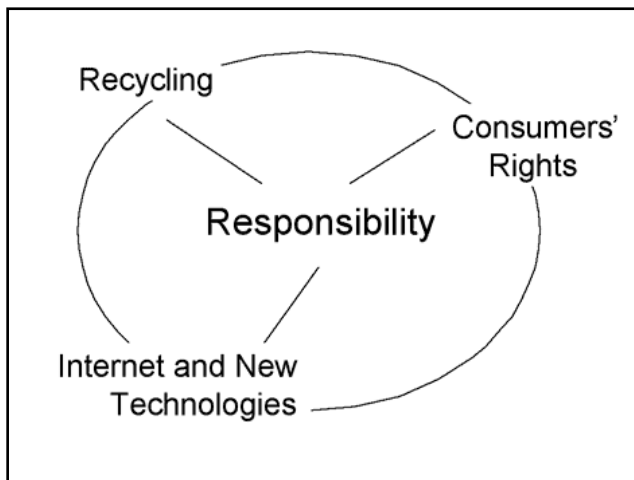
- **Scrutinize** the ways we define instructional units – themes are central ideas and topics are sub-units of the theme
- Use **planned transitions** across topics and across tasks within topics
- Consider **threads** – linkages across themes in curriculum development

Our first step should be to scrutinize the ways in which we define our instructional units. I find it useful to think in terms of *themes* and *topics*, not as synonyms as they are used in so much of our literature, but I like to make a distinction between the two. Themes represent central ideas that organize major curricular units. We might have a thematic unit on explorers in the fourth grade. We might have a thematic unit on endangered species in high school. We might have a thematic unit on demography at a college level. Topics, on the other hand, represent sub-units of instruction or content that explore more specific aspects of a theme. Let me give you an example. If you were exploring a unit on astronomy, you could focus on humans and space, technology and space, and research and space. If you were exploring a different unit on astronomy, you could focus on four totally different topics. You could focus on Earth, Venus, Mercury, and Pluto. Sadly, what I’ve seen is this. A teacher will identify a theme like astronomy, but then they’ll mix and match different topics like humans and space, Venus, and constellations. These topics all fall under the umbrella of the overarching theme, but the end result is fragmentation. The unit is fragmented. It doesn’t fit together. Students are scratching their heads, thinking ‘How does this relate to what we did yesterday?’ How do we know it’s fragmented? We would know it’s fragmented if there are no straightforward connections to be made, few opportunities for progressively more challenging problem-solving, few means for elaboration, and only artificial opportunities for synthesis. Think about your lessons and the books you’re using. How can you change them a bit to make a more well-defined distinction between themes and topics?

Another way to promote curricular coherence is through the use of planned *transitions across topics* (with, for example, a deliberate shift from humans-in-space to technology-in-space) and the use of smooth and deliberate *transitions across tasks within topics*. I’m not suggesting that

these transitions have to be totally transparent to our students . What I'm suggesting is that transitions need to be orchestrated in our lesson plans, and that their use be deliberate on our part so one task leads smoothly to the next. One task builds upon the previous one. Imagine a unit on population. Imagine giving your students a chart that tracks population growth from 1750 to 2150. Imagine this sequence of tasks. We're going to assign one task that builds on the next. Students may be asked to interpret the graph, depicting population growth into the future (task #1). We could then ask them to create a new graph with raw data obtained from either library work or maybe a web search on their own country or some particular region of the world (task #2). We could then ask students to write an interpretation of their own graph or their own graph in relationship to the original one (task #3). We could then ask our students to reconstruct the graph on the computer (task #4), then incorporate the graph into their research papers (task #5). And finally, students might create a bulletin board display or a poster session for an oral presentation in which they share their newly learned information with classmates (task #6). One task leads nicely into the next, building on content knowledge and involving students in lots of language learning.

So we've got themes, topics, and transitions. We also have *threads*, another way to create curricular coherence. Threads, unlike transitions, are *linkages across themes*. Threads are often discovered by students (when they say 'Didn't we talk about that last week?' or 'This makes me think of...'). Linkages can also be introduced by teachers. Threads, from my observations of many classrooms, emerge rather naturally in curricula made up of closely related themes but they take a bit more work on our part if we're in a school setting where we're obliged or choose to explore more disparate themes.

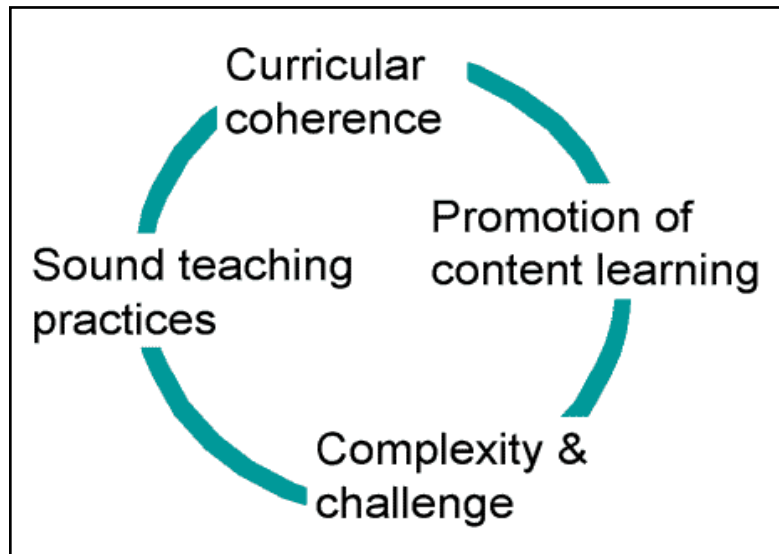


Let me give you an example to point out the utility of threads. I'm actually thinking of a language institute in Montevideo, Uruguay, that's in the process of revising its curricula and thinking of moving towards content-based instruction. They've identified three themes that would be of interest to their intermediate-level students: recycling, consumers' rights, and the internet and new technologies. The teacher could use *responsibility* as a thread to link these themes. So this is how it would work. In the first unit, the teacher asks students to consider the responsibilities of individuals, local

governments, and maybe local industries, to recycle and/or provide mechanisms for recycling. Later on, when exploring the unit on consumers' rights, students are encouraged to consider the responsibility of individuals and industries to respect the rights of consumers and everything that entails. Later on the teacher would engage students in tasks that assist them in making connections across all three themes, using the thread of responsibility to get students to revisit, to integrate, and to elaborate upon content, concepts, and vocabulary explored in all units. Now keep in mind that we don't want to confuse responsibility here with the themes being explored. Responsibility is something different; here it is a conceptual link that can be developed across themes. And from my

experience, students are challenged and motivated to explore these connections, using language in a meaningful way to do so.

Whatever form the threads take, what results is more curricular coherence, the promotion of content learning, the possibility of bringing in elements of complexity and challenge (positive complexity and positive challenge), and the principled use of sound teaching practices to foster content and language learning. So we've come full circle now, which makes it easy for me to summarize my main points and conclude with a few additional thoughts.



Conclusion

Today I've tried to make a case for a dual commitment to our students' language and content learning needs. I'd like to suggest that we take a closer look at our teaching practices, the materials that we write, and the activities that we engage our students in. Let's ask ourselves questions such as these:

- Are we incorporating sound teaching practices, like the ones I introduced earlier, to promote language and content learning?
- Are we taking the appropriate steps to promote students' acquisition of content and language by, for example, varying content, asking students to revisit input for different purposes, and guiding students in the synthesis of that information?
- Are we taking the appropriate steps to engage students in increasingly challenging and complex tasks? Are we upping the ante, but guiding our students along the way?
- Are we taking the appropriate steps to build curricular coherence?

Even though I'm persuaded that content-based instruction has great potential, I will admit, publicly, here in front of you all, that we still have a long way to go. We've got a lot of learning to do about how to make content-based instruction work for our students. And it's my sense that one way to move the field forward as a group is to make two more commitments. The first

commitment – one I’m sure you’ve heard mentioned many times – is to engage in more teacher reflection. We need to think about the way we promote content and language learning. We need to think about how to incorporate healthy tension, healthy complexity, and healthy challenge into our classrooms. We need to think about how we are building curricular coherence. The other commitment is to share the insights gained from reflection with one another and basically not keep our revelations to ourselves. We should be sharing what we learn from these reflective activities with our colleagues in teacher lounges and in teacher corridors. We should also think about spreading the word a little more through affiliate newsletters, in conferences presentations, and in other publications. Hopefully today, you’ll begin by reflecting on your teaching practices. Think about the small or possibly large changes that you can make in your curricula, in your schools, with the materials that you’re writing, to use CBI as a framework for language and content learning rather than using content simply as a shell for language teaching.

References

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