Two Birds with One Stone: Teaching English with Content Based Instruction

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One of the areas of language teaching which has a great deal of potential that has not yet been fully realized is content-based instruction or CBI. This method, when implemented properly, has the potential to teach students both language and content-specific knowledge, effectively getting double the results compared to strictly language-focused or strictly content-focused classes. In CBI students engage with the subject matter in the target language and their language skills improve as they produce and comprehend language related to the content (Met 1999). This article will talk about some of the reasons why teachers should pursue content-based lessons, from the perspective of benefits for both the students and the teachers. It will also talk about some techniques to implement CBI as well as how to develop materials and how CBI can fit into institutional contexts that don't explicitly support CBI.

Why do CBI

CBI has several potential benefits for language pedagogy. The first benefit is that students are given an ideal context to assimilate new vocabulary. CBI involves meaningful use of vocabulary in context which makes students more likely to attend to the words meaning. It gives students a reason to learn the words because the vocabulary is necessary for mastering the content. The most important aspect of why CBI is good for students to learn vocabulary is that they are repeatedly exposed to the same words across different texts. CBI instruction involves texts which will naturally contain repetition of the same subject-specific vocabulary because those words are naturally relevant to the subject matter they are studying. For example, a student studying in a CBI class focusing on politics is likely to encounter the word democracy repeatedly in different readings or lectures across the course. This allows the learner to pick up the vocabulary more easily because it gets repeated before they have a chance to forget it (Nation 2001). Students learn vocabulary better when they have spaced repetition, they can't learn and master a word in one day because they are likely to forget it over time. CBI provides natural spaced repetition for the content-specific vocabulary of the course. As an added benefit students can understand more and more difficult texts as the course progresses because their acquisition of subject-specific vocabulary gives them better and better vocabulary coverage of texts in that subject area.

The second major benefit of CBI is that it lends itself to the interests of both the students and the teacher which has benefits for motivation. Students who are allowed to take CBI English courses as elective courses can choose CBI courses that match their interests. Interest in the subject matter being taught is an important factor in determining how much vocabulary students learn (Elly 1998, as cited in Nation 2001). Desire to learn the subject matter gives students motivation to attend to the language features in the texts which they don't understand and engage meaningfully with the language. In addition, CBI provides the motivational basis for purposeful communication (Lyster 2007). This motivational benefit based on interest goes both ways as teachers have an opportunity to potentially teach about topics that are personally interesting to them. When teachers are engaged with material they find personally interesting they are more likely to be more passionate while delivering their lessons, and this will translate to greater student engagement.

The third benefit of CBI is that it benefits teachers' ability to evaluate their students, and improves the motivation that evaluation provides students. When making evaluations for students in CBI classes, teachers can test students on the content knowledge the students gained in the class rather than only on their language proficiency. This is beneficial for two reasons. When language teachers evaluate their students they face the difficulty that students come into the class with a great deal of language knowledge already. Their evaluations might in large part test how much the students knew before coming into the class rather than how much the students learned or their effort in the class. With content-based evaluations students are tested on what they learn in class. This leads to the second major benefit which is that students are motivated to pay attention to what they learn in class because they have to learn it to do well on their evaluations. Students can't coast on a relatively high level of language skill learned before the class because that is not what they are being evaluated on. This encourages students to pay attention to the course material and makes their engagement with the language more meaningful.

How to do CBI: Leveling

One of the most important aspects of teaching content is teaching with the appropriate level of language for the students. It is important that the language the students are exposed to is not so complex that they are completely incapable of understanding and participating in the lesson. The level of the language should be mainly comprehensible but should in some ways challenge the students by introducing new language features. Students should also be encouraged to generate output that is not too demanding but still challenges their abilities. A content course

geared for native speakers, with unleveled readings and lectures would for the most part be too much for non-native speakers to handle. To achieve an appropriate balance of difficulty, content teachers will probably have to mainly strive to reduce the difficulty of the language they employ and use techniques to make it easier for students to comprehend and participate. To achieve the appropriate level of language difficulty, the teacher can employ a variety of techniques to bring the difficulty for their students down. This article addresses the use of subject-focused readings, lectures and discussion with students, which are all common in CBI courses. It will focus on these individual components as well as how to use them in combination to allow students to comprehend and participate.

One of the main ways a teacher can bring the level of the material closer to the students' level is to use readings that are designed to be more comprehensible to learners of English. These readings can be more approachable for learners than textbooks or articles designed for native speakers in a variety of ways. First, the readings can contain less low-frequency vocabulary, and still convey the same conceptual message. Readings should contain mostly words the learners are likely to be familiar with and some words that are likely to be new to them. If the vocabulary level is too high, learners are likely to be bogged down in the difficulty rather than benefit from all the new words. If students know enough of the words around words they don't know, it will aid in their uptake because they can understand the new words in context (Nation 2001). It may also be helpful for the teacher to highlight the target vocabulary in the reading by putting the words in bold and also pre-teaching some of the words before the students begin the reading.

Second, the readings should avoid uncommon expressions or unnecessarily difficult grammar. There are often many ways to say the same thing, and for CBI simpler is usually better. Having to parse extremely long multi-clausal sentences can be a major feat for language learners. Typically the average human can only hold information in their short-term memory for a few seconds (Ortega 2008). If the learner reaches the end of the sentence well after their short-term memory runs out, they won't be able to remember what was at the beginning of the sentence, and they won't be able to understand. If they read the same information broken up into simpler shorter sentences they will be able to comprehend much more easily. Grammar and expressions should be simplified compared to what a native speaker learner can handle.

Third, the reading should not be too long for the students. Assigning a book chapter or article from a material designed for native speakers would represent too great of a challenge for most non-native speakers to complete in a reasonable time frame. Students should be doing only as many minutes of homework as they spend time in class at maximum. Keeping in mind that non-native learners will have to spend a great deal of time looking up and assimilating new vocabulary, parsing grammar and reading slower than native-speaker learners, reading

assignments should be considerably shorter and less difficult than those for native speakers.

Finally, the reading can be made more comprehensible by allowing students to go over an assigned reading they read for homework with a classmate during class time. The student could be asked at the start of class to simply talk to a partner for a few minutes to confirm that they understood the important vocabulary and concepts of the reading. This will allow the students to learn from each other as well as provide them an opportunity to review the subject matter before class.

Lectures are another important area for CBI. As far as leveling lectures appropriately, many of the same principles apply from leveling readings. The language should be simplified to the students' level in real-time. In addition to the techniques mentioned above about reducing the difficulty of vocabulary, teachers can use a variety of other methods to bring down the difficulty. Teachers should speak at an appropriate pace, as the speed of speech contributes greatly to how easy it is to comprehend. Teachers can also make use of discourse markers to improve comprehension. One study found that the use of markers of discourse organization like "To begin with" and "What I'm going to talk about today" improved the comprehensibility of spoken texts (Chaudron and Richards 1986). In addition, teachers can repeat themselves by rephrasing important points so that the information is more easily absorbed. Repetition allows information to be absorbed more easily, and by rephrasing information students will be able to understand an idea even if they didn't understand some of the vocabulary the first time it was explained. Finally, teachers can highlight and teach specific vocabulary that comes up in the lectures if it seems that the students aren't able to understand a specific point.

Another important point is that the reading and the lecture should complement each other in a way that aids comprehension. The lecture should contain a lot of the same information vocabulary and concepts from the reading. Reading the reading before the lecture will prepare the students conceptually and linguistically to absorb the lecture. The language they learn from the reading will help them comprehend the contents of the lecture. Also having some understanding of the concepts from the reading will make the concepts presented in the lecture easier to understand and absorb. Repeating some of the same material and concepts not only helps establish the right level to allow for comprehension, but pedagogically the repetition helps students to better absorb the vocabulary, information and concepts of the course. The lecture itself can build on and go beyond the reading, but if the two are well connected it will be helpful for learners.

The last component that will be examined is discussion. The teacher will typically ask the students to engage in some kind of discussion with each other in groups or pairs, as well as engage in discussion with the whole class. One of the major vehicles to promote discussion

is by posing students questions or asking them to pose questions to each other. There are a variety of ways to help make this process easier for students so that they will be able to engage in productive discussion which allows them to engage with the content being taught and also pushes their language development forward.

Teachers should avoid simply asking the students to discuss a topic or concept generally and instead ask students specific questions which are relevant to the subject matter. The teacher should have a supply of questions prepared in advance for the students to ask each other or to be asked by the teacher to the students. This will allow the teacher to consider the level of difficulty of the questions themselves as well as how difficult they are to answer both cognitively and linguistically.

Additionally, questions can be made easier for students to use if they have time to prepare their answers in advance. If the students are given the questions before class they will have time to think about their answers, prepare what they will say, and even look up relevant vocabulary. Alternatively, students can be given a little time before the discussion to prepare their answers and write notes about what they want to say. This preparation time can greatly enhance the students' ability to successfully engage with the material while still using English.

Another thing to keep in mind is the cognitive demand the questions put on the students. The questions themselves should of course be comprehensible to the students. In the case of pairwork discussions, the teacher can help ensure this by rephrasing the questions or offering an example answer before the discussion to make sure the students understand what they will be asking each other. Teachers should consider how cognitively demanding the questions are to answer. The more abstract and difficult the questions the harder it will be for students to maintain their discussion in the target language. Questions can have a range of difficulties from very abstract to very simple. There are a number of types of questions including but not limited to comprehension questions, questions asking for examples of concepts, questions asking for opinions and questions that require deep analysis of abstract concepts. These fall on a spectrum of difficulty as you can see by considering the questions below.

Easy

What does the concept of balancing in international relations mean? (comprehension)

What is an example of balancing you know of from history? (examples)

Why do you think countries seek to balance against powerful neighbors? (opinions)

When making a decision to balance against a neighbor do nations consider their neighbor's total power or their perceived intentions more? Why? (analysis)

Difficult

When designing questions for students to discuss with each other it might not be necessary to only use the simpler type of questions. Teachers will want their students to engage with the material on a deeper level, but discussions should at least have a range of difficulty within the questions provided. For example, a teacher could ask their students to discuss 4 different questions for 3–5 minutes and include questions of different levels of difficulty. If there is a range of difficulty, lower-level students can take their time answering a few of the easier questions, while higher-level students go on to discuss all of the questions.

How to do CBI: Error Correction

When doing CBI, teachers may be tempted to minimize error correction and focus on less invasive forms of error correction like recasts to keep the flow of communication going. It may in fact be more helpful for students' language growth to supply students with error correction that directly focuses students' attention on the mistake. Studies that look at error correction in a CBI context have found that although students' English improves with recasts it improves more when students are prompted to repair their own utterances (Lyster 2007). It might be helpful to use different kinds of error correction for different types of mistakes. One study showed that prompts were more successful at getting students to repair lexical or grammatical errors, while recasts were more effective for phonological errors (Lyster 1998, as cited in Lyster 2007). Teachers should bear these points in mind while giving feedback to their students.

How to do CBI: Materials

When conducting a CBI course it may be necessary for a teacher to develop their own materials or modify existing materials. There are some materials available for CBI but most of them focus on science or business. Teachers interested in teaching subjects in the social sciences or humanities are likely to have a harder time finding a textbook that will fit their needs. In addition to developing appropriately leveled questions as was discussed in the previous section, a teacher may have to develop or modify material for readings.

The first approach is for the teacher to create the readings themselves. Teachers should use the appropriate level of vocabulary, keep grammar relatively simple and make their materials shorter than the materials they are basing the subject matter on when they create their materials. A teacher can bear these things in mind, and still create materials which are conceptually rich and convey the ideas the teacher wants the students to absorb. Complex concepts can be

conveyed without complex language. The readings should be shorter than would be expected for a native speaker learner, and this makes it within the teacher's ability to potentially develop enough readings of sufficient length on their own. This approach has the advantage of ensuring the teacher has a thorough command of the subject matter they are teaching, allows the teacher to direct the class through the exact material they think is most relevant and promotes a deep engagement between the teacher and the material they are presenting. The disadvantage is that it can be quite time-consuming for a teacher to develop these kinds of materials.

A second approach is to modify existing materials. This approach would involve a teacher finding an article of an appropriate length and about the appropriate subject matter which is designed for native speakers. They can then modify the article to reduce its difficulty to the appropriate level for their students. One useful tool to do this is vocab profiler on the lextutor website (Cobb. T 2018). Using this tool teachers can see which words in a text are in the 1–2000 most frequently used words in English, which are on the academic word list, and which are less frequently used. A teacher can use this tool to look at which words in the text are uncommon and make a conscious decision to teach them or to replace them with more common vocabulary and expressions. Of course, teachers will have some natural intuitions about what vocabulary students can handle, but being able to see which words are less frequently used highlighted, can be quite helpful. It is easy to miss some things with an intuitive evaluation and our intuitions have limits. Using this tool teachers can modify existing texts and produce materials more quickly than by creating them themselves.

How to do CBI: Institutional Context

Most language teachers don't teach in contexts that encourage and provide support for CBI. However, it may be possible for teachers to implement CBI lessons and gain some of the benefits described in this paper without explicit institutional support. Most Universities offer electives for language learners that give the teacher considerable latitude in their choice of materials. CBI instruction can fit into this context. This allows students to pick classes with subjects that interest them and allows teachers to create CBI classes without any particular institutional support.

In the author's experience, there is possibly a minimum level of language competence students must have to participate in a CBI course. CBI based on cultural material, for example, music, art, video, or dance may be more appropriate for students at the lower intermediate level and up. Cultural material can be directly seen or heard and much of the language used in the course material is descriptive rather than conceptual. In the case of more academic subjects like those in the social sciences, students should be at least intermediate and probably better at upper

intermediate level and up to get the most out of such a course. In one CBI course I taught on the subject of international relations, the students were required to have a minimum TOEIC score of around 600 to participate in the class. This was effective at ensuring all students got the most out of the class. Some form of level requirements to enter CBI courses, depending on their subject matter, may be more ideal from an institutional perspective.

Conclusion

Teachers and students can benefit greatly from a CBI approach and there is room to implement such an approach at some level in many institutional contexts. There are however many challenges to implementing CBI including that it requires a great deal of knowledge and effort from instructors. English instructors in many contexts often have diverse knowledge and expertise outside of language instruction. Institutions could encourage CBI by starting small and surveying their own teachers on their willingness to conduct a CBI course and on their areas of expertise. If they could create a handful of classes and support it by advertising them to their students or by enforcing standards on which level of students can take which courses, an institution could eventually grow a full-fledged CBI program.

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