

English & Contract Bridge: A Content-Based Language Class

Timothy B. Curtis

Abstract

Contract bridge is known around the world for being one of the most interesting and challenging card games. Although it has typically been considered to be a game, something done for fun in one's free time, bridge has value beyond that of any ordinary game. It requires numerous high-level thinking skills including calculation, logic, memory, concentration, communication, inference, and ethics. In this paper, I will argue that bridge is beneficial not only in these areas, but also in the realm of language learning, as part of a content-based language classroom. After explaining the background and rules of bridge, I will show the justification for teaching bridge in an English classroom, and how a teacher might go about creating a syllabus and lesson plan. Finally, results of a student questionnaire will be discussed.

Introduction

Is there any justification for teaching EFL/ESL students how to play a card game in a language class? Although at face value the idea seems rather preposterous, I will argue that learning how to play contract bridge is actually the perfect topic for a language class, and its teaching is fully supported by the tenets of content-based instruction.

What is contract bridge?

Before explaining why contract bridge is appropriate for teaching in language classrooms, it will be useful to review the background and rules of the game itself. Contract bridge, otherwise known simply as "bridge", is one of the most popular card games in the world, with *The Official Encyclopedia of Bridge* (2011, p. 141) estimating the number of bridge players worldwide to be around 100 million. It is a partnership game played with four players who sit around a square table, with partners sitting opposite one another. The entire deck of 52 cards is dealt out, with each player receiving 13 cards. Bridge is a "trick-taking" game, in which each person plays a card, one by one, and the highest card of the four wins that trick. One of these four players is the "dummy", whose cards all players can see, and whose partner (the "declarer") gets to decide which of the dummy's cards to play.

An additional element of complexity in bridge comes from the "auction" (also called the "bidding"), which occurs before any of the cards are played. During the auction, players must not only predict how many tricks they think they can win, but also decide which suit to make "trump" –

a suit that is more powerful than the others, and can win tricks even with lower cards. This is done by making a bid, a kind of coded message that allows partners to exchange information about their hands without actually looking at each other's cards. For example, by making a bid of 1♠ ("one spade"), you can suggest that you have the potential to take one more than half of the total number of tricks, if spades are trump. Your partner gets a chance to bid in reply, and your opponents are not likely to keep quiet either. When all other players refuse to bid any higher, the auction ends and the last bid made becomes the contract. The declarer must successfully win as many tricks as promised in the contract in order to win points and ultimately the game.

Bridge is different from a great number of card games in that the element of luck can be greatly reduced by playing a kind of bridge called "duplicate". In duplicate bridge, after bidding and playing out a hand, the cards are passed to another group of four players without being shuffled. Those same cards are then bid and played out, and results are compared between the people who held the same cards at the different tables. This process repeats and the pair that did the best compared to all other pairs is named the winner. This is not to say that duplicate bridge is the one and only way to play bridge – indeed, other forms of bridge that do not have this element of comparison, such as rubber bridge, remain quite popular.

Why teach contract bridge at all? Isn't it just a game?

Some people may be of the opinion that card games do not have a place in any school curriculum. I would argue, however, that bridge teaches so many skills and requires such high-level thinking that it would be a shame not to include it in classrooms. These skills include:

- logic and reasoning: figuring out the best way to play your cards to allow your partnership to win the maximum possible number of tricks, determining which opponent holds certain high cards based on deduction from the auction and cards that have already been played...
- memory: remembering which cards have been played, counting how many cards remain unplayed in any given suit, knowing what all of your bids mean and which bidding conventions (agreements regarding the meaning of certain bids) you have decided to use...
- probability: recognizing which player is most likely to hold which cards, understanding how certain missing cards are most likely to be distributed between the other players' hands, and taking advantage of that information to play your cards in the optimal manner...
- interpersonal skills: predicting how your partner will react and respond to your bids, inducing your opponents to make the plays that will benefit you, understanding the behavioral patterns and psychology of all players...

It is this social component of bridge that makes it stand out from the other high-level thinking games that are sometimes compared with bridge, like chess or go. While computers have been able

to beat humans at chess for decades, they are still no match for humans in bridge, because they are not yet able to understand the human mind. Teachers have cited this social benefit as another reason bridge is a great choice for a study topic in schools: “You actually have to put down your cellphone and interact around a table. It’s reintroducing a lot of social skills that have been lost” (Hu, 2001).

In studies at the University of California, Irvine, it has been shown that engaging in activities that stimulate the mind, particularly in early and mid-life, delays the onset of cognitive problems, such as Alzheimer’s disease, in older adults (Dick-Muehlke, n.d.). Bridge is specifically named as one such activity. In another study, bridge players were found to perform better on working memory and reasoning tests when compared to subjects who did not play bridge (Smith and Hartley, 1989). In Diamond, Weidner, Schow, Grell, and Everett (2001), a connection was shown between playing bridge and a stronger immune system. They linked playing bridge to the stimulation of an area of the brain responsible for memory, judgment, planning, etc., which in turn influences production of T cells in the immune system:

Our data suggest that people might be able to improve their immune functions with more purposeful demanding activities related to frontal lobe tasks. For example, because CD4 cells are decreased in AIDS, might it be possible for people with this devastating disease to learn to play bridge or a comparable mental stimulating activity? (p. 84)

With all of the suggested mental and physical benefits of playing bridge, it seems logical to include bridge as a part of the school curriculum. However, it still remains to be shown how bridge can connect with learning a foreign language.

What is the justification for teaching contract bridge in an EFL/ESL class?

Some English is in fact used during a game of bridge. Although most verbal communication between partners at the bridge table is prohibited in formal tournament settings, certain phrases are commonly used. For example, when the declarer tells the dummy what card to play, he or she might say, “I’ll take the ace of clubs, please”. Players also speak to alert opponents about special meanings of any bids, and also to confirm that their partner has understood the opponents’ bids (“Any questions, partner?”). Finally, plenty of table talk occurs after a deal has finished, when players like to comment on others’ bidding and card play decisions. Since these comments may occasionally take the form of somewhat harsh criticism, this period of chat is often called the “post mortem”. This bridge talk is certainly beneficial, but alone is not quite enough to justify teaching bridge in an EFL/ESL classroom. The justification, I believe, comes from the tenets of CBI (content-based instruction).

CBI, in a nutshell, refers to using a foreign or second language to teach some kind of content subject, whether it be science, math, history, or the arts. Different models exist which place varying levels of emphasis on learning the subject matter versus learning the language (Met, 1999). In total immersion courses, students are required to fully learn the content and are tested on it at the end

of the course, whereas any language learning that occurs is incidental and may not be measured. On the other hand, in theme-based courses, improving language competence is the main focus, and topics from various subjects are chosen solely to organize the language material and make it more interesting to learn. The decision of which model to use is obviously up to individual teachers, classes, situations, and overall learning environments. But whichever model is used, “[t]here is strong empirical support for CBI, and the success of many well-documented programs offers additional support for the approach” (Grabe and Stoller, 1997).

Grabe and Stoller present seven rationales for CBI, and I would like to show how a bridge-based English class would support and “operationalize” these rationales.

1. “In content-based classrooms, students are exposed to a considerable amount of language while learning content”: While learning how to play bridge, students must either listen to and/or read the rules and explanations of strategy. Though the basic rules of bridge can be learned quickly, there is a limitless amount of information that can be taught to help students improve their game.
2. “CBI supports contextualized learning”: Students need to understand what they have been taught in order to play the game at a basic level, and need to build on this foundation of knowledge in order to progress and get better. All of the language that students learn isn’t for the sake of learning the language itself but has more immediate purpose – to learn how to play and enjoy the game.
3. “Students in CBI classes have increased opportunities to use the content knowledge and expertise that they bring to class”: In this area, students are likely to have quite a wide range of background knowledge. Some students may have no experience playing a card game, but may be able to make associations with other “mind sports” like chess or go. Other students may be familiar with certain similar card games, and therefore would be able to assist their peers in getting accustomed to the trick-taking aspect of the game.
4. “CBI itself promises to generate increased motivation among students”: The thrill of winning in bridge is a feeling students will not soon forget. Even the act of winning one trick, making a single contract, or defeating an opponent’s contract may give new players a sense of confidence and motivation to keep improving and studying. Being able to learn a new tidbit, a simple strategy, and putting that to use successfully within an actual game, is both satisfying and rewarding.
5. “CBI supports, in a natural way, such learning approaches as cooperative learning, apprenticeship learning, experiential learning, and project-based learning”: Bridge and cooperative learning go hand in hand because students are always thinking, discussing, and problem-solving in groups of four, around a bridge table, serving as mentors for one another. Rather than rote learning, students learn by doing, actually bidding and playing the cards in order to understand and apply the rules they have been taught.

6. “CBI allows greater flexibility and adaptability to be built into the curriculum”: In a typical language-only classroom, teachers often adjust the level and amount of material being taught to accommodate the various needs of all students. In a CBI classroom, there is the added element of the subject matter, which will likewise need to be adjusted and tweaked. I would say that CBI not only “allows” for more flexibility but *requires* it. This is of course true in the bridge context as well. For example, some students may wish to know exactly how to calculate the score after each hand. Others may find this too difficult, and be content with getting a score chart to look up their scores, and will not need explicit instruction in how to do calculations by hand.
7. “CBI lends itself to student-centered classroom activities”: Although in this paradigm bridge has already been selected as the class content, which to some extent makes assumptions about what students are interested in learning, it is still possible to make the class student-centered by giving students choices and freedom in other areas. Do students want to spend more time chatting with a partner, doing practice bridge worksheets, or playing sample hands? Do students want to learn a new bidding tool in the next week’s class, or would they rather review what has already been covered? Do students find it more useful reading bridge rules in a book, listening to the teacher’s explanations, or watching a bridge video (for a high-quality example, see Robson)? While the subject matter is fixed, students can be given choices with regard to classroom activities, pace, and learning styles.

Using bridge as the subject matter in a CBI English class (or any foreign language class for that matter) exploits all positive aspects of CBI and is a logical choice for regular incorporation into the curriculum.

How would a bridge-based English class be designed and taught?

One thing a teacher of bridge does not need to worry about is having enough material to teach. There is simply an endless amount of things to learn about bridge. Even bridge professionals (yes, there are people who make a living just by playing bridge) continue to study their entire lifetime. Bridge bidding is constantly changing, in a manner similar to TESOL – some older, more traditional methods are rejected and replaced with new ones, while other more radical approaches are deemed too extreme and discarded. Part two of bridge, the play of the cards, remains the same, but being able to know the “percentage play” for certain card combinations requires intense mathematical study and memorization. Because of these complexities, bridge has a reputation for being the most difficult card game to learn. That is why it is vital to introduce beginners to the rules of the game slowly, especially when teaching in a foreign language.

A sample selection of topics for a 15-week beginner bridge-based English class is shown below:

- Class 1 – Taking Tricks
- Class 2 – Playing with a Trump Suit
- Class 3 – Determining the Contract
- Class 4 – Making Bids
- Class 5 – Keeping Score
- Class 6 – Opening the Bidding
- Class 7 – Counting Cards
- Class 8 – Responding to an Opening Bid
- Class 9 – Establishing a Long Suit
- Class 10 – Bidding in No-Trump
- Class 11 – Drawing Trumps
- Class 12 – Overcalling
- Class 13 – Choosing an Opening Lead
- Class 14 – Taking a Finesse
- Class 15 – Duplicate Tournament

If teachers wanted to include specific language learning points to the syllabus, vocabulary and grammar topics could easily be added each week. While certainly a lot of bridge vocabulary is jargon specific to bridge, there are words and phrases that apply to the real world as well: convention, sequence, artificial, discard, encourage, distribution and forcing are some that come to mind. As for grammar, take a look at this paragraph from an introductory chapter of Kantar's *Bridge for Dummies* (1997, p. 11):

In bridge, four people each place a card face up on the table, and the highest card in the suit that has been led takes the trick. Because each player has 13 cards, 13 tricks must be fought over and won in each hand.

Already we can see passive perfect tense, relative clauses, irregular past participles, superlatives, coordinating conjunctions, and more. It is up to the teacher to decide how much time would be spent actually focusing on such grammar points in class.

As for what to actually do in class, there is an abundance of possible activities that practice any of the four major skills. Listening can be as simple as listening to the teacher explaining a defensive strategy, or watching a video that demonstrates a bidding technique. Reading can consist of assigned readings from bridge textbooks, coupled with worksheets and exercises that practice the material from the text and check comprehension. The output skills of speaking and writing are more challenging to incorporate, but a bit of creativity helps here. For speaking, students can be asked to summarize what was studied in class the previous week or what was covered in the homework. They can also discuss bidding problems, giving reasons for their choice of bids, and work together as a “double-declarer”, discussing what plays to make on the fly. As for writing, worksheets that require fully-formed sentence answers are not difficult to create, and online blogs on Moodle or

Facebook where students can post questions and comments are another possibility.

How do students react to this kind of education?

It is important to take into account how students feel about being taught in such an untraditional way. To find out, as part of an end-of-term questionnaire, the following five questions were asked of 27 Japanese students taking an bridge-based English course (the original Japanese shown after the English translation):

1. Do you think this class has helped you to improve your English?
この授業で英語力はレベルアップしたと思いますか？
2. Were you able to study bridge and English at the same time?
同時に英語とブリッジを勉強することができましたか？
3. Do you think bridge is a good thing to study in a university class?
大学の授業でブリッジを学ぶのは、いいと思いますか？
4. Was it interesting learning how to play bridge?
ブリッジのやり方を習うのは面白かったですか？
5. Are you interested in playing bridge more in the future?
将来、もっとブリッジをしたいと思いますか？
6. Answers were given on a four point scale: A = Agree (そう思う), B = Agree somewhat (ややそう思う), C = Disagree somewhat (あまりそう思わない), and D = Disagree (そう思わない). The results were as follows:

設問内容	A そう思う	B ややそう 思う	C あまりそう 思わない	D そう 思わない
この授業で英語力はレベルアップしたと思いますか？	11	12	2	2
同時に英語とブリッジを勉強することができましたか？	13	9	4	1
大学の授業でブリッジを学ぶのは、いいと思いますか？	19	6	1	1
ブリッジのやり方を習うのは面白かったですか？	20	4	2	1
将来、もっとブリッジをしたいと思いますか？	13	10	2	2

A great majority of students agreed that bridge is appropriate for studying in a university class, and that it is interesting to learn in and of itself. Student opinion regarding learning English through bridge was slightly more mixed, but still, more than 80% of respondents agreed or agreed somewhat that they had in fact been able to study and improve their English. Interest in continuing to play bridge was similarly positive.

While self-evaluations can only prove so much, it is illuminating to note that most students realized the value of what they were learning, had the desire to continue learning, and felt that bridge and English did work together and complement each other.

Conclusion

Contract bridge is a complex game that trains the brain by requiring logic, memory and concentration. By teaching bridge in a foreign language, a teacher can simultaneously harness the power of content-based instruction, giving students the motivation to learn and the contextualized exposure to the language they need.

Teachers wishing to give bridge a try in the classroom will first probably want to practice playing the game themselves. One of the books I used to get started was *Bridge for Dummies* by Eddie Kantar. More beginner books, along with all the bridge supplies you could ever need, are available from Baron Barclay. A simple Google search will yield tons of web sites where you can learn the basics of the game for free. If you are itching to sit down and play, but don't have three other players readily available, or don't have the nerves to play against actual humans yet, anyone can play bridge for free against robots at Bridge Base Online. One warning, though, from Kantar: "After you play a few hands, you may find that you can't stop playing bridge. If this happens, call a doctor – you may be a bridgeaholic. The only cure for your addiction is play, play, play" (p. 332).

References

- Andrew Robson Bridge. (2012, April 13). *Learn Bridge Taster* [Video file]. Retrieved September 19, 2014 from <https://www.youtube.com/watch?v=qGw5trRnIj8>
- Baron Barclay Bridge Supply. (2014). Retrieved September 19, 2014, from <http://www.baronbarclay.com/category/beginner>
- Bridge Base Online. (2014). Retrieved September 19, 2014, from <http://www.bridgibase.com/index.php>
- Diamond, M. C. (2008). Marian Cleeves Diamond. In L. R. Squire (Ed.), *The History of Neuroscience in Autobiography: Vol. 6* (pp. 62-94) [Electronic version]. Society for Neuroscience, Autobiographical Chapters.
- Diamond, M. C., Weidner, J., Schow, P., Grell, S., & Everett, M. (2001). Mental stimulation increases circulating CD4-positive T lymphocytes: a preliminary study [Electronic version]. *Cognitive Brain Research*, *12*(2), 329–331.
- Dick-Muehlke, C. (n.d.). *Protecting Your Brain with Cognitive Activity*. Retrieved September 11, 2014, from UC Irvine Institute for Memory Impairments and Neurological Disorders Web site: <http://www.mind.uci.edu/alzheimers-disease/articles-of-interest/behaviors-mindfulness-biomarkers-stem-cells-other-dementia/protecting-brain>
- Grabe, W. & Stoller, F. L. (1997). Content-based instruction: research foundations. In M. A. Snow & D. M. Brinton (Eds.), *The content-based classroom* (pp. 5-21). White Plains, NY: Longman.
- Hu, W. (2001, April 24). In Bridge, Schools See Mental and Social Benefits. *The New York Times*. Retrieved from http://www.nytimes.com/2011/04/25/education/25bridge.html?pagewanted=all&_r=0. Retrieved 9/19/2014, 2:50 PM.
- Kantar, E. (1997). *Bridge for Dummies*. Foster City, CA: IDG Books Worldwide, Inc.
- Manley, B. (Ed). (2011). *The Official Encyclopedia of Bridge* (7th ed). Horn Lake, MS: American Contract Bridge League.
- Met, M. (1999). *Content-based Instruction: Defining Terms, Making Decisions*. NFLC Reports. Washington, DC: National Foreign Language Center.
- Smith, L. C., & Hartley, A. A. (1989). The Game of Bridge as an Exercise in Working Memory and Reasoning [Electronic version]. *Journal of Gerontology*, *45*(6), 233-238.