

# Thinking in English: A content- based approach

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Learners are motivated by being taught to think outside the box. Developing our intellectual capabilities is an inherently motivating activity. This paper examines the rising interest in critical thinking skills as a beneficial by-product of English language teaching. This paper proposes that rather than just being a by-product, critical thinking can become the focus of content-based courses which teach critical thinking directly, and at the same time, motivate language learning. Researchers have provided strong arguments in favor of content-based learning as an approach to second language acquisition. Other research has shown that intellectually challenging and stimulating activities such as critical thinking tasks are intrinsically motivating, and that intrinsic motivation increases long-term retention of language. This paper proposes that content-based study of critical thinking, which involves logic, patterns of valid arguments, meaning analysis, validity and soundness, and inductive reasoning, can become the main focus of content-based courses in which students learn about critical thinking in their second language.

学習者は、枠組みにとらわれずに考えることを教えられることによって、動機付けられる。私たちの知的能力を開発させることが、本質的な動機付け活動となる。本論文は、英語教授法の有益な副作用としての批判的思考能力の開発に対する関心の高まりを研究している。本論文は、単なる副作用ではなく、批判的思考がコンテンツベースコースの中心となり、批判的思考を直接教えると同時に、語学学習の意欲を高めるということを提案する。本研究者は、第二言語習得へのアプローチとしてのコンテンツベース学習に強く賛成する。先行研究によると、第一に批判的思考法のような知的意欲をかき立てる刺激的な活動は、本質的に意欲を高め、第二に、本質的な意欲の高まりは言語の長期保持を増加させる。本論文は、批判的思考のコンテンツベース学習が論理、妥当な議論のパターン、意味の分析、妥当性と健全性、そして帰納的推理を伴い、学生が第二外国語で批判的思考について学ぶというコンテンツベースコースの中心になり得るということを定義する。

*"Part of the English teacher's task is to prepare learners to interact with native speakers who value explicit comment, intelligent criticism and intellectual assertion" (Davidson, 1998, p. 121)*

**E**NGLISH LANGUAGE teachers who use textbooks to develop academic-English skills may have noticed in recent years the addition of a new column in the scope and sequence tables of some textbooks. This column is often entitled "Critical Thinking Skills," and it outlines the thinking skills that students may develop as they undertake the language content and tasks of each unit. These critical thinking skills are not the main focus of the given material, but a potential by-product of some of the activities in each unit. The skills are usually not taught directly. Rather, it is hoped either that students already possess the skills and will display them if given the right circumstances, or that they will acquire the skills through par-



icipating in the activity, without direct instruction. This paper proposes that rather than being a possible by-product, critical thinking skills can become the main focus of content-based courses in which students learn critical thinking as a subject in their second language.

### Content-based language learning

Content-Based Instruction (CBI) is a significant approach in second language acquisition (Brinton, Snow, & Wesche, 1989). Typical content-based language courses combine the learning of content from a specific discipline such as engineering, science, or history, with a focus on language learning. This paper proposes that one of those disciplines should be critical thinking. Brown (2007) called this a “sustained-content language teaching model” (p. 56) that involves a focus on a “single content area or carrier topic... [along with] a complementary focus on L2 learning and teaching” (Murphy & Stoller, 2001, p. 3). Brown explains that “such an approach contrasts sharply with many practices in which language skills are taught virtually in isolation from substantive content. Through CBI, language becomes the medium to convey informational content of interest and relevance to the learner” (p. 55).

The interesting and self-developing nature of the subject matter in a critical-thinking-centered, content-based course may well provide students taking it with added motivation to develop language skills and communicate with each other in the target language. As Widdowson (1990) states, “The effectiveness of language teaching will depend on what is being taught, other than language, which will be recognized by the learners as a purposeful and relevant extension of their schematic horizons” (p. 103).

### What are critical thinking skills?

The term critical thinking skills can mean a variety of things to different people depending on their personal, educational, and cultural backgrounds. Definitions of critical thinking are varied but seldom contradictory. However, it is important that we define critical thinking skills within the boundaries of this content-based approach to teaching language through teaching critical thinking skills, which I shall abbreviate in this paper to *Thinking in English*. The thinking skills developed through the use of the Thinking in English approach are those which encourage learners to develop new ways of looking at or approaching a given topic, problem, or item of information. The approach involves developing learners’ abilities to find new and more thorough ways of interpreting and evaluating information, finding flaws that exist within information, and expressing opinions competently using the correct terminology. Critical thinking lessons also develop learners’ abilities to find answers to questions, and encourage learners to find out new things about themselves, their attitudes, the reasons why they do things, and whether there are any reasons for them to act or think differently.

Critical thinking as a subject has been growing in popularity in western high schools and universities for a number of years (Arenson, 1998). Some universities now make the study of critical thinking skills a compulsory freshman course, and many of the books used for these courses have broadly overlapping content and objectives (for example see LeBlanc, 1998; Hughes, 1992; Thomson, 2000; van den Brink-Budgen, 2010; Howell and Kemp, 2002). This common content, for example the study of argument; logic; fallacies; techniques of persuasion; and inductive, deductive, and moral reasoning, is what this paper suggests be the focus of Thinking in English classes.



## What is a critical thinker?

Critical thinkers apply certain processes when evaluating their own or others' views or theories. They also have a spirit of enquiry. Developing this spirit in our students is part of the challenge of the Thinking in English approach. This spirit includes keeping an open mind and a willingness to examine unfamiliar views. This doesn't mean being so open that any new theory that comes along is accepted. There is an old saying in critical thinking (attributed to more than one person) which goes, "Keep an open mind, but not so open that your brain falls out." Skepticism is a healthy attribute and an essential component of critical thinking. The Thinking in English approach, therefore, helps learners become less vulnerable to people who may try to convince them of things which are not entirely true, such as advertisers, politicians, con artists and indeed those that are truly deluded.

A critical thinker is equally open to credible, alternative ideas, treats them all with the same healthy skepticism, and is prepared to admit fault if an alternative view passes the test of critical thinking. A critical thinker is able to step away from beliefs and habits, examine them objectively, and make appropriate changes if warranted.

The word "critical" can have a negative connotation which implies that critical thinkers are pessimistic killjoys that seek only to destroy or reject others' arguments. However, finding fault in claims or arguments, which may lead to their rejection, is only part of critical thinking and not something to shy away from for any reason.

## Why combine critical thinking and language learning?

Most language teachers are familiar with the notional-functional approach to syllabus design (Halliday, 1985), in which the teach-

er uses a list of language functions or speech acts as the guiding element in course planning, rather than working through the more traditional lists of grammatical structures (Brown, 2007). When comparing the specific learning outcomes in a functional syllabus with the learning outcomes of a critical thinking course, one may notice a striking similarity in the two. Many of the skills outcomes listed for notional-functional based courses read very much like the skills outcomes in critical thinking. Examples of such outcomes include: self-correction, clarifying ideas, making distinctions, giving reasons, formulating appropriate questions, making connections, and comparing. These examples could be taken from an outcomes list from either a critical thinking curriculum or a notional-functional language learning curriculum. However, the skills are not the same. The difference is that in critical thinking, the aim is cognitive awareness of these skills, whereas in notional-functional language learning the aim is to express or articulate these cognitive skills.

This paper proposes that notional-functional and critical thinking outcomes can be merged in one approach. Linking the two, in a content-based language course, allows students to learn directly about critical thinking skills while simultaneously developing related functional language skills such as those mentioned above.

## Why teach critical thinking in a content-based approach?

Content-based classrooms have the potential of increasing intrinsic motivation and empowerment, since students are focused on subject matter that is important to their lives. Students are pointed beyond transient extrinsic factors, like grades and tests, to their own competence and autonomy as intelligent individuals capable of actually doing something with their new language (Brown, 2007, p. 56).



The development or expansion of critical thinking skills is intrinsically motivating because it appeals to our innate desire for self-improvement. Maslow's (1970) "hierarchy of needs" (p. 17) describes our motivation to achieve "self-actualization" (p. 22) once our more immediate and basic needs are met. More research needs to be done to prove that critical thinking based language learning can result in increased motivation and effective long-term language acquisition. However, the aforementioned research by Brinton, Snow, and Wesche (1989), Widdowson (1990), and Maslow (1970) indicates that when learners recognize that they are pursuing their intrinsic drive to develop their intellectual capacities, while also acquiring the target language, there will be an increase in motivation.

A Thinking in English approach should incorporate communicative, task-based techniques into the teaching of English and critical thinking skills. The approach should involve students undertaking structured tasks in pairs and groups, in order to learn more about critical thinking while also developing communicative English skills using targeted language. The Thinking in English approach takes the view that language acquisition is not merely a process of memorizing lexis, phrases, and rules in the hope that these can be applied effectively in a communicative context. The approach sees language as a living skill in which students endeavor to make sense and to understand language in order to solve authentic or real-life problems. Language is also a tool used to express learners' ideas, wishes, and views. Swain (2006) defines this expression of thoughts as the all important "languageing," in which comprehension is enhanced through producing language, or as she said, "what it is that we do to transform our thoughts into a shareable resource".

### Who is Thinking in English for?

This approach has been conceived with particular students in mind, namely those who have attained an intermediate or

higher level of English proficiency, who intend to study abroad, or in English medium contexts, or work for multi-national companies or organizations.

This approach introduces students to alternative cultures of thinking that they will likely encounter in foreign countries, or in multi-national workplaces, and particularly to the culture of thinking which shapes the nature of study in schools and universities in English speaking countries. These contexts require students to display critical and creative thinking skills. As Sir Li Ka Shing (2003), the Hong Kong tycoon says, "We are approaching a new age of synthesis. Knowledge cannot be merely a degree or a skill... it demands a broader vision, capabilities in critical thinking and logical deduction without which we cannot have constructive progress". Even more importantly, the above-mentioned contexts will require students to be able to articulate critical thinking in English.

Students from Asian countries with Confucian Heritage Cultures (CHCs) (Chiu, 2009) may find added benefit from this approach, through practicing skills which are less familiar to their cultural contexts. Chiu, a Taiwanese researcher, is just one of many who have written about the importance of developing critical thinking skills in CHCs. She has observed that Asian students are under different levels of influence from CHCs, which cultivate students to revere authority, maintain harmony, and avoid conflict in public. This has a significant impact on Asian students' cultural readiness to verbalize critical thinking. Many of the practices associated in the West with the nurturing of critical thinking are alien to the norms to which these students have become accustomed (p.42).

Atkinson (1997) has criticized the teaching of critical thinking in CHCs on the grounds that it may be culturally inappropriate or that there may be "potential discontinuity between cultural assumptions that may underlie critical thinking and modes of thought and expression prevalent among non-Western cultural



groups” (p.7). This would appear to be all the more reason to teach critical thinking and explicitly examine existing differences with students, asking them to compare their native culture of thinking with the ideas presented in a course which follows the Thinking in English approach, and allowing them to critically evaluate the strengths and weaknesses of each. Hongladarom (1998), a Thai academic, also disagrees with Atkinson, asserting that “Asian philosophy and Asian thought in general do not necessarily conflict with critical thinking and its suppositions” (p.1).

It is safe to say that no single country or culture can justifiably claim the modern concepts of critical thinking as its own. Before English became the global language (Crystal, 2003), critical thinking became a discipline studied the world over. Therefore it is difficult to argue that the Thinking in English approach in and of itself imposes specific cultural norms. The approach is merely an introduction to a globally recognised subject. Furthermore, this paper does not suggest that students in CHCs lack critical thinking ability any more than the uninitiated in any other culture, merely that there may be less comfort with expressing critical thoughts, and that the ability to do so effectively in English will benefit students. Approaches and attitudes to critical thinking are obviously not better or worse in any given culture. They are merely different in some ways, and the students’ own cultures should at all times be respected. This approach is designed to be an introduction, not indoctrination.

This approach is also designed for teachers and students aware of the social changes which compel language educators to alter the way they design curriculum and operate in the classroom. Those changes include:

- The increasingly global perspective which gives rise to multiculturalism, and therefore the need to be able to express, consider, and evaluate different cultural perspectives and be able to work effectively in multi-cultural teams.
- The fact that people change professions much more often now than they did in the past, requiring people to have transferable creative and critical thinking skills rather than skills specific to one particular career.
- The change in types of jobs, particularly a huge growth in information technology and service industries, which means that learners of the global language need to have both language and thinking skills, which will serve them in professions in these industries.

### Example lesson outlines: Thinking in English approach

Providing full lesson plans for classes based on critical thinking content is unfortunately impractical here, given space restraints. Instead, here are brief outlines intended to convey how some general concepts may be covered.

### Statements

Students develop skills to help them identify logical statements. First, they are taught the difference between a statement and other kinds of sentences such as imperatives and interrogatives. Next, they look at sets of statements and learn how to judge whether they are consistent with each other or not. Finally, they learn to identify statements that contain an argument or conclusion, and the premises supporting that argument.

### Testing theories

Students learn how to negotiate ways of testing questionable theories. First they read a text about a girl who believes that her lucky charm helps her find empty parking spaces. Students then discuss superstitions about luck and ways that they could test the girl’s theory. Along the way students learn how to make polite suggestions, learn associated vocabulary (e.g., theory,



coincidence, proof, superstition), and explain how their tests work. A role-play involving a discussion with the character from the story may follow.

### Fallacies

Students learn about common fallacies used in arguments such as the slippery slope fallacy (an argument that an unavoidable series of negative and not necessarily consequential outcomes will be set in motion by a certain decision) or the straw person fallacy (misrepresenting an opponent's argument in order to more easily defeat it). Students then identify these fallacies in example arguments based on current affairs. Along the way, students learn vocabulary which helps them articulate what is wrong with an argument and revise reported speech in order to effectively comment on others' statements. The slippery slope fallacy lends itself to the practice of conditionals, too. Finally, students create their own advertising copy or a political speech incorporating one of the fallacies; other students must then identify which fallacy has been committed.

### What English language skills can be developed?

This approach can be applied to develop communicative competence across all macro-skills through creating opportunities for students to interact and generate target language. Specific vocabulary, grammar, and micro-skills required to successfully undertake each task and negotiate meaning with fellow students, can receive teacher-directed focus both before and after presentation of the critical thinking content. These skills vary according to the task being undertaken. Deductive and inductive language learning approaches can be utilized, with incidental focus on form and implicit and explicit corrective feedback (Ellis, 2006, pp.102-103).

### Introducing and organizing Thinking in English

Given the lack of a universal definition of critical thinking, a good way to start a course which employs the Thinking in English approach may be to have students look at the history of critical thinking, study different views on what the concept means, and come up with their own definition.

Students may need more teacher controlled structure when first introduced to this kind of class; however, as with all good teaching, teachers should know when to be silent and move out of the limelight, giving students the chance to organize themselves. This is never more important than in Thinking in English activities. Teachers should circulate, help students construct the language they need, make notes for later language focus, and sometimes ask leading questions, but not take over the activity or judge student comments or ideas.

### Some notes on lesson design

In many critical thinking tasks, students have to create a solution. In these tasks, students should not just seek *any* answer, but the *best* answer. This is not judged by the teacher, but by the students themselves from a range of possibilities produced. Students, therefore, have to defend their ideas and look for weaknesses in suppositions, as well as judge the best option in cases in which no answer is perfect.

Teachers should always try to connect the content of the lesson to their students' particular knowledge and experiences. Teachers need to activate schemata in their students by linking classroom language use and concepts to their students' real worlds. A topic from a textbook is often not as motivating as the students' own classroom teacher connecting the lesson content to specific events or experiences which have attracted the students' attention recently.



Similarly, students should always be able to see how the thinking and creative skills they are developing can benefit them in their everyday lives. This motivating factor may help drive them to communicate, seek others' views and opinions, and strive to achieve the tasks set, through communicative exchange. Critical thinking objectives should always be explicitly explained at some stage. Students may then identify contexts in their own social, working, or student lives in which they use these skills.

### Motivation and retention

Most teachers will have noticed how giving puzzles or riddles to both L1 and L2 students of all ages usually proves to be a great intrinsic motivator. Critical thinking activities are similarly intrinsically motivating because they appeal to so many of the same intrinsic desires: to know, to be challenged, to improve our minds, to find an answer or solve a puzzle (Brown, 2007). Research indicates that if students acquire language through critical thinking or problem solving activities, they not only have better long-term retention, having applied the language use to a practical activity (Dornyei, 1990), but they feel more challenged and motivated by having learned and practiced the language not through meaningless repetition or inauthentic role play but through an activity worthy of their intellectual level.

### Conclusion

This paper has introduced the idea that students can and should develop both English language skills and critical thinking skills in unison through content-based classes which focus on explicit teaching of critical thinking as a subject. Researchers have provided strong arguments in favor of content-based learning as an approach to second language acquisition. In addition to this, other research has shown that intrinsic motivation increases

long-term retention of language and that intellectually challenging and stimulating activities such as critical thinking tasks are intrinsically motivating. Since the stated outcomes of critical thinking and functional language syllabuses are quite similar, there seems to be a strong synergy in the combination of these, producing a result in which their combined benefit is greater than the sum of the two separate disciplines.

### Bio data

**James Crocker** has over 25 years experience in education. He has been a primary school teacher, an ESL instructor, Director of Studies, and Teacher Trainer in language schools and universities in Australia, China, Brunei, the USA, the Czech Republic, Korea and now Japan, where he teaches at Kobe Women's University. He has presented at a number of international TESOL conferences and his publications include ESL texts for Southeast Asian schools. <james@suma.kobe-wu.ac.jp>

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