

QRCV APPROACH TO ENHANCING CRITICAL THINKING SKILLS IN ESP LEARNING

Ri Chung Sim*, Kang Chol Su, Kim Yong Hyong

*Faculty of Finance, Kim Il Sung University,
Pyongyang, Democratic People's Republic of Korea*

Received 22 January 2021

Revised 7 March 2021; Accepted 18 July 2021

Abstract: The term 'Critical Thinking' increasingly appears in education and language teaching. It would be among key skills for any 21st century learner (Hughes, 2014). Recently, considerable attention has been paid to critical teaching approaches in studying foreign languages. It is usually difficult for students to acquire financial knowledge in English even though they have already passed a basic English course in non-English speaking countries. We introduce the QRCV approach for enhancing learners' CT skills so that learners can overcome challenges in ESP learning. The main principle of the QRCV approach is heuristic Questioning, Reasoning, Considering the issues from different angles, and Visualizing in learning ESP. Our study aims at validating the QRCV approach in enhancing learners' CT skills in ESP learning. Participants were 72 students learning finance in English. During a semester, the experimental group (n=36) took the financial English course through the QRCV approach while the control group took it in a conventional approach. The self-developed instrument, Critical Thinking Skills Test for Financial English (CTSTFE) was used as a pretest and posttest, and their results were scored by instructors in accordance with relevant criteria for CT skills. The findings indicate that the experimental group outperformed the control group in the course achievement, especially in the dimension of Considering from multiple-perspectives. Implications for applying QRCV to other ESP courses in general are suggested.

Keyword: critical thinking, ESP, financial English, questioning, reasoning

1. Introduction

The emergence of a knowledge-based economy over a once dominant manufacturing economy means that positive outcomes are dependent on critical thinking (CT) abilities (Abrami et al., 2008; Ahuna, Tinnesz & Keiner, 2014; Meepian & Wannapiroon, 2013). Developing CT skills needed for success in this era beyond the classroom has been recognized as a primary goal of colleges and universities (Astin, 1993; Gellin, 2003; Stedman & Adams, 2012). Many chief academic officers identify critical thinking as one of the most important skills for students and not a few

employers want universities to place a stronger emphasis on developing critical thinking skills (AAC&U, 2011). Universities would fail their students if they can pass through to their junior or senior years by relying on memorizing facts which are setting *them* up for failure in upper level courses or in a profession where analysis and evaluation of information is essential.

In order for students to use critical thinking skills in their professional careers, they must first be taught how to develop those skills since CT skills are not inherent and they are developed through time and experience (Hackworth, 2009).

* Corresponding author.

Email address: cs.ri0831@ryongnamsan.edu.kp
<https://doi.org/10.25073/2525-2445/vnufs.4755>

As ESP (English for Specific Purposes) is mainly for learners' professional careers while EGP (English for General Purposes) for their everyday life, it requires learners to be equipped with CT skills for their future careers more keenly than EGP. While students learn both English and subject-matter content in ESP courses, they need to be equipped with not only linguistic skills but also subject-oriented thinking skills. ESP is distinguished from EGP in the point that it is rooted from EGP and is in combination with a specific domain. Domain – the subject matter – required critical thinking more keenly than language itself. In the financial English course (one branch of ESP) learners are taught EFL and finance as the subject-matter content. For their university achievement and future professional success, they choose to apply an economic or financial way of thinking in their course rather than acquiring the norms and principles merely by rote-retention. To think like an economist, they must acquire CT skills since economic or financial matters are sophisticated enough to be embodied with elegant decision-making and problem-solving abilities.

In our practice, the financial English course is acknowledged as more difficult than the EGP course to students. Etymology-visualization techniques have been used to help them overcome such difficulties in acquiring finance-specific English terms (Chung-sim, 2019). There still remain some other challenges in comprehending financial texts, preparing a presentation or writing an academic paper on financial topics in English. As for financial texts, students merely attempt to translate their literal meaning into their mother tongue without grasping its content meaning. This also prevents them from thinking in a more rational way as an economist. We see these challenges are normally connected to the lack of domain-specific knowledge, not to

that of linguistic skills. Such challenges could be overcome when students are encouraged to be active and independent learners for domain-specific background knowledge rather than passive and dependent acquirers and critical thinking is central to this.

Furthermore, it is more vital for non-English students in the course of ESP since domain-specific materials in English do not always match with their mother tongue equivalents easily, and that also requires critical thinking skills. By taking charge of the critical thinking process, they can develop an understanding of what they do *not* know about a particular subject, and make better decisions as a result (Brian, 2005).

In consideration of the domain-specific features of financial English, to improve students' CT skills, effective teaching approaches must be applied, and the QRCV approach is one of those. This study will prove the QRCV approach's usefulness for enhancing CT skills in financial English learning.

2. Theoretical Bases for the QRCV Approach

Teaching critical thinking is important for learning and social practice and teachers around the world are encouraged to integrate those skills in teaching. However, little is known about integrating critical thinking skills in foreign language instruction (Lili, 2016). E1-Soufi and See (2019) tested a range of approaches to enhancing the CT skills of English language learners and found that research in this field is still rather immature and more large-scale, replicable robust studies are needed to advance the field. Yet there is no study even on the relationship between CT skills and ESP learning, so we intended to conduct a study on effective teaching approaches for ESP learning by taking

advantages of relevant abilities for CT in general and domain-specific sub-skills. The abilities or behaviors identified as relevant to critical thinking include asking and answering questions for clarification (Ennis, 1985); defining terms (Ennis, 1985); identifying assumptions (Ennis, 1985; Paul, 1992); interpreting and explaining (Facione, 1990); reasoning verbally, especially in relation to concepts of likelihood and uncertainty (Halpern, 1998); predicting (Tindal & Nolet, 1995); and seeing both sides of an issue (Willingham, 2007).

Meanwhile, Hughes (2014) suggests 20 practical activities for integrating CT in the language classrooms such as critical questioning, reason generator, seeing things from another point of view, and supporting evidence, etc. Kanik (2010) urges that questioning methods and considering issues from different angles are main tools for getting students to think critically in the social sciences course. Multiple researchers highlight the importance of questioning in various forms for integrating CT skills in their courses (Ritchhart & Perkins, 2008; Day, 2011; Arend, 2009; Paul & Elder, 2006). Bailin et al. (1999) states that domain-specific knowledge is indispensable to CT.

We introduce three main categories, namely questioning, reasoning and considering new aspects among the relevant CT abilities and other CT teaching approaches in general and in EFL learning. We also combine these three categories with the aid of visualization which is regarded as a valuable tool for education to produce the QRCV approach. QRCV stands for questioning, reasoning, considering issues from different angles and visualization. These four combined can be a helpful teaching approach for comparing, analyzing and evaluating financial English texts, which are necessary for getting critical thinking skills in ESP learning.

Keeping in mind that CT is defined as “learning how to ask and answer questions of analysis, synthesis, and evaluation” (Paul, 1985), it includes two interrelated processes, including identifying and challenging assumptions, and imagining and examining others (Brookfield, 1991). Identifying and challenging assumptions can be received by questioning and reasoning, imagining by visualizing, examining others by considering from different perspectives.

‘Socratic questioning’ still heavily influences many approaches to education to this day and is certainly one skill required of effective critical thinkers (Hughes, 2014), which enables us to integrate questioning as one element of effective CT teaching approach for ESP domain-specific learning.

Answering a question requires reasoning. Reasoning aims at finding a solution or making a choice. Reasoning results in a simple decision, an interference, a judgment, and/or a conclusion (Brian, 2005). The fact that critical thinkers take the time to find out what they do not know with the methodical analysis of reasoning indicates that we should integrate reasoning as another element of effective CT teaching approach for ESP learning.

Well-balanced reasoning can be achieved free from bias, which requires thinkers to put themselves in alternative points of view. Critical thinkers take charge of their point of view by bringing it out into the open through active study and analysis on situations from different perspectives (Brian, 2005). We integrate considering from different perspectives into the other element of effective CT teaching approach for ESP learning.

Questioning, Reasoning and Considering from different perspectives are good elements for acquiring CT skills, which would be facilitated with visualization. We know English proverbs like ‘a picture is

worth a thousand words' and 'seeing is believing', both of which demonstrate the high communicative power of visual signals. Therefore, in language teaching-learning, like teaching-learning other subjects, the use of visualization is highly encouraged. A new vocabulary item, for instance, can be instantly understood by language learners if accompanied with a picture showing what it really is. Visualizing the text can greatly improve reading comprehension. Since it is most effective and essential to comprehension, understanding and application to optimize visualization ability which is an intrinsic potential of human being, visualization is given great attention. Also, concerning learning, VAK (Visual, Auditory, and Kinesthetic) has been identified as various preferred styles by each individual: some can learn better by seeing (V) while some can learn best by merely listening (A), and still others can study best by moving and actions (K). In their studies, Dunn and Dunn (1972) conclude that 'many in our cultural framework are visual learners' whereas Goleman (1986) said that '94% of population utilizes visualization well'.

For these reasons, in education of finance in English, several visualization methods can be adopted to improve reading and application ability.

As for the QRCV approach, QRC is vital for bringing up CT skills while V facilitates learners to follow QRC. If QR provides milestones for CT routine, CV provides a van to shorten the routine. If QR provides raw materials for CT food, CV provides seasoning and flavor for it.

The QRCV approach can facilitate the way of thinking for financial English learners to have critical eyes on the materials they used to absorb merely by translating. This also enables them to see hidden meaning or invent their own new ideas, or uncover and explain deeper meaning of the

text and expand their perspectives by building up critical thinking. The QRCV approach effectively helps learners develop CT skills by promoting deeper thinking of cause/effect relationships, parts-whole relationships, the reliability of sources, and prediction (Nold, 2017).

As domain-specific CT skills lead to domain-general CT skills and vice versa, learners could have a critical attitude not only towards the financial text in English but also other subject matters. Their learning behavior might turn themselves from passive consumers into active producers of knowledge through the QRCV approach.

We apply the QRCV approach in two steps, before class and in class. In the 1st step, students are given instructions with relevant financial English materials before class. They are required to make *Questions* as critical as possible to instructors or their colleagues. Normally they are instructed to observe the text carefully to find odd things in it. Then they should try to do their own *Reasoning* to answer such questions. While doing their assignments, they try to *Consider* the issues from all possible sides. And after finishing their assignment according to instructions, they should draw a text map or sometimes a concept map so as to *Visualize* the context wholly or partially.

Instructors collect their assignments, summarize and classify the questions before class. They build up their own instruction plan for each lesson along with a questioning routine to carry on during class.

In the 2nd step, instructors put questions as tough as possible to the students on the given text. They find themselves involved to answer the questions by reasoning with given tips from instructors. In this case, they are generally asked to conclude a well-balanced judgment or answers with the help of instructors who enlighten their point of view to consider the

text from several aspects. Often a prepared text (Appendix 1) or concept maps are given to the students by instructors to facilitate their comprehension of the text. And more often instructors do these mapping promptly in consideration of collected ideas from students during the class. In practice, various kinds of financial text in English often require the application of QRCV approach wholly or partially combined and sometimes singly.

We are going to prove that the QRCV approach is helpful to overcome difficulties in ESP learning to produce better faculty achievements by enhancing students' CT skills in the subsequent sections of the paper.

3. The Study

The present study aims at proving the effectiveness of the QRCV approach in the course achievement and in enhancing critical thinking skills in ESP learning. The following research questions are posed.

Question 1: Can the QRCV approach improve ESP course achievement by overcoming its inherent challenges?

Question 2: Can the QRCV approach enhance CT skills in ESP learning?

Participants

After Basic EGP course, all the students in our University take an ESP course according to their majors. Students of Finance Faculty go through the financial English course. We divide 72 participants at the average age of 22 into two groups: the control group (36 participants) and the experimental group (36 participants). Proficiency in English and major subjects between the two groups was found to be similar, at the beginning of the project, in accordance with their previous terminal exam results.

Table 1

Composition of Participants Based on Their Proficiency in English And Major

Average terminal exam result (marks)	Control group	Experimental group
A (8.5~10)	3 (students)	3 (students)
B (7.5~8.4)	27	27
C (6~7.5)	6	6

For a semester, the control group go through the ESP course in a traditional way i.e. by explaining them in English as in dictionary and acquiring financial English terms mechanically, L1 word for L2 word, or vice versa shown in bilingual English-Korean dictionaries and merely translating the text into Korean for their comprehension and while experimental group is taught in the new way i.e. through the QRCV approach.

Then after a semester, the participants were examined to evaluate their critical thinking skills to deal with financial English texts.

Instruments

There exist many standardized assessments including the California Critical Thinking Skills Test (Facione, 1990), the Cornell Critical Thinking Tests (Ennis & Millman, 2005), and the Watson-Glaser Critical Thinking Appraisal (Watson & Glaser, 1980). Such assessments utilize multiple-choice items designed to assess component critical thinking skills, such as deductive reasoning, inductive reasoning, drawing conclusions, evaluating arguments, and so forth. These assessments are not confined to domain-specific areas but to domain-general areas. Therefore, we introduce CT assessment specific to ESP (herein financial English) as an instrument for the current study.

This assessment (Critical Thinking Skills Test for Finance in English - CTSTFE) consists of 7 types of problems:

1st filling in the blank with appropriate words, 2nd choosing the right answer for the blank, 3rd matching blanks with appropriate words, 4th deciding true or false, 5th rearranging the parts to complete a sentence, 6th interpreting into mother tongue, 7th finding solutions as many as possible. (Appendix 2)

The content of problems are extracted from relevant glossaries, journals, magazines, newspaper articles or other reference books. While comprehending, analyzing and guessing the context, examinees collect candidate answers to problems and sort out the most reasonable one. Problems of the 1st, 2nd, 4th, and 7th types aim at checking CT skills from financial aspects more than linguistic aspects, and vice versa for those of 3rd, 5th, 6th types.

Procedures

Both the control and the experimental groups are given the pretest and the posttest with CTSTF. As for the pretest before the semester, the control participants record the average marks of 4.7 while the experimental earns the average of 4.6, which tells that their CT skills are almost similar at the beginning of the study.

After the treatment semester, participants of the two groups go through the posttest equally with CTSTFE. According to the exam results (Table 2), 36 participants in each group are ranked in order from the highest to the lowest, and they are clustered again with 6 members in each subgroup. All of 6 subgroups in each group are ranked from No 1 to No 6 in accordance with their exam performance.

No 1 subgroups of the control and experimental groups form Pair 1. Like this, we form from Pair 2 to Pair 6. Then we conduct an interesting debate-type experiment for assessing CT skills in ESP learning. We put forward some statements (Appendix 3). The subgroups in each pair

should either affirm or deny the statement. In three pairs of No 1, 2 and 3, the control participants are asked to agree with the statements while the experimental subgroups are to disagree with them and vice versa in the other three pairs of No 4, 5 and 6. Three examiners are invited to rank the above 12 subgroups with some criteria for CT skills (Table 4). Each subgroup is given 10 minutes in advance to build up their argumentation. Then each pair starts to defend their arguments for the given statement. After 3 minutes, they should stop their arguments and examiners judge their performance (Table 3). Also, the experimental participants are particularly examined how much this QRCV approach encourages their attitude towards ESP learning in consideration of some useful elements needed for critical thinkers such as flexibility, disposition, and motivation by questionnaire (Table 5). All the relevant results above are manifested in the finding section of this paper.

4. Findings and Discussions

After the treatment semester, the average marks per group show that the experimental participants overwhelm the control ones in total. As for the 6th type problem (Appendix 2), we find a big gap between the two groups (9.1 and 4.7) with the question of which requires a more critical way of thinking. This indicates that the QRCV approach can enhance critical thinking skills for financial English learning especially in the respect of considering issues from different perspectives. The 1st to 6th problems are almost made from new materials not mentioned in textbooks or teaching materials. The experimental results (7.5) are higher than the control ones (6.4), which indicates that the QRCV approach could help the learners overcome difficulty in comprehending financial context.

Table 2

Average Posttest Result per Examinee With CTSTFE

	Finance-focused problems				Linguistic-focused problems			Average marks
	1 st	2 nd	4 th	6 th	3 rd	5 th	7 th	
Experimental group	7.3	8.2	7	9.1	6.9	5.4	8.5	7.5
Control group	5.9	7.4	4.8	4.7	6.7	6.9	8.4	6.4

Table 3

Who Successfully Persuades its Counterparty in Debates?

Pairs for debate	Control subgroup		Experimental subgroup
No 1	pros	<	cons
No 2	pros	<	cons
No 3	pros	<	cons
No 4	cons	<	pros
No 5	cons	<	pros
No 6	cons	>	pros

As the table indicates, five experimental subgroups defeat their counterparties and only one control subgroup defeats its counterparty. This

shows that the QRCV approach can enhance learners' persuasive and argumentative abilities which are inevitably accompanied by CT skills.

Table 4

Rank in CT Skills for 12 Experimental and Control Subgroups

Rank in the following criteria*	Control subgroups							Experimental subgroups						
	1	2	3	4	5	6	Σ	1	2	3	4	5	6	Σ
Questioning quality	4	5	7	9	11	10	46	1	2	3	6	8	12	32
Reasoning power	7	3	5	9	10	11	45	4	2	1	6	8	12	33
Fairness (multi-side consideration)	4	2	6	8	10	12	42	3	1	5	7	9	11	36
Relevance	6	4	2	7	9	12	40	5	3	1	8	10	11	38
Clarity in expression	1	3	6	8	12	9	39	2	5	4	7	11	10	39
Collaboration	1	4	6	9	10	11	41	2	3	5	8	7	12	37
Total Σ	23	21	32	50	62	65	253	17	16	19	42	53	68	215
Rank in Total	5	4	6	8	10	11	44	2	1	3	7	9	12	34

*Criteria for assessing CT skills are established by examiners in consideration of various CT standards.

Examiners rank 12 experimental and control subgroups in the order from 1 to 12 in accordance with some criteria such as questioning quality, reasoning power, fairness and relevance. Collaboration is added to the criteria as this is one element for displaying CT skills. Each subgroup is ranked according to each criterion. Each rank value is added up to be total which shows the sum of ranks. The bigger the sum is, the lower the rank is.

It is found that experimental group's rank (215) is higher than control one's (253) except in the criterion of Clarity in expression (39). As for Fairness (multi-side consideration) comparing it with the other

Table 5

How do QRCV Participants Feel Improvements in Their Learning Attitude?

	Most willing	More willing	Willing	Not willing
	How many (%)	How many (%)	How many (%)	How many (%)
Flexibility	7 (19.4%)	16 (44.4%)	9 (25.0%)	4 (11.1%)
Disposition	4 (11.1%)	8 (22.2%)	17 (47.2%)	7 (19.4%)
Motivation	19 (52.8%)	11 (30.6%)	5 (13.9%)	1 (2.8%)

The table shows that the QRCV approach substantially enhances learners' motivation. All the findings above proves that the QRCV approach facilitates ESP learning, and helps learners overcome intrinsic difficulties by making them independent learners.

What is most important in the QRCV approach is Questioning, as the quality of questions with relevant reasons would determine the success or failure of the approach to enlighten or guide the learners in the direction of critical thinking. These questions would be better to be accompanied with standards of reason involving clarity, relevance, logic, accuracy, depth, significance, precision, breadth, and fairness as suggested by Brian (2005), which mainly depends on the quality of instructors since it seems obvious that teachers first need to be critical thinkers to be able to teach this

criteria, the experimental rank is much higher than the control rank, which indicates that the QRCV approach is more effective in enhancing the skill of considering the issues from multiple perspectives.

Critical thinking may also support and be supported by motivation.(Emily, 2012) The disposition to think critically has been defined as the “consistent internal motivation to engage problems and make decisions by using critical thinking” (Facione, 2000). Thus, student motivation is viewed as a necessary precondition for the exercise of critical thinking skills and abilities.

ability to their students (Sheybani & Miri, 2019). Instructors should be critical thinkers to produce such quality questions to bring up students to be critical thinkers. The instructors who received specific training on methods to teach critical thinking are more effective in developing critical thinking in students than instructors who had no prior training (Abrami et al., 2008). It is further required to develop an effective training program for instructors to acquire methods for teaching CT skills in ESP courses.

While the QRCV is derived from domain-general CT abilities and applied to domain-specific fields, financial English in this case, one branch of ESP, and it works quite well, we also suggest the applicability of the QRCV approach to other domain-specific ESP learning. It can generally apply to language learning with specific domain for this approach is generalized and

extracted from the general sub skills and activities for language classroom. But this should be creatively applied specific to target domain. If necessary, the QRCV could produce variations suitable for target domains. This implies that it can apply to other ESP courses.

5. Conclusions

The importance of critical thinking skills has long been aware of as an outcome of student learning (Emily, 2012). However, little is known about integrating CT skills in ESP learning. ESP learning requires two skills; linguistic skill for English on the one hand and CT skill for specific subjects on the other. Financial English, as one branch of ESP, needs CT skills for learners to acquire domain-specific background knowledge.

We assume that learners can get successful achievement in their ESP course and further professional careers when they are equipped with economic ways of thinking that can be developed by CT skills in the field of finance in English. We see Questioning, Reasoning, and Considering the issue from multiple perspectives as main elements for enhancing CT skills and combine these three elements with Visualization which has been recognized as an effective teaching tool to produce the QRCV approach for effective ESP learning.

The study demonstrates that the QRCV approach is effective in enhancing learners' CT skills particularly in multiple-side consideration. The learning attitude of experimental participants has also proved to be positive towards ESP courses taught in the QRCV approach. All these results indicate the QRCV approach can enhance learners' course achievement by enhancing their CT skills and overcoming inherent challenges in this course.

References

- AAC&U. (2011). *The LEAP vision for learning: Outcomes, practices, impact, and employers' view*. Association of American Colleges and Universities.
- Ahuna, K. K., Tinnesz, C. G., & Kiener, M. (2014). A new era of critical thinking in professional programs. *Transformative Dialogues: Teaching & Learning Journal*, 7(3), 1-9.
- Alwehaibi, H. (2012). Novel program to promote critical thinking among higher education students: Empirical study from Saudi Arabia. *Asian Social Science*, 8(11), 193-204.
- Astin, A. (1993). *What matters in college: Four critical years revisited*. Jossey-Bass.
- Brookfield, S. D. (1991). *Developing critical thinkers: Challenging adults to explore alternative ways of thinking and acting*. Open University Press.
- Egan, B. D. (2005). *The role of critical thinking in effective decision making* [White Paper]. Global Knowledge. https://uploads-ssl.webflow.com/5d024b052b8dd5c1a487d582/5ec55c033a09a644a8e82d9f_criticalthinking.pdf
- E1-Soufi, N., & See, B. H. (2019). Does explicit teaching of critical thinking improve critical thinking skills of English language learners in higher education? A critical review of causal evidence. *Studies in Educational Evaluation*, 60, 140-162.
- Ennis, R. H. (1985). A logical basis for measuring critical thinking skills. *Educational Leadership*, 43(2), 44-48.
- Ennis, R. H., & Millman, J. (2005). *Cornell critical thinking test: Level X* (5th ed.). The Critical Thinking Co.™
- Facione, P. A. (2000). The disposition toward critical thinking: Its character, measurement, and relation to critical thinking skill. *Informal Logic*, 20(1), 61-84.
- Gellin, A. (2003). The effect of undergraduate student involvement on critical thinking: A meta-analysis of the literature 1991-2000. *Journal of College Student Development*, 44(6), 746-762.
- Hackworth, R. M. (2009). *Radiation science educators' perception of obstacles in the use of critical thinking* [Unpublished Doctoral Dissertation]. The Ohio State University.
- Halpern, D. F. (1998). Teaching critical thinking for transfer across domains: Dispositions, skills, structure training, and metacognitive monitoring. *American Psychologist*, 53(4), 449-455.

- Hughes, J. (2014). *Critical thinking in the language classroom*. ELI.
- Lai, R. E., & Viering, M. (2012, April). *Assessing 21st century skills: Integrating research findings* [Paper presentation]. National Council on Measurement in Education, Vancouver.
- Li, L. (2016). Integrating thinking skills in foreign language learning: What can we learn from teachers' perspectives? *Thinking Skills and Creativity*, 22, 273-288.
- Meepian, A., & Wannapiroon, P. (2013). Design of social learning environment as inquiry-based on cloud technology for enhancing the critical thinking skill and collaborative learning. *International Journal of e-Education, e-Business, e-Management and e-Learning*, 3(3), 253-257.
- Nold, H. (2017). Using critical thinking teaching methods to increase student success: An action research project. *International Journal of Teaching and Learning in Higher Education*, 29(1), 17-32.
- Paul, R. W. (1992). Critical thinking: What, why, and how? *New Directions for Community Colleges*, 77, 3-24.
- Sheybani, M., & Miri, F. (2019). The relationship between EFL teachers' professional identity and their critical thinking: A structural equation modeling approach. *Cogent Psychology*, 6(1), Article 1592796.
- Stedman, N. R., & Adams, B. L. (2012). Identifying faculty's knowledge of critical thinking concepts and perceptions of critical thinking instruction in higher education. *NACTA Journal*, 56(2), 9-14.
- Tindal, G., & Nolet, V. (1995). Curriculum-based measurement in middle and high schools: Critical thinking skills in content areas. *Focus on Exceptional Children*, 27(7), 1-22.
- Watson, G. B., & Glaser, E. M. (1980). *Watson-Glaser critical thinking appraisal manual: Forms A and B*. The Psychological Corporation.
- Willingham, D. T. (2007). Critical thinking: Why is it so hard to teach? *American Educator*, 31(2), 8-19.

Appendix 1

Sample Text: Commercial Banking

Commercial banks are businesses that trade in money. They receive and hold deposits, pay money according to customers' instructions, and lend money, etc. There are still some people who do not have bank accounts. Traditionally, factory workers were paid wages in cash on Fridays. Non-manual workers, however, usually receive a monthly salary in the form of a cheque or a transfer paid directly into their bank account.

A current account (US: checking account) usually pays little or no interest, but allows the holder to withdraw his or her cash with no restrictions. Deposit accounts (in the US also called time or notice accounts) pay interest. They do not usually provide cheque (US: check) facilities and notice is often required to withdraw money.

Standing orders and direct debits are ways of paying regular bills at regular intervals. Banks offer both loans and overdrafts. A loan is a fixed sum of money, lent for a fixed period, on which interest is paid; banks usually require some form of security or guarantee before lending. An overdraft is an arrangement by which a customer can overdraw an account, i.e. run up a debt to an agreed limit; interest on bank loan is calculated daily.

Banks make a profit from the spread or differential between the interest rates they pay on deposits and those they charge on loans. British commercial banks lend to blue-chip borrowers (big, secure companies) at the base rate. They are also able to lend more money than they receive in deposits because depositors rarely withdraw all their money at the same time. Because a commercial bank can lend most of the money deposited with it to other borrowers, who in turn may lend it to another borrower, each sum of money deposited in a bank is multiplied several times. To ensure the safety of the banking system, central banks impose

reserve requirements, obliging commercial banks to deposit a certain amount of money with the central bank at zero interest.

In order to optimize the return on their assets (loans), bankers have to find a balance between yield and risk, and liquidity and different maturities, and to match these with their liabilities. The maturity of a loan is how long it will last; the yield of a loan is its annual return - how much money it pays - expressed as a percentage.

Application of the QRCV approach in class

“Commercial banks are businesses that trade in money. They receive and hold deposits, pay money according to customers’ instructions, and lend money, etc.”

Q: Can you relate the meaning of trade to the main business of commercial banks?

Q: How can they normally earn profits by trade? Then how can commercial banks get profits through trade in money?

“Deposit accounts (in the US also called time or notice accounts) pay interest. They do not usually provide cheque (US: check) facilities and notice is often required to withdraw money.”

Q: Deposit accounts, time accounts and notice accounts are the same. But can we extract the features of this type of account from its various names with identical meaning and different appearance? (It’s deposited in bank for a certain length of time and notice is required before withdrawal)

Q: When deposit accounts provide cheque facilities, what benefit or loss do commercial banks get? (Cheque facilities do not allow commercial banks to use deposit accounts for a certain period of time, so banks lose the opportunity of utilizing idle cash.)

“Standing orders and direct debits are ways of paying regular bills at regular intervals.”

Q: Is “standing orders” different from “direct debits” or not? (Both of them are identical in meaning and disparate in appearance.)

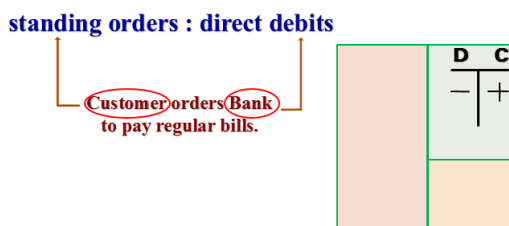
Q: Where is B among A, B and C? (In the middle, on the right side of A and left side of C. On the right from A’s perspective, on the left from C’s perspective, and in the middle from the whole perspective.) This means the answer is different according to perspectives.

Q: Then who are the participants in periodic installment payment? (Customer and bank)

Q: What can you say about the periodic installment payment from the perspectives of customer and bank respectively? Oxford Business Dictionary (2005) says as follows: ‘Standing order’: an instruction that you give to a bank to pay somebody a fixed amount of money from your account on the same day each week, month, etc. ‘Direct debit’: an instruction to your bank to allow somebody else to take an amount of money from your account on a particular date, especially to pay bills. The definitions say that a *customer* orders a *bank* to pay regular bills. When you focus on ‘customer’, then it’s named ‘standing order’ (here ‘standing’ stands for ‘continuing’ or ‘regular’). When you focus on ‘bank’, then it’s named ‘direct debit’. (Bank receives an order from a customer and *directly debit* his or her account.) Customers make orders to the bank periodically and the bank receives orders and makes payments. Thus the customer side is “standing order” and the bank side is “direct debit”.

Figure 1

Visualization Aid ‘Standing Order’ & ‘Direct Debit’



“Banks offer both loans and overdrafts. A loan is a fixed sum of money, lent for a fixed period, on which interest is paid; banks usually require some form of security or guarantee before lending. An overdraft is an arrangement by which a customer can overdraw an account, i.e. run up a debt to an agreed limit; interest on bank loan is calculated daily.”

Q: What’s the relationship between loans and overdrafts? (Overdraft is like a loan in some aspects)

“Banks make a profit from the spread or differential between the interest rates they pay on deposits and those they charge on loans. British commercial banks lend to blue-chip borrowers (big, secure companies) at the base rate.”

Q: Can you find something unusual? (If a retailer sells merchandise at a wholesale price, there is no profit. Likewise, if a commercial bank lends borrowers at base rate, it commits to a non-profit transaction)

Q: Blue-chip means a large best known company which is considered a secure investment. What do you think of being big and secure for making profit in this kind of transaction? (Since being large means a great number of transactions and high level of cash flow, there would be more bank commission. Stocks of secure business have relatively high demand in the market, therefore, it has great possibility to be traded above the face value. Banks can deal with issues of the stock to make additional profit. In other words, they give favorable lending to reap some other benefits.

“Because a commercial bank can lend most of the money deposited with it to other borrowers, who in turn may lend it to another borrower, each sum of money deposited in a bank is multiplied several times. To ensure the safety of the banking system, central banks impose reserve requirements, obliging commercial banks to deposit a certain amount of money with the central bank at zero interest.”

Q: What are the keywords of the given sentences, which have first priority in the sentence and can give the general meaning of the sentence without the rest of the words. (First sentence – multiplied, Second sentence – reserve requirement)

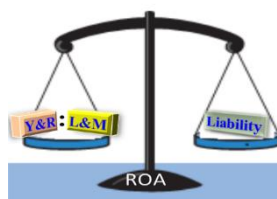
Q: What is the relationship between two sentences? (The first sentence is the cause and the second one is the effect.)

“In order to optimize the return on their assets (loans), bankers have to find a balance between yield and risk, and liquidity and different maturities, and to match these with their liabilities.”

Q: Can you match the context with the following figure?

Figure 2

Visual-Aid Commercial Banking – Optimizing ROA.



Note: Y&R: yield and risk, L&M: liquidity and maturities

Appendix 2: Sample Extract From CTSTFE

Question Type	Questions
<p>1. Fill in the blank with appropriate words.</p>	<p>_____ is an amount of money paid regularly by the government or company to someone who does not work anymore, for example because they have reached the age when people stop working or because they are ill.</p> <p>Pension _____ is an amount of money that is invested and then used to pay pensions. Its goal is to build up enough money to pay pensioners their promised benefits.</p>
<p>2. Choose the right answer for the blank.</p>	<p>Another attribute of a bond that influences its interest rate is its liquidity. A liquid asset is one that can be a) _____ and b) _____ converted into cash if the need arises. The c) _____ liquid an asset is, the more desirable it is (holding everything else constant). Treasury bonds are the most liquid of all d) _____ bonds; because they are so widely traded, they are the easiest to sell quickly, and the cost of selling them is low. e) _____ bonds are not as liquid because fewer bonds for any one corporation are traded; thus it can be costly to sell these bonds in an emergency because it might be hard to find buyers quickly.</p> <p>quickly, slowly cheaply, expensively more, less long-term, short-term corporate, blue-chip</p>
<p>3. Match the blank in each sentence with the appropriate word in the following.</p>	<p>We use not only coins and dollar bills as _____ of payment, but also cheques written on accounts held at banks, credit cards, debit cards, stored-value cards, and electric cash. Money has been _____ things at different times, it has always been important to people and to the economy. To understand the _____ of money in the economy, we must understand exactly what money is. As the word money is used in everyday conversation, it can mean many things, but to _____ it has a very specific meaning. To avoid confusion, we must clarify how economists' use the word money _____ from conventional usage. Economists _____ money as anything that is generally accepted in payment for goods or services or in the repayment of debts. Currency, consisting of dollar bills and coins, clearly fits this definition and is one type of money.</p> <p>Words: <u>differs, define, means, different, effects, economists</u></p>

4. Determine True or False.	It's not always convenient to trade by exchanging goods because you can't always get what you want when you want it.
5. Rearrange the following parts to make up a complete sentence.	The policy is, not a claim is covered, when determining whether or, insurance company refer to, that both insured and, the written document.
6. Translate the following context into mother tongue	Marketing intermediaries constitute a distribution channel or a channel of distribution. The shortest channel exists in cases of direct marketing, where the manufacturer sells directly to consumers, reaching them by telephone or direct mail, or by way of its own sales reps. More common are channels with a single intermediary-e.g. a sales agent or broker for industrial goods, a retailer for consumer goods, an authorized dealer in the automobile industry. More complex channels add further intermediaries such as wholesalers, and where goods are exported, very likely an agent as well.
7. Find solutions from many perspectives.	Did Robinson Crusoe on an uninhabited island need money or not? Why?*

* Examinees are required to analyze the question critically and find criteria to classify the direction of the solution as many as possible.

Appendix 3: Statements to be Debated

No	Statements	Con. subgroups	Exp. subgroups
1	When money is tight, interest rates rise, because commercial banks have to borrow at a higher rate on the inter-bank market.	should argue that these statements are right.	should argue that these statements are wrong. *
2	When money is tight, credit falls, because people and businesses borrow less at higher rates.		
3	When money is tight, output falls, because with less consumption, firms produce less.		
4	When money is tight, unemployment rises, because companies are producing and selling less, and so require less labor.	should argue that these statements are wrong.	should argue that these statements are right.
5	When money is tight, inflation falls, because there is less money in circulation.		
6	When money is tight, the exchange rate will probably rise, if there is the same demand but less money, or if there is higher demand, as foreigners take advantage of the higher interest rates to invest in the currency.		

* Cons develop their ideas as critical as possible to defeat the counterparty's right statements, somewhat feeling to the extent of "logic-chopping". Though the pros' statement seems to have enough logic in it, it's interesting that cons has a superior position than pros during debate. This is because cons have the advantage of knowing the direction of their counterparty in advance while pros feel satisfied with the logical certainty of the statement.

PHƯƠNG THỨC QRCV NHẪM NÂNG CAO KỸ NĂNG TƯ DUY PHÊ PHÁN TRONG HỌC TẬP TIẾNG ANH CHUYÊN NGÀNH

Ri Chung Sim, Kang Chol Su, Kim Yong Hyong

*Khoa Tài chính, Đại học Kim Nhật Thành,
Bình Nhưỡng, Cộng hòa DCND Triều Tiên*

Tóm tắt: Thuật ngữ ‘tư duy phê phán’ ngày càng phổ biến trong giáo dục và giảng dạy ngôn ngữ. Nó là một trong những kỹ năng cốt yếu đối với mọi người học trong thế kỷ 21 (Hughes, 2014). Gần đây người ta cũng đã đặc biệt quan tâm đến các phương thức rèn luyện tư duy phê phán trong học ngoại ngữ. Thông thường sinh viên học ngoại ngữ chuyên ngành ở các nước phi bản ngữ rất khó thụ đắc kiến thức tài chính bằng tiếng Anh mặc dù đã đạt trình độ tiếng Anh cơ bản. Do vậy, bài viết giới thiệu phương thức QRCV để tăng cường kỹ năng tư duy phê phán giúp người học vượt qua những thách thức trong tiếng Anh chuyên ngành. Nguyên tắc cơ bản của phương thức QRCV là Tự vấn, Lập luận, Xem xét vấn đề từ nhiều góc độ, và Trực quan hóa. Nghiên cứu của chúng tôi nhằm xác định hiệu quả của QRCV trong việc nâng cao kỹ năng tư duy phê phán của người học tiếng Anh chuyên ngành. 72 sinh viên học tiếng Anh tài chính tham gia nghiên cứu. Trong 1 học kỳ, nhóm thực nghiệm (n=36) học môn tiếng Anh tài chính theo phương thức QRCV trong khi nhóm đối chứng học theo cách thức truyền thống. Bài kiểm tra tư duy phê phán trong tiếng Anh chuyên ngành (CTSTFE) được sử dụng làm công cụ kiểm tra trước và sau thực nghiệm, và kết quả thi được chấm theo các tiêu chí tư duy phê phán quan yếu. Kết quả nghiên cứu cho thấy nhóm thực nghiệm có kết quả học tập cao hơn nhóm đối chứng, đặc biệt là về kỹ năng Xem xét vấn đề từ nhiều góc độ. Nghiên cứu chỉ ra những ứng dụng hữu ích của QRCV trong môn tiếng Anh các chuyên ngành khác nữa.

Từ khóa: tư duy phê phán, tiếng Anh chuyên ngành, tiếng Anh tài chính, tự vấn, lập luận