# **Incorporating Critical Thinking in Language Classrooms**

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### Abstract

Whether or not to teach critical thinking skills in language classrooms has long been discussed among language teachers. This paper first reviews different viewpoints in the current literature on including critical thinking in language classrooms. Next, the author will share some simple activity ideas that incorporate critical thinking into content-based integrated English skill courses through questions asked after reading and giving presentations, different types of debates, and discussion questions that require evaluative and analytic skills. After a semester of instruction, a short questionnaire identifies Japanese students' struggles in asking questions and thinking deeper when they read and listen. Survey also indicates their increased motivation and curiosity towards topics covered in the curriculum, all of which facilitate English production. Future studies should focus more specifically on asking questions and its psychological effects on language learners, as well as implications on building a safe community when practicing critical thinking skills.

### **Incorporating Critical Thinking in Language Classrooms**

In Japan, the mandatory English education system that requires students to study English in order to pass the entrance examinations demotivated students in English learning, regardless of levels (Kikuchi, 2013). Studying English is then considered passive, receptive, and irrelevant in Japan. Thus, it is relevant to ask how curricula can be presented differently between high school and university. The author proposes that educators train students to actively process information and contemplate what they receive in class. In this way, educators can avoid memorization and grammar-translation—identified as one of the five demotivating factors among Japanese university students (Kikuchi, 2009, as cited in Kikuchi, 2013).

Introducing critical thinking seems to provide a new perspective on language teaching. Shirkhani and Fahim (2011) suggested that the promotion of critical thinking encouraged learners to take charge of their thinking, which helped them "monitor and evaluate their own ways of learning more successfully" (p. 112). They continued to state that learning how to think critically made language learning more meaningful to students (Shirkhani & Fahim, 2011).

This paper aims to promote student motivation by posing two questions regarding the researcher's designed activities in her integrated skill English classes:

- *RQ1:* To what extend does critical thinking help learners in language learning?
- *RQ2:* Does critical thinking help language learners to be more confident and motivated in their overall communication?

In this paper, the author will briefly review some benefits and concerns about teaching critical thinking, introduce a few activities conducted in her integrated-skill English classes, and students' feedback on the activities collected in July 2020.

# Literature Review

### The Role of Critical Thinking in Language Classrooms

Atkinson (1997) called for educators' attention to be cautious in teaching language learners critical thinking skills. Atkinson described critical thinking as a social practice imprinted in English-speaking cultures, believing individualism and self-expression were culturally unique to Western cultures. Educators might be imposing values that did not align with learners' cultural values by teaching critical thinking skills. Atkinson believed that Asian culture emphasized contextualization, consent, and relationships with the world, which impeded analytical skills by Western norms. Of course, Atkinson did not claim that language learners did not think; rather, learners had their own ways of thinking from their respective cultural backgrounds, and it, in most cases, did not align with Western logic and arguments (Atkinson, 1997, 2003; Cutrone, 2010; Park, 2013, as cited in DeWaelsche, 2015). Thus, pressuring language learners to decontextualize and align with the Westerners' norms could draw potential problems (Atkinson, 1997, 2003; Cutrone, 2010; Park, 2010).

Despite the consideration of learners' cultural differences, other educators criticized the stereotypes implied in the previous point of view, which indicates the tendency to dichotomize the world into two cultures, the West and the East (Kubota, 1999; Kumaravadivelu, 2003). The categorization of viewing Western as *critical, analytical, decontextualized,* and Eastern as *vague, ambiguous, relational* demonstrates how culture was understood as "fixed, objective, homogeneous, ahistorical, and apolitical [...] [that did] not recognize the organic and plural nature of culture influenced by political and ideological forces and intricate power relations within the culture and between cultures at a certain time" (p. 17, Kubota, 1999). The labels also overlooked the complexity of postcolonial and poststructuralist views of cultures.

Further, the argument that language educators should not impose different ways of thinking on language learners lacked poststructuralist and postcolonial concerns (Kubota, 1999, 2004). Language educators should include critical pedagogies to help learners find their voices in the world rather than being consumed by the ideas dictated by the government or the world (Kubota, 1999; Crookes, 2012; Sultan et al., 2017).

# Critical Thinking in the Curriculum

One of Atkinson's concerns in his 1997 article was that there had never been a clear definition of critical thinking. Different scholars had proposed various definitions without a conclusion. He then drew from Johnson (1992, as cited in Atkinson, 1997) that critical thinking was interchangeable between terms like "metacognition, higher order thinking skills, problem solving, rationality, and reasoning" (p.74). However, despite various versions of different definitions throughout history, Davidson (1998) argued that there was a significant area of overlapping with little difference, even when viewed as "paraphrases of the same concept" (p.120). Yet, Davidson encouraged educators to teach Japanese learners critical thinking skills to succeed in the academic world (also see Bagheri, 2015).

From the historical trend of critical thinking, Lai (2011) explained how it has turned from a philosophical perspective (e.g., *quality of what* people think) to cognitive behaviorists (e.g., *how* people think). Cognitive behaviorists studied what behaviors and skills people perform. Elder and Paul (1994) stated that "critical thinking is best understood as the ability of thinkers to take charge of their own thinking" (p. 34) rather than social norms. Bagheri (2015) suggested

that educators should teach critical thinking as a "higher use of language learning strategies. Thereupon, the more language learning strategies used on learning the language, the better language learning will result" (p. 975).

Bloom's taxonomy was the most well-known in critical thinking in the education field (Lai, 2011). Bloom's taxonomy on critical thinking portrays a hierarchical model wherein remembering and understanding are essential skills, followed by applying and analyzing in the middle and evaluating and creating the top of the pyramid (Baker & Westbrook, 2018). This taxonomy is adopted in this paper due to the straightforwardness and simplicity of the six skills.

Due to course textbook selection, the six skills were only introduced to students verbally with some examples. Throughout the semester, the words *analyze, apply, evaluate,* and *create* are repeatedly mentioned in class. Remember and understand seem to be skills that students have achieved by answering comprehension questions. Simultaneously, the author also believed that each individual has different behaviors in their critical thinking journey. Emphasizing these six skills did not mean eliminating other behaviors. For example, Moore (2013) interviewed seventeen tenured staff from various academic fields in an Australian university to elicit their understanding and practicality of critical thinking in their teaching. The seven definitions and behaviors were critical thinking as *judgment-making, skeptical and provisional view of knowledge, simple originality, careful and sensitive reading of the text, rationality*, the adoption of an ethical and activist stance, and self-reflexivity. In class, for example, the author encouraged learners to be reflective, even though it was not included in the six skills of Blooms.

# **Classroom Activities**

The author has been experimenting with different routine activities in her integrated-skill content-based English classes. Activities were done in physical classrooms in 2019, while in 2020, due to the COVID-19 outbreak, courses had been moved online, and activities were redesigned to fit the online setting. The author will introduce the revised activities that she incorporated online from April to December 2020.

# Reading

While reading textbook articles, students were instructed by the researcher to annotate the text, including underlining, circling, commenting, and asking questions. Underlining and circling help students focus on text and gather essential information. Commenting, for example, "True," "Interesting," and "This is new to me" helps readers identify what kind of information it is. Asking questions allows students to stay curious about the topic and think actively about what is written, rather than reading receptively. Asking questions during reading helps students to leave rote memorization and memory recall during the reading process, and it transforms receptive tasks into more student-guided thinking and cultivates metacognitive reading strategies (Singer, 1978; Magogwe, 2013; Joseph et al., 2016).

# In-Class Handout

As a unit assignment, students completed the following tasks (see Appendix A for an example from one unit):

- 1. New Findings: students wrote down newly learned information from the reading.
- 2. Question Asking: students wrote down any questions they raise while reading.
- 3. Research: students chose one of their questions and researched for answers online.
- 4. Reflection: teacher provided a few questions that required critical thinking for the students to answer in a short paragraph.

### Question Sharing and Discussion

The author designated time for students to share their unique and self-generated questions (Task 2 of the in-class handout) in pairs or groups in class, identified as social reading strategies (Magogwe, 2013). This was to promote collective learning where students explored the same topics from different perspectives.

#### Speaking

The integrated skills courses included a considerable amount of speaking and listening activities in class (while reading and writing outside the classroom). The nature of speaking, regardless of conversation or presentation, required immediate responses in communication. Students were encouraged to ask questions promptly to demonstrate their curiosity toward the class content and classmates' opinions.

### **In-Class Discussions**

In-class discussion questions were carefully designed to not only share ideas but also to urge students to exercise their prior knowledge, analyze given information or current events, evaluate specific plans, apply class material into their daily lives, or create plans to solve problems. It was critical that students learned how to confidently express their disagreement in these discussions and provide supporting reasons. Asking follow-up questions was then an essential skill in conversations of this kind.

# **Q** & A Discussions after Presentations

At the end of every presentation in class, the audience was obliged to ask questions immediately, while the presenters must take questions and reply immediately. It requires a high level of concentration when listening to their classmates' presentations. The author also encouraged the audience to take notes and think of questions to ask while listening, rather than thinking about questions after the presentation ended.

#### **Casual Debates**

This debate activity is done regularly in class. The students are paired up for a debate topic, for example, "the government should take care of the civilians' health" on a unit about fitness and health. They would play 'Rock, Paper, Scissors' to decide who agrees on the statement and who does not. It is to help students to improvise reason and questions. It also requires active listening to be able to come up with questions or arguments against the partner.

#### Group Debates (Roleplay)

This collaborative group activity was only conducted for the second-year course for almost all units (see Appendix B for debate topics and details). With each unit topic, a prompt was given to students a week before the debate day, as well as a different role assignment (see Table 1 as example). According to the assigned roles and given situation and positions, students would research for the information they needed to participate in the debate. A week later, on the debate day, students were placed into groups of the same roles for a 5-minute *uchiawase* meeting (i.e., pre-meeting in Japanese) where they exchanged their research and ideas. Later, they were placed into their debate group. The role which called the meeting would be the moderator (for example, the head politician in Table 1 was the moderator). It was ideal that different members, not solely the moderator, would question each other in groups, but it depended on the topic, group dynamics, and the moderator. The debate activity usually took about 20 to 25 minutes.

To better explain the activity and planning, the author would use a Unit 6 scenario from the *Prism Reading 2* textbook, which included a video introducing an artificial river project in China planned to solve water shortage in Northern China. The author considered the project as a relevant, complicated, and debatable one to review issues related to animals (Unit 1), environment (Unit 2), and technology (Unit 6). After watching the video together in-class and checking comprehension, students discussed the advantages and disadvantages of this project in China. Then, the author introduced the debate scenario and assigned roles (see Table 1). A week later, on the debate day, the head politician started the meeting, took notes, and made the final decision.

### Table 1

Group	Roles						
1	You are a fisherman in China. The polluted water from the south will pollute the lake.						
	You can't fish anymore.						
2	You are an environmental activist. This project is going to damage nature and the environment. You don't want to see that.						
3	You are a farmer in the North. You need the water for farming.						
4	You are a resident in Beijing (in the North). You need the water from the south.						
5	You are working for a construction company. You want the income, so you want the project.						
6	You are the head politician. You will ask questions to ask the group, lead the conversation, take notes, and make a final decision.						

Role Assignment for Unit 6: Discovery and Invention

# **Student Responses and Discussion**

A questionnaire was given in July 2020 to university sophomore and junior students majoring in a foreign language other than English (n=46) after a semester of instruction (from April to July 2020). All questions given in English and Japanese. It was made clear that participation in the questionnaire was voluntary and did not affect their grades or relationship with the author. Students responded to eight statements based on a four-point Likert scale from 1 (strongly disagree) to 4 (strongly agree), followed by three open-ended questions (see Table 2). All English and Japanese responses were accepted, and Japanese responses were translated into English by the author.

Questionnaire results show that students felt optimistic about asking questions, critical thinking, and researching even after one short semester of instruction. Based on items 1 and 6 (see Table 3), asking questions was not an easy task for most sophomore and junior students. Yet, they considered it helpful to stay curious about different topics when studying English. The survey did not show significance if researching their proposed research questions was difficult; nevertheless, it was optimistic that the act of researching was something they enjoyed doing.

Survey Questions					
Item	Questions				
1	I think asking questions is difficult.				
2	I think asking questions helps me to be curious.				
3	I think asking questions helps me to think and explore deeper in different topics.				
4	I think research on the questions I make is interesting.				
5	I think research on the questions I make is hard.				
6	When I read or listen to presentations, I can come up with questions easily.				
7	I think after learning how to think critically, I was challenged to use more variety of				
	English words.				
8	I think I became more confident and prepared when I talk about these topics in				
	English after learning how to think critically.				
9	What did you learn the most from critical thinking skills?				
10	How do you feel about yourself when you can think deeper about certain topics?				
11	Any other thoughts?				

# Table 2

In terms of vocabulary learning, it is significant to see learners were more aware of the increased vocabulary they have gained during the semester. In the EFL context, vocabulary acquisition can be challenging for language learners. Siyanova-Chanturia and Webb (2016) indicated that "English vocabulary knowledge and learning rates in the EFL context fall far short of what is considered to be a norm in the L1 context" (p. 229). Comparing vocabulary learning between the EFL context and the L1 context could be unrealistic, but it was important to notice the factors between the two. Siyanova-Chanturia and Webb (2016) specified a number of factors, including insufficient input and output. Therefore, students' acts on researching on their generated questions granted them opportunities for exposures to new vocabulary, similar to the effect on extensive reading, which was considered helpful in vocabulary acquisition (Siyanova-Chanturia and Webb, 2016). On another note, researchers have proposed metacognitive reading strategies helped learners acquire vocabulary (Tseng et al., 2006; Cubukcu, 2008; Teng & Reynolds, 2019). Unfortunately, the survey did not include learner metacognitive behavior to indicate which activity or behavior was helpful in their vocabulary acquisition. On item 8, it is encouraging to observe that students felt more confident after a semester of various activities that cultivated critical thinking.

As shown by responses to the open-ended questions, students also showed more confidence and maturity about themselves when trying to think more critically. On item 9 about what students have learned through critical thinking, they expressed that they learned to examine all received information (including the textbook), not to make any judgment calls right away, and became more objective than before. It is significant that they learned to think from various perspectives and angles, to think deeply, and to stay interested, curious, and knowledgeable.

# Table 3

Survey Results

	Cou	Count				
Item	1	2	3	4	Mean	SD
Asking questions						
1 Asking questions was difficult.	2	13	25	6	2.76	0.73
6 Asking questions after presentation was easy.	4	23	15	4	2.41	0.77
Helpful in thinking and researching						
2 Helped curiosity	0	1	7	38	3.80	0.45
3 Helped think in-depth	0	0	10	36	3.78	0.42
4 Researching self-generated questions was interesting	<sup>3</sup> 2	0	18	26	3.48	0.72
5 Researching self-generated questions was hard	8 2	17	14	13	2.83	0.90
Self-improvement						
7 Vocabulary acquisition	0	8	31	7	2.98	0.57
8 Improved confidence	0	12	26	8	2.91	0.66

*Note.* 1 = strongly disagree, 4 = strongly agree

Some students also responded that they had used English words that they had never used before. The survey responses also showed that they learned how to ask questions, how to discuss, and how to approach problems, how to listen to others more seriously and closely to understand their answers, and to have their own opinions and not to be afraid to say no and criticize. It is probably more encouraging to see one response connecting the experience of critical thinking to be more reflective and relevant:

# • "I realize that thinking deeply means being able to know what I really feel." (S10)

In terms of students' self-image, among those who answered the question, 87% of the responses were very positive, showing that they felt more knowledgeable, confident, more interested and curious, happy, proud, concentrated, enthusiastic, cool, excited, educated, sense of achievement, fulfilled, actively working, and mature. Some responses also included that they felt their researching skills had improved. Further, the activities provided opportunities leading to the discovery of more advanced vocabulary:

• "As I am researching, I would encounter more technical or advanced vocabulary, and it is useful for studying." (S35)

Some students also expressed that they had never been given opportunities to think, pose questions, and research like this:

- "It was a lot of fun researching on the areas that others may not be interested or areas I never doubted or wondered. It was the first time for me to express my own opinions, so I enjoyed the class very much. (S8, translation)
- "It is hard to think the topics deeply because I didn't have such opportunities so much." (S26, translation)
- "I have never had classes where I had to research on the lesson topics further..." (S40, translation)

Through the activities, they learned to explore more actively on their own to connect what they learned in class and reflected on their lifestyles and behaviors. It was also due to the nature of critical thinking, where there is no "yes" and "no" in the first place; the students feel more comfortable saying "no" and express their *honne* (i.e., "real opinions") due to their growing critical thinking skills. These safe places are needed in university classrooms while promoting critical thinking:

- "...but by acquiring critical thinking skills, I could link the lesson topics with my personal life, reflect it effectively, and improve my quality of life. I became proud of myself for being able to do that, and I was confident that I might have become a little more mature." (S40, translation)
- *"it is important to think about one thing, and through thinking I get to see how I can improve my behavior and arikata (what I thought I should have behaved)." (S45, translation)*
- "I want a place where I can think and give my opinion [;] I want to think deeply, I value many things I gained from it. I thought I didn't understand myself even though I was myself. [This class] is unique, but I find it fresh and fun."(S8)

Importantly, extensive thinking can drain students' energy sometimes. Since they were continually thinking and questioning, and as mentioned before, it could be their very first time doing this explicitly and purposely, they found themselves sometimes skeptical, feeling ignorant, and tired. The more they researched, the more they wondered what was true:

- "It's very fulfilling to ponder a particular topic and find out what you're wondering about, but at the same time, the feeling of ignorant is tiring." (S30, translation)
- "[It is difficult to] consider what is the answer." (S34)
- "Doing it required a lot of time so first parts are hard." (S3)

Overall, students' responses were encouraging and positive. One student also shared the necessity of teaching critical thinking in the Japanese school systems:

• "I think the movement for teaching critical thinking in Japan is great and it should be taught in all schools." (S15)

# **Limitations and Implications**

For future lesson improvements, the author will continue developing similar activities to help learners think critically, especially through debates and discussions, with more student choices. Also, the survey of July 2020 is comparatively short and general. It is desirable to survey students with more specific questions, particularly about how the action of asking questions benefits or harms learners in their presentations (both presenters and audience), debates, and discussions. At the same time, it is essential to examine how learners see themselves and others in learning to think critically. Another idea is to assess if learners develop more responsibility and autonomy in their learning. Finally, it is possible that when learners connect English learning to their own lives and reflect on their past actions, some may feel discomfort and need emotional support. Learners especially need a safe place to confidently express their opinions and disagreement in a language they are still uncomfortable with. It is essential to investigate what kind of support can instructors and the class community provide.

### Conclusion

Regardless of the extent to which Japanese educators believe in critical thinking, Japanese students responded positively to learning critical thinking skills. It benefits learners not only to obtain practical and useful information in English but also helps them be critical and reflective in their own learning. Learning to be independent thinkers helps learners to connect what they learn in class and how they behave. Bohon et al. (2017) described learning as "[requiring] a constant back and forth of conflict resolution, [and involving] internal conflict as a learner moves between reflection and action and between feeling and thinking" (p.614, Kolb's experiential learning theory, 1984). The practice of critical thinking benefits language learning. As described in the discussion, the possible emotional experience of applying critical thinking skills in English participation also becomes part of the learners' linguistic repertoire, "the lived experience of language" (Busch, 2015, p. 341).

Of course, it can be dangerous if language educators judge how learners process their information and how they think. Teaching critical thinking to students is not to impose the educator's ways of thinking on their students; it is to help learners and educators understand what is different in their ways of thinking and why there are differences. Throughout the process, all involved parties can reflect on themselves and on their thoughts that, so far, they had taken for granted. Therefore, asking questions is an effective start to cultivate higher-level thinking, and it does avoid Japanese educators' tendency to justify or criticize students' ways of thinking. Examining learner confidence through thinking critically can be deducted as a better approach than assessing critical thinking skills.

### **BIO DATA**

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# Appendix A

This is an example of an in-class handout from one chapter from another course with the textbook Reading for Today 3: Issues.

#### Integrated English 4 Chapter 12 In-class Assignment

#### Vocabulary

Do you have any vocabulary words you want to try to use in this assignment? Here are the words from this chapter. If you have other English vocabulary or phrases you want to use, please put them down in the blanks. You can add more blanks too.

affordable	amazing	devastating	automatically	effectively	exhausted	incision
option	perform	react	reality	recover	require	skeptical
task	Traditional	Traumatic	treatment			

### Reading

#### 1. New findings?

What is something new that you learned from this article?

#### 2. Questions that help you think

We have talked about what critical thinking is like. Please write down the questions that you have while you read. You can specify lines if it's from the reading. For example, "Have we seen any errors from surgical robots?" "Do doctors need a special license to operate a robotic surgery?"

# Understanding and exploring the reading

#### 3. Research

Please choose two questions from part 2, and research for answers. You can research Japanese sites, but please write some answers in English here. Bullet points are OK.

Your Question:	
Source:	
	1

Your Question:	
Source:	

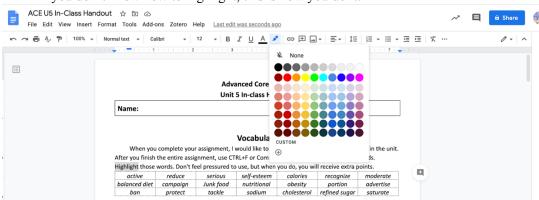
#### Reflection

4. There are a few questions to help you reflect on this chapter. You can choose one question and write about it. One paragraph of about 100 words is good.

- a. Robotic surgery would allow surgeons to perform operations on patients miles away. Do you think a patient would want a surgeon who is so far away? Why or why not?
- b. How can modern technology help a surgeon perform an operation that is less dangerous for the patient? What do you think?
- c. To see robotic surgery more common and available to people in Japan, what needs to be improved to see more robotic surgery in reality? For example, health insurance system, medical education, better Internet connection, and more. Please choose one area, and explain why it needs to be improved and why it is necessary.

#### Vocabulary

Did you use those vocabulary words? Of course, it is OK that you didn't use them. If you did, please highlight those words **in your writing**. Use CTRL+F or Commend+F to look for the words and highlight them. (Choose your favorite color.) Of course, any form is OK. For example, joy becomes joyful.



# If you don't know how to highlight, this is how you do it.

# **Appendix B**

# Group debate (role play) topics for all units.

Unit	Unit Topic	Debate Topic	Designer
			Acknowledgements
3	Transportation	Mayor Kawamura would like to improve Nagoya's traffic congestions and listens to different plans to make the final decision.	Niall Walsh
		Roles and instructions:	
		- Work for a road construction company. You want that money.	
		- You work for a transportation development company. You want that money.	
		- You want to protect the environment.	
		- You work for a building construction company. You want that money.	
		- You are Mayor Kawamura. Prepare some questions to ask.	
4	Customs and Traditions	Their teacher is getting married. The secretary will listen to different designers and friends to plan the wedding for their busy teacher.	Wan Jung Amy Lin
		Roles and instructions:	
		<ul> <li>A wedding planner from the USA. Plan the wedding according to American culture.</li> </ul>	
		<ul> <li>A wedding planner from Taiwan. Plan the wedding according to Taiwanese culture.</li> </ul>	
		<ul> <li>Wedding planner for unique themes. Prepare a wedding theme for the secretaries.</li> </ul>	
		<ul> <li>Hotel staff. Prepare reception and banquet for 100 guests; design a central piece, food, and music.</li> </ul>	
		<ul> <li>Amy's secretaries. Please prepare questions to ask planners and staff. Decide on location and style.</li> </ul>	

Unit	Unit Topic	Debate Topic	Designer Acknowledgements
5	Health and Fitness	Civilians and businesses are meeting with Japanese politicians to decide if the government should tax products that are bad for health.	Jared Peo
		Roles and instructions:	
		- You are a worried parent from Okinawa, which has the highest rate of obesity in Japan. You want the tax.	
		- You are the CEO of Ezaki Glico; you do not want the tax.	
		- You are a concerned office worker. You do not want the tax.	
		- You are a farmer. You want the tax.	
		- You are the CEO of a life insurance company. You want the tax.	
		<ul> <li>You are the head politician. You will ask questions to ask the group, control the debate, take notes, and make a final decision.</li> </ul>	
6	Discovery and Invention	The Chinese politician listens to civilians' opinions from the North and South, and construction company about the artificial river project and decide how to proceed.	Wan Jung Amy Lin
7	Fashion	An eco-friendly mall in Japan would like to take in two more shops but would like to avoid scandals and sweatshops. The mall owner has a meeting with representatives from different brands.	Jared Peo
		Roles and instructions:	
		Representatives from Zara, Nike, Uniqlo, H&M, and GAP.	
		Make a sales pitch for your company & you should research possible problems in your own company and one or two other companies.	