Chapter 1

CLIL Uncovered: Origins, theory and the basics of planning

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Introduction

Despite the huge sums of money and effort expended by the Japanese government on English education in junior high school and senior high school in Japan in the post-war period, there is a widespread and generally-accepted recognition that language-driven curriculums and syllabuses have fallen short of expectations and not resulted in the hoped-for outcomes of a majority of its citizens being part of an educated second-language speaking population. This shortfall in outcomes, as well as factors such as societal pressure and recognition that other Asian nations educate their citizens in English in elementary school (among others), has led the Ministry of Education, Culture, Sports, Science, and Technology (MEXT) to implement ʻEnglishʼ as an official academic subject in years 5 and 6 from April 2020. With this decision, it is clear that the Japanese government regards an English-speaking population as an essential element in the countryʼs toolkit towards the globalization of its population and the revitalization of its sliding economic stature among countries of the world.

While a discussion of language teaching methodologies in Japan is not the focus of this chapter or this book, it is fair to say that since the 1980s, innumerable practices associated with the now prevalent but rather obfuscated ʻCommunicative Language Teachingʼ (CLT) methodology have dominated the construction of curriculum and syllabuses. In Japan, it appears that while the ʻweakʼ form of CLT has dominated practice particularly at junior high school and high school, the ʻstrongʼ version of CLT (Howat, 1984) is making inroads. In its ʻweakʼ form, CLT focuses primarily on the teaching of English as a language to use. In practice however, this has been interpreted as teaching learners to cumulatively acquire knowledge of and (hopefully) facility with, an academic subject called ʻEnglishʼ. The knowledge, *i.e.* content, of English syllabuses in Japan has become a language-driven bank of progressively complex grammatical structures and lexical items, and its acquisition, an exercise in accumulation through repetitive language practice and memorization. These grammatical structures are most often to be found located within a veneer of situated communicative-language-using scenarios. Yet there are signs that in recent times, teachers - and in particular high school teachers - are teaching dynamically, eschewing teacher-fronted lesson formats for a more student-centered focus through such designing learning tasks incorporating debate skills. Hence, the ʻstrongʼ version of CLT in which learners are ʻusing the language to learn itʼ is being utilized by some grade school teachers here in Japan, albeit few in number at this stage.

In the lead-up to the introduction of English into the elementary school, MEXT has funded many projects (including this one) into researching alternative language teaching methodologies. One such methodology is the subject of this book: 'Content and Language Integrated Learning' (CLIL). Similar to the strong version of CLT, 'using language in order to learn it' is a tenet of the CLIL approach but with the added requirement that the language of learning be the language of the subject content. The notion that integrating content and language learning is a relatively new educational concept is false given that the tradition of doing so dates back 5000 years to when Sumerian was used as the medium of instruction to teach the Akkadians (modern-day Iraqis) theology, botany and zoology (Mehisto, Marsh & Frigols, 2008). Similarly, the Romans "educated their children in Greek to ensure that they would have access to not only the language, but also the social and professional opportunities it would provide them in their future lives" (Coyle, Hood & Marsh, 2010 p.2). In the intervening millennia, very little has changed in terms of the motivation for learning an additional language (i.e. for the social and professional opportunities an L2 offers), but language learning, aided by advances in technology, has now been opened up to a broad range of learners, not just the privileged and elite of a society.

In Japan, advocacy for the implementation of the CLIL methodology has been led by academics such as Shigeru Sasajima and Katsuhiko Muto of Toyo Eiwa University and their colleagues, as well as Makoto Ikeda, Yoshinori Watanabe and Shinichi Izumi at Sophia University in Tokyo. Initially, the Toyo Eiwa group were concerned principally with implementing CLIL-oriented courses at their institution by developing curriculum and classroom practices and then conducting follow-up research on the viability of their CLIL-curriculum. Along with the Sophia group of academics, their research groups' success in disseminating CLIL theory and research in Japanese to Japanese academics led to an increase in the numbers of CLIL-oriented academics in Japan, culminating in the establishment of the J-CLIL academic association in 2017 (at the end of 2019, some 400 plus members strong). The association's stated aim is "to study and promote practices for the implementation of integrated education called CLIL (Content and Language Integrated Learning) or CBLT (Content-based Language Teaching)" (*retrieved from* https://www. j-clil.com/english-j-clil).

So what are the principles and educational practices of CLIL, its origins, theoretical foundations and its principles of planning and implementation?

Origins

The term 'Content and Language Integrated Learning' (CLIL) was coined by David Marsh in 1994 as a means to "describe and further design good practice as achieved in different types of school environments where teaching and learning takes place in an additional language (Coyle *et al*. 2010, p. 3). CLIL refer to "situations in which subjects, or parts of subjects, are taught through

a foreign language with dual-focused aims, namely the learning of content, and the simultaneous learning of a foreign language" (Marsh, 2002, p. 2). Almost three decades later, "CLIL is the most common term used in the European setting to describe the approach to teaching a curriculum subject through a foreign language, with the dual focus of acquiring more subject knowledge and improving one's skill and competences in the foreign language" (Ioannou-Georgiou & Pavlou, 2011, p. 5). Its dual-educational approach interweaves both subject content for primary, secondary and vocational level subjects such as math, science, art or business (Mehisto, *et al.* 2008) and an additional language that is not the student's L1 "even if the emphasis is greater on one or the other at a given time" (Coyle, *et al.* 2010, p.1).

On a continuum of language teaching methodologies, CLIL is located towards the ESL marker (see Figure 1, adapted from Ikeda, 2012) as is 'Content-Based Instruction (CBI). However, CLIL can be distinguished from the latter because CBI programmes are tasked to use content to teach language, and are thus language-driven. CBI classes are taught by language educators and the input for language classes is topics based upon subject content. Likewise, CLIL is not 'Immersion', as these programmes are taught by immersion subject teachers and are tasked to teach content with no attention paid to language, and are thus purely content-driven.
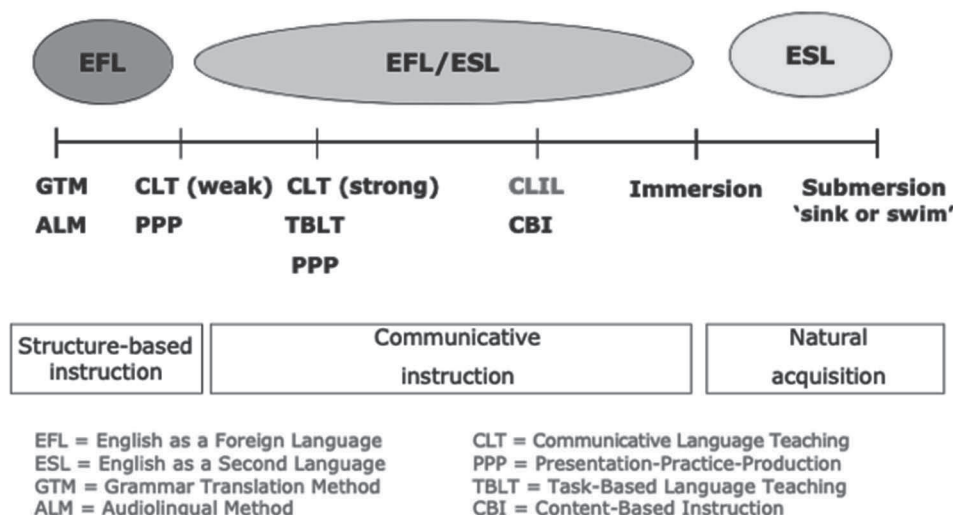

Figure 1. CLIL and the Language Teaching Methodology Continuum
(adapted from Ikeda, 2017a)

The 4Cs model

Mehisto *et al.* (2008) states that the core of any teaching-learning process is driven by cognition, *i.e.* thinking. The mental faculty of *knowing* about something includes cognitively engaging with that content through processes such as perceiving, recognizing, judging, reasoning,

conceiving, and imagining (Mehisto *et al.* 2008, p. 30) to make meaning. The process of making meaning of new knowledge and skills through cognitive engagement is developed through both personal, social and cultural interaction (community/culture), personal as well as cooperative reflection/analysis (cognition) and through a communicative process (communication) with peers. (Mehisto *et al.* 2008). These four principles serve as the reference point upon which CLIL-oriented syllabuses and lessons are built (Mehisto, *et al.* 2008; Coyle, *et al.* 2010) (Figure 2).
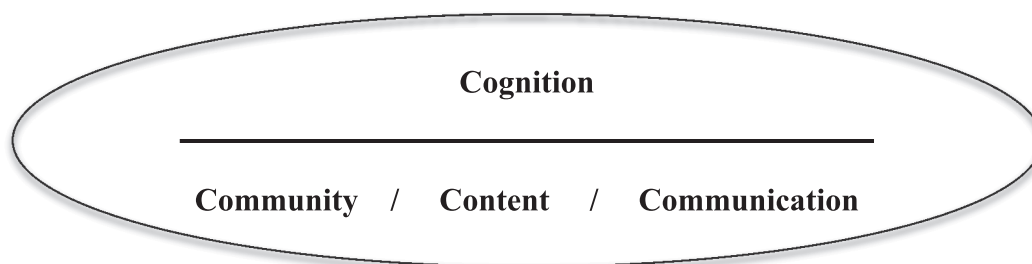
Cognition

Community / Content / Communication

Figure 2. CLIL Principles (source: Mehisto, et al. 2008, p. 31)

A brief review of how CLIL incorporates each principle follows.

COGNITION refers to the levels of cognitive engagement of the learners with the learning activities that are designed to teach the content. With the seminal works of Bloom, Engelhart, Furst, Hill and Krathwohl (1956) and Piaget (1972), among others, educators began to consider and query the levels of cognition that the classroom activities and practices associated with behavioristic methodologies – which emphasized the 'filling up' of learners with the 'product of learning' (i.e., knowledge) in teacher-fronted lessons – generated among their learners. For behaviorists, the 'process of learning' was fairly straightforward and dimensionally restricted with drills, repetition and memorization strategies forming the basis of classroom practices. However, Paiget and Bloom's work picked apart 'cognition', complexified and stratified it and made educators think more about the 'process of learning' (i.e. how learners' were learning) and the cognitive engagement levels of the classroom learning activities they were asking learners to undertake. Moreover, with Vygotsky's (1978) work on the 'Zone of Proximal Development' –the zone just beyond what a learner can do independently–the understanding was reached that for effective learning to occur, learners have to be cognitively engaged at a variety of levels but also cognitively challenged.

CLIL educators embrace these notions and 'Cognition' is the building block for interacting with the Content: writing lesson objectives and structuring and designing classroom learning tasks and activities. The ʻRevised Bloomʼs Taxonomy (RBT) for the Cognitive Domain' (Anderson, Krathwohl, Airasian, Cruikshank, Mayer, Pintrich, Raths and Wittrock, 2001), has become a particularly important tool for CLIL teachers. The RBT recognizes of four types of knowledge and

six levels of cognitive processes, *i.e.* thinking skills. The four types of knowledge (adapted from Anderson *et al*. 2001, p.46) that learners are expected to encounter and interact with, range from the concrete to the abstract:

A: Factual Knowledge

-includes the basic knowledge students must know to be acquainted with or solve problems in a subject, including its terminology, specific details and facts.

B: Conceptual Knowledge

-includes knowledge of the interrelationships among the basic elements that allow them to function together as a whole, including its classification and categories systems, principles, generalizations, theories, and models.

C: Procedural Knowledge

-includes knowledge of how to get something done in a subject such as its subject-specific skills, algorithms, techniques, methods of inquiry, and procedures.

D: Metacognitive Knowledge

-includes self-knowledge of one's own cognition, such as strengths and weaknesses in terms of learning strategies in relation to the subject/content. Also, knowledge of contextual factors, and conditional factors.

In regard to the knowledge dimension, CLIL considers learner awareness, *i.e.* metacognitive knowledge, of particular importance. Teachers have to enable and challenge learners to develop their own metacognitive skills of learning how to learn (Coyle, *et al*. 2010). In others words, not only should CLIL teachers structure their teaching so as to engage their students with cognitively demanding and challenging learning activities, but they are also tasked with ensuring their students are explicitly made aware of the skills of learning how to learn. CLIL learners need to be taught how to interact with knowledge to not only explore and analyze its composition, origins or elements but also how to evaluate and develop new knowledge. To this end, it is not unusual to find the RBT in chart form on the walls of CLIL classrooms, and learners regularly engaging with the content at varying levels.

In regard to the cognitive processes and in order of ascending cognitive complexity, the thinking skills are ʻRememberʼ, ʻUnderstandʼ, and ʻApplyʼ which encompass the lower-order thinking skills (LOTS), and ʻAnalyzeʼ, ʻEvaluateʼ, and ʻCreateʼ, which encompass the higher-order thinking skills (HOTS).

Lower Order Thinking Skills (LOTS)

Remember = The student acts like a dictionary or an internet database to find information, facts, &

data. He/she also recognizes and recalls relevant knowledge from textual information or long-term memory. *Corresponding Skills*: recognizing, recalling.

Understand = The student acts like an 'expert' and understands and interprets (makes sense of) the meaning of information including oral, written and graphic communication. *Corresponding Skills*: interpreting, exemplifying, classifying, summarizing, inferring, comparing, explaining.

Apply = The student acts like a 'How To' manual, and selects and uses a previously learned procedure or information in a new but similar situation or problem. *Corresponding Skills*: interpreting, exemplifying, classifying, summarizing, inferring, comparing, explaining.

Higher Order Thinking Skills (HOTS)

Analyze = The student acts like a sorting tray and breaks information into its parts and explores how the parts relate to one another and to an overall structure or purpose. *Corresponding Skills*: differentiating, organizing, attributing.

Evaluate = The student acts like a judge in a court and critically examines information and makes judgments based on evidence, criteria and standards. *Corresponding Skills*: checking, critiquing.

Create = The student acts like an inventor: improving, designing, planning and putting elements or information together to create something original. *Corresponding Skills*: hypothesizing, planning, producing.

Appendix A lists other significant skills (*i.e.* verbs) in both English and Japanese within each of the above RBT categories.

CONTENT of a subject usually refers to the specific knowledge of that subject such as social studies, geography, science or music. However, in CLIL programmes, acquisition of content is considered to be not only knowledge acquisition but also acquisition of the skills needed to access that knowledge (Coyle, *et al.* 2010). Moreover, what constitutes knowledge content is much more flexible given that contextual variables such as subject teacher availability, target language proficiency of teachers, age of learners, national curriculum guidelines and individual learning institutions, place constraints on whether or not a programme can be more or less content-led or more or less language-led. Content could range from core elements taken directly from a science or social studies curricula through to cross-disciplinary thematic projects on topical events or issues

such as the Olympic Games, alternative energy, climate change, global citizenship, poverty and technology. "CLIL, therefore, offers opportunities both within and beyond the regular curriculum to initiate and enrich learning, skill acquisition and development" (Coyle, *et al.* 2010, p. 28).

In terms of the interaction between subject content and language content, the language items needed in CLIL lessons do not necessarily follow the same grammatical progression that is found in a language-driven syllabus. For example, in a science lesson about the life cycle of a butterfly, the concept of 'pastness' and past tense forms of the key verbs will be needed. In a lesson about future technology, future tense verb forms will be taught as needed.

COMMUNICATION in the CLIL setting refers to two complementary aims: (a) learning language in order to use language, and (b) using language to learn. The first refers to learners' engagement
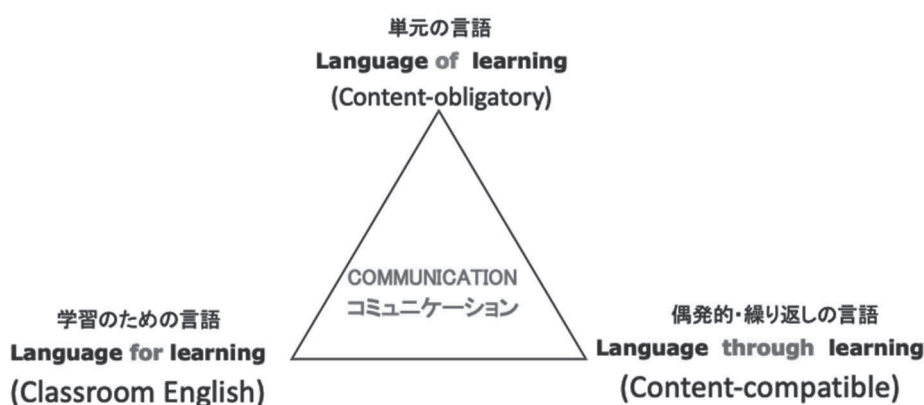

Figure 3. Communication in the Japanese context
(adapted from Ikeda, 2017b & Coyle, *et al.* 2010)

with the traditional communicative language curriculum comprised of essential grammatical and lexical items needed for communication, while the second involves learners using the vehicular language in order to learn content about a subject. CLIL utilizes the 'Language Triptych' (adapted to the Japanese context in Figure 3) as a conceptual representation to make clear the connections between three interrelated language perspectives in use in a CLIL lesson. These are the:

- language *of* learning (the language of the subject's content)
- language *for* learning (language required for engaging in learning activities)
- language *through* learning (language that emerges during the lesson)

The language *of* learning refers to the language needed for learners to access the basic concepts and skills of the subject topic or theme. It is comprised of content-obligatory lexical items such as technical vocabulary, special expressions, synonyms, and syntactical features including

verb tenses (e.g. past tense, present tense etc.) and things such as ʻactiveʼ and ʻpassive voice.ʼ The language functions in the RBT categories (e.g. explaining, defining, classifying, analyzing, inferring, etc.) are examples of such functional language. "For the language teacher, this means shifting linguistic progression from a dependency on grammatical levels of difficulty toward functional and notional levels of difficulty demanded by the content... . For the subject teacher it requires greater explicit awareness of the linguistic demands of the subject or content to take account of literacy and oracy in the vehicular language" (Coyle, *et al.* 2010, p. 37).

The language *for* learning focuses on the kind of language needed to operate in a foreign language classroom. In the CLIL classroom, learners need to be supported in developing speech act skills such as those expressions required for the different interaction modes of whole class discussion, pair and group work, asking questions, debating, enquiring, describing, evaluating, and drawing conclusions, among others. Equally important is the language of classroom, lesson and task management. Appendix B, the result of a survey of 130 junior high school teachers, is a list of useful classroom English phrases for teachers (a learner speech act list is under development).

The language *through* learning in a lesson arises when learners are encouraged to articulate their understanding of a concept. In contrast to *language of and language for* learning, *language through* learning is largely unpredictable but is an aspect of and result of the dialogic activities in the varying interaction modes experienced by the learners in a lesson. Content-compatible and language-learning compatible language emerges *in situ* as it is needed by the learners, and includes making connections with and drawing upon prior knowledge, skills and strategies that cannot always be predicted in advance.

In addition to the three types of language, one further aspect of the ʻCommunicationʼ principle is the acceptance by CLIL teachers of the notion of ʻtranslanguagingʼ. CLIL lesson implementation, particularly in the early stages of content and concept development does not restrict the use of the learnersʼ L1 in lessons. In fact, rather than prohibit its use, CLIL encourages a teacherʼs and learnersʼ use of their L1 as "learning is maximized when they are allowed and enabled to draw from across all their existing language skills (in two+ languages), rather than being constrained and inhibited from doing so by monolingual instructional assumptions and practices" (Hornberger, 2005, p. 607). However, as learners gain proficiency in the L2, CLIL teachers gradually decrease language support, in keeping with the principle of assisting and scaffolding learners towards tutor-independence (*i.e.* through the ZPD). Ikeda (2017b) (Figure 4) argues there are four language use patterns available for implementation of a CLIL lesson. Type 1 involves the learner receiving L2 English input through reading or listening passages and producing output in L2 English through speaking or writing. Type 2 involves learner receiving L2 English input through reading or listening passages but producing output in the L1 through speaking or writing. Type 3

mirrors Type 2, with the learner receiving L1 mother tongue input via written or aural passages, but producing output in L2 English through speaking or writing. Type 4 involves the learner receiving L1 mother tongue input through reading or listening passages and producing output in the L1
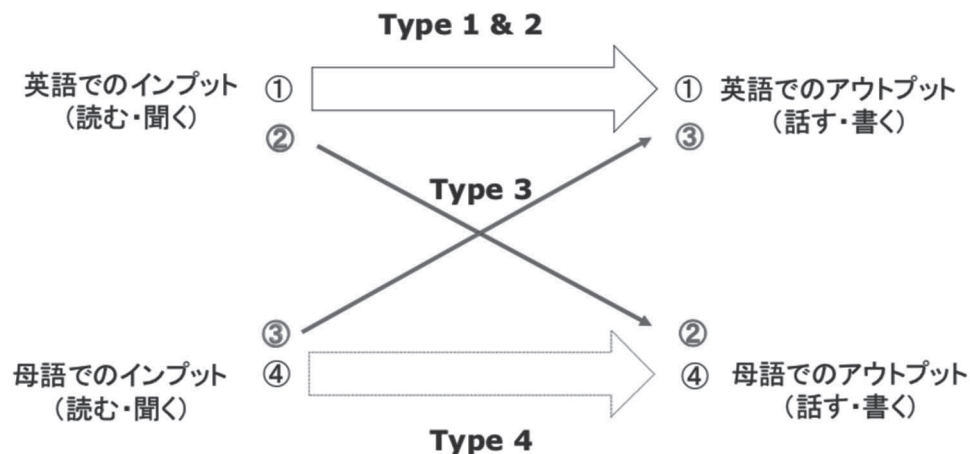
mother tongue through speaking or writing.

Figure 4. Translanguaging types. (source Ikeda, 2017b, July).

Kiely (2011) argues that effective CLIL lesson implementation must tread a fine line between over- and under-use of the L1 and over- and under-use of the CLIL language by both teachers and learners. Taking English as the CLIL language, he states that "on the one hand, maximal use of English increases exposure to the language forms and develops confidence in using the language. On the other hand, such use of English can lessen comprehension of subject knowledge, reduce participation in the classroom discourse, and lead to subject learning goals being comprised" (p. 55). He suggests the following principles be followed concerning the use of the L1 and L2: (a) maximize exposure to and use of English (b) manage the classroom in English (c) focus on accuracy in pronunciation (d) check comprehension using L1 (e) teach L1 terms for subject content (f) promote interlingual discussion of language differences, similarities, parallels and patterns, and (g) use L1 to support learning, such as using the last 5 minutes of a lesson for a plenary summary or discussion of the content.

COMMUNITY & CULTURE refers to dual components. In terms of ʻcommunityʼ it refers to the modes of interaction within a lesson such as individual, pair, and group work as well as whole class discussion. The dominant model of content learning in traditional western societies emphasized the transmission of the knowledge and skills of the expert (teacher) into the memory bank of the novice (student). Classroom activities were teacher-led, and teacher-controlled. However, with the eschewing of behaviorism in the 1950s, the centrality of the teacher in the classroom has gradually become replaced by the emergence and encouragement of the learner as an active participant in his

or her own learning rather than purely as a passive receiver of knowledge. Vygotsky (1978) coined the term ʻZone of Proximal Developmentʼ (ZPD) to describe a point just beyond what a learner already knows or what a learner can do on his or her own. He suggests that learning takes place in the ZPD when they interact with ʻexpertʼ others or peers on the condition that appropriate support, scaffolding (Wood, Bruner & Ross, 1976) and guidance are provided by the more expert interactant, but are gradually withdrawn as the learner progresses through the ZPD to a ʻnewʼ level of what he or she can do by oneself. In other words, interactive dialogic learning modes are fundamental The CLIL teacher is therefore tasked with "maintaining a balance with cognitive challenge for learners and appropriate and decreasing support as learners progress" (Coyle, *et al.* 2010, p.29) from being tutor-assisted to tutor-independent. CLIL is not about the transfer of knowledge from expert to novice but about stimulating learners to challenge themselves and construct their own understandings.

In terms of ʻcultureʼ, the development of pluricultural understanding and principles of global citizenship is the goal. By default, studying a foreign language fosters international understanding and "if learners understand the concept of *otherness* then it is likely to lead to a deeper understanding of *self*" (Coyle, *et al.* 2010, p.55). That is, by studying the cultures of others, a deeper understanding and different perspective of oneʼs own culture arises. However, in order for this to be brought about, it is important that intercultural understanding does not remain at the level of ʻsurface learningʼ via a few classroom lessons about folk songs, customs or celebrations. Extending social and educational interactions beyond the classroom through the invitations of guest speakers from foreign countries, the establishment of school partnerships and student-exchanges, and using a range of technologies to continue these connections is essential if ʻdeep learningʼ is to eventuate.

In summary, the 4Cs model posits that through the integration of (a) knowledge, skills and understanding of the subject matter, (b) interaction in a communicative context and developing the appropriate language knowledge and skills, (c) engagement in associated cognitive processing, and (d) acquiring a deepening intercultural awareness through the positioning of ʻselfʼ and ʻothernessʼ, learners not only progress in learning to use language but also how to use that language to learn content effectively (Coyle, *et al.* 2010, p.41).

CLIL variations

There is no single model for CLIL because its practical implementation must take into account the context in which it is being implemented. A basic distinction can be drawn between what has become known as ʻsoft/weakʼ CLIL and ʻhard/strongʼ CLIL (Ball, 2009). The ʻsoft/

weak' CLIL version is primarily a language-driven course taught by native or non-native language teachers trained in CLIL practices. The 'hard/strong' version is a content-driven course taught by subject teachers trained in CLIL practices in which language learning results "from a more peripheral attentional focus" (Coyle, *et al.* 2010, p.90) What is important is that "the main objective of the CLIL lesson remains the teaching of concepts which are being introduced, explored or refined" (Coyle, *et al.* 2010, p.96) That is, the content of the unit is the focus and not on the "language-learning objective *per se*" (Coyle, Hood & Marsh, 2010, p.90).

Dale and Tanner (2012) (Table 1) make a distinction between CLIL types from the perspective of the teacher and their various roles and duties regarding language teaching and content teaching.

Table 1. Some differences between 'soft' and 'hard' CLIL

	CLIL	
	SOFT CLIL **language-led model**	**HARD CLIL** **content-led model**
Who teaches?	CLIL language teachers in language lessons	CLIL subject teachers in subject lessons
What kind of language work do they do?	Work on general language while supporting subject related topics and language	Work on the language of their subject
What is the aim?	To teach language	To teach content and some language
What do they teach?	The language curriculum and the language of the subjects to support the subject teachers	Curricular subject matter and subject language
Who do they work with?	Language department colleagues and subject teachers on developing subject and language with learners	Language teachers on developing subject and language with learners
How do they assess?	Assess and mark language	Assess and mark content (and sometimes language)
What do they give feedback on?	language	Content (and sometimes language)
What kind of knowledge do they refer to?	Content of the subject teachers' lessons which is sufficient to be able to work on related ideas and language during language lessons	Content knowledge and knowledge about the language of their subjects such as text types, vocabulary, writing or speaking activities, language functions
What assumption do they have about learning?	That language depends on content; content depends on language	That content depends on language; language depends on content;

Source: adapted from Dale & Tanner, 2012, pp. 4-5

Ikeda (2011b) (Figure 5) formulated a useful model for the Japanese context that distinguishes CLIL-types on the basis of purpose, frequency of implementation, lesson priority and language usage. He argues that while "the 'soft' version of CLIL should be recognized as an adapted, contextualized breed..., at the same time, its authentic, universal model (i.e. European CLIL) is (to be) pursued as the norm" (Ikeda, 2011, p. 41) if CLIL is to take root solidly in the Japanese educational landscape.
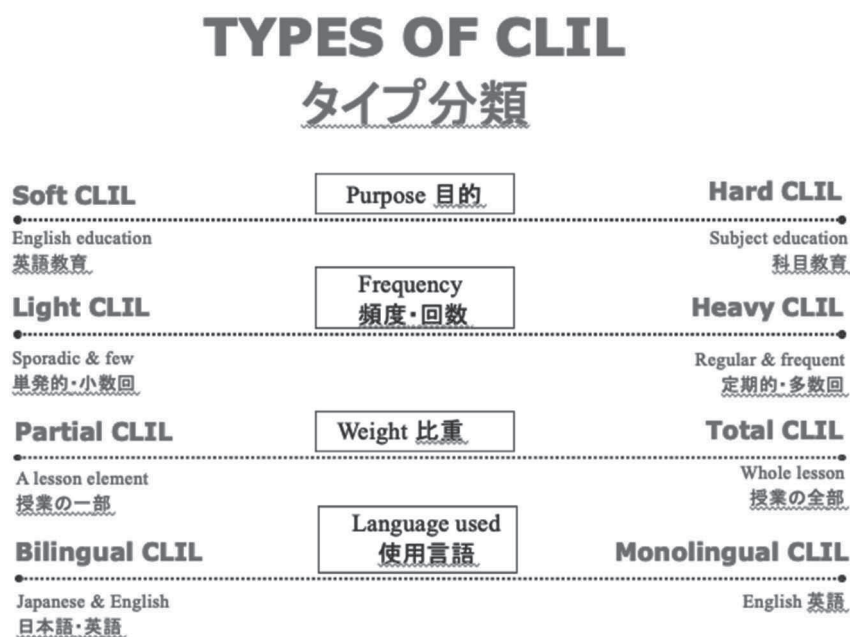
TYPES OF CLIL
タイプ分類

Soft CLIL	Purpose 目的	Hard CLIL
English education 英語教育		Subject education 科目教育
Light CLIL	Frequency 頻度・回数	**Heavy CLIL**
Sporadic & few 単発的・小数回		Regular & frequent 定期的・多数回
Partial CLIL	Weight 比重	**Total CLIL**
A lesson element 授業の一部		Whole lesson 授業の全部
Bilingual CLIL	Language used 使用言語	**Monolingual CLIL**
Japanese & English 日本語・英語		English 英語

Figure 5. CLIL types in the Japanese context
(adapted from Ikeda, 2017a)

CLIL Unit development and lesson structure

Coyle *et al.* (2010) state that although connecting the 4Cs into an integrated whole is fundamental to unit planning, it is content that initially guides the planning process. Next is to consider how cognitive elements interconnect in order to determine the types of learning tasks that will be suitable, and consequently the communication modes and cultural aspects that are appropriate to the level of learners and the tasks. Coyle *et al.* (2010) suggest the designers ask themselves a series of questions at each step in the four-step process in order to prioritize teaching and learning tasks. The following list is derived from Coyle *et al.* (2010, pp. 57-64).

Step 1: Considering Content
Example questions:
    Is there a choice of content? If so, which is the most appropriate for our context?

Do we have to use an existing syllabus or curriculum?

What will the students learn? (*i.e.* What are the learning outcomes?)

How will new knowledge and skills be selected?

How does the knowledge and skills develop our global goals?

Step 2: Connecting Content and Cognition

Example questions:

Do the activities or tasks encompass a broad spectrum of RBT cognitive processes?

Which activities or tasks are likely to encourage higher order thinking skills (HOTS)?

Which activities or tasks are likely to encourage lower order thinking skills (LOTS)?

What kind of questions must be asked in order to go beyond 'display questions'?

What kind of questions do we want our learners to ask?

Step 3: Linking Communication

Example questions:

What content-obligatory (language of learning) can be identified? How can it be most effectively taught?

What language for learning needs to be pre-existing, recycled and taught?

What content-compatible (language through learning) can be predicted?

What interactive modes will be utilized in order to allow learners to discuss their new knowledge?

What interactive modes will be utilized in order to allow learners to demonstrate their skills?

Are language items within each type accessible to learners?

How can language be scaffolded and recycled for use throughout the unit?

Step 4: Developing cultural awareness

Example questions:

What different types of cultural implications are there for development of this topic?

How do the tasks and activities actively involve the learner in developing their pluricultural understanding?

What kind of links can be made with other schools both regional and international?

Can the content be adapted to make the cultural aspects more accessible?

Does the content highlight similarities and differences in cultural and intercultural perspectives?

Once unit planning has been completed, the individual lessons of the unit of work need to be constructed, and materials and resources collected in order to match the key requirements and demands of the teaching aims and outcomes. Harmer (2012) suggests the following decisions need to be made when planning a particular lesson:

1. Decide specific CONTENT
2. Decide LEARNING OUTCOMES (i.e. aims)
3. Decide how to ASSESS the attainment of the aims
4. Predict the LANGUAGE EXPONENTS (vocabulary, grammar, language functions) the students will need
5. Decide the COGNITIVE SKILLS we want the learners to engage with or display
6. Decide CULTURAL ELEMENTS that will be included
7. Decide RESOURCES and MATERIALS that will be needed
8. Decide INDIVIDUAL, PAIR, or GROUPWORK (i.e. the interaction modes)
9. Decide the TIMING

After the decisions are mapped out, the lesson plan can be constructed. For Coyle *et al.* (2010) a canonical CLIL lesson (*i.e.* a learning process) is divided into three sub-stages:

A: Meeting Input
B: Processing Input
C: Producing a Response

Sub-stage 1, *Meeting Input,* is similar to the 'Presentation' stage of the PPP language lesson structure. Generally, subject teachers the world over either start with visuals, realia, a presentation, activity, brainstorming session or a set of questions in order to generate lexis or stimulate thinking about some aspect of content. Often this consists of learners seeing or hearing some kind of text type and they may be passive or active whilst doing so. In recent times, the Internet is clearly a valuable source of input material, and learners are often more attuned to its potentiality than teachers themselves. In the input stage, the CLIL teacher builds on prior learning and has the opportunity to scaffold new content through familiar language or scaffold new language through familiar content (Coyle, *et al.* 2010).

Sub-stage 2, *Processing Input,* is the stage in which the learners are challenged through an activity or task to cognitively engage with the content at varying degrees of cognitive complexity (i.e. corresponding to the RBT levels). The task design must not only incorporate scaffolded activities to stimulate thinking but also build in specific opportunities for help to be available when learners

need support from peers or the teacher. Moreover, learners need to be able to ask for help in the CLIL language, seek repetition, direct others what to do. In other words, language for learning also plays a key role in the processing input stage of a lesson.

Sub-stage 3, *Producing a Response,* is the final sub-stage of the lesson in which the learner is expected to be creative and produce original output, be it in the form of written, graphic, or spoken language text types, artistic output such as a video blog, role play, sculpture, woodwork, musical composition, project or research results, and so on. The output of the task may also vary along lower levels of the RBT scale. For example, the output may require a summary of facts (LOTS level), an analytical exposition or an evaluation of pros and cons of a concept (HOTS level) Here too, scaffolded language support may or may not be needed.

Of the three-stage lesson structure, Coyle *et al.* (2010) further suggest that Input-Processing-Output is not just a model for CLIL contexts because "every good lesson requires learners to think while engaging with either previously learned or new content" (p. 92); the implication being that 'processing input' should be an essential element of all lessons whatever the subject. Ikeda (2017a) (Figure 6) gives an example of tasks at each stage of the lesson.
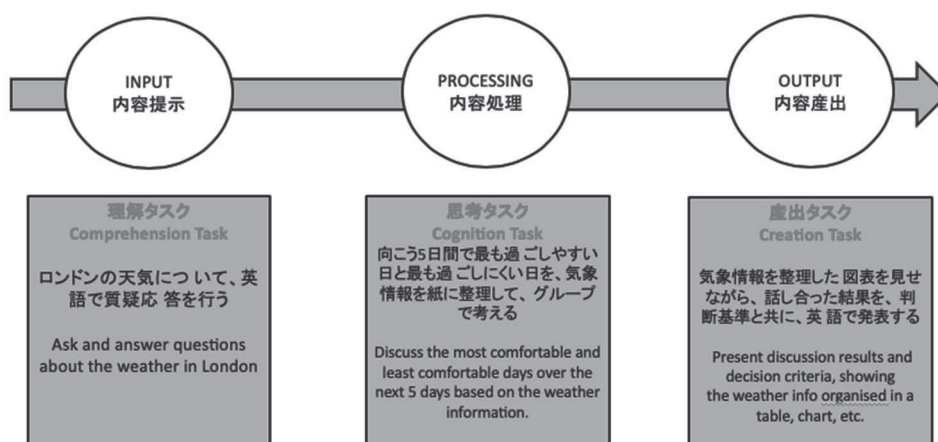
Figure 6. CLIL Lesson Structure (source: Ikeda, 2017a)

The CLIL teacher and the CLIL Classroom

It is clear that the implementation of CLIL poses significant challenges to both subject and language teachers. Of particular importance is that both types of teachers need to acquire knowledge of the other's *subject* - be it 'language' itself or the subject of the content - and also become familiar with the norms of the corresponding methodological practices. Language teachers teaching science content, for example, will have to familiarize themselves with scientific concepts,

materials, resources and best practices in the science education field. Subject teachers will need to acquire enough proficiency in the CLIL language for their students to be able to understand the content in the CLIL language. Dale and Tanner (2012) state that CLIL *subject teachers* also need:

- a clear understanding of how their subject uses language
- to know how to activate learners' existing knowledge of a topic in the CLIL language
- to provide appropriate multimodal input
- to guide learners to actively understand and process input
- design activities which encourage learners to think, speak and write
- to know how to assess learners' progress in both content and language
- to know how to give feedback for both content and language

Authentic materials are central to CLIL lesson implementation. A simple definition of 'authentic' materials in a CLIL lesson are those that are not designed to be used to teach language but rather those designed to teach a content subject. Teachers employ a wide variety of stimulation techniques such as mind mapping, brainstorming, pair and group work discussion and debating, and use a wide range of resources including book-based material (newspapers, encyclopedias, dictionaries, coursebooks written the CLIL language), realia (real objects) and genre-specific texts such as instruction manuals, film reviews, descriptions, and procedural texts. Teachers and learners utilize graphic organizers, tables, word maps, and KWHL charts when interacting with content and information. Hardware such as interactive whiteboards, audio and video machines, laptops, and tablets are common in CLIL classrooms and presentation software, APPS (applications), and digital textbooks, as well as the Internet are utilized by teachers and learners.

Summary

This introductory chapter has attempted to outline the origins, theory and major concepts underlying CLIL, as well as give a brief overview of best practices regarding planning for its implementation. Advocates and practitioners of the CLIL methodology argue that the benefits of the methodology do not limit themselves to the improvement of language skills and subject knowledge, but that it also gives learners the opportunity of develop their intercultural knowledge and understanding and their intercultural communication skills as well as develop greater metacognitive awareness of their own learning skills and strategies (Ioannou-Georgiou & Pavlou (2011).

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Appendix A: The Revised Bloom Taxonomy & Key Verbs

RBT Level	English Verbs*	Japanese Verbs
HIGHER ORDER THINKING SKILLS (HOTS) 高次思考力		
CREATE/DESIGN 創造する：発明者のように行動し，要素や情報を改善し、設計し、計画し、まとめて新しいものを創造する The student acts like an inventor improving, designing, planning and putting elements together to create something new.	create	創造する
	improve/modify	適応する
	invent	発明する
	plan	計画する
	predict	予測する
	propose	提案する
	rewrite	書き直す
	synthesize	総合する
EVALUATE 評価する：裁判所の裁判官のように行動し：批判的に情報を調べ、証拠、基準、基準に基づいて判断します．The student acts like a judge in a court & critically examines information and makes judgments based on evidence, criteria and standards.	argue / justify	議論する・正当化する
	evaluate / assess	評価する
	critique	判断する
	decide	決める
	judge	判定する
	conclude	結論づける
	prioritize	優先順位をつける
	recommend	勧める
ANALYZE 分析する：研究者のように行動し，情報をパーツに分割し、パーツ同士の関係や全体的な構造や目的を探る The student acts like a scientist and breaks information into its parts and explores how the parts relate to one another and to an overall structure or purpose	organize	組織する
	examine	調査する
	distinguish	見分ける
	parse / separate	解析する・分ける
	attribute	起因している
	analyze	分析する
	categorize / classify	分類する
	infer	推察する
LOWER ORDER THINKING SKILLS (LOTS) 低次思考力		
APPLY 応用する：指導案・説明書 のように行動し，以前に学習した手順や情報を選択して使用します．The student acts like an instruction manual, and selects and uses a previously learned procedure or information in a new but similar situation	demonstrate	実証する
	solve	解く
	demonstrate	実証する
	apply	返事する
	implement	実装する
	calculate	計算する
	use	使う
	practice	練習する

UNDERSTAND 理解する：専門家のように行動し、口頭、書込み、グラフィックコミュニケーションなどの情報の意味を理解し理解する .The student acts like an 'expert' and interprets the meaning of information including oral, written & graphic communication	clarify	明らかにする
	express	表現する
	paraphrase	言い換える
	restate	言い直す
	explain	説明する
	infer	推察する
	discuss	話し合う　議論する
	distinguish	区別する
REMEMBER 記憶する：辞書やネットデータベースのように行動し，情報、事実、データを検索します。The student acts like a dictionary database to find information, facts, & data. He/ she also recognizes and recalls relevant knowledge from textual information or long-term memory.	match	致させる
	define	定義する
	label	ラベルを貼る
	memorize	記憶する
	list	列挙する
	recognize	認識する
	recall	思い出す
	repeat	繰り返す

* Anderson, L. W., Krathwohl, D. R., Airasian, P. W., Cruikshank, K. A., Mayer, R. E., Pintrich, P. R., Raths, J. & Wittrock, M.C. (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives.* New York: Longman.

Appendix B: The Language *for* Learning

Greetings:	
Hello, (Mari)	こんにちは
Good afternoon	こんにちは
Goodbye class	みなさんさようなら
Good morning (Mari).	おはようございます
How are you?	元気ですか。
Classroom routine:	
Stand up please	立ってください
Sit down please	座ってください
Who's absent today?	今日は誰が欠席ですか？
Put up / down your hands.	手を挙げて / 下ろして
Raise your hands	手を挙げて
Look at the blackboard	黒板を見て
Any volunteers?	誰か手伝ってもらえる？
Take out your books	教科書を出しなさい
Can you take out your books?	教科書を出してくれませんか
Please put away your books.	教科書を片付けてください
Turn to page (3)	３ページを開いて
Look at (the picture)	絵を見て
Whose turn is it?	誰の番ですか？
Clean the blackboard please	黒板を消してください
Give me (a ruler) please	定規をください
Can I have your (book) please	（教科書）を借りてもいいですか
Please repeat	くり返してください
Please say after me	私の後に続けて言ってください
I want you to repeat after me	私の後に繰り返してほしい
Please say this sentence	この文を言ってください
I'll read this word again. Please pay attention to the pronunciation	もう一度この単語を読みます。発音に気をつけてください
Louder please	もっと大きな声で言ってください
Please speak up	大声で話してください。
Sorry, I can't hear you	ごめんなさい、聞こえないよ。
I beg your pardon	もう一度お願いします
Pardon?	何て？

Try again	もう一度やってみて
Write your name here	あなたの名前をここに書きなさい
Write down the date	日付を書きなさい
Write on every other line	1 行おきに書きなさい
How do you spell (January)?	（January）はどのようにつづりますか
Use a (pencil) to do your corrections.	訂正には（鉛筆）を使いなさい
Please hurry up	急いでください
Please go back to your seat	自分の席に戻ってください
There will be a test on Friday.	金曜日にテストがあります。
Classroom Management	
Look at me	私を見て
Please listen to me	私の言うことを聞いてください
Speak in English please	英語で話してください
Pay attention to me now.	今は私に注目して
Don't move around	動きまわらないでください
Turn around please	ぐるりと向きを変えてください
Look up for a moment	しばらく顔を上げなさい。
Stay in your seat	席に留まりなさい。
Sit up straight	背筋を伸ばしてすわりなさい。
Quiet please	静かにしてください
Stop talking now	今話すのをやめなさい。
Please work quietly	静かにやってください
Don't make any noise please	どんな音も立てないでください。
Would you please keep quiet for a moment	しばらく静かにしてください。
Please keep your voice down	小声で話してください
Distribution and collection of materials	
Get the books from the shelf	本棚から本をとって
Give out the (books) please	教材を配ってください。
Pass the (worksheets) to the back	ワークシートを後ろに回して
I'd like to collect the (books)	本を集めたい
Please put the books on the (desk)	机の上に本を置いてください
Hand-in your notebooks please	ノートを提出してください
Transitions between parts of the lesson	
OK, well done. Let's move on to...	はい　よくできました。では〜に移りましょう
OK, good job. It's time now for...	はい　よくできました。さあ〜の時間です。
Now that we've finished (X), let's go on to...	さあ（X）は終わりました。続いて〜に行きましょう。
We'll go back to that later. For now, let's look at...	後でそのことを見直しましょう。今は〜を見ましょう。
That was well done. Alright now, let's keep moving	よくできました。よろしいですね。このまま 続けましょう。

Elicitation	
How do you come to school?	どうやって学校に来ましたか
How do you make (a cake)?	どうやって（ケーキを）作りますか
Where did you get the idea?	どこからそのアイデアを思い付いたのですか
Why are you late?	どうして遅れたのですか
Why do you think so?	なぜそう思いますか
Why did you say that?	どうしてそう言ったのですか
What did you do (yesterday)?	昨日何をしましたか
Whose book is this?	この教科書は誰のですか
Instructions for activities	
Work in pairs	ペアで作業して
Work with your partner.	パートナーと一緒にやって
Work in groups of (four)	4 人グループでやって
I want you to get into groups of three.	三人のグループに入ってほしい

(Mari) join this group.	マリ、このグループに入って
Would you like to join this group?	このグループに入りませんか？
There should be (4) in a group	4 人グループになるはずです
There are too many in the group	グループの人数が多すぎます
One person will be the group leader	一人でグループリーダーになります
Group leaders, please come out and collect the material	グループリーダーは出てきて教材を集めてください
Work on your own please	1 人でやってください
Try to do it yourself	1 人でやってみて
I want more ideas	もっと意見が欲しいな
Don't show it to your partner	パートナーにみせないで
Don't let your partner see the picture	その絵をパートナーに見せないように
Show your (drawing) to the group	絵をグループの人に見せて
Tell your group members how to do it	どうやってやるのかグループの人に教えて
Let's do a role play.(Mari) will play the part of (..) and (Taku) will be (..)	ロールプレイをします。（マリ）は（）の役を、（タク）は … を
Read the dialogue with your partner	パートナーと一緒にその対話を読んで
Use [read, look-up, & say]	［読む・探す・言う］テクニックを使って
How do you say that in English?	それは英語で何と言うのですか

You may begin	始めるように
Time is up	時間終了
Stop (writing) now	（書くのを）すぐやめてください
Pencils down please	鉛筆を置いてください
Instructions for exercises, worksheets or papers	
Circle the right word	正しい単語を丸で囲みなさい
Underline the answer	答えに下線を引きなさい
Color the picture	絵に色を塗りなさい
Join the dots	点を結びなさい
Match the words with the pictures	絵に単語を合わせなさい
Listen and draw lines	聞いて、線を引きなさい
Write the letter/number in the brackets	括弧に文字 / 数字を書きなさい
Tick the correct answer	正しい答えにチェックをつけなさい
Circle the correct answer	正しい答えに丸をつけなさい
Put a tick / cross in the box	囲み枠にチェック / クロスを入れなさい
Label the picture	絵を分類しなさい。
Fill in the missing word	たりない単語を書き込みなさい。
Fill in the blank with a suitable word	空白に適切な語を書き込みなさい
Choose and write the correct word in the brackets	括弧に正しい単語を選んで書きなさい
Put the words / sentences in the correct order	正しい順番に単語 / 文を並べなさい
Finish the sentence	文を完成させなさい
Complete the table	表を完成させなさい
Answer the questions	質問に答えなさい
Read the instructions carefully	指示を注意して読みなさい
Let's look at the (picture) together	一緒に絵を見てみましょう
Instructions for assignments / homework	
Do this exercise now	今この課題をやりなさい
Finish exercise (3) on page (5)	5 ページの 3 番をやりなさい。
Do your corrections tonight	今夜、訂正をしなさい
Study page (3) for homework	3 ページを宿題として勉強しなさい

Complete the worksheet at home	家で問題用紙を完成させなさい。
Hand in your work tomorrow	明日、宿題を提出しなさい。
Read the story again tonight	今夜、もう一度話しを読んで
Read aloud to your parents	両親に声を出して読みなさい。
Your homework is page (3)	あなたの宿題は 3 ページです

Feedback to learners	
Right	正解
You are right	正解です。
That's it	それだ。
That's correct	正解です。
Exactly	まさに。
Good	よろしい
Well done!	よくやった
How clever you are	君は賢いんだ
Excellent!	すばらしい！
That's nice	すてきだ。
Fine	いいね。
Terrific!	すばらしい！
Fantastic!	すばらしい！
You've done a good job	良くやった
Interesting idea	おもしろい考えだ。
That's a good idea	いい考えだ。
Try again	もう一回やってみなさい
You're quite close	おしい。
Not quite	おしい。
Nearly	おしい
Not exactly	そうではない
You nearly got it right / correct.	ほとんど正解だ。
A good try	いい試みだ
A good guess	いい推測だ
You're almost right	ほとんど正解だ。
Can anyone help (him)?	誰か彼を手伝える？
You can do better	もっとよくできるだろう。
Don't give up	諦めないで
Discussion on reading or dialogue texts	
What is the title of the book?	その本のタイトルは何ですか。
Who is the author?	著者は誰ですか
Who is the illustrator?	イラストレーターは誰ですか。
Look at the cover. What do you think the story is about?	表紙を見。てその話についてどう思いますか
Who is the dialogue between?	その会話は誰が話していますか。
Where does it take place?	それはどこで起こっていますか。
Where did the story happen?	その話はどこで起きたのですか。
When did the story take place?	それはいつ起こった話ですか。
When did the dialogue take place?	その会話はいつ交わされたのですか
What is (he) doing?	（彼は）何をしていますか。
What can you see in this picture?	この絵に何が見えますか。
If you were (Jack) what would you do next?	あなたが（ジャック）なら、次に何をしますか。
What will happen next?	次に何が起こるでしょうか。
Are the two speakers friends?	二人の話し手は友達ですか。
What does this person do?	この人は何をしますか。
Could you tell me more?	もっと教えてくれませんか。
Point to the (ship) in the picture.	写真の船を指して
What do you think they will say next?	彼らは次に何を言うと思いますか。
What is (his) problem?	（彼の）問題は何ですか。
What is wrong with (her)?	（彼女）はどうしたのですか。
What is the matter with (him)?	（彼）はどうしたのですか。