Effective content/ language integrated teaching at high school

Calum G. Adamson

Kyoto Gaidai Nishi High School

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This paper will introduce a media studies course written for a high school language program in which lesson content and language-learning objectives are integrated. Passing from a brief review of the literature surrounding integrated programs, including discussion of the particular difficulties that exist when attempting to account for dual objectives in this context, the paper will offer advice for materials writers as to how integrated courses can be more effectively designed for teenage learners in an EFL setting. The paper will then describe the course as it was designed, implemented and received by learners and instructors.

本小論文でご紹介するメディアスタディーコースは、言語習得の目的に加えて授業内容そのものも考慮統合されながら進められていく高校の英語プログラムのために書かれたものです。このような統合プログラムのための教材環境と実際に使っていくうえでの幾つかの顕著な問題点について言及し、教材を作成される方々にどのような落とし穴がありまた避けうるものなのかを知っていただくための一助になればと願います。また本メディアスタディーコースがどのように企画・実行され生徒や教師たちに受け入れられていったのかを述べています。

N INTEGRATED programs, rather than a foreign language being the primary object of study, an L2 becomes the medium to study academic topics such as geography, literature or whatever is considered appropriate within an institution. Essentially, instead of organizing language courses in a incremental series of syntactical structures, as is still a prevalent approach in language teaching, learning is approached top-down with learners taking account of how language is used in input/output materials while pursuing parallel, content-orientated goals (Brinton, Snow, & Wesche, 1989; Stryker & Leaver, 1997). A useful analogy would be how the use of computers has evolved in educational settings. Where the machine and its workings were once the primary focus of inquiry, now learners typically acquire skill-based computer literacy through tasks such as word-processing, blog-building, making slide shows and so on. In integrated EFL/ESL programs, the English language is not being studied *per se*, rather topics are being studied in English.

This paper will describe the design, implementation and learner reaction to a high school media studies course in which language objectives shared equal weight with content learning. A literature review will first introduce the notion of integrated language programs and some



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areas which require consideration by material writers to ensure that course design is suited to learner needs. The paper seeks to illustrate how, with careful planning and consideration of context, integrated programs can satisfy both content and language objectives with younger learners in an EFL setting.

Integrated content/language programs

There are a number of attractions with integrated programs. Firstly, there is an obvious appeal to elementary/secondary and tertiary institutions in the commitment to dual goals. Clearly, it is far more efficient and valuable for students if knowledge of an academic subject can be imparted at the same time, and without deficit, as skills in a foreign language. Moreover, integrated approaches have been strongly supported in academic literature. There may be concerns with the applicability of research across contexts, but the major claims for programs which integrate content and language can be summarized as follows:

Using foreign languages, such as Latin, for instruction has a successful history far outreaching the brief history of applied linguistics and is unremarkable in many parts of the world (Dalton-Puffer, 2002).

Findings from North America have consistently shown that immersion students achieve strong academic results resembling those of native speaking learners (Grabe & Stoller, 1997).

Language is an important driver of cognitive development and should be learned in tandem with appropriate content. Disassociating language from stimulating material is unlikely to assist strong academic development, particularly in the young (Genesee, 1995).

Language is best learned when contextualized in meaningful and significant settings (Eskey, 1997; Snow, Met, & Genesee, 1989).

Greater opportunity exists for learners to engage in critical thinking and analysis (Met, 1991; Van de Craen, 2002).

Integrated programs can accommodate a range of learning theories and methodologies (Van de Craen, 2002).

Integrated programs respect the specificity of content (Genesee, 1995). In other words, learning history and learning mathematics in the same L2 may entail different language and discourse structures. Thus integrated programs may present more diverse sources of input.

Meaning-focus rather than form-focus should be primary (Skehan, 1998; Willis & Willis, 2007). Nonetheless, due attention must be paid to form for learning to occur: " ...if students are to actually acquire a second language by 'going for meaning', then they have to be engaging, in some way, in some sort of form-function analysis" (Swain, 1988, p. 72).

Terminology

Content-based instruction (CBI) and Content-based Learning (CBL) are by far the most commonly encountered terms in the literature and originate largely out of work conducted with immigrant and bilingual communities in Canada and the US. English Across The Curriculum is a term that arose with the teaching of immigrant communities in the UK. Content/Language Integrated Learning (CLIL) is a term gaining increasing promi-

nence in Europe though, as is true for all, it has been interpreted very broadly, as Edelenbos, Johnstone and Kubanek (2006, cited in Piske, 2009) have pointed out, referring from "teaching a 15-minute sequence about apples as part of a lesson on fruits, to teaching some topics within a year in the foreign language, to teaching one or more subjects in the other language" (p. 1).

The fact that definitions of these terms have been so loosely handled makes the application of research findings problematic, with the most obvious concern lying with the ESL/EFL distinction. Clearly there is a divergence between learning English as an immigrant child in Los Angeles; learning French as an Englishspeaking Canadian high-school student in Montreal and learning English as German-speaking university student in Munich. This said, research findings from North America, no doubt because of their ubiquity, have been repeatedly drawn upon to justify content/language integrated programs in EFL environments such as Japan, arguably with less regard for affecting environmental considerations than might be considered advisable. As has been well noted in CLIL literature (Dalton-Puffer, 2002; Van de Craen, 2001), it would be foolhardy to dismiss empirical support from contexts that differ in significant ways from a teacher's own there are a great many affecting contextual factors in language teaching, after all. Nonetheless, it would be welcome to see a broader basis to research, with more case-studies drawn from an EFL context. Though at present in the literature there appears to be little attempt to clearly delineate CLIL as EFL-based and CBI as ESL-based, this might be a sensible distinction given that direct language instruction is more typical in the CLIL setting. In any case, since there seems to be more common ground between a Japanese and a European context, this paper will utilize the term CLIL except where it is appropriate to indicate that the research indicates an ESL context.

Beyond these distinctions, there are further differences to be found in the types of integrated programs that the terminology accommodates, ranging from the exemplary full-immersion model, in which language learning is essentially seen as a secondary byproduct of content learning, to more language-driven models in which content aims may be less important. This continuum (see Met, 1994, for a detailed discussion) includes a variety of course-types from partial immersion: sheltered courses (where content is taught in L2 but simplified to accommodate language learning needs), adjunct model courses (where content and language share equal goals and may be taught by both subject and language teachers), theme-based courses which are typically language orientated but are based on specific content exploited by language instructors for language-learning potential and finally language classes which employ regular content for practicing forms.

Content/language balance and learner output

A number of studies have called attention to particular difficulties in implementing CLIL successfully. Several researchers have shown how classrooms in integrated courses are often highly teacher-centered with the requirement to get through a certain amount of content negatively affecting the amount of time devoted to language learning (Muscemi, 1996; Short, 2002; Swain, 1985). Muscemi's (1996) study showed that even when teachers declared themselves in favor of interactive lessons they typically spoke over 70% of the time, asked display questions to illustrate points, with minimal negotiation taking place between teacher and student when teachers were addressing the class as a whole. Nonetheless, Muscemi (1996) noted different interactions with greater negotiation taking place when the teacher was not using a "teacher's voice" and interacting with smaller groups.

Genesee (1995) reviews a number of studies to note that while receptive skills of listening and reading may be comparable with native speakers in immersion programs, students' expression in writing and speaking typically has shortcomings. He

suggests that this also may be attributable to a lack of extended discourse in the classroom.

Swain (1987) also suggested in a study of early immersion learners that without explicit planning, teachers may adopt strategies to achieve content-goals which may negatively affect learners; for example presenting confusing or inaccurate forms, ignoring grammatical errors and over-simplifying language.

Do learners have adequate transferable schemata to handle the content area?

A further suggestion, particularly compelling in the high school context, is the concept of student readiness (Eskey, 1997; Stryker & Leaver, 1997). Schema theory suggests that repeated encounters with lexis and prior knowledge of a topic area can assist learners in bridging gaps between known and unknown language in a text (Brinton, Snow, & Wesche, 2003). Managed effectively, schemata can act as a springboard to faster and more effective learning, though without due consideration, learners may struggle unnecessarily. Agreeing with Corin's (1997) findings that learners progress faster with linguistic schema to transfer from their own language to the L2 content, Stryker and Leaver (1997) write "if the students are not ready, in terms of both the linguistic and cognitive schemata, they may be overwhelmed by the quantity of new information and may, ultimately, flounder" (p. 292).

Are authentic materials really the best choice?

Authentic materials have been favored in integrated courses (Brinton, Snow, & Wesche, 2003). Though the most popular definition is of a text created for a native-speaking audience, there is little agreement about what actually constitutes authenticity, and there is even some controversy over any use of the term. It has been suggested that words such as authentic are unfairly

value-laden, compared with non-authentic, fabricated, artificial (see Gallien, 1998, for a discussion). The usual justification for authentic materials is:

- They are inherently more interesting for learners and thus more motivating.
- They more genuinely reflect the natural patterns of English and thus are more effective for acquisition.
- Pre-prepared materials may be out-of-date or inappropriate in some way.
- This makes a certain amount of sense, but it is difficult to find adequate support from research. More typically, what is offered are common-sense assumptions of worthiness.
- "[Authentic materials] ...motivate students because they are derived from the ultimate goal....English as used by native speakers" (Morton, 1999, p. 177).
- "[Learners]...are exposed to English which may be flawed and so develop the ability to identify errors." (Wong, Kwok, & Choi, 1995, p. 319).
- Defending difficult literary texts: "Language is learned by human beings and the interest and love of literature for its various qualities is a human characteristic, a common denominator" (Paran, 2008, p. 465).
- "They give the reader the feeling that he or she is learning the real language; that they are in touch with a living entity" (Guariento & Morley, 2001, p. 347).

In contrast, Peacock (1997) has shown that, while there is a place for the use of authentic material, it is not the case that learners find `real` materials inherently more motivating than those that have been contrived for the classroom. Further, research by Nation (2006), has offered extensive information about how much vocabulary coverage is needed to handle different kinds of texts, suggesting that coverage of 98% of a text is required for unassisted extensive reading.

A lot of work done in the classroom, of course, focuses on intensive reading tasks. A key concept in the use of challenging texts is that of 'scaffolding' which involves setting up supports that "permit learners to participate in the complex process before they are able to do so unassisted" (Peregroy & Boyle, 1997, p. 81). Ways of scaffolding written texts might include visual representations of text, glosses or simplifications of language, pre-teaching of vocabulary or the use of familiar or predictable materials. Scaffolding can support the learner, of course, but teachers would still be well advised to consider the vocabulary load of course materials in relation to the level of the students. If learners have coverage of 80% of a text, this still means that one word in five is unknown. Considering the added cognitive demands of the content objectives, this may be too challenging for effective language learning to take place with some learners.

Course design Media Studies

The course designed by the author was called Media Studies, the theme being chosen for the following reasons:

- Media is current, ubiquitous and learners are likely to have some schematic awareness of it.
- The study of newspapers and TV news is amenable to the completion of meaningful tasks.
- The subject has practical application, in that it represents a field that students encounter on a daily basis and might one day enter as a career.
- The subject has acceptable academic weight for a high school program.

The course was taught to a mixed level class of 29 second year students enrolled in a limited-immersion content-based language course in which they typically have fifteen 50-minute pe-

riods of contact time each week. Classes were loosely streamed into two upper level classes and a class of lower-level learners. The streaming was organized by the homeroom teacher according to a holistic appraisal of their ability in terms of speaking ability and an in-house test of English ability (*Jitsuroku test*). Streaming in the two upper-level classes was intentionally loose, to allow higher-level learners to scaffold the content learning of motivated, but slightly lower-ability students. It was expected that the lower level class would cover less material. The higher level classes were of intermediate to upper intermediate ability and included six students with overseas study experience. The lower level class was considered by the homeroom teacher to be of elementary to lower intermediate ability

As discussed in the preceding literature review, context is a strongly affective factor in CLIL. In terms of this study, the following were considered pertinent to course design (listed alphabetically).

- Age and gender distribution of learners, which may affect needs, learning interests and motivations for learning. The classes were predominately composed of female students with only four males. The extent to which this would affect material selection was unknown in the planning stages, though it was considered as having potential for further study in terms of text selection. The students were all either 16 or 17 years of age and topic areas were designed to be of interest to younger learners.
- Amount of contact time with learners. This strongly affects the ability of teachers to integrate a meaningful amount of content with language-learning objectives.
- Institutional requirements, including promises made in advertising literature, school philosophy and expectations of student achievement upon graduation. The institution is eager to attract more students to the program and creative projects, such as making a newspaper and video, have appeal

within the department. It was also important that the course provided some continuity between the other second-year courses (Literature; Gender & Education).

- Language-level of learners. This affected materials choice and design.
- Learner needs. It is critical to evaluate and articulate both language and content goals at the outset to ensure successful integration. In this course, the goals were divided into the categories of content, skills and form-focus (described in more detail below).
- Learning environment, including access to technology and secondary resources such as guest speakers, field trips. It was felt that the course should be made more relevant to learners by introducing them to Japanese people working in the media. Access to the computer room is limited and required careful scheduling.
- Material writing facilities and staff. Access to technologies, skill-level and time schedule of material writers were considered. Teachers needed to be familiar with text and video editing software.
- Parental expectations. It was felt that tangible examples of coursework would be welcome to parents, both current and those considering the school for their children.
- Teaching staff: experience/skills/favored approach/current workload. Teacher involvement in the projects was extensive. It was also considered how the project work, e.g. interviews for news stories, might affect other staff.

The course was taught over a single semester by three language instructors and was divided into two topic areas: "Newspapers" and "TV News". The following elements comprised the main learning areas:

- Input materials.
- Fieldtrip to Kyoto Shimbun.

- Industry speaker (a retired Daily Yomiuri journalist).
- Student-produced newspaper.
- Student-produced news show.

Input materials were designed by the writer using a Macintosh computer and took the form of slide presentations, video and two short textbooks of around 25 pages each. The following areas were critical to the course goals:

- Content information about the basic elements of news and news-gathering (history; tabloid and quality news style; editorial policy and subjectivity; ethics).
- Skills-focussed areas (identifying key information for an audience; writing headlines, leads, and articles; editing skills; interview technique; ordering and presenting broadcast news).
- Form-focus (collocations and other lexical items from the
 texts and secondary materials; relative clauses; use of quotes
 and reported speech; use of tense in narrative writing). In
 terms of form focus, a certain amount of prescription was
 necessary to ensure parity in testing but teachers were also
 encouraged to use initiative in encouraging their learners to
 notice the most relevant aspects of the lessons.

Overall, no specific methodology was specified for instruction but the materials were devised to favour a task-based framework and effort was made in the design stages to ensure that content-areas did not dominate lessons and, to the greatest extent possible, learners would interact and negotiate meaning in class-time.

Text design

Nation (2006) has indicated that learners require a vocabulary size of around 8,000 word families to "handle" authentic newspapers. Further, at a school level, students had previ-

ously expressed frustration in student surveys that many of the course texts were too challenging. Therefore, it was decided that class texts would be either semi-authentic (i.e. simplified and abridged) or custom- written. It is perhaps of relevance that, although this class was not tested for vocabulary size before planning the course, in the second year of implementation, a slightly lower-ability class showed good awareness of the first 1,000 words according to Nation and Beglar's (2007) Vocabulary Size Test but erratic scores thereafter. It was decided among the teaching staff that vocabulary from within the first 3,000 words of the British National Corpus (BNC), chosen because of its ready availability online, would be appropriate for learners and that items which were mainly required for the purpose of comprehension of a specific text would not be a teaching-focus. Texts were simplified by use of a web-based vocabulary profiling tool called Vocabprofile (Cobb, 2009), drawing on the most frequent words of English according to the BNC. Vocabulary items falling outside the 3,000 word range were either replaced with more frequent terms or glossed with a Japanese equivalent. A breakdown of a sample reading of 241 words (tokens) about the journalist Kate Adie can be seen in Table 1. It will be seen that a learner with knowledge of the first 1,000 words of English will have coverage of almost 88% of the text, rising to 95.5% with awareness of the second 1,000. Items highlighted for the purpose of testing would be drawn from those 234 tokens (and their collocates) that seemed of most value to the students. Obviously, frequency profiles are far from foolproof and a degree of experience and common sense is necessary to manage the effectiveness for learners but it does seem sensible to first introduce those items that learners are most likely to encounter.

Table I. Profile of Kate Adie reading using Vocabprofile (Cobb, 2009)

Frequency level	Families	Types	Tokens	Coverage%	Cumula- tive %
K1 Words	102	113	212	87.97	87.97
K2 Words	17	17	18	7.47	95.44
K3 Words	4	4	4	1.66	97.10%
K4 Words	3	3	3	1.24	98.34%
K5 Words	1	1	1	0.41	98.75%
K6 Words	1	1	1	0.41	99.16
K12 Words	1	1	1	0.41	99.57
Off-List	?	1	1	0.41	100%
Total	129+	141	241	100%	100%

Custom-made materials were first written and then simplified to seem as natural as possible. This seemed most likely to provide potential for noticing high-utility structures while self-consciously limiting language or syntax likely to impede comprehension and cause frustration. Authentic, current events and individuals were utilised as much as possible as well as pictures and video to lend credence to the notion that the students were participating in a real-world environment. Form-focus activities arose from the various texts presented in the input materials and were largely reminiscent of activities found in four-skills EFL textbooks.

Student projects and fieldwork

The projects of creating a class newspaper and TV news program were assigned because the tasks are both process and product-orientated. It was thought that the project would test learner's understanding of the input process and that the creative aspects of design would be motivating. Further, there were significant secondary-learning possibilities in the use of publishing and editing software, and the use of digital recording equipment. In practice, the students created three separate class news sheets, with pairs of students collaborating on two or three articles. An editor and editorial assistant were elected who took leadership roles in the ordering and overall design of the paper. In the news-video, each class created a news program of around 20 minutes in duration. There was a focus on actual school events and a number of outside sources were interviewed for the programs, with translators if necessary.

The fieldtrip and industry speakers were intended to lend a greater sense of reality to the classroom experience and provide further valuable content-knowledge about the Japanese newspaper industry and the working life of a journalist. It was a particular goal of the course that learners would be introduced to pertinent career-information.

Learner and teacher assessment

Overall, the course was widely perceived as successful. Of the 29 students surveyed, 85% indicated approval of the language component and 92% were satisfied with the content component. 81% reported that they felt that media was an appropriate topic for high school students to study. Gratifyingly, several students reported that they had previously had little interest in the subject but had come to see the value of learning about media. One student wrote (translation) "before I started this course I couldn't see the point of learning about media, but now I can

understand why we studied this topic." A number commented on the fact that they had been able to speak more English than in other lesson formats and a majority wrote that they had enjoyed the creative elements of creating newspapers and news broadcasts. One student was particularly inspired by the guest speaker's accounts of his time reporting on various crises in South East Asia. Of the negative responses, the most common remark was that they had no interest in the topic, though one teacher noted that classroom performances belied some contradictory comments in the questionnaire. It was noted that a reshuffling of the classes had provoked both negative and positive responses from some students. Almost all learners reported that they felt they had made significant progress in some aspect of their English skills and, although this self-assessment cannot be supported with any evidence from independent testing, the tone of the questionnaires was indicative of a high level of positivity and motivation.

Teachers similarly reported positively on the course though some constructive criticisms were raised regarding the conceptual difficulty of certain texts (material focussing on manipulation of news-content to accommodate editorial policy had proved most challenging for some classes). Also, the appropriateness of certain language points was discussed and the possibility of moving the focus from western media to Japanese media was raised by one teacher. It was also noted that the editing process of the video was particularly time-consuming for teachers and that certain logistical aspects regarding access to video cameras and computer facilities ought to be better organised. The institution was also pleased with responses to the student questionnaire and was impressed that the students had completed a challenging and worthwhile task which resulted in a tangible product. Videos created by the students have become a feature of the school's Open Campus recruitment.

Conclusion

Though this paper does not make any direct claims regarding the superiority of content/language integrated programs for acquisition of a second language, it seems clear that with effective planning and careful selection of materials and content, such programs can be effective and fulfilling for younger learners in an EFL context. From the available literature and insights gained from implementing this course, it seems most important that course designers in CLIL take account of the necessity to clearly articulate content and language goals so that content learning does not obscure the potential for language learning. Learners require sufficient opportunities for output if motivated learning is to take place and lessons should not be allowed to become too teacher-centred. Further, it is important that the learners' available schemata are considered and that materials are carefully selected and effectively scaffolded to ensure that frustration does not impede either objective. Finally, it is hoped that further case studies and comparative research outside of ESL immersion will add much needed scope for materials writers in this context.

Bio data

Calum G. Adamson works for a high school in Kyoto. He is currently interested in developing effective reading texts for the CLIL classroom. <adamson.calum@yahoo.co.uk>

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