Content-based instruction (CBI) challenges in Turkey: Voices of high school students

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ABSTRACT

CBI is gaining popularity all over the world and in Turkey. We hear more about it as the International Baccalaureate are becoming popular. There is void in literature about CBI and high school as most studies are done in tertiary context. The current study is mixed-method research with the participants from high schools in Turkey. The findings of the current study have shown that language and content integration provide high school students with a clear and relevant learning background. When language is a key to substantive interactions, events have real intent and involve a sincere exchange of meaning. The themed learning helps students to strengthen their reading and writing skills as they can create schemes during the course and can adapt existing schemes to new learning situations. CBI also found to be a source of motivation for learners to use the language in an authentic context.

Introduction

As with the rapid developments in science and other disciplines, the educational trend is moving towards using English as a way for communication and to create a shared basis. More and more students are now studying their courses in English as a Medium of Instruction (EMI universities and in order to prepare to students for tertiary education, content courses (Science, Mathematics, Social studies) are thought in English at high schools. There are different programs such as DP (Diploma Programme) of International Baccalaureate and an increasing number of students join these programmes nowadays. No study, to our knowledge, has ever investigated challenges that high school students face while learning content in English. This research paper deals with the data gathered from students to understand their feelings regarding Content-Based Instruction and the findings may help teachers to understand the problems they experience, and teachers could better suit the courses to students' needs and thus turning the challenges into learning opportunities.

History of teaching content in Language Education

Throughout history, languages have changed along with the changes in the lifestyles of communities they belong to. Some languages emerged out of the communities they were utilised and began to be learned and utilised across nations due to political implications, and domination of other countries as well as the use of the language for trade and science (Ostler, 2005). This situation necessitated foreign language education across generations. Foreign language education had a long history which dates back to ancient times. Starting in the earliest periods of human history, the practice of teaching, and learning a foreign language was common as several languages had the lingua franca status. In the period between ancient times through the beginning of medieval ages, in language education, the focus was merely on *content*. In this long history of language learning, the content used in learning the language has always been significant. The fundamental tool to learn the language was the very books the scholars had to excel in. The only forms of learning materials students of intended language could use in the way of classic texts, religious texts such as the Quran and Bible, and other scientific reference sources because the primary reason of learners was to make a scholarly understanding of the intended text rather than conversing in the target language. Latin was the prerequisite for scholars of ancient, and medieval periods in Europe as it was "the language of instruction" (Dalton-Puffer, 2007, p.2). Therefore, some effort was made to determine the vocabulary and master the grammatical forms found in the text. Thus, it can be stated that language teaching at an early age was content-oriented. The content had also been an area in which language learners immersed themselves in various grammatical subjects and tried to discover the vocabulary.

In the grammar-translation method, the content was the source of grammar rules and forms. Then with the audio-lingual method content was mostly dialogue which this time along with grammar patterns also included vocabulary and sound patterns, and finally, with the communicative methods, the content was the place where we can find examples of communication (Tedick, 2018). Dalton-Puffer (2011) describe the emergence of Content-based Instruction (CBI) as a language approach in first language education in language across the curriculum movement. Widdowson (1978) was one of the first to propose that language and content can be integrated and emphasized the importance of content in communication. It can be said that although some approaches adopted the use of content in language teaching by the 1960s, the term content-based instruction wasn't into use until the late 1980s. The first implementation of CBI in the education field took place in Canada in immersion classes. From that time on, the application areas of CBI have gone to age and school diversity (Larsen-Freeman, 2005). Moreover, Murphey (1997) states that "CBI in the EFL (English as a foreign language) context is an exciting endeavour well worth the doing and well worth improving" (as cited in Moriyoshi, 2010, p.6); it was accepted both by researchers and teachers in the field as a trusted approach effective in the teaching of a language.

Defining Content-Based instruction

Many definitions are formed by scholars to describe the CBI. Initially, Krahnke (1987) defined it as that "the teaching of content or information in the language being learned with little or no direct or explicit effort to teach the language itself separately from the content being taught" (p. 66). One of the first definitions that emphasized the teaching of a subject

matter along with second language teaching was made by Brinton et al. (1989). In their definition, they emphasized "concurrent" teaching of language and the subject (16). These definitions changed form with the developments in language education. The use of CBI in a wide range of applications from different educational levels to the teaching of academic skills necessitated different definitions. This caused CBI to become a domain rooting many branches with various applications all over the world. To illustrate this phenomenon, Stoller (2008) defined CBI as 'an umbrella term' for approaches with varying degrees of emphasis on content or language.

Different models of Content-based instruction

Three "primary models of CBI " was first introduced by Brinton et al. (1989). These were sheltered instruction, adjunct introduction, and theme-based instruction. CBI has five models in total even though three of them are more common in language education especially at the tertiary level: theme-based, adjunct, and sheltered model (Unirow, 2012).

Sheltered content instruction

Sheltered programs are, in many ways, similar to immersion programs. The audience of the courses are L2 speakers, but the most crucial point that the two models differed is the course hours. In the sheltered program, there is a weekly three-hour program, while immersion programs can cover half of the students' whole education programs (Johnson & Swain, 1997). In sheltered instruction, the audience is the students who still continue their L2 education and development and in their general education environment, they are together with native speaker students who speak their L2. The keyword in this model is "sheltering" or "separation". Several studies showed that sheltered content instruction program proved successful in many settings (Brinton & Snow, 2017).

Adjunct Model

Language and content courses are held together in the adjunct instruction. They are called paired courses as well. The language course's goal was to complement the content course's teaching. In comparison to the sheltered teaching, in the content course, L2 students are not segregated from native speaker students and students from both groups that take part in the content course. The language level of content in this type of instruction is higher than the level of sheltered courses. The aim of the training is to enhance the student's language acquisition with a higher level of English content and academic instruction in the participation of the content course. In this type of instruction, the language level of content is higher than that of sheltered courses. The training aims to improve the language acquisition of the student with a higher level of English content and accompanying academic instruction in the language course (Brinton et al., 1989).

Theme Based Model

According to Satılmış et al. (2015), theme-based instruction is the most popular, and widely utilised CBI model in educational contexts in which it takes place due to its lack of complexity for implementation. The major principle of theme-based language instruction is that the content and language skills are shaped around particular themes and topics (Tsai &

Shang, 2010). The ultimate goal of the theme-based language course is to improve students' second language competence through specific topic areas. Interesting topics that are based on student needs and cognitive and academic interests, especially about social issues, are included in course content, and around these topics; various language tasks are implemented (Siqi, 2017). Thus, theme-based language instruction might be categorized into student-centered pedagogy by forming the course content according to students' needs and experiences which can satisfy both their language competence and tastes. In students-centered teaching, students are expected to actively participate in classroom activities to explore knowledge. In student-centered instruction, the role of language teachers has also shifted towards a facilitator or coordinator to integrate topics related to a specific content area (Kızıltan & Ersanh, 2007). Some brief information about the practices in Turkey will be offered in the following chapter.

CBI practices in Turkey

The research in Turkey mainly focused on CLIL (Content and language integrated learning) and EMI in tertiary settings. In Turkey, Arslan and Saka (2010) investigated the effect of CBI on a group of science students at a preparatory school. They found that students feel positive towards CBI since it increased their motivation as they improved their academic knowledge. They reported that CBI is appropriate for preparatory school students as it meets their language needs providing them with necessary academic language skills. However, neither this study nor the others addressed the challenges the students are facing in high schools.

Similarly, at the tertiary level, Er (2011) investigated the perceptions of instructors towards CBI in a state university in Turkey in which CBI is used by some instructors. The results showed controversy in the answers of instructors with reasons behind each. İlhan and Kayabaşı (2014) also researched in order to examine the effect of CBI on students' academic achievement in language skills and knowledge related to their subject area. According to the results, there was an increase in the students' academic achievement in language skills and content knowledge. Likewise, Satılmış et al., (2015) conducted a study to see whether CBI is an effective strategy to teach students the required language skills and content knowledge of the academic subject. According to the results, content knowledge and language skills can be effectively taught to students through CBI.
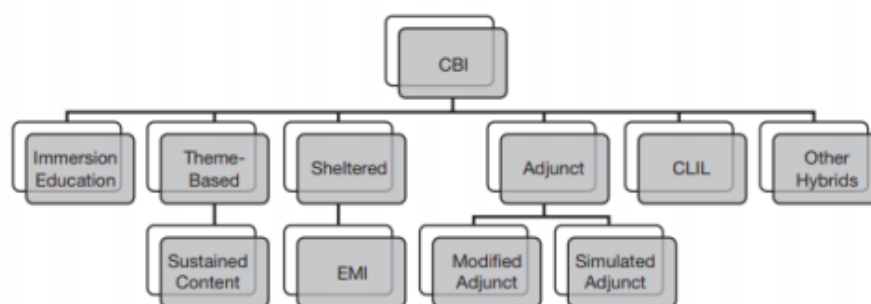

Figure 1. *Snow and Brinton's (2017) Updated Map of CBI Models*

CBI related issues

Like other teaching methods, CBI is not without issues. In countries such as Canada and the USA, the popularity of CBI has risen dramatically due to the growing population of non-English-speaking migrants into English speaking countries (Dalton & Puffer, 2007). However, the proficiency level of English is a concern both for learners and teachers. Fujii (2000) found in this study that students with higher proficiency levels reacted more positively towards the CBI since they had the necessary skills and learning strategies to handle the cognitive load of the CBI courses. Conversely, learners with a low level of English proficiency will experience difficulties. The language proficiency of lecturers was studied in the study of Dimova and Kling (2018) despite awareness of their lack of nuanced vocabulary, lecturers' content knowledge and teaching experience facilitate their language performance. Soruc and Griffiths (2017) researched EMI tertiary setting at a Turkish university and found out that students have difficulties related to speaking and listening, teacher and class, and how they deal with these issues were explained in their study. The current study will shed light on issues experienced in high schools in CBI classrooms.

Research Methodology

The current research is a mixed-method inquiry utilizing a mixed-method approach to gather both qualitative and quantitative data (Piano-Clark & Creswell, 2008). A Likert scale questionnaire was administered to participant high school students and five voluntary students were interviewed and voice -recorded upon informed-consent form.

Context

As the expectations were increasing from private schools gradually, some private schools now use a unique curriculum that prepares the students to study abroad where the medium of instruction is English. As a result of the current changes, the IBO (International Baccalaureate Organization and Cambridge IGCSE (International General Certificate of Secondary Education) program schools are becoming popular among parents. They are willing to pay higher school fees or donate generously to get their children into bilingual schools (Feng, 2005). In Turkey's Education Vision 2023 (2019) that different disciplines, such as mathematics, natural sciences, social sciences, and the visual arts, will be integrated with English language education so that students can use the foreign language in various fields. The CIE's IGCSE and IB's DP are the most popular curricular programs at junior and high school levels, respectively. As the oldest of the international programs, DP has established itself as the premium university preparatory curriculum for students in Grades 11 and 12 (Hayden, 2006). Schools need to give a critical decision on the program that would best prepare students for the rigour of the DP (Çorlu, 2014). In Turkey, more and more schools are trying the get authorization from IBO and similar education bodies to be a credible institution in their cities.

Participants

The management of two schools and their teachers accepted to take part in the study. Although more than twenty schools were contacted, only two schools agreed to participate voluntarily. They all wanted permission document from the governorship, but it took some time to apply to these documents and contact the state schools. Three students from the private school and two students from the state school were interviewed. In total 121 students completed the survey; six surveys were excluded from the study as they only choose one option, or many missing values are found in their data. The data of 115 surveys and six interviews (two from a state high school and four are from private high schools were reported in the findings part.

Data collection

The researcher visited the schools and explained the procedures and the instrument about CBI to English teachers. He did not visit the classes; the English teachers helped the students to complete the questionnaires. Each school was given two weeks to complete the questionnaires. The survey included 22 items with a 5 -point Likert scale. The survey has four subscales; their names are issues related to *homework, teacher, learning strategies, and programme*. The themes were gathered from the semi-structured interviews. Interviews were not recorded, but some notes were taken during the interview in the private school, but in the state school, the permission guaranteed that the researcher would not record voice or video. The statistical analysis revealed that the Cronbach Alpha reliability coefficient of the questionnaire was over .70 which pointed out to the high internal consistency of the items. The voluntary students respond to the surveys which were given pen and paper with demographic information and 22 items of five-point Likert scale which describe the high school students' challenges while studying the content lessons in English.

Data Analysis

Interrater reliability and consistency checks were done with an English teacher with M.A in ELT on the qualitative data. However, to summarise the quantitative data that is collected from the written instrument were analysed by SPSS 23 (Statistical Package for Social Sciences) and the data on the SPSS were compatible with the AMOS, so the researcher was able to check the factor analysis of the item and the patterns of a normal distribution is found in the current data.

Results

The researcher first deals with the demographic information of the data set. One of the significant findings was that in state school students (N=34) at this prestigious school studied in private schools either in primary or secondary schools. This may tell us private schools are chosen by parents because of the exam success they have.

When the factor *teacher* was analysed using a one-sample test, the results in the table below were found. The items were; a*)* When the teacher thought me, the application of knowledge in a practical way, I become happy. *b)* I love teachers who cooperate with us when they face language problems while teaching c*)* I observe that some teachers try to do

translation while they are training us. *d)* When my teacher is angry, I have difficulties in understanding him or her.

Table 1. *T-test results for attitudes towards the CBI teachers*

	M	SD	Std. Error Mean	T	Sig. (2-tailed)	Mean Difference
application	4,21	1,12	,10537	40,024	,000	4,21739
Language issues	3,46	1,17	,11000	31,540	,000	3,46957
Translation in mind	3,25	1,33011	,12403	26,220	,000	3,25217
Teachers' mood	2,09	1,35707	,12655	16,560	,000	2,09565

The findings suggest that when the teacher teaches the application of knowledge in Science and Maths lessons, students feel happy. ($M = 4.21$, $SD = 1.129$), $t(115) = 40.02$, $p = .001$.). The result indicates that students want to learn how knowledge is utilized in the real world. Another finding is that the students prefer the content-teachers who cooperate with them in their language problems. ($M = 3.46$, $SD = 1.179$), $t(115) = 31.54$, $p = .001$). When the researcher visited the schools, the administrators gave information about the difficulty of finding content teachers with language proficiency. Tedick, Christian and Fortune (2011) stress that teachers undergo "generic" teacher instruction, but not CBI content-specific information and skills. There should be more CPD opportunities for CBI teachers to collaborate and discuss the bilingual identity of their learners and ways of dealing with it.

The "three dimensions of language proficiency" were defined by Cummins (1996, p.64). Social language is the first dimension; discrete language abilities including sound-symbol relationships are the second dimension, and academic language is the third dimension. Clearly, in order to be prepared to work with ELLs, educators need an understanding of the scope and ability growth involved in SLA. The content teacher may have an academic language to study the content i.e. cognitive/academic language proficiency (CALP). However, it takes approximately one to two years for a student or teachers to develop BICS (Basic Interpersonal Communication Skills) (Cummins, 1996). We might infer that both content and English teachers should be the right level of BICS and CALP in order to address the needs of students. We can infer that being bilingual in other majors (Maths, Visual Arts, Information Technology in Global Society) will help teachers to be realized and employed in private schools and have the right to work in prestigious state schools. In the last part of the survey, students were asked to make comments about the teachers and the lessons, surprisingly in the private school 91.8 % of the students expressed Biology as the most difficult subject but in the state school, most students expressed that the most difficult lesson is TOK (Theory of knowledge) or English B.

"Studying Biology is nothing different from History, it is full of unfamiliar concepts, and understanding the text and producing something out of it is a challenge." (Private School Student 2 / Data recorded 10 December 2019

"The most difficult lesson is TOK and literature for sure. As I studied in a state school, we were never asked to state our opinions in any course. In reaction essays, we need to

synthesise the information with our views, it is complicated for us." (State school students 1 /data recorded on 20 December 2019

From what is expressed by the students in the interviews also in the survey, what makes a lesson achievable or not is the teacher. These students study the same curricula and same books in different schools but their perceptions towards some courses are totally different and this difference might stem from the course instructors and emotions he or she creates in the lesson. Ebata (2009) asserted the content has an effective impact on students' cognitive abilities when they are learning a language or studying the content and teachers also have such a critical role.

When the researcher examined the students' views with one way- ANOVA, it was found that out that assignments that prepare the students themselves for the exit tests are favoured by the students. (M=4.04). The question that has the lowest mean in this subscale was (I have difficulty in understanding what is expected from me in the assignments), the mean score for this question was 2.06 so we might infer that students often understand what is expected from them, but they sometimes have issues in catching up the deadline calendars.

Table 2. *The views regarding assignments using one way -ANOVA*

	N	Mean	Std. Deviation	Std. Error Mean
Abstract topics	115	3,017	1,221	,1138
Assignments	115	4,043	1,223	,1141
Expectations in homework	115	2,060	1,208	,1127
Submission issues	115	2,530	1,384	,1291

Students in the current study mentioned they enjoy writing abstract essays, at first it was a challenge,

"I enjoy studying courses in English, we write both write along in a shred of evidence and finding, we are expected to write about highly abstract topics." (Private School Student 2 / Data recorded 10 December 2019)

Table 3. Pearson correlation between in writing abstract topics and the assignments that prepare them for the DP exams

Correlations			
		Abstract topics	Assignments
Abstract topics	Pearson Correlation	1	,088
	Sig. (1-tailed)		,176
	N	115	115
Assignments	Pearson Correlation	,088	1
	Sig. (1-tailed)	,176	
	N	115	115

It was also found out that there is a Pearson positive and (.80-1.0 "very strong"),*088* correlation between the challenges of writing the assignments in abstract topics and challenges students face when they do an assignment that prepares them for the official DP test. Although some students mentioned they sometimes do not know what is expected, they are happy about the assignments.

Table 4. *One- way ANOVA results for the language strategies sub-scale to solve the challenges students face.*

ANOVA

		Sum of Squares	Df	Mean Squares	F	Sig.
explanations	Between Groups	1,400	3	,467	,208	,890
	Within Groups	248,548	111	2,239		
	Total	249,948	114			
Films I watch	Between Groups	2,835	3	,945	,822	,484
	Within Groups	127,548	111	1,149		
	Total	130,383	114			
Pre-readings	Between Groups	23,308	3	7,769	4,665	,004
	Within Groups	184,866	111	1,665		
	Total	208,174	114			
Selective courses	Between Groups	8,417	3	2,806	1,697	,172
	Within Groups	183,548	111	1,654		
	Total	191,965	114			
Synthesis difficulty	Between Groups	9,055	3	3,018	2,030	,114
	Within Groups	165,066	111	1,487		
	Total	174,122	114			
Strategies for writing	Between Groups	5,688	3	1,896	1,320	,272
	Within Groups	159,442	111	1,436		
	Total	165,130	114			
Home-school books	Between Groups	15,046	3	5,015	2,656	,052
	Within Groups	209,615	111	1,888		
	Total	224,661	114			
Adding my comment	Between Groups	10,460	3	3,487	2,980	,035
	Within Groups	129,888	111	1,170		
	Total	140,348	114			

In order to decrease the type 1 errors of conducting a t-test, one-way ANOVA was conducted, values between groups and within groups were tested. In the challenges and language strategies part, there were 8 items (2,4,6,10,12,14,16,19), the ANOVA results showed that only "Pre-readings I have done before courses help me to understand the content better "have a significance p = .004.

In the interview, state school 2 said that "I enjoy learning the terms in different courses in Turkish first then I learn them in English" (State school student 2 /data recorded on 20 December 2019)

By learning the concepts first in their L1, they can translanguage and have better retention of knowledge. Students in the CBI programme also can build on their knowledge (scaffold) and learn the things they already know with a bilingual perspective. In a similar vein, Xiaozhen (2010) found that learning CBI topics is an advantage for students who already studied these topics in their mother tongue. The participants of the DP programme were chosen from successful students (language and other courses) in both schools. Similarly, as mentioned previously Fujii (2000) found in this study that students with higher proficiency levels reacted more positively towards the CBI since they had the necessary skills and learning strategies to handle the cognitive and metacognitive load of the CBI course.

When students' general attitudes and challenges toward their CBI *programme* were examined, the questions 7,9,11,13,17,22 were analysed on the SPSS programme. The researcher found out that "studying abroad at the tertiary level is the reason for my participation in this bilingual programme. In the interviews, the prep and 9th graders were generally planning to study in Turkey but the ones in the 11th and 12th grades were planning to study in Canada, UK, Holland, Germany, and other countries.

Table 5. *The One-Sample t-test regarding the attitudes and challenges of the programme*

			Test Value = 0.005	95% Confidence Interval of the Difference	
	t	Sig. (2-tailed)	Mean Difference	Lower	Upper
studying abroad	25,90	,000	3,551	3,279	3,823
YGS disadvantage	25,72	,000	3,160	2,916	3,403
too much production	31,29	,000	3,351	3,139	3,563
some topics	22,25	,000	3,047	2,776	3,318
world citizen	25,27	,000	3,368	3,104	3,633

One state school student said that: "I think we have to work harder for the YGS (University Entrance Exam) as our curriculum and Turkish curriculum is slightly different" (State school student 2 /data recorded on 20 December 2019)

From the interviews' entry, we can assume that some students may plan the study in Turkey but most students (82%) want to study abroad. The teachers at the private school mentioned that when they graduate from the 12th grade, almost all of them study abroad, as the second-highest mean holder "being a world citizen" is a concern for the DP students that is why they love studying the content in English. Moreover, another advantage of CBI

is that students who have a negative attitude towards English courses receive opportunities to change their negative attitude towards English (British Council, 2013). Studying in CBI they might understand that English is not a subject at school, it is a lingua franca and a key to the bilingual identity.

As a response to the item 22 (My school forces me to produce too much is a short time) on this items t (115) = 31.29, the highest of all in the subscales which means it has more power to reject a false null hypothesis and find a significant result. The results will be elaborated and discussed in the next section.

Discussion

The students taking the lessons using CBI have higher scores in writing tasks than the other group of students in secondary school. They were more eager to learn when their tasks included communicative and authentic features (Elgün - Gündüz, Akcan & Bayyurt, 2012). We can conclude the CBI programme accelerates their writing skills and they will be expressing the scientific findings in a more fluent way than their peers.

Lasagabaster and Sierra (2009) stated that as a result of working hard to develop students' foreign language skills, education departments in Europe revealed that CBI is the best way to improve students' foreign language skills.

The results of the present study indicated that language and content integration provide a meaningful and purposeful learning context for students for high school students. When language is a medium for meaningful communication through genuine interactions, activities have a real purpose and require an authentic exchange of meaning. The subject matter learning enables learners to improve their reading and writing skills as they can develop schemata about a subject through the course and the learners can apply already existing schema into new learning situations.

Conclusion

The results of the present study have some implications for language teaching in particular to CBI classroom or any other situations where the content is thought in any foreign language. Teachers who are qualified in language and content integration could organize teacher cooperation more effectively and design successful CBI programs. Objectives can be decided, and the instruction can be planned accordingly. The results indicate that language and content- integration in EFL classes can result in better content learning which can lead to students' familiarization with different topics from different areas of interest. This is a natural way to improve the target language. Students are active during the lessons and CBI helps students to participate in class. Maybe as in the past, some teacher training programmes in Turkey should be delivered in English so schools can find qualified teachers for these courses.

Teacher preparation is also needed for successful CBI programs. Content-based language teacher training programs should be included in preservice education programs in EFL contexts including Turkey. For a better designed CBI EFL classes, more research should be conducted. The future researchers, rather than challenges, may investigate how bilingual identity develops in PYP (Primary Years Programme) and find out the earlier, the better approach works in the PYP program.

Disclosure Statement

No potential conflict of interest was reported by the authors.

References

Arslan, R., & Saka, C. K. (2010). Teaching English to science students via a theme-based model of content-based instruction. *Journal of Turkish Science Education*, *7*(4), 26-36.

Brinton, D. M., Snow, M. A., & Wesche, M. B. (1989). *Content-based second language instruction*. New York, NY: Newbury House

Çorlu, M. S. (2014). Which preparatory curriculum for the International Baccalaureate Diploma Program is best? The challenge for international schools with regard to mathematics and science. *International Review of Education, 60*(6), 793–801. https://doi.org/10.1007/s11159-014-9446-9

Dalton-Puffer, C. (2007). *Discourse in content and language integrated learning (CLIL) classrooms* (Vol. 20). John Benjamins Publishing. https://doi.org/10.1075/lllt.20

Dalton-Puffer, C. (2011). Content-and-language integrated learning: From practice to principles? *Annual Review of applied linguistics*, *31*, 182-204. https://doi.org/10.1017/S0267190511000092

Dimova, S., & Kling, J. (2018). Assessing English-medium instruction lecturer language proficiency across disciplines. *TESOL Quarterly*, *52*(3), 634-656. https://doi.org/10.1002/tesq.454

Ebata, M. (2009). Content-based instruction. In M. A. Vyas & Y. L. Patel (Eds.), *Teaching English as a Second Language: A New Pedagogy for a New Century* (pp. 129–135). PHI Learning Private.

Elgün- Gündüz, Z., Akcan, S. & Bayyurt, Y. (2012). Isolated form-focused instruction and integrated form-focused instruction in primary school English classrooms in Turkey. *Language, Culture, and Curriculum, 25*(2), 157-171. https://doi.org/10.1080/07908318.2012.683008

Feng, A. (2005). Bilingualism for the minor or the major? An evaluative analysis of parallel conceptions in China. *International Journal of Bilingual Education and Bilingualism*, *8*(6), 529-551. https://doi.org/10.1080/13670050508669067

Fujii, T. (2000). [Content-Based language education for undergraduate students, with particular reference to the Kansai Gaidai IES program]. Kansai Gaidai educational research and report, 1, 7-18. from the National Institute of Informatics Scholarly and Academic Information Navigator.

İlhan, E., & Kayabaşı, Y. (2014). Yükseköğretim düzeyindeki özel amaçlı İngilizce derslerinde içerik tabanlı yabancı dil öğretim yaklaşımının öğrencilerin akademik başarılarına etkisi. *Journal of Turkish Educational Sciences*, *12*(1), 16-22.

Kiziltan, N., & Ersanlı, C. Y. (2007). The contributions of theme-based CBI to Turkish young learners' language development in English. *Journal of Language & Linguistic Studies, 3*(1), 133-148.

Krahnke, K. (1987). Approaches to Syllabus Design for Foreign Language Teaching [M]. Prentice-Hall.

Larsen-Freeman, D. (2005). A critical analysis of post-method. *ILI Language Teaching Journal*, *1*(1), 21-25.

Lasagabaster, D., & Sierra, J. M. (2009). Immersion and CLIL in English: More differences than similarities. *ELT Journal*, *64*(4), 367-375. https://doi.org/10.1093/elt/ccp082

Moriyoshi, N. (2010). *Content-based instruction (CBI) in Japanese college classrooms: Focusing on language, content, or both?* [Doctoral dissertation, McGill University Library].

Murphey, T. (1997). A CBI curriculum innovation: Nanzan's revolving six-week workshops. *Language Teacher-KytoJALT, 21*, 25-30.

Piano-Clark, V., & Creswell, J. (2008). *The mixed-method reader*. Sage Publications.

Satılmış, Y., Yakup, D., Selim, G., & Aybarsha, I. (2015). Teaching concepts of natural sciences to foreigners through content-based instruction: The adjunct model. *English Language Teaching*, *8*(3), 97-103. https://doi.org/10.5539/elt.v8n3p97

Snow, M. A., & Brinton, D. (Eds.). (2017). *The content-based classroom: New perspectives on integrating language and content*. University of Michigan Press. https://doi.org/10.3998/mpub.8198148

Soruç, A., & Griffiths, C. (2017). English as a medium of instruction: Students' strategies. *ELT Journal*, *72*(1), 38-48. https://doi.org/10.1093/elt/ccx017

Tedick, D. J. (2018). Teacher development for content-based instruction. In *ELT in Asia in the Digital Era: Global Citizenship and Identity* (pp. 19-30). Routledge.

Tedick, D. J., Christian, D., & Fortune, T. W. (2011). The future of immersion education: An invitation to 'dwell in possibility'. In D. J. Tedick, D. Christian, & T. W. Fortune (Eds.), *Immersion education: Practices, policies, possibilities* (pp. 1–10). Multilingual Matters. https://doi.org/10.21832/9781847694041

Tsai, Y. L.& Shang, H. F. (2010). The impact of content-based language instruction on EFL students' reading performance. *Asian Social Science*, *6*(3), 77-85. https://doi.org/10.5539/ass.v6n3p77

Turkey Education Vision 2023. (2019). *T.C. Ministry of Education.* http://2023vizyonu.meb.gov.tr

Türkiye'de İngilizce Öğretimi Araştırması. (2013). *British Council.* https://www.britishcouncil.org.tr/programmes/education/research.

Widdowson, H. G. (1978). *Teaching language as communication.* Oxford University Press.

Xiaozhen, Z. (2010). Course designing strategies of bilingual curriculum based on CBI. *Journal of Guangdong University.*

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