

Fostering Critical Thinking in EFL Context

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• Background

Government junior high school teacher (2 years)

Government high school teacher (11 years)

- (Four years at a so-called "academically challenging school")
- (Three years at an island night school)
- (One year in Australia)
- (Three years preparing for an International Baccalaureate programme)
- *obtained an International Baccalaureate Teaching Certificate.*

Waseda University Honjo Senior High School (7 years)

Sagami Women's University (2 years)

Recent Research and Studies

- Observation and interviews in IB-authorized schools in Indonesia and Japan
- Research on IB education by Japan MEXT IB Education Research Team (Co-Investigator)
- Exploration of Inference Generated by Multiple Text Reading with Preceding Question Generation - For Developing Thinking Citizens (Co-Investigator) (24K21189 – KAKEN Grant-in-Aid for Challenging Research (Pioneering))
- As a parent of an IB student:
 - PYP 1 / MYP 1 / MYP 3 (IB-authorized school in Jakarta)

Contents

- ☑ Examine the significance of learning **critical thinking** in English language education.
- ☑ Overview of IB education lesson structures centered around "inquiry."
- ☑ Summarising the role of critical thinking in IB education.
- ☑ Report the findings on whether critical thinking is fostered in EFL (English as a Foreign Language).

Definition of Critical Thinking

In modern science, reflective thinking, as proposed by John Dewey, is seen as the starting point of critical thinking.

“Reasonable, reflective thinking that is focused on deciding what to believe or do” (Ennis, 1985, p.10).

Recent findings in critical thinking research suggest that there are various perspectives on the concept and definition of critical thinking itself. (e.g. Michita, 2003) 。

✂ Critical thinking consists of various aspects, and it is not easy to define it as a concept composed of a single ability.

In EFL contexts

In situations where English is used, it refers to introspective, rational, and logical thinking that examines the reasoning process (Akatsuka, 2025).

The significance of learning **critical thinking** in English language education.

- Developing **critical thinking** in language learning enriches learners' lives by enhancing **academic and civic literacy** (Kusumi, 2010b), contributing to higher-quality civic engagement.
- Ritchhart (2015) argues that schools must cultivate a **culture of thinking**, recognising language as a tool for deepening thought.
- Freire (1970) emphasises that literacy expands learners' worldviews, suggesting that **learning language enables the objectification of the world** .
- Hosokawa et al. (2016) argue that, since humans engage in social life through language, it is essential to provide education that deepens thinking **beyond the boundaries of first and second languages**.

- Critical thinking enhances **second-language proficiency** (Liu & Stapleton, 2018), benefiting **reading** (Haji, 2014) and **argumentative writing** (Golpour, 2014).
- In **EAP courses**, integrating critical thinking into curriculum design strengthens **students' ability to articulate opinions in English** (Li, 2019; Wilson, 2016).

Photo by Yuya Akatsuka. Visited Exeter University on 22 August 2023 to meet with Professor Li.



Golpour, F. (2014). Critical thinking and EFL learners' performance on different writing modes. *Journal of Pan-Pacific Association of Applied Linguistics*, 18(1), 103–119

Haji, M. A. (2014). The effect of critical thinking skills on reading English novels. *IJRELT*, 2(2), 97–108.

Li, L. (2019). *Pathways for the development of students' critical thinking in EAP programmes*. Part of the Cambridge papers in ELT series. Cambridge: Cambridge University Press.

Liu, F., & Stapleton, P. (2018). Connecting writing assessment with critical thinking: An exploratory study of alternative rhetorical functions and objects of enquiry in writing prompts. *Assessing Writing*, 38, 10–20.

Wilson, K. (2016). Critical reading, critical thinking: Delicate scaffolding in English for Academic Purposes(EAP). *Thinking Skills and Creativity*, 22, 256–265.

The IB Programme aims to foster the multifaceted qualities and abilities of learners and is regarded as an educational programme that particularly seeks to develop critical thinking (Aktas & Guven, 2015; International Baccalaureate Organization, 2017).

Consequently, the IB Programme can serve as an ideal model for charting a path towards creating new educational methods for teaching critical thinking in Japanese EFL Context.

IB education lesson structures centered around "inquiry."

"What are IB lessons like?"

Lesson Structures in IB Education Centered Around "Inquiry"

Scenery of an IB-Authorised School

Concept-Based Learning Model (Erickson, 2008)

- A teaching method where teachers pose three types of questions to students:

"Factual Questions" – Questions that confirm general facts.

"Conceptual Questions" – Questions that deepen students' understanding of concepts and phenomena.

"Debatable Questions" – Questions that invite differing opinions among individuals.

Erickson (2008) suggests that for each unit, teachers should pose **3–5 factual questions, 1–2 conceptual questions, and 1–2 debatable questions.**

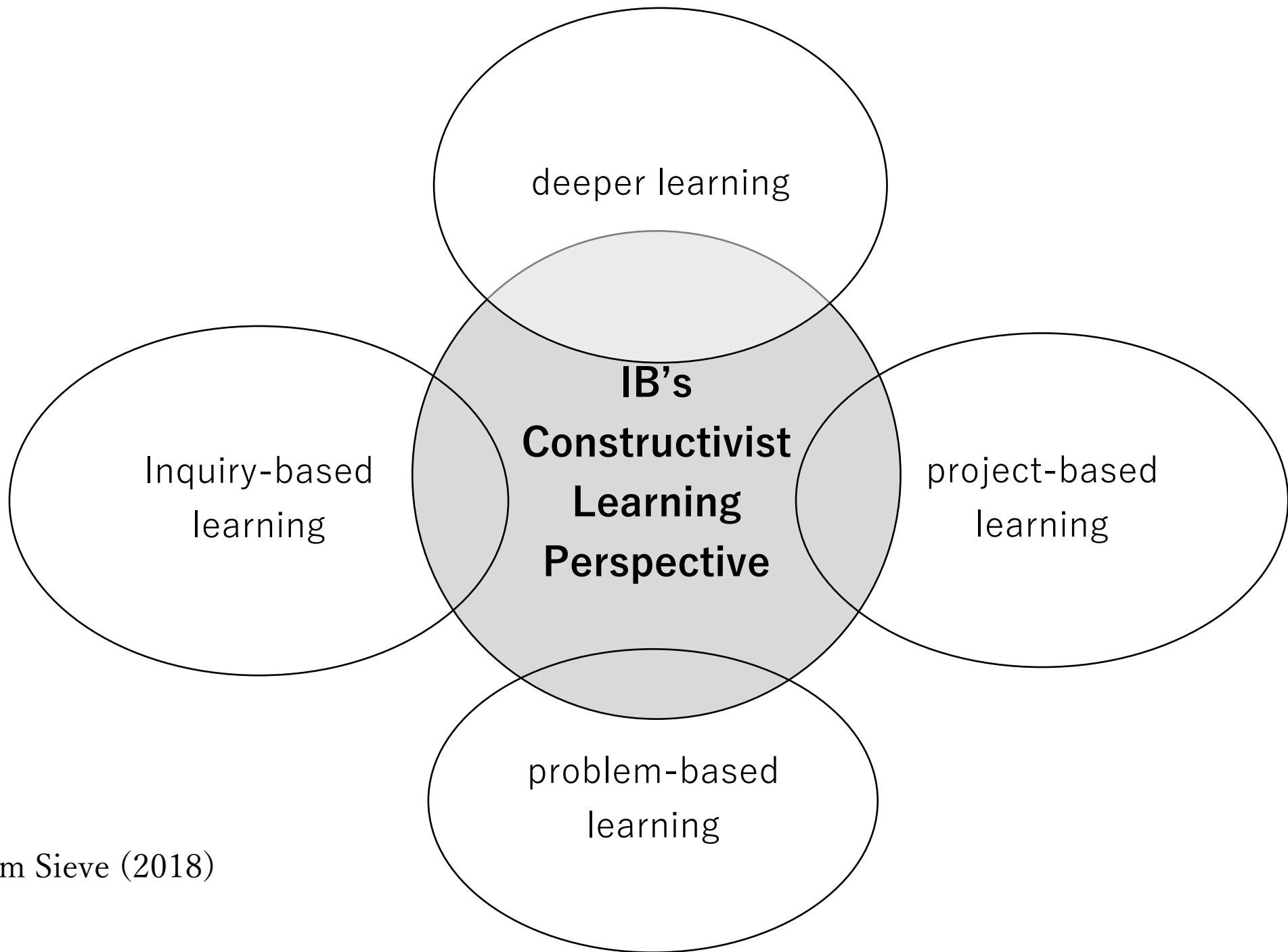
Positivism

"Learners are portrayed as passive beings and as recipients into whom knowledge is efficiently poured" (Kubota, 2003, p. 14).

- The ultimate goal is to efficiently convey accurate and precise information from teachers to learners.
- Learning outcomes are measured through paper-based tests that assess whether responses are correct or incorrect, capturing how accurately learners can process what they know.

Constructivism (IB Education)

- A concept that views learners *"not as passive beings, but as active participants who engage with the world in order to discover meaning"* (Kubota, 2003, p. 13).
- Classroom learning emphasises connections with real life and society, deepening inquiry through collaborative learning with classmates.
- Performance-based assessments, such as essays, creative works, and presentations, are often used, with achievement levels typically evaluated using rubrics.



☒ 1. Retrieved from Sieve (2018)

2. The Role of Critical Thinking in the IB – Focusing on Its Relationship with Inquiry–

How does IB education define "critical thinking"?

How does IB education aim to develop "critical thinking"?

What is the concept and definition of critical thinking in the IB programme?

- An exploration of the educational philosophy of A.D.C. Peterson, one of the founders of the International Baccalaureate (IB) organisation and a key figure in its establishment, provides insight into this question.
- Peterson significantly influenced the curriculum and teaching methods of the IB programme. By examining his educational philosophy, we can understand the rationale behind the emphasis on critical thinking, as well as the specific ways in which critical thinking is conceptualised within the IB framework.

Peterson's Educational Philosophy

- Peterson's philosophy of education prioritised **the act of thinking itself rather than knowledge that is merely memorised or recalled.**
→ This forms the foundation of critical thinking in the IB programme.
- **"The development of intellectual powers and capacities that can make all of us more sensitive and humane persons, and some of us scholars and intellectual innovators."** (Peterson, 1972, p.36)
- **"The International Baccalaureate (IB) aims to develop inquiring, knowledgeable, and caring young people who help to create a better and more peaceful world through intercultural understanding and respect."** (International Baccalaureate Organization, 2014, p.3)

- Peterson's **vision of fostering "sensitive and humane persons"** can be considered the foundation of critical thinking in the IB programme.
→ Findings in critical thinking research suggest that **compassion towards others is an essential component of critical thinking** (Michita, 2002).

- "What matters is not simply absorbing, verifying, or interpreting established facts, but rather developing the power of the mind and methods of thinking that can be applied when faced with new situations and new facts." (Peterson, 1972, p.40)

→ **Inquiry and knowledge** are also highlighted as crucial elements. Research indicates that **inquiry and knowledge are key aspects of critical thinking** (Hirayama & Kusumi, 2004).

- So, can applying the IB's critical thinking model deepen the critical thinking of English learners whose first language is Japanese?

Experiment 1 (AY 2018-2019)

Targeted Participants : CEFR A2, B1, B2

n=19 (high school), n = 31 (uni)

- Classes designed to elicit responses to high-order level thinking questions were found to significantly influence the critical thinking attitudes of intermediate-level English learners.
- However, for those at the lower intermediate CEFR A2 level, there was evidence of resistance to answering such questions. The primary factors were difficulties in expression due to limited vocabulary and expressions, and the degree of resistance was proportional to the opportunities for dialogue with other learners.
- Meanwhile, the findings suggest that, regardless of English proficiency, engaging with high-level thinking questions has the potential to enhance critical thinking attitudes among English learners.

Experiment 2 (AY 2021)

Targeted Participants : CEFR A2, B1, B2

n=33 (high school), n = 18 (uni)

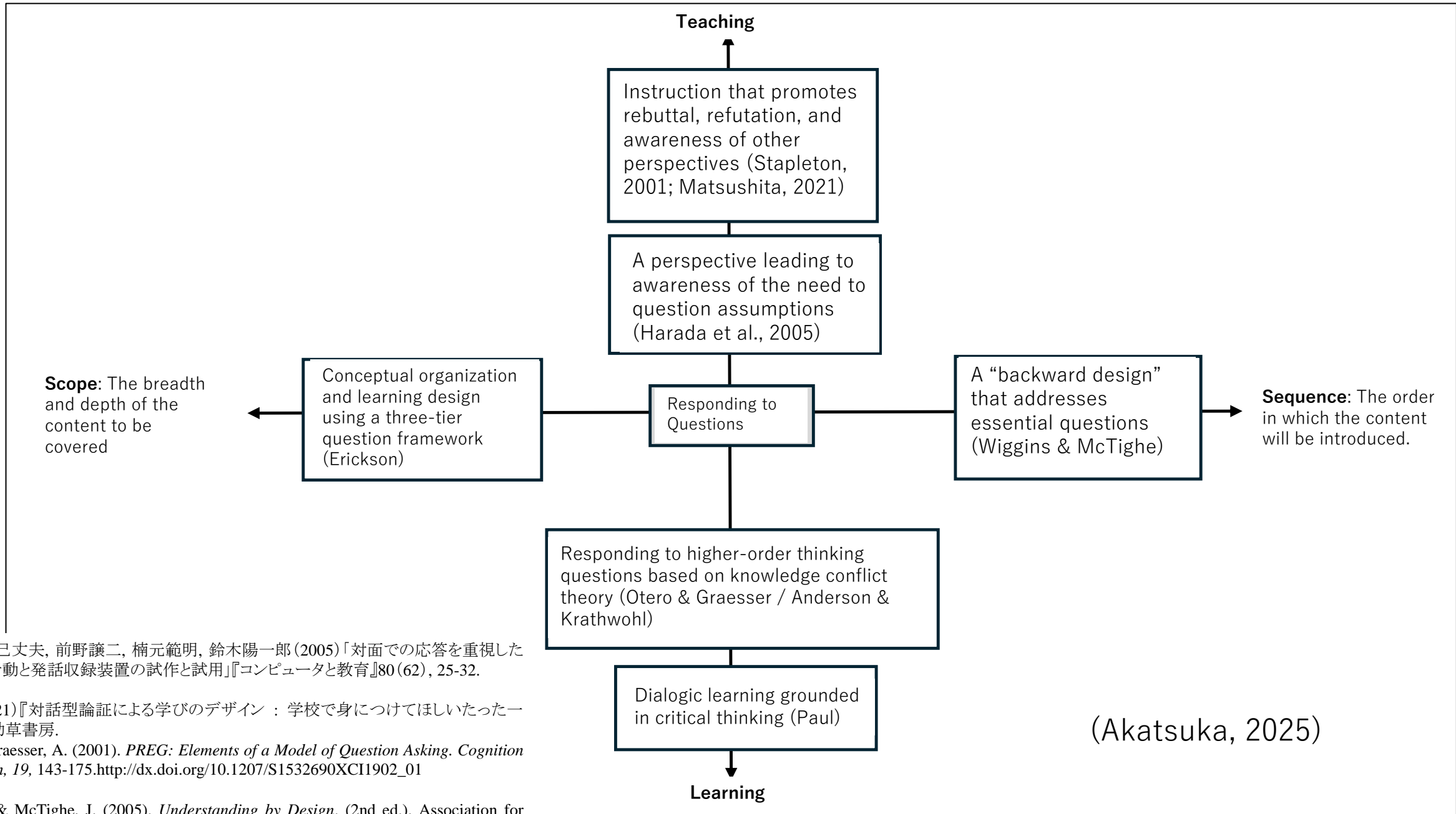
- It was indicated that learners might be taking the content of English texts at face value, rather than examining it critically—an approach that undermines a fundamental aspect of a critical thinking attitude.
- The results showed that simply adopting the core learning theories underlying the IB Programme's approach to critical thinking instruction was insufficient to significantly deepen the critical thinking attitudes of intermediate-level English learners whose native language is Japanese.
- Moreover, even when the English materials were adapted to match the learners' proficiency, addressing higher-order thinking questions did not reduce their hesitation to speak.
- The instructional model that should theoretically work effectively does not function adequately for domestic intermediate-level English learners whose first language is Japanese.

Experiment 3 (AY 2021)

Targeted Participants : CEFR A2, B1, B2

n=80 (A high school: n=18, B high school: n = 33, C high school: n = 31)

- Building on the insight gained from previous practice—namely, that responding to higher-order thinking questions can deepen the critical thinking attitudes of intermediate-level English learners— I restructured my instructional model.
- I also explored the following specific measures to ensure that learners with lower English proficiency do not feel resistance to providing responses.
- First, drawing on Harada et al. (2005), we integrated practice where students respond to questions in groups of three, thereby incorporating learning activities aimed at reducing reluctance to answer. Second, based on Stapleton (2001) and Matsushita (2021), we introduced tasks that foster awareness of other perspectives, along with exercises in rebuttal and refutation. Third, we designed questions in line with Otero and Graesser's (2001) knowledge conflict theory.



原田康也, 辰己丈夫, 前野譲二, 楠元範明, 鈴木陽一郎 (2005) 「対面での応答を重視した英語学習活動と発話収録装置の試作と試用」『コンピュータと教育』80 (62), 25-32.

松下佳代 (2021) 『対話型論証による学びのデザイン : 学校で身につけてほしいたった一つのこと』勁草書房.

Otero, J., & Graesser, A. (2001). *PREG: Elements of a Model of Question Asking*. *Cognition and Instruction*, 19, 143-175. http://dx.doi.org/10.1207/S1532690XCI1902_01

Wiggins, G., & McTighe, J. (2005). *Understanding by Design*. (2nd ed.). Association for Supervision and Curriculum Development.

- It was found that two approaches are particularly effective for cultivating critical thinking: the backward-design curriculum that focuses on essential questions (Wiggins & McTighe) and a unit design featuring three types of questions to promote conceptual understanding (Erickson).
- The study identified two key teaching strategies as indispensable: instruction aimed at reducing resistance to responding (Harada et al., 2005), and instruction that promotes rebuttal, refutation, and awareness of other perspectives (Stapleton, 2001; Matsushita, 2021). In addition, the findings showed that, as forms of learning activities, both responding to higher-order thinking questions based on knowledge conflict theory (Otero & Graesser; Anderson & Krathwohl) and dialogic learning rooted in pluralistic logic (Paul) significantly contribute to developing critical thinking.

References (The lists that couldn't be included in the slide.)

- 楠見孝(2010b)「批判的思考と高次リテラシー」, 楠見孝[編]『思考と言語(現代認知心理学3)』, 134-160, 北大路書房.
- 久保田賢一(2003)「構成主義が投げかける新しい教育」『コンピュータ&エデュケーション』15, 12-18.
- 細川英雄・尾辻恵美・マルチェッラマリオッティ(2016)『市民性形成とことばの教育ー母語・第二言語・外国語を超えて』くろしお出版
- 道田泰司(2003)「批判的思考概念の多様性と根底イメージ」『心理学評論』46(4), 617-639
- 渡邊雅子(2014)「国際バカロレアにみるグローバル時代の教育内容と社会化」『教育学研究』81(2): 176-186.
- Ennis, R.H.(1985).A logical basis for measuring critical thinking skills. *Educational leadership*, 43,44-48.
- Erickson. H.L. , Lanning, L.A., French, R.. (2017). *Concept-based curriculum and instruction for the thinking classroom*. 2nd ed. (エリクソン, H.L. 遠藤みゆき(訳)(2020). 思考する教室をつくる概念型カリキュラムの理論と実践: 北大路書房)
- Freire, P. (1970) *Pedagogy of the Oppressed*. (三砂ちずる(訳)(2011). 新訳被抑圧者の教育学 新訳: 亜紀書房)
- International Baccalaureate Organization (2015) . 『 学 習 の 方 法 』 (参 照)
https://ibpublishing.ibo.org/dpatln/apps/dpatl/guide.html?doc=d_0_dpatl_gui_1502_1_j&part=2&chapter=2 (2023年12月10日閲覧)
- McTighe, J., & Wiggins, G. P. (2013). *Essential questions: opening doors to student understanding*. Alexandria, Virginia, USA: ASCD.
- Peterson, A. (1972). *International Baccalaureate*. George G. Harrap & Co. Ltd: London
- Ritchhart, R. (2015). *Creating cultures of thinking. The 8 forces we must master to truly transform our schools*. San Fransisco, CA: Jossey-Bass.
- Sieve, C, M. (2018). Teachers' experiences in using constructivist pedagogies in the International Baccalaureate Diploma Programme[Doctoral dissertation,. College of Professional StudiesNortheastern University] Northeastern University Repository.
https://repository.library.northeastern.edu/files/neu:m044c765r/fulltext.pdf?fbclid=IwAR3InWueFRvInGVaGV-FpgRsTzjHAK2NP5Hg-ySX5Wfn2eAS_Cri8eQadzg

Q & A

Related books can be found here

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