



ELSEVIER

Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

# Learning, Culture and Social Interaction

journal homepage: [www.elsevier.com/locate/lcsi](http://www.elsevier.com/locate/lcsi)

## Exploring dialogic education used to teach historical thinking within the cultural context of East Asia: A multiple-case study in Taiwanese classrooms

Chih-Ching Chang<sup>a,\*</sup>, Rupert Wegerif<sup>b</sup>, Sara Hennessy<sup>b</sup><sup>a</sup> *Institute of Education and Center for Teacher Education, National Sun Yat-Sen University, Kaohsiung 804, Taiwan*<sup>b</sup> *Faculty of Education, University of Cambridge, Cambridge CB2 8PQ, UK*

### ARTICLE INFO

#### Keywords:

Dialogic education  
 Historical thinking and reasoning  
 Taiwan  
 Taoism  
 Yin and Yang

### ABSTRACT

Empirical evidence suggests that dialogic education is an effective way to develop students' higher order thinking and reasoning skills. In history education, curriculum goals share these aims, especially in Taiwan's latest national curriculum reform. It is then important to explore whether and how dialogue is being used to this end in history classes and the form that dialogic education takes in this East Asian cultural context. This study explored the features of Taiwanese teachers' talk and how it was used to teach historical thinking. Video recordings were made of a total of 6 lessons by three high school teachers. Descriptive statistics of word frequency of teachers' discourse using Nvivo (v.12) in complement with fine-grained qualitative analysis of whole class dialogue from a sociocultural perspective shed light on the various discursive strategies that the teachers used to facilitate students' historical reasoning. Findings suggest that some prominent features in Taiwanese teachers' talk include the hybrid use of monologue and dialogue and the hybrid of short-term and long-term dialogue for teaching historical thinking and reasoning. This study contributes significantly to the theoretical discussion of dialogic education for history classes in the East Asian cultural context. Moreover, it has practical implications for how teachers could use this hybrid form of talk to introduce the elements of historical thinking to students. Limitations of the study are also discussed at the end of the article.

### 1. Introduction

Empirical evidence emerging in recent decades has acknowledged that good-quality classroom dialogue can positively impact student learning and thinking (e.g., Alexander, 2020; Boyd & Markarian, 2011; Hennessy, Warwick, & Mercer, 2011; Howe & Abedin, 2013; Littleton & Mercer, 2013; Wegerif, 2011). Two recent large-scale studies have identified that some aspects of the dialogue are related to learning gains (Alexander, 2018; Howe, Hennessy, Mercer, Vrikki, & Wheatley, 2019). Through dialogic teaching (Alexander, 2020), teachers can probe and promote students' higher-thinking skills (Wegerif, 2018), which resonates with the idea of historical thinking and reasoning (HTR). Historical thinking and reasoning is defined as thinking skills that apply not only general thinking skills but also various domain-specific knowledge, such as using historical heuristics related to the meta-concepts of history (Lee, 2005; Seixas, 1996, 2017; van Drie & van Boxtel, 2008, 2018; Wineburg, 2010). To connect these two ideas, van Boxtel and van

\* Corresponding author.

E-mail address: [ccchang@mail.nsysu.edu.tw](mailto:ccchang@mail.nsysu.edu.tw) (C.-C. Chang).

<https://doi.org/10.1016/j.lcsi.2023.100729>

Received 13 February 2022; Received in revised form 12 January 2023; Accepted 25 May 2023

2210-6561/© 2023 The Author(s). Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Drie (2017) argue that, based on Wegerif's (2013) notion of dialogic space, teachers could open up and broaden the use of dialogue to stimulate students' HTR. In this sense, they advocate a future involving dialogic history education. Nonetheless, the paucity of empirical study in this area (i.e., dialogue in history education) remains significant and requires further investigation, especially in the East Asian context.

In Taiwan, where the culture has been heavily influenced by Confucianism and Taoism (Clart & Jones, 2013; Hui, 2018; Nisbett, 2004), it is commonly acknowledged that the ground rules of a regular Taiwanese classroom do not encourage active verbal engagement from students (Song, 2008). From the epistemological point of view, Confucius put forward the idea that humans interact with the world with confusion and acquire knowledge from other beings in their surroundings. Therefore, the search for one's identity occurs on an ontological level, on which confusion and exploration transform into a linguistic form of questioning and inquiring (Chen, 2002; Guan, 2012). It is then crucial to revisit the concepts of dialogic education within such a cultural context. This study proposed a reconceptualised theoretical framework of hybrid dialogue for dialogic history education within East Asian cultural context and illustrated it with empirical data from Taiwanese high school classrooms drawn from a year-long study. By analysing the features of teachers' talk in history classes in Taiwan, the study is theoretically significant in exploring the form that dialogic education takes for history classrooms in the East Asian cultural context. Moreover, it has practical implications for how teachers could use this hybrid form of talk to introduce the elements of historical thinking to students.

## 2. Theoretical background

### 2.1. Two approaches of dialogic education: epistemological and ontological dimension

One approach to understanding dialogic education is through an epistemological perspective in which dialogue could be employed as an educational instrument to achieve learning goals and as a way of meaning-making (Wegerif, 2020). This perspective has its root in Vygotsky's (1978) theories on the importance of social interactions, particularly language, for constructing knowledge. Building on this concept, Alexander (2020) argues that in dialogic teaching, dialogue is considered a form of 'shared inquiry' and helps students and teachers collaboratively construct knowledge as opposed to traditional teacher-led monologic lectures in which educational goals are usually viewed as merely knowledge transmission from teachers to pupils. Mercer (2004) also refers to language as a tool for thinking and puts forward an educationally effective form of talk, called *Exploratory Talk*, with which children could improve their reasoning and problem-solving. Aligned with the concept of Exploratory Talk, Murphy and colleagues (Murphy et al., 2018) proposed a dialogic pedagogical approach, *Quality Talk*, to 'increase students' high-level comprehension by encouraging students to think and talk about, around, and with the text (ibid, p. 1120).

The differences between monologic teaching and dialogic teaching are often emphasised in terms of the forms of the talk. The monologic style (Lyle, 2008) that teachers tend to apply in class consists of what Sinclair and Coulthard (1975) call the 'IRF' or 'IRE' structure (Initiation/ Response/ Feedback or Evaluation). A teacher initiates a question which stimulates a response from students and is then followed by the teacher's feedback or evaluation of students' answers. However, in dialogic teaching, a spiral IRF exchange in which the role of Feedback opens up the following exchange is adopted to further engage pupils in the co-construction of knowledge with the mediation of educational dialogues (Rojas-Drummond, Torreblanca, Pedraza, Vélez, & Guzmán, 2013).

Such an approach, however, has been criticised for its instrumental utility of dialogue. For instance, Boyd and Markarian (2015) challenge the necessity of the structural pattern to be equated with dialogic teaching and argue that dialogic teaching is a teaching stance that focuses on promoting dialogue and discussion within the classroom. It involves analysing how language and communication are used in the classroom and how they contribute to the learning process. Dialogic teaching aims to create a classroom environment that supports cognitive activity, inquiry, and positive relationships between students and teachers. It is concerned with the dialogic stance of the teacher and how it supports joint work and multiple perspectives.

Matusov (2009) also calls for genuine dialogic education and suggests an ontological perspective of dialogic teaching rather than an instrumental one. In educational settings, an ontological dimension of dialogic suggests that dialogue is not just a means or a tool to construct knowledge but participating in a true dialogue means engaging in a perspective-shifting and self-transforming process. Highlighting the typically unequal power in the conventional classroom, Matusov (2009) argues that both teachers' and students' consciousness should be taken into account equally as they seek information from and with each other. Any sort of educational end goals (e.g. curriculum goals) should not be held by teachers as they inhibit a genuine dialogic education. Knowledge under the ontological dimension of genuinely dialogic is considered unstable – in a constant state of transformation with the use of open-ended questions. The epistemological gap between teachers and pupils could never be reducible since it is the gap that defines the dialogue (Matusov, 2009).

### 2.2. Exploring dialogic education within the East Asian context: the hybrid dialogue bridging Western dialogic perspectives and Taoism

However, on the one hand, it could be argued that viewing dialogic education from an ontological perspective might seem too radical to be practical in real educational settings. In Taiwan, the primary goal of teaching practice is often seen as an approach to teach knowledge to students and help them prepare for exams. Therefore, promoting an ontological perspective of dialogic teaching in Taiwanese classrooms might seem quite impractical. On the other hand, by adopting an epistemological dimension of dialogic education, the overuse of interactive patterns of talk might impose inefficiency to achieving overwhelming teaching goals that are preset in the curriculum in the Taiwanese context. Moreover, the implicit ground rules in the Taiwanese classroom encourage pupils to engage in inner dialogue within themselves. The cultural differences between East-Asian and Western countries might lead to unsuccessful

dialogue in the classroom.

This paper thus aims to present an alternative and synthesised perspective on dialogic education: hybrid dialogue, a middle-ground not only to seek a balance between two extreme perspectives but also to transcend one's thinking from a dichotomous belief toward a more holistic perspective (Chang et al., 2001). This balance emerges from synthesising two contradictory concepts (e.g. monologue and dialogue), but the process is a never-ending transformation. By adopting this concept, one has to overcome a monological self to take on others' voices in which empathy would then be required, which is the idea of Yin and Yang (「陰陽」) from Taoism (「道家」). Taoism is a religion and philosophy from China that emphasises living in harmony with the universe. It is connected to the philosopher Lao Tzu (「老子」) and his book, the Tao Te Ching (「道德經」). The Tao is a difficult concept to define but is generally understood as the way of the universe. Taoism promotes living in harmony with the universe and its energy, known as ch'i or qi (「氣」). This energy is believed to be present in and guide all things in the universe (Kirkland, 2004).

The concept of Yin and Yang is an essential aspect of Taoism. This belief centres on the idea that opposite forces are interconnected and interdependent and that they must be in balance in order for the universe to function harmoniously. Yin and Yang represent the two opposite names, yet these stem from the same source, such as non-existence and existence, black and white, low and high, voiceless and voiced, and here, the monologue and dialogue (Poon & Poon, 2020). There are four main principles in the notion of Yin and Yang Theory: *opposition, interdependence, mutual complementarity, and mutual transformation* (Wei, 1996, p. 152). In *Tao Te Ching*, a fundamental text for Lao Zi pointed out that each member of a pair of two opposite elements gets its meaning from the other and can achieve completion only through the other, which represents the quality of interdependence of the oppositions. Moreover, the state of such contrast in the opposite elements does not remain static but is constantly 'waxing and waning' (Wei, 1996, p. 152). Yin and Yang, symbolising monologue and dialogue, depicts how these two concepts co-emerged, accompanied, contradicted but harmonised each other (also see Hui, 2018, on the discussion of relational thinking based on Yin-Yang; Poon & Poon, 2020) as shown in Fig. 1, which depicts the theoretical framework of this research. The white area represents Yang, the dialogue, and the black one, Yin, illustrates the concept of monologue. However, inside the dialogue, the embedment of the existence of monologue is vital to form a genuine dialogue (Bakhtin, 1981; Zhou, 2019) and vice versa. The intertwined space of monologue and dialogue creates a dialogic space, where *hybrid dialogue* is then born.

Dialogic space, as shown in the diagram, is another crucial aspect of hybrid dialogue, which is directly informed and borrowed from Wegerif's (2020) notion of dialogic space. The opening up of the space allows participants not only to construct knowledge together but also to transform themselves into more dialogic individuals. In this space, dialogue becomes not merely an interactive form of talk but instead becomes a long-term dialogue where the presence of cultural and virtual voices is embedded and shared within humans (Bakhtin, 1981); Oakeshott (1962) referred to this as 'Conversation of Mankind'. Such dialogue could appear as an external, fixed and

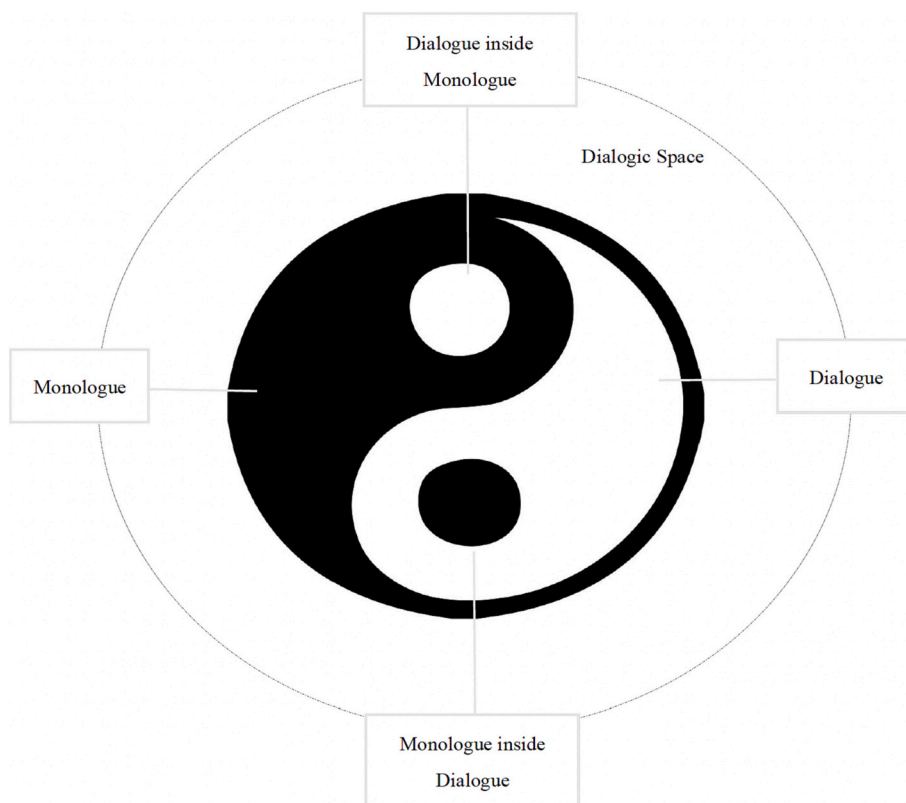


Fig. 1. The conceptual framework of hybrid dialogue.

static authoritative voice but could, in fact, allow learners to enter with living voices to understand new things (Miyazaki, 2019; Wegerif, 2013). According to this account, dialogic education enables individuals to learn how to engage in and internalise the dialogues of their cultures. By engaging students with their cultural inheritance, which can then be fully inhabited and developed from within the cultural dialogue, dialogic education helps people to move forward into a better future.

Viewing dialogues in such a hybrid perspective could provide a more flexible, holistic, and dynamic approach (Hui, 2018) to analysing classroom dialogues at two different levels, which would also be more grounded in the Taiwanese cultural context. The first level concerns how a more interactive and short-term form of dialogue (Mercer, 2008) could be employed in hybrid dialogue to facilitate pupils' higher-order thinking (i.e. historical thinking and reasoning, see Lee, 2005; Seixas, 1996, 2017; van Drie & van Boxtel, 2008, 2018; Wineburg, 2010). The concept of 'short-term dialogue' is based on Alexander's (2018) and Mercer's (2010) notion of dialogic teaching, which highlights the temporal and structural aspects. It focuses on using various discursive techniques, such as eliciting students' knowledge, inviting students to contribute to a topic, or challenging students' perspectives, to engage students in higher-order thinking (Mercer, 2008). At the second level, the examination centres on how the long-term shared dialogue, a synthesised perspective from Wegerif (2020) and Confucian-tradition (Guan, 2012; Li & Wegerif, 2014) about historical knowledge is delivered and scaffolded by teachers with the use of hybrid dialogue and inducted by the short-term temporal dialogue of the first level. The idea of long-term dialogue could be referred to as an introduction to the long-term cultural voice of humankind (Guan, 2012; Oakeshott, 1962; Wegerif, 2020). This voice includes external, static knowledge of a well-established discipline and cultural traditions. This form of dialogue then could be represented in a more monologic style than short-term dialogue since the main purpose of long-term dialogue is to induce individuals to understand the knowledge established by humankind to further engage them in a cultural dialogue with their own cultural heritage (Wegerif, 2018).

### 2.3. Explore learners' historical thinking and reasoning components of historical thinking and reasoning

The competence of historical thinking and reasoning (Lee, 2005; Seixas, 2017; van Drie & Van Boxtel, 2018; Wineburg, 2010) is seen as a core competence in the national curriculum for history education in Taiwan (NAER, 2018). Historical thinking means applying general thinking skills and various domain-specific knowledge, such as using historical heuristics related to the meta-concepts of history. Lee (2005) proposes the idea of a 'counterintuitive' approach to historical thinking, expressing how historians do research in history. In correspondence with this notion, Wineburg (2010) argues that, unlike other thinking skills, historical thinking is not a 'natural process' or an automatic 'psychological development'; instead, it is an 'unnatural' achievement in which students learn how to attain a balance between the 'familiarity and strangeness' of history and that historical thinking takes on greater importance in the aims of history education.

Various models of historical thinking and reasoning have been put forward in the last decades to conceptualise its components and concepts, such as Lee's (2005) six concepts of historical thinking (*evidence, time, change, accounts, empathy, and cause*), Seixas's (2017) 'Big Six' in historical thinking (*primary sources evidence, continuity and change, historical significance, historical perspective-taking, cause and consequence, the ethical dimension*) and van Drie and van Boxtel's (2008, 2018) model of historical reasoning. In this study, the latter model, in particular, was employed to inform the classroom dialogue analysis. This model comprises six components:

(a) asking historical questions: the ability to ask, recognise, and answer historical questions is one of the competencies underlying historical thinking and could serve as an engine for historical reasoning.

(b) using sources: the ability to select, interpret, and corroborate information from sources to answer given questions or provide evidence to support the arguments as well as to consider the evaluation of sources.

(c) contextualisation: the ability to describe, compare, or evaluate a historical phenomenon and situate it in a temporal, spatial and social context.

(d) argumentation: the ability to use language to argue a claim by giving supporting evidence and considering counter-arguments.

(e) using substantive concepts: the ability to name historical phenomena, persons, and periods when organizing information about the past in order to describe, compare, and/or explain historical phenomena.

(f) using meta-concepts: the ability to use heuristics in history such as describing historical change, providing historical interpretation or comparing different historical accounts.

### 2.4. Understanding history education in Taiwan as research context

In the current heated debate in history education within the current curriculum reform in Taiwan, the conundrum between teaching historical knowledge (substantial concepts) and teaching HTR (second-order concepts) has been even more apparent (NAER, 2018). Some have argued that students find it difficult and arduous to be required not only to understand history as a non-fixed story but also to shift to multiple perspectives and interpretations according to their approaches to analysing the primary sources (Duquette, 2015). Other history educators believe that the concepts of historical thinking are too sophisticated and unnecessary for students to grasp since not all wish to become academic historians (Lévesque, 2008). Responding to these critics, Lee (2014) argues that the emphasis on second-order concepts does not imply reducing the value of teaching substantive concepts in history. Furthermore, the goal of this new history education was never intended to produce miniature historians (Lee, 2014; Lévesque & Clark, 2018). In Taiwan, the main challenge highlights the pedagogical dilemma in history education: whether teachers should teach historical facts as their primary curriculum goals or foster pupils' second-order concepts as their priority (e.g., contextualisation and using historical sources, see Hsiao, 2009; Lin, 2019). In addition, Hsiao (2009) points out that teachers need to identify students' preconceptions about historical reasoning in class. More questions also remain regarding how to apply the results from educational research to history teaching

practice and how to apply the core competencies prescribed in the curriculum to teach (Chuang, 2019).

This study then proposes an integrated conceptual framework (see Fig. 2). These six elements of historical thinking are used as a principal analytical framework in collaboration with the conceptual framework of hybrid dialogue to explore how these components could be embedded in this form of talk to teach students about historical thinking and reasoning. As shown in Fig. 2, the Dialogic Space is opened up by hybrid dialogue in the constant transformation of monologue and dialogue. In the Space, the elements of HTR are embedded, with some of the components requiring more monologue (such as using sources and using substantive concepts) and others more dialogic (such as argumentation and contextualisation). However, it is also important to note that all the elements are interconnected in the Dialogic Space, which is supported by the balance between monologue and dialogue teachers use in history classrooms. That means that by using this form of talk, it is possible for teachers to both teach historical knowledge and introduce students to the higher-order thinking skills in history as a well-established discipline as well.

### 2.5. Research aims and questions

From the literature, little is known about the use of classroom dialogue in history classrooms, particularly in the East Asian context. With the proposed conceptual framework for dialogic theory and the model of historical thinking (van Drie & van Boxtel, 2018), this study explores how these features and strategies were used to foster learners' historical reasoning. The guiding research questions therefore are:

- (1) What are the features of teachers' talk in history class?
- (2) How could teaching historical thinking and reasoning be embedded in teachers' talk?

The aims of this study are twofold. Firstly, in terms of theoretical purpose, by looking at the overall features of teachers' talk in history classrooms in Taiwan in a more detailed analysis, this study aims to revisit and expand the notion of dialogic education within the East Asian cultural context. Moreover, besides the theoretical interest, this study also aims to provide some practical insights into the teachers' discursive strategies that could be employed in history classrooms for teachers to teach the concepts of historical thinking and reasoning.

## 3. Method

### 3.1. Case selection

This paper reports multiple case studies in which six history lessons were videotaped and delivered by three teachers from two different municipal high schools in Taiwan. The lessons were selected purposefully to demonstrate the dialogic features in Taiwanese teachers' talk. The teachers referred to using the pseudonyms Teacher Hsu, Teacher Huang, and Teacher Chang, were experienced teachers with more than 5 years of teaching experience, located in 3 schools. All the participating teachers held a Bachelor's and Master's degree in history and had obtained an official teaching certificate in Taiwan. The main purpose of selecting these teachers as the case study is in order to present rich information related to the phenomenon of interest. Cresswell and Plano Clark (2011) suggest that, based on researchers' practical knowledge of the research area, researchers should actively select the most productive sample to illustrate and explore a specific phenomenon. Such sample selection is known as 'purposeful sampling' (Palinkas et al., 2015). Purposeful sampling can yield 'information-rich cases' to study in-depth and in which one can learn a great deal about 'issues of central importance to the purpose of the research' (Patton, 1990, p. 169). Thus, to explore the features of teachers' talk in history classrooms, these three teachers were selected as the cases to study.

These teachers, who participated in one-year design-based research on dialogic education, were selected from three different high schools, all located in urban cities in Taiwan. The three schools were deliberately chosen to provide a contrast. School A is considered more conservative and traditional in terms of teaching style and the role of students. School B is particularly famous for its open-minded school environment in which teachers are given much freedom to design and conduct their teaching, and students are encouraged to engage in their school to express their thinking and creativity. School C, in the capital city, has the richest educational resources and is open to experimenting with innovative pedagogy. The socioeconomic backgrounds of students in these three schools were largely from middle-class families (Table 1).

### 3.2. Data collection

Data collection comprised class observations conducted with the use of video cameras. Six history lessons with a time of 300 min in total were observed and recorded. The videotaped lessons were later transcribed with an adapted version of Jefferson's (1985) transcription guidelines.<sup>1</sup> All the analysis, both qualitative and descriptive statistics, was based on the Chinese transcription to explore the features of teachers' talk in Taiwanese classrooms, where Chinese is the native language. However, to overcome the linguistic barrier, the transcription was translated into English. A professional translator proofread the English version to ensure the meaning was properly and thoroughly conveyed in English transcriptions.

<sup>1</sup> Standard punctuation is used to illustrate the grammatical organisation of the speech and italics are applied to the words spoken emphatically by the speaker. Simultaneous speech for preceding utterance is presented with the use of square brackets ([ ]) and non-verbal actions are described in parentheses ().

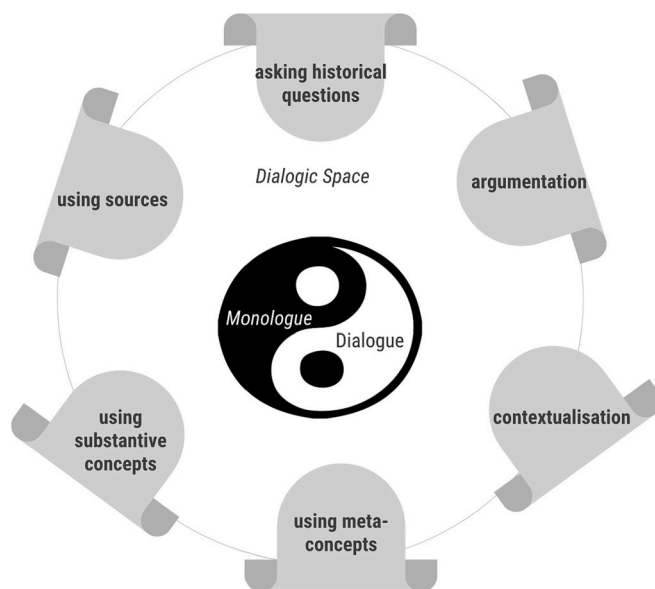


Fig. 2. The conceptual framework for elements of historical thinking and reasoning embedded in hybrid dialogue.

**Table 1**  
Participants' information.

Case	School	Teacher	Students number (gender ratio)	Student grade and age
Case 1	School A	Hsu	N = 38 (1.1:1)	Grade 1 (Age 15–16-year old)
Case 2	School B	Huang	N = 40 (1:1)	Grade 1 (Age 15–16-year old)
Case 3	School C	Chang	N = 36 (boy-only-school)	Grade 1 (Age 15–16-year old)

### 3.3. Data analysis

In order to understand and characterise each teacher's lesson and their strategies to foster learners' historical thinking, both descriptive statistics and qualitative analyses were employed from a sociocultural perspective (Mercer, 2010). For descriptive statistics analysis, data were first sorted into speech turns (Hennessy, Howe, Mercer, & Vrikki, 2020), enabling the researcher to count the frequency of certain words in teachers' turns. Moreover, this micro-level analysis also allowed 'fine-grained, systematic' qualitative analysis (Hennessy et al., 2020, p. 5). This acknowledges that the interaction between interlocutors (teachers and pupils) is situated in a particular institutional and cultural context, and knowledge co-construction through dialogue is 'inherently reflexive'; that is, the immediate shared experiences through conversation could further provide resources for 'building future conversational context[s]' (Mercer, 2008, p. 55).

In terms of the qualitative analysis, the sociocultural perspective for classroom talk analysis, proposed by Mercer (2004), focuses on the use of language as a social mode of thinking – a form of intellectual activity. Based on the Vygotskian concept, language is regarded as both a cultural and psychological tool to achieve certain goals. From this perspective, education can be seen as a 'dialogic process' in which teachers and students work together to construct knowledge through dialogues occurring in classrooms. Dialogues then are based on a personal foundation of common knowledge and necessarily involve 'the creation of more shared understanding'. Moreover, participants in dialogues use language to travel through time and space and mutually transform the current state of their understanding of the topic discussed in the conversation (Mercer, 2004, p. 140). The notion is strikingly echoed by the transcendental aspect of dialogic space in education settings (Wegerif & Yang, 2011) in which one pole of dialogue is as a spectrum with the space-time surface; the other pole is 'universal, unsituated and atemporal', constantly evolving and shaped by the 'infinite other' that is a 'potentially emerging voice within all dialogues' (p. 313). This is also similar to what Mercer (2004) called 'the dynamic aspect' of talk as an emphasis on how collective thinking shapes understanding. Thus, this dialogue analysis methodology can investigate how teachers' use of talk guides the construction of knowledge and how learners mutually engage with the construction development. Therefore, the analysis's concerns are not only about the process of joint cognitive engagement among teachers and pupils but also about learners' developmental outcomes (Mercer, 2004, p. 141).

To further explore how the features of teachers' talk for guiding and scaffolding, the qualitative analysis of this research also considers the three most used discursive techniques as 'tools of their trade' (Mercer, 2004). These three techniques are (p.145):

1. *Eliciting knowledge from students*, including *direct elicitations* and *cued elicitations* (providing strong visual cues and verbal hints to draw out the information from students)
2. *Responding to what students say*, including the use of confirmations, rejections, repetitions, elaborations and reformulations
3. *Describing significant aspects of shared experience*, including using 'we' statements and both literal and reconstructive recaps.

As Mercer (2004) suggests, these techniques are commonly used by teachers, even in different teaching styles and within various cultural contexts. This study aims to blend van Drie and van Boxtel's historical thinking model (2018) with Mercer's (2004) socio-cultural discourse analysis, testing its fit within Taiwanese educational settings.

This qualitative interpretative analysis allows researchers to move away from a snapshot approach to dive deeper into a more holistic perspective of classroom dialogue. This approach helped us to understand where the quantitative measures came from and what they mean (see Hennessy, Calcagni, Leung, & Mercer, 2021, for an example of related sociocultural discourse analysis). The analysis was conducted with NVivo (V. 12), a software programme used for the mixed-method research.

#### 4. Analysis and results

Below, excerpts from three teachers' lessons are portrayed. These portraits include a description of the contextual background and goals of the lesson. Qualitative information about the whole-class dialogue and examples of strategies the teacher used to foster students' historical reasoning are discussed as well. Word frequency is illustrated in a visualised form of a word cloud to examine the key features of each teacher's talk. The Chinese version of the transcripts is presented in the [appendix](#).

##### 4.1. Case 1 Teacher Hsu

The data were collected from two separate lessons on Taiwanese history. Students (about 15 years of age) in this class were in the first semester of their first year of high school. Taiwanese history is a core compulsory subject that all first-year students are required to take (NAER, 2018). The first excerpt was chosen to demonstrate how the teacher employed a series of simple closed questions to introduce complex historical concepts (Lee, 2005). Highlighting the complex causal and contextual background of a historical account of one Taiwanese aboriginal rebellion against the Dutch Government, Hsu introduced the concept of 'subduing' (「以番制番」) as a means to establish total control of Taiwan. The second lesson was on the topic of Taiwanese economic history. After the chronological introduction of each era, Hsu concluded the lesson with a question that challenged the textbook's narrative and provided an alternative perspective about a particular policy from the Land Reform executed by the KMT Government in the mid-twentieth century. According to the textbook, the Land Reform had a hugely positive effect on postwar Taiwanese economics. However, Hsu pointed out that some research claimed that the policy was unconstitutional, violating the rights of many landlords at the time. The exchange, Excerpt 1 below, demonstrates how Hsu unpacked the distinct perspective to students using a link to their historical knowledge about that time period.

The result (see Fig. 2) shows that words with the highest frequency are used to introduce substantive concepts in history (van Drie & van Boxtel, 2008). For instance, the top five words are 'Dutch' (「荷蘭」), 'incident' (「事件」), 'Madou' (「麻豆」), 'tribe' (「部落」), and 'Taiwan' (「台灣」). The frequent use of these words indicates that in Teacher Hsu's class, introducing and familiarising students with substantial historical concepts was, by and large, the lesson's main focus. To achieve such a purpose, Teacher Hsu demonstrated one of the most crucial and fundamental components of historical thinking: asking historical questions (van Drie & van Boxtel, 2008). Three types of historical questions were identified:

- (1) descriptive questions (e.g. *What happened during the Madou Tribe Incident?* retrieved from L1);
- (2) causal questions (e.g. *Why did it take so long?* retrieved from L8);
- (3) evaluative questions (e.g. *What is the significance of this incident?* in L11).

All three types could be identified in this excerpt (See Table 2). As seen in the first line, Hsu opened up with a historical, descriptive question ('What happened during the MaDou Tribe Incident?'), which also served as a core question to stimulate inquiry with students throughout the lesson. In the following lines, Hsu gradually unpacked the historical account and the historical significance behind the account (Seixas, 2017) with a series of further historical questions.

Interestingly, the surface structure of this exchange in the first excerpt (Table 2) is not dialogic since it is predominantly Hsu's monologue (Alexander, 2020) to introduce the substantial historical concepts (e.g. 'Dutch' (「荷蘭」) weighted 0.66 %, 'incident' (「事件」) weighted 0.66 %, 'Madou' (「麻豆」) weighted 0.66 %) from this lesson as demonstrated in the word cloud (see Fig. 2). However, the function of the discourse (Boyd & Markarian, 2015) aims to scaffold students to understand the complex causal relations and contextual background of an unfamiliar historical account with a series of self-asked and self-answered questions. The self-dialogue (Sidorkin, 1999) from Teacher Hsu is a demonstration of employing a Confucianist way of self-reflection to embark on a journey of reasoning and engagement with the cultural world (Shen, 1994), a world that could be entered through the engagement of long-term shared dialogue with human beings throughout history (i.e. the conversation of humankind, see Oakeshott, 1962). The series of closed questions that were asked to scaffold students through causal reasoning, once considered monologic, is construed here as being transformed into the hybrid form of dialogue that opens up dialogic space (Wegerif, 2011) for students to participate in a dialogue with the past (i.e. Bakhtin's notion of Great Time, Bakhtin, 1981) and learn the historical knowledge from within. For instance, as shown in the word cloud (Fig. 3) and the transcript below (Table 2), the frequent use of the word 'Madou' (「麻豆」) weighted 0.66 % was to engage students in the dialogue with this crucial historical account in Taiwanese history.

In the second excerpt (Table 3), Hsu attempted to incorporate the ideas of 'social justice' and 'transitional justice' by challenging



the narrative from the textbook (e.g., in L1 ‘*Could we really deprive the rights of the landlord just to boost economics?*’ and in L3 ‘*but why we don’t see anything about how they fought in the textbook?*’). The ethical issues (Seixas, 2017) in Taiwanese history concern dealing with two major injustice incidents in postwar Taiwan: the 228 Massacre (1947–1948) and the White Terror (1949–1987; Wu, 2006), which formed the common contextual background of historical knowledge acquired by learners in the lesson. With the use of the word ‘incident’ (「事件」, weighted 0.66 %, see Fig. 3), Hsu employed this historical knowledge and invited students to contribute to the reasons for ‘*why the landlords didn’t fight against the Land Reform*’ (L3, also see in L11). From L4 to L11, the interaction demonstrates how the teacher and students co-built the causal relationship between the Land Reform and the White Terror, which is neglected in the textbook. By challenging the narrative from the textbook in the dialogic space, the teacher also critically presented students with multiple interpretations and modelled how to adopt different perspectives (van Boxtel & van Drie, 2017).

#### 4.2. Case 2 Teacher Huang

Teacher Huang is a highly experienced teacher with more than 20 years of teaching experience. In this new semester, as the study began, Huang was keen to adopt a new pedagogical dialogic approach. In her class, students were usually divided into ten small groups. Each group was assigned a worksheet. The students were then required to work cooperatively to complete the questions, aided by the textbook and the supplementary materials provided by the teacher. Each group were asked to present the answer that they filled in on their worksheet, and other groups were encouraged to challenge their answers. For instance, in the first excerpt, Huang focused on the differences between *Gaishan* (「高山族」) and *Pingpu* (「平埔族」) Indigenous people. The goal of the lesson was to teach pupils historical knowledge regarding Indigenous people and to scaffold students to achieve an understanding of how historians study typology using the methodology of ethnography as first-hand sources. Such an approach was demonstrated by the results of the descriptive statistics of word frequency, which shows that the top five words with the highest frequency in the lesson (as shown in Fig. 4) are as follow: ‘people’ (「人」, weighted 0.54 %), ‘yes’ (「是的」, weighted 0.50 %), ‘camphor’ (「樟腦」, weighted 0.46 %), ‘textbook’ (「課本」, weighted 0.38 %), ‘different’ (「不同的」, weighted 0.29 %). Only one of these (‘camphor’) was used to teach substantial concepts; others were involved in either guiding the classroom activities, providing responses to students’ ideas or scaffolding learners’ critical thinking.

In the first excerpt (Table 4), the analysis shows that Huang often invited students to build on ideas and offered feedback, as well as refocusing the dialogue on the questions with further use of historical thinking. For instance, following the first question posed to the class (‘*Does anyone want to share your answer with us?*’ in L1), Huang directly invited Gina to share her answer in order to open up the dialogue, and she focused on the concept of ‘*Gaishan*’ to simplify the question (van Drie & van Boxtel, 2008). After Gina’s response, to further the dialogue (as in spiral IRF exchanges, see Rojas-Drummond et al., 2013), Huang extended Gina’s answer to pose another question regarding *Pingpu* (‘*Why is it that Pingpu women farmed and men hunted?*’ in L7) by challenging the pupils’ pre-existing epistemological structure (Hsiao, 2009; Lee, 2005) and the textbook’s dominant epistemological imbalance (e.g., ‘*You have to be careful about the current typology in the textbook because it could be challenged and redefined once you gather more empirical evidence*’ in L17). It is also noticeable that Teacher Huang’s talk sometimes appears to be monologic in structure (e.g. L7, L17, L18) but dialogic in essence. For instance, in L7, the monologue about the Pingpu could be seen as a long-term dialogue that engages students in the cultural dialogue with Pingpu tribes in the seventeenth century in Taiwan. This monologic long-term dialogue was then transformed into a

**Table 3**  
Discussion on Taiwanese Land Reform in the Post-War era from Hsu’s second lesson.

Agent	Line	Utterance (Translated into English)
Teacher	1	The second one is the issue of land justice. Even if you say that I want to stabilize politics or even I want to promote Taiwan’s agricultural economy, can it really be implemented if the farmers have their own land? Could we really deprive the rights of the landlord just to boost the economy? Could we?
Teacher	2	Therefore, the Supreme Court once explained the constitution of the farmer’s land and found that this policy is unconstitutional, so the issue of land justice deserves our reflection.
Teacher	3	Finally, we end this lesson with a question. When we learn about this period of history, may I have learned that when the KMT Government implemented these land policies in Taiwan, the landlords had fierce resistance, but why we don’t see anything about how they fought in the textbook? No, so the question is, why didn’t the landlords resist fiercely?
Student	4	(inaudible)
Teacher	5	Why?
Alex	6	They got rid of it.
Teacher	7	Got rid of? Alright, anything else?
Ben	8	Temporary Provisions against the Communist Rebellion.
Teacher	9	Great! You got the point! Why? What happened in 1947?
Ben	10	228 Incident.
Teacher	11	228 Incident. Even an anti-communist regime was implemented by the KMT Government when it came to Taiwan! White Terror! So with the experience of the predecessors, in order to rebel against the National Government in Chen Yi’s time, these people disappeared and were arrested and detained and disappeared. So do you dare to resist? You dare not.
Teacher	12	So we can see from The 37.5 % Arable Rent Reduction Act, which was executed before KMT fled to Taiwan. Who implemented it?
Cathy	13	Chen Cheng.
Teacher	14	Chen Cheng, then chairman of Taiwan Province at that time. Many landlords resisted when Chen Cheng promoted The 37.5 % Arable Rent Reduction Act at the beginning. At that time, Chen Cheng said, “There are some mischievous people, but there are no people who don’t want to live.” So we can see from this sentence to summarize the land reform after the war. Do you have any questions? Class is dismissed if there is no problem.



**Table 4**  
Discussion on the typology of Taiwanese Indigenous People from Huang's first lesson.

Agent	Line	Utterance (Translated into English)
Teacher	1	...We could finish here, alright. So Does anyone want to share your answer with us? It's a very important concept in social science called typology, which we discussed in the last lesson, right?
Class	2	Yes! (in unison)
Teacher	3	Right, let's do this. Gina, would you share your answer with everybody? What did you write about Gaushan?
Gina	4	The culture of millets.
Teacher	5	Yes! As you can see from the textbook, they have a culture of millets and also fishing, depending on the geographic differences. But does that mean they only eat millet and fish?
Gina	6	No.
Teacher	7	No, it's their main dish, but they also eat other things from nature. Understand? So don't believe everything in the textbook. This point is how they lived with nature cooperatively and peacefully. In comparison to Pingpu people, some were farming. The class also asked about the farming method called slash-and-burn farming the other day, but some groups were hunting. The more interesting thing is that if it was farming, it was girls who went to the farm, and if it was hunting, it was men who went hunting. So this is not written here in the description of the Gaoshan people, and the Gaoshan people are classified by region. But when it comes to the Pingpu, there is a new discovery, which was related to gender, not necessarily to ethnic groups. I want to ask why. Why is it that Pinpu women farmed and men hunted?
Benson	8	Because hunting is more dangerous.
Teacher	9	It's one possibility. Anything else? How many Pingpu Tribes do we know so far? We just talked about how we know more about Gaoshan than Pingpu from the textbook. There are only two tribes mentioned in the book. Which two?
Besson	10	Siraya.
Teacher	11	Siraya and?
Jake	12	Ketagalan.
Teacher	13	Yes, so why do we see the Pingpu people like this? Is it possible because we have only observed these two tribes, which happens to be the case for these two tribes? Ah, but we are observing other tribes in the future[
Gina	14	[possible
Teacher	15	Is it possible to break such classification?
Class	16	Yes (in unison)!
Teacher	17	Fantastic! So you have to be careful about the current typology in the textbook because it could be challenged and redefined once you gather more empirical evidence. Do you understand? So in the history department, it is called induction, which means you read a lot of materials and then sort them out. Then this semester, I just want to ask you to practice such skills.
Teacher	18	So, have you found that the title in the textbook is important? Don't just look at the text below the title. You have to see how the textbook is classified, so why are the textbooks divided into these three categories? This is a question worth asking.
Dylan	19	It's more important.
Teacher	20	Yes, it is how the textbook shows the methods that anthropologists use to observe a society that we don't know these three. So for the same reason, can you write a description for Han people? Most of us are Han. What is the life philosophy and lifestyle of the Han people? Then, what are our Han family and social organisation? Then, what are the religious beliefs and ceremonies of the Han people? Can it be compared with the indigenous people? ...
Teacher	21	...Moreover, how did we know these things about the indigenous people? This is the seventh question. Yes, how do we know? In addition to the written historical materials of <i>Dongfanji</i> that we read last week, what other methods are there? ( <i>Ethan raises hand</i> )
Ethan	22	Mythology.
Teacher	23	Yes, mythology, so we need to collect their mythologies. It's what we call oral traditions. Great, how about here?
Fiona	24	Food.
Teacher	25	Food and what? What do we study? What kind of culture?
Fiona	26	In life.
Teacher	27	In life, yes, visible things. It's called material culture. Great, so you can observe what they eat and what they wear. What else?
Eric	28	Religious activities.
Teacher	29	Go and see or experience their religious activities on your own. So when you go to the Harvest Festival and the Dwarf Spirit Festival, you are not just for entertainment. You can also do observations. Anything else? Did your classmates inspire you when they talked about their answers? Can you also write down what you didn't think about? Okay, what else?
Helen	30	Physique structure.
Teacher	31	Physique structure, that's interesting. Can you elaborate more on why studying other's physiques?
Helen	32	It's the body.
Teacher	33	Body? Interesting. You've noticed that for physique structure, there are both living and dead. Could you say more?
Helen	34	People from different countries live in different places and have different body structures.
Teacher	35	Excellent! So she is saying that because the Austronesian people live in the tropics, their physical structures may be different from those in the north. That's right, great. She mentioned something I didn't expect to talk about today. It's called "Physical Anthropology." ...It's a branch of anthropology. Through medical anatomy and physiology, what is the impact of understanding people from different regions on their physique and their environment? What different diseases would be created? So indeed, in Taiwan, we will see later in the textbook that there will be this when Japan ruled Taiwan, tropical medicine research

#### 4.3. Case 3 Teacher Chang

In Teacher Chang's class, students were in the humanities and social science stream of the second year (aged 16).<sup>2</sup> The teacher, Chang (a pseudonym), is an experienced (with more than 30 years of teaching experience) high school history teacher who was keen to employ the dialogic approach in class. Highlighting the complexity of historical causality, in his class, a lesson usually started with a

<sup>2</sup> In the Taiwanese high school system, second-year students are required to choose one group from: humanities and social science, natural science (biology excluded) and natural science group (biology included).

**Table 5**  
Discussion on the concept of ‘NaoLiao’ from Huang’s second lesson.

Agent	Line	Utterance (Translated into English)
Teacher	1	Moving onto the next group, please tell everyone, on page 82, what does this “NaoLiao” mean? Come on, please come on stage. Okay, please prepare to talk about comprador, the fourth group! So, let’s talk about it, what is it, is it really about the brain? Scary!
Alice	2	[NaoLiao was a place for making camphor. It was kind of like a factory, where the camphor trees were turned into camphor.
Teacher	3	Ah! OK! Great! What is this paragraph about? So NaoLiao was where camphor was made, and many places still have such place names. For example, when you take the bus!
Alice	4	[GongLiao
Teacher	5	[The Blue 32 Line, to the MaZao Tang, the place is still there. OK, how about this paragraph on page 82? Why this word was mentioned in this paragraph? Can you explain? Come on stage.
Carrie	6	(Carrie goes onto the stage) Because during this period, they had international trade, and[
Teacher	7	[period? Which period?
Carrie	8	Umm... after the harbour opened.
Teacher	9	Yes, after the harbour opened. Ok and?
Carrie	10	Camphor was the major commodity in international trade [
Teacher	11	[Yes, so?
Carrie	12	More and more NaoLiao were built to make more camphor and store the bark of the camphor trees.
Teacher	13	Yes, camphor trees. Where could you see these trees in Taiwan? Which areas?
Carrie	14	Mountains.
Teacher	15	Mountains, in the north, middle or south of Taiwan?
Carrie	16	North.
Teacher	17	Yes, there should be more NaoLiaos in the mountains in northern Taiwan. Because after the opening of the port, camphor was a very important commodity for international trade. Okay, so you can know that in that era, after the opening of the port in the late 19th century, many people would do the camphor-making work in camphor companies. OK. Great!

question that intended to engage students in dialogue. This approach was demonstrated by the results of the analysis of word frequency (see Fig. 5), with the top three words being: ‘Enlightenment’ (「啟蒙」 weighted 2.93 %), ‘mean’ (「意思」, weighted 2.93 %), ‘cause’ (「原因」, weighted 2.44 %). The result of the descriptive statistics indicates that Teacher Chang often used these words to coordinate students’ ideas and build up causality, as elaborated in the following qualitative analysis.

The excerpts (Tables 6 and 7) were chosen from the two lessons on the history of the Enlightenment Movement and the French Revolution. In the first lesson, the teacher began the class with a discussion of the causes of the French Revolution. This discussion was initiated by a pupil sharing his opinions on this topic. Then the teacher extended this discussion into a debate and encouraged more students to engage. After the debate, the teacher continued to elucidate more historical accounts related to the French Revolution with the use of a relevant video. This discussion followed up the debate on the inevitability of the French Revolution. Students were required to use evidence from the book *The Humanist Tradition in the West* to interpret whether there was a causal relationship between the Enlightenment Movement and the French Revolution. Although it was still a teacher-led discussion, the participating students took up the majority of the discussion.

These excerpts illustrate a strong teacher-led debate. The IRF exchanges were widely used by the teacher to control the flow and guide the direction of the dialogue. Shown in the result of the high frequency of the word ‘mean’ (「意思」, weighted 2.93 %, see Fig. 5), Teacher Chang often encouraged students to provide elaboration and explanations on their own answers to deepen the dialogue. For instance, in response to Dan’s contribution, the teacher first reformulated his language into a more ‘educated discourse’ (or ‘academic discourse’) by presenting some concrete examples in a relevant historical context (see Line 3). By doing so, the teacher could help pupils to understand the ideas they have already held under a more rigorous historical context (Mercer, 1995). The same discourse techniques could be identified in the remarks of the teacher (see Line 5) after Gary’s argument. Moreover, the teacher then used an explanatory question (‘What sorts of things does it need to break out?’ see Line 7) to ask Gary to elaborate more to support his argument. Then the teacher again reconstructed Gary’s argument to form a counterargument, as opposed to Dan’s earlier remark, by introducing ‘everyday discourse’ as an analogy (‘Like even you have enough tinder but you don’t have any lighters. It’s useless’ see Line 12). The spontaneous flow between the use of ‘academic discourse’ and ‘everyday discourse’ could not only enable students to understand historical phenomenon more effectively to develop their own arguments but also cultivate a shared collective consciousness within the whole class. That is an example to demonstrate the idea of ‘dialogue in monologue.’ The overall features of teachers’ talk with students appear to be in a more dialogic form, in which questions were asked, and responses were given to expand the dialogic space. However, it is quite crucial to note that this temporal and dynamic dialogue, or short-term dialogue, is a way to induce the whole class into a more monologic and static long-term dialogue that introduces students to a significant element in historical thinking: the concept of causation in history (Lee, 2005).

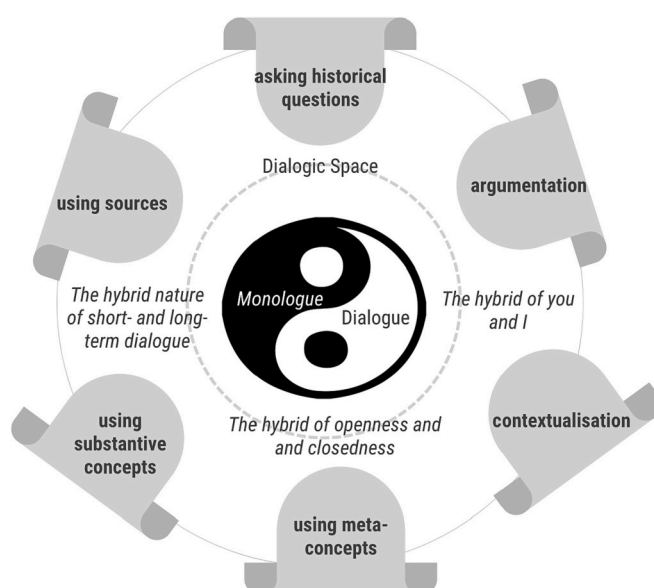
Although both arguments that Dan and Gary made in the excerpt were not quite strong, the dialogue still showed that they used evidence to support their own claims. For instance, to argue that the French Revolution was an inevitable result of history, Dan stated, ‘Because the financial and political issues were really upsetting people.’ (Line 2), referring to an excerpt from the book as evidence to support his argument. Similarly, Gary used another excerpt to support his view on historical contingency: ‘To make such things happen, there must be all kinds of contingent events (Line 4).’ However, this argument at first was neither complete nor comprehensible for the rest of the class. Thus, the teacher guided him to further unpack his own ideas through extensive questions and reformulation of discourse with the constant use of the word ‘mean’ (「意思」, weighted 2.93 %, see Fig. 5). Interestingly, his argument appeared to show that Gary managed to weigh and synthesise different possible interpretations to support his claim, and he took into account



**Table 7**  
Discussion on the enlightenment movement from Chang’s second lesson.

Agent	Line	Utterance (Translated into English)
Teacher	17	OK, let’s think about the second question: Did the Enlightenment Movement cause the French Revolution or did the Revolution cause the Movement? Why did they put the chapter on the Enlightenment before the French Revolution? Is it just because it happened earlier? Or do they have some causal relation? Or just chronological? Please keep in mind that having chronological relations doesn’t necessarily mean they have causation. Who can share his ideas with us? ( <i>Benny raises his hand</i> )
Benny	18	It’s like today’s a very hot day, so we turn on the AC. And someone suggests turning off the AC to save energy, but nobody agrees with that. So even if you agree this is good for the Earth, you still won’t say a thing.
Teacher	19	Do you get what he meant? ( <i>look around the whole class</i> )
Benny	20	Yeah, he thinks it might be right, but he doesn’t dare to do so. But the Enlightenment offered a different voice, and then somebody started to do so. I also think it’s the right thing to do, so I follow him. Is that clear?
Teacher	21	Do you understand? ( <i>pause</i> ) He means that because they’ve already known the ideas of the Enlightenment, they still didn’t act. Because they were a minority. But once the moment arrived, these ideas would become the motivation. Is anyone questioning this claim?
David	22	The spread of the Enlightenment only reached the elites at first, and they kind of hated the lower-class people. So it’s hard to have an impact on those people.
Teacher	23	OK, you think they knew <i>too little</i> , so in their mind, they didn’t even understand any ideas about the Enlightenment?
Benny	24	What I was saying is that it’s not like they really understand the ideas of the Enlightenment. It’s something rebellious deep down in their hearts. They want to improve the current situation no matter what sort of ways, reform or revolution. And there’re some guys who start to say something out loud about the king that might be wrong. That’s how a revolution begins. It doesn’t mean they have a thorough understanding of ‘liberty, equality, fraternity’.
Teacher	25	But did these rebellious thoughts come from the Enlightenment?
Benny	26	These rebellious thoughts... ( <i>pause</i> )
Teacher	27	Yeah, so [
Benny	28	[it’s more like <i>one</i> of the opportunities.
Teacher	29	<i>One</i> of the opportunities. ( <i>pause</i> ) Does anyone have a different opinion? ( <i>Fred raises his hand</i> ) Yes, please.
Fred	30	The leaders of the General State in the French Revolution were doctors, lawyers and journalists. According to the source, they have been influenced by the Enlightenment, so I would assume so. They were the ones who led the French Revolution. So I think the impact of the Enlightenment was to let these people have an idea that the existing system was wrong and could be reformed. As for those from the lower class, they might not understand, but they just found their lives really difficult. They wanted to change too, but they just didn’t know how. Because they haven’t been influenced by the Enlightenment. So once the leading doctors, lawyers and journalists stepped up, those farmers saw this as an opportunity and then followed their lead.
Teacher	31	So, what you’re saying is that these two arguments are not contradictory to each other? ( <i>Fred nods his head</i> ) Good! First, what you just said ( <i>points at Fred</i> ) is really good! ...

following guidance of co-construction of knowledge. Moreover, through this question, Benny recognises the need for further elaboration (‘Yeah, he thinks it might be right ...’). In response, instead of directly providing an evaluative comment, the teacher again sought confirmation from the whole class and proceeded with a reconstructive *recap* of Benny’s remark as well as an invitation for more pupils’ critical engagement (‘Is anyone questioning this claim?’ Line 21). These dialogic approaches successfully provoked other pupils to use meta-concepts to explain the historical phenomenon from a different perspective (see Line 22). The teacher then identified two different arguments and used a reformulation as a question not only to re-emphasise David’s point but also to guide other students



**Fig. 6.** The final version of the conceptual framework of hybrid dialogue.

to think more deeply about both interpretations with the use of historical reasoning. Similarly, in response to Benny's second contribution, the teacher used repetition without any subjective assessment involved and further expanded the dialogic space to the rest of the class ('Does anyone have a different opinion?' Line 29).

## 5. Cross-case discussion

The three cases presented above illustrate quite a diverse depiction of Taiwanese high school history class. They differ with respect to lesson contexts, lesson goals, teachers' experience and their teaching beliefs, as shown by the results of both quantitative and qualitative analysis. These differences have yielded rich data to explore features of Taiwanese teachers' talk in classroom dialogue and how the elements of historical thinking could be embedded in this form of talk. Firstly, in terms of structural form, it is apparent that in Teacher Hsu's lessons, the talk was largely more monologic in comparison to the other two teachers. However, we also argue that despite the monological form in structure, it is dialogic in nature with the demonstration of self-reflection and self-dialogue, which could be seen as a hybrid form of monologue and dialogue. Furthermore, from the results of the descriptive statistics analysis, the differences in word frequency among the three teachers demonstrate the various features of each individual teacher's talk. Yet, despite the variety, in this study, three major features of Taiwanese teachers' talk are identified as shown in the revised conceptual framework (Fig. 6). Developed by drawing on both the literature and the findings of the present study, the original concept of Yin and Yang was subsequently developed to open up a dialogic space constructed by the three features of this hybrid form of teachers' talk. Inside the space, interlocutors could not only engage in a short-term, interactive form of dialogue to co-construct historical knowledge and build on each other's ideas but could also participate in a long-term shared cultural dialogue with all humankind that transcends time and space. The three features are described as follows:

### a. The hybrid of openness and closedness

It has been argued that it is difficult to engage students in genuine dialogue using a closed question (e.g., Alexander, 2020; Matusov, 2009) because, with a single predetermined answer, students merely try to guess the correct answer. Such talk is reduced to a simple IRF structure (Sinclair & Coulthard, 1975), in which education is considered merely the transmission of knowledge from the educated to the ignorant (Matusov, 2009), and no deep reasoning occurs. However, in this study, the results of the analysis suggest that the use of closed questions can provide a dialogic space in which teachers can probe or elicit students' prior knowledge and their epistemic beliefs, as well as build up their substantial concepts (i.e., historical knowledge, see Lee, 2005; van Drie & van Boxtel, 2008, 2018). The knowledge introduced to students may then provide a crucial foundation for inner silent reflection (Song, 2008; Starr, 2012), which allows teachers to introduce and co-explore more complex second-order concepts with pupils (i.e., historical thinking, see Lee, 2005; van Drie & van Boxtel, 2008, 2018). For instance, Teacher Huang delivered a lesson on the history of Taiwanese indigenous tribes (see Table 3). Before asking an open-ended question, Huang employed a substantial number of closed questions to elicit the students' historical knowledge and then used this knowledge as a foundation for critically examining the narratives from the textbook (Chang, 2020). A dialogic space was opened through a series of closed questions in which the teacher facilitated the pupils to reason historically and critically with careful scaffolding. During this scaffolding process, more dialogue was constantly created and redirected to a meaningful discussion. This approach aligns with Confucius's dialogic approach as the facilitation of pupils' self-development and self-reflection (Li & Wegerif, 2014). Although some talk might seem monologic on the surface, it is dialogic in nature, as suggested by Boyd and Markarian (2015), who also argue that it is more vital for teachers' talk to support pupils' epistemic growth and communal functions to create a successful dialogic stance than a structural form.

The hybrid of openness and closedness can also be reflected by the model of Yin and Yang proposed in this research, in which closeness is represented as Yin (the black side) and openness as Yang (the white side). Yin and Yang suggest the co-emerged, accompanied, and contradictory yet harmonised concepts of openness and closedness. The dynamic of these two ideas is constantly shifting as they are intertwined with each other. There is openness in closedness, and vice versa, and 'that being before and behind give the idea of one following another' (「前後相隨」, Tao Te Ching [1:2] translated by Legge). The intertwined space is created for thinking and reasoning using second-order concepts. In this space, the dichotomy of openness and closedness is superficial and even irrelevant because the opposites transform into each other and are mutually complementary (see also Matusov, 2009 for a complementary view on the notions of monologue and dialogue).

### b. The hybrid of you and I

In the dialogic space created by the hybrid of openness and closedness, the entanglement of teachers' and pupils' thinking occurs, and such entanglement fosters hybrid thinking. Hybrid thinking is also echoed in Buber's (1958) notions of 'I-Thou' orientation. In the I-Thou, the important relationship is between you and I, a human-dialogic relationship instead of a material-objective one. 'I perceive you as an end, not as a means, and vice versa. No isolated 'I' exists in the intersubjectivity relation of I-Thou; 'I' is accompanied by the presence of the subjectivity of you. In this sense, for this study, the notion of hybrid dialogue does not suggest that all monologue is dialogue, nor that all dialogue is monologue; instead, a crucial aspect of this hybrid form of talk lies at the centre of the intersubjectivity of the interlocutors (Dafermos, 2018).

In hybrid dialogue, dialogic space is only created if a teacher considers his or her pupils' subjectivity and transcends it into 'Thou' in the light of I-Thou orientation. With 'Thou' in mind, a teacher can transform the talk, either monologic or dialogic, to become more genuinely dialogic, more inclusive, and even more open to polyphonies (Bakhtin, 1981). In Teacher Chang's class, for example, on the discussion of the French Revolution (see Table 5), Chang attempted to open a dialogue with pupils to embrace different voices and answers. Throughout the dialogue, Chang constantly reshaped his questions to include more pupils in the dialogue. Such an attempt can demonstrate how a teacher takes an I-Thou stance. In return, once the students sense how their subjectivity is acknowledged, appreciated, and respected by the teacher, they transform the image of the teacher into 'Thou' and engage in the dialogic space created

by the intersubjectivity of both the teacher and pupils. The model of Yin and Yang could also illustrate such an I-Thou orientation, in which the black and white spheres represent one another. In each sphere, the embedment of the other sphere depicts how intersubjectivity is crucial for opening up a dialogic space. The notion of mutual respect in I-Thou orientation is also highlighted in the Confucianist perspective on human relations, in which 'virtue' (Ren, 「仁」) lies at the core of all relations. Virtue provides moral and ethical guidance regarding how an individual interacts with another in different social relationships. On this matter, the Master said: '... when the prince is prince, and the minister is minister; when the father is father, and the son is son' (「孔子對曰:「君君, 臣臣, 父父, 子子。」, Confucius, 1893, [12: 11], translated by Legge).

However, in hybrid dialogue, the notion of I-Thou also attempts to challenge such a linear and authoritative way of regarding human interactions. Instead, as mentioned above, this orientation promotes more inclusion and equality among interlocutors (Matusov, 2009). In the dialogic space, mutual respect then does not merely mean putting oneself in others' shoes; instead, the concept could be further realised through the idea of 'Shu' (「恕」, meaning *reciprocal consideration*). The genuine dialogue occurs when the relationship between two individuals becomes balanced reciprocity as a shared identity (Wang, 2018). Therefore, in this research, a dialogic and dynamic interpretation of Confucianism in hybrid dialogue can also be considered an attempt to reconceptualise how Confucianism influences the implicit ground rules in Taiwanese classrooms and to open up more genuine educational dialogue to foster students' higher-order thinking and diversity. Again, as seen in Chang's class discussion on the French Revolution (see Table 6), it is noticeable how he included students' subjectivity in his talk and respected responses from students. By doing so, the teacher demonstrated the concept of reciprocity and, moreover how such a concept could be employed in learning to take alternative historical perspectives.

### c. The hybrid nature of short- and long-term dialogue

In this research, the last major features informed by the findings centre on the hybridity of short- and long-term dialogue. Short-term dialogue highlights the temporal and structural aspects of hybrid dialogue, which can foster pupils' historical thinking (van Drie & van Boxtel, 2008, 2018) by employing various discursive techniques (Mercer, 2008). In this study, the findings also suggest how long-term dialogue can be crucial for teachers to deliver and scaffold well-established historical knowledge to students (Guan, 2012; Li & Wegerif, 2014). With short-term dialogue, a more interactive form of talk (e.g., question and answer) is usually conducted to engage pupils in the discussion. Using discussion, teachers can question, challenge (either their own opinions or narratives from authorities), or invite students to build on ideas. In return, students have opportunities to articulate their historical reasoning and even challenge teachers. This process of 'doing history' (Lee, 2005) is promoted by the latest curriculum reform, which can be considered progressive and inquiry-based. For instance, as is evident in the analysis, in one of Teacher Huang's classes, the hybrid use of short- and long-term dialogue was employed not only to scaffold students' historical knowledge about Taiwanese aboriginal history but also to engage students in dialogue with history as a well-established discipline. The same approach could also be demonstrated in Teacher Hsu's lesson on Taiwanese Land Reform in the Post-War era (see Table 3).

The current heated debate regarding the history curriculum in Taiwan also focuses on the two poles of history education: the traditionalist (emphasising teaching substantial knowledge) and the progressivist (emphasising teaching historical thinking; Chuang, 2019; Lin, 2019). Informed by the findings in this study, short- and long-term dialogues were observed in the history classrooms. Long-term dialogue attempts to introduce a long-term cultural voice of humankind (Guan, 2012; Oakeshott, 1962; Wegerif, 2020) into the dialogic space created by hybrid dialogue. This voice includes external, static historical knowledge, cultural traditions, and knowledge of history as a well-established discipline. In this space, the voices are transformed into dynamic, constantly shifting, live conversations between teachers and pupils, conversations employing historical knowledge from long-term dialogue as material for open discussion to include polyphony and exploration of the diversity of historical interpretations. By proposing the notion of hybrid dialogue, this study also aimed to provide a 'middle ground' to address such a dilemma with the hybridity of short- and long-term dialogue. The middle ground, as Gadamer (1960) argues, always 'involves rising to a higher universality that overcomes not only our own particularity but also that of the other' (p. 305). Therefore, the middle ground emerges from the synthesis, which is constantly changing. By adopting this concept, one must overcome a monological self to consider others' voices, meaning empathy is required. In other words, a middle ground stance opens up a dialogic space to synthesise and integrate monologue and dialogue toward a new form of talk: hybrid dialogue. On the one hand, such a concept resonates with the idea of dialectic proposed by Hegel (2010), in which two opposite notions (i.e., thesis and antithesis) merge to form a higher level: a synthesis. As Bakhtin (1981) argues, 'Dialectics was born of dialogue so as to return to dialogue at a higher level (a dialogue of personalities)' (p. 162). On the other hand, this synthesis of the higher-level form is not a reduction of meaning to a single text but instead offers a dialogic space in which short- and long-term dialogue constantly entangles and transforms into new meaning. To address the dilemma in the current debate between traditionalists and progressivists, the concept of hybrid dialogue might provide a possible solution regarding finding a balance between two educational philosophies.

However, it should be noted that when proposing the revised conceptual framework of hybrid dialogue, we are not saying that all talk falls under the category of this form of dialogue. It is then crucial to further clarify the boundary that sets differences between a hybrid form of dialogue and a non-hybrid one based on the three main features of hybrid dialogue stated above. Firstly, one major boundary lies at the centre of the intersubjectivity of the interlocutors (Dafermos, 2018). Without the relationship of I and Thou as in hybrid dialogue, a non-hybrid form of teachers' talk would appear to be the self-centred, goal-oriented and authoritarian voice that lives outside students' minds regardless of the structural form. That is to say, when a teacher does not empathise with students when talking, whether the talk is in a monologic form (lecturing style) or dialogic form (question-and-answer style), it becomes an *I and It* relationship. Unlike I and Thou relationship, which treats the other as an individual subject, in an I-It relationship, one treats another as an object to achieve one's goals. Therefore, the interactions in such a relationship can never be genuine (Buber, 1958).

The other major difference between hybrid and non-hybrid forms of dialogue is due to the balance or the imbalance. As mentioned above, the key fundamental element of hybrid dialogue is the balance between monologue and dialogue and how these two

contradictory yet complementary concepts in the constant dynamic transformation to one another, eventually reaching the middle ground. In that sense, once the dynamic between monologue and dialogue is imbalanced, it becomes a non-hybrid dialogue. Such imbalance could be due to the teachers overusing of questions to enhance superficial classroom interactions without further genuine engagement with students or the imbalance of epistemic power of teacher-centred monologue throughout the class.

## 6. Conclusion

This study explored features and strategies of three Taiwanese teachers' talk used to teach different elements of historical reasoning in history classrooms. Descriptive statistics of word frequency in complement with fine-grained qualitative analysis were conducted from sociocultural perspectives (Mercer, 2004). The conceptual framework of a hybrid form of dialogue integrated with elements of historical thinking first proposed was informed by literature, and employed, then finally revised through the data analysis in this study.

Findings suggest that three features of hybrid dialogue emerged from this study (namely, the hybrid of openness and closedness, the hybrid of subjectivity and the hybrid nature of short- and long-term dialogue). These three major features of hybrid dialogue offer a synthesised perspective on how dialogic education looks in Taiwanese history classrooms. The concept contributes significantly to an alternative theoretical perspective for current dialogic education theories from East Asian perspectives. In this hybridity, intersubjectivity is mutually recognised between teachers and pupils. Long-term cultural dialogue (i.e., historical knowledge) is brought into the dialogic space and transformed into a dynamic live conversation in which teachers and students explore higher-order concepts in history (i.e., historical thinking and reasoning). Moreover, as for the contribution for teaching practice, this study also argues that a midway found in hybrid dialogue is then considered a solution for dealing with the paradigm war between traditionalist and progressive perspectives in history education created by the latest Taiwanese national curriculum reform (NAER, 2018).

As for implications for practice, it is suggested that to adopt a stance of hybrid dialogue in a history class is to be willing to explore constantly a never-fixed middle-ground between different perspectives (polyphonic voices), as well as learning, acknowledging, and respecting an external static monologic voice in history as a well-established discipline. That means teachers could employ some discursive techniques, as suggested in this study. For instance, questions (causal and evaluative questions) can be used as a prompt to start and facilitate dialogue. Teachers can also invite students to contribute or build on others' ideas. To engage students in the dialogue of history as a well-established discipline, teachers can restructure students' everyday discourse into academic discourse (Lee, 2005). Finally, despite using talk that seems from its surface structure to be a monologue, teachers can model the process of historical reasoning and explicitly demonstrate self-dialogue for students.

However, this study suffered from a few methodological limitations. For one, the in-depth case study approach meant that the sample size was relatively small, limiting generalisability. Moreover, although the whole-class dialogue was taken into account in the analysis, the main focus was primarily on the teacher's talk. Future research could observe a broader context, such as students' group discussions when doing collaborative activities. Lastly, this study did not administer any test to quantify learners' competency in historical reasoning and hence could not make claims about the causal relation between dialogic teaching and learners' historical reasoning skills. Future research is needed to examine the relation through correlation and regression analysis to build a potential causal model. In this study, other types of data, such as interviews with teachers and students, were lacking and hence failed to give voices to them to explore how historical thinking is embedded in their discourse. For future studies, we highly encourage researchers to employ a triangulation method to enhance the validity of history education research (Kelle, Kühberger, & Bernhard, 2019).

## Funding

This work was supported by Taiwan Cambridge Scholarship (No. 10468576).

## Declaration of competing interest

None.

## Data availability

Data will be made available on request.

## Acknowledgements

We thank all of the teachers who took part in the original study and peer reviewers of drafts of this manuscript, especially Professor Fiona Maine, Cristina De Oliveira Santos and Lydia Cao.

## Appendix A. Original transcripts in Chinese

**Table 1**  
Discussion on Taiwanese aboriginal rebellion from Hsu's first lesson.

Agent	Line	Utterance
Teacher	1	麻豆社事件發生什麼事情呢?簡單來說,荷蘭人大舉入侵麻豆社,殺了非常多的麻豆社原住民後,一把火把麻豆社全部燒了。這對於麻豆社社民來說,這個東西滿慘烈的。那為什麼麻豆社事件會爆發呢?有他的背景。背景是什麼?荷蘭當初想要加強控制整個南台灣,可是日本人跟漢人他早就在荷蘭人以前跟原住民做生意了,可是1624年荷蘭來了之後,他覺得自己是老大,於是他開始跟漢人海商課徵「十一稅」,那這時候有些日本人就不滿...
Teacher	2	...那濱田彌兵衛事件怎麼爆發的呢?濱田彌兵衛是長期在台灣做生意的日本人,那荷蘭人來之後,除了被課稅之後,荷蘭還百般刁難甚至還軟禁了濱田彌兵衛,於是他就找了同夥跑到荷蘭官邸去綁架當時的長官,之後經過人質交換到日本談判,才解決這件事情。
Teacher	3	那為什麼他是麻豆社事件背景呢?原因非常簡單,因為他只花十幾個人就可以到荷蘭長官邸去挾持長官,這代表什麼事?原因非常簡單,因為荷蘭當時對於台灣的控制並不穩固,如果你在台灣你現在敢做這件事情,你覺得你會發生什麼事情?你說你要挾持誰?你走在凱達格蘭大道,你都還沒行動,你就会被逮捕了。所以不可能。
Teacher	4	所以當時濱田迷兵衛可以挾持長官,這代表荷蘭對於台灣的控制並不穩固的情況底下,所以才會有這個引爆點啊!所以麻豆社事件就是,當荷蘭開始對原住民開始加壓控制,麻豆社原住民早就不滿,在1629年時候彼此串通好:我們背荷蘭人到河中間的時候,我們就把他溺死吧造成荷蘭六十名士兵全部溺死。
Teacher	5	之後結果是什麼?1635年荷蘭人反擊,他大屠殺麻豆社社員,這就是麻豆社事件。那他怎麼大屠殺呢?肯定是有人幫他的,他除了用荷蘭人先進武器外,還有一個重要的「以番制番」。「以番制番」就是外來統治者用來控制原住民的方式,這我們之後到清代到日治都會看到一樣的方法,這叫做「以番制番」。
Teacher	6	那到底誰去幫荷蘭人?幫我寫上,新港社,新港社去幫荷蘭人。
Teacher	7	但問題又來了,1629年發生麻豆社事件,但為何1635年荷蘭人才報仇?為什麼隔了那麼久?
Teacher	8	為什麼那麼久?原因有兩個,第一個荷蘭人當時對台灣控制還不穩固,所以他沒有足夠兵力,去鎮壓麻豆社社員,這是第一個原因,第二個請問各位,荷蘭人為什麼要控制台灣,難道他真的很想統治台灣嗎?不是,他是要把台灣作為什麼?
Student	9	貿易的點
Teacher	10	貿易的點!轉口貿易很重要的中繼站,他是要跟誰做貿易?日本跟中國,所以1629年當時荷蘭人他的目光都在明朝,他想跟中國做生意,結果在1633年的時候,明朝打敗了荷蘭,所以荷蘭就不能跟明朝做生意了,這時候他們就把經營中心從中國轉到台灣,所以是有這個原因的,聽得懂意思嗎?
Teacher	11	所以麻豆社事件結束以後呢,這時候荷蘭就跟麻豆社社員簽訂麻豆條約...這時候他在台灣的主權才開始確立,所以這一整個事件的結果是什麼?確立統治基礎。
Teacher	12	那如何證明確立統治基礎呢?我給大家一個數據,在麻豆社事件隔一年後,1636年就有47個平埔族的部落紛紛歸降於VOC,所以麻豆社事件他起了殺雞儆猴之用。

**Table 2**  
Discussion on Taiwanese Land Reform in Post-War era from Hsu's second lesson.

Agent	Line	Utterance
Teacher	1	來第二個是土地正義的問題,就算你說我要穩定政治,甚至我要促進台灣的農業經濟,難道耕者有其田就真的可以實施嗎?我們真的能夠剝奪地主的權利嗎?可以嗎?
Teacher	2	所以呢,大法官曾經就對耕者有其田去做釋憲,發現這個政策是違憲的,所以土地正義這個問題值得我們去反思。
Teacher	3	最後,我們用一個問題去結尾,當我們學到這一段歷史的時候,請問我們有學到說,國民政府在台灣實施這些土地政策時,地主有激烈反抗,但我們有學到這段歷史嗎?沒有,所以問題是,為什麼地主沒有激烈反抗?
Student	4	(不清楚)
Teacher	5	為什麼?
Alex	6	被磨除掉
Teacher	7	被除掉?好,那還有嗎?
Ben	8	動員戡亂時期條款
Teacher	9	動員戡亂時期條款!好,有講到重點了!為什麼,1947年發生什麼事情?
Ben	10	228事件
Teacher	11	228事件,甚至是國民政府來到台灣時為反共,實施的一種戒嚴體制!白色恐怖!所以有了前人的經驗,這些人為了要反抗國民政府在陳儀那年代,所以就被消失了,被抓去關就不見了。所以請問你敢反抗嗎?你不敢反抗。
Teacher	12	所以我們從三七五減租就看到,三七五實施的時間點是在國民政府遷台以前,三七五是誰推動的?
Cathy	13	陳誠
Teacher	14	當時的台灣省省主席陳誠。陳誠一開始在推動三七五減租時是很多地主在反抗的,當時陳誠就說了一句話,調皮搗蛋的人有,但不要命的人總沒有。所以我們就可以用這句話,總結戰後的土地改革,那各位有問題嗎?沒問題就下課了。

**Table 3**  
Discussion on the typology of Taiwanese Indigenous People from Huang's first lesson.

Agent	Line	Utterance
Teacher	1	...我們也可以整理在這裡頭,好來,那所以有沒有同學要來發獎勵卡的?有沒有誰要跟我們分享,你怎麼寫的?這是我們上次一開始講的,社會科很重要的概念叫做分類,對吧?
Class	2	對。(齊聲)
Teacher	3	所以我們就來正確的分類,Gina你要不要來幫大家,你怎麼寫的?你把學習單拿出來,你唸一下你高山族怎麼寫的?
Gina	4	食小米文化。
Teacher	5	談對沒錯,課本就寫拉...對,他是小米文化,也有漁獵文化依據地理條件不同。但統整起來,高山族的特色就是什麼?他是跟大自然共存的,然後為什麼只寫小米跟漁獵?表示他只吃魚跟小米嗎?
Gina	6	不是

(continued on next page)

Table 3 (continued)

Agent	Line	Utterance
Teacher	7	不是,小米跟魚是他的主食,他還會找其他的,有什麼吃什麼。這樣聽懂嗎?所以課本這樣寫的時候你不要以為阿他們都只有吃小米,他可能還有吃其他的野菜,重點是他們跟自然共存生活的概念。好,那課本有寫這邊,那對應過來平埔族呢?有沒有發現,有些是農耕,那天同學也有問到叫做刀耕火種的農耕方式,但是也有一些族是狩獵的。比較有趣的事,如果是農耕的話,是女生去種田,狩獵的話是男人去打獵。所以這個是高山族這邊沒有寫到的,高山族這邊是靠地區來分類。可是到平埔族這邊他有一個新的發現,多的發現,就是他跟性別有關,不見得跟族群有關。那同學我要問一下為什麼?為什麼平埔族會有這樣的女生是農耕男生是狩獵?
Benson	8	因為狩獵比較危險
Teacher	9	有可能是這樣,那還有沒有?我們現在知道的平埔族有哪些?我們剛剛講過了,高山族我們現在知道比較多族,平埔族很少,課本怎麼講只有兩族,哪兩族?
Besson	10	西拉雅族
Teacher	11	西拉雅跟?
Jake	12	凱達格蘭
Teacher	13	對所以平埔族為什麼我們看到是這樣?有沒有可能因為我們只觀察這兩個族,剛好這兩個族就是這樣。阿可是以後我們在觀察別的族[
Gina	14	[有可能
Teacher	15	有沒有可能會打破這樣的分類?
Class	16	有(齊聲)!
Teacher	17	太好了,所以你要注意到,所有分類都是暫時的,他以後是可以打破的,但你現在就是從既有的資料裡面去分類。這樣聽懂嗎?所以我們歷史科叫做歸納法,就是你看了好多好多的資料再整理起來,那這個學期我就是想要請同學好好的練習這樣的技巧。...
Teacher	18	所以你有沒有發現課本標題是重要的,不要只看標題下面的文字,你要看課本是怎麼分類的,那為什麼課本分成這三類?這才是要問的問題
Dylan	19	比較重要
Teacher	20	對,就是課本展現人類學家用來觀察一個我們不知道的社會的方法,就是這三個。所以同樣道理,你可不可以寫一個漢族的?我們大部分是漢人,漢人的生活哲學跟生活方式是什麼?然後我們漢人的家族跟社會組織是什麼?然後再來漢人的宗教信仰跟祭典是什麼?是不是就可以跟原住民比對出來。...
Teacher	21	...再來,剛剛講的這些關於原住民的事情,我們是怎麼知道的?這是第七題要問的,對,我們是怎麼知道的?除了我們上禮拜看的東番記這些文字史料之外,還有哪些方法?好來。
Ethan	22	神話
Teacher	23	對,神話傳說,所以我們很多都要去採集他們的神話傳說,就是前面講的口傳的故事,很好!這邊呢?
Fiona	24	食物
Teacher	25	阿食物跟什麼?所以我們是研究什麼?什麼樣的文化?
Fiona	26	生活上
Teacher	27	生活上,是,看得見的東西,所以叫做物質文明。很好吼,也可以看他們吃什麼穿什麼。再來呢?
Eric	28	祭典活動
Teacher	29	看他的祭典活動,對,親自體驗祭典活動,所以你去參加豐年祭、矮靈祭,你不是只是去娛樂而已,你也可以去做觀察。還有呢?同學在講的時候有沒有啟發你,你是不是可以把自己沒想到的也記錄下來。好,還有呢?
Helen	30	身體構造
Teacher	31	身體構造,這個有意思喔!好可不可以詳細說明為什麼要研究人家的身體?
Helen	32	是屍體
Teacher	33	屍體?有意思喔,你有觀察到,身體構造不是只有活著的人也有死的人。來再多講一點。
Helen	34	不同國家的人住在不同地方,身體構造會不一樣。
Teacher	35	很好,所以他在講說,因為南島語族住在熱帶地區,他的身體構造可能會跟著在北方的人不一樣。沒有錯,太好了,他講到一個我沒想到今天會講的,叫做「體質人類學」。...就是人類學的一個分類,透過醫學的解剖與生理的研究,了解不同地域的人他的體質上跟他的環境,會有什麼影響?會產生什麼不一樣的疾病。所以確實在台灣,我們後面會看到,日本統治台灣時期,就會有這個,熱帶醫學研究。

Table 4

Discussion on the concept of 'NaoLiao' from Huang's second lesson.

Agent	Line	Utterance
Teacher	1	來接下來第一組請告訴大家82頁,這個「腦寮」講的是什麼?好來請上台。好接下來第四組準備講買辦喔!好腦寮來講一下,什麼是,腦寮是頭腦的腦嗎?嚇死人[
Alice	2	[腦寮就是製作樟腦的地方。就是有點像一個工廠,然後把樟腦樹變成樟腦的地方。
Teacher	3	喔!OK!好極了!所以這一段在講什麼呢?所以腦寮是製作樟腦的地方,現在很多地方還有這樣的地名。比如說,有同學坐那個[
Alice	4	[貢寮
Teacher	5	[那個藍32線,到那個(馬祖堂)的那個公車路線,他現在還有這樣的地方,有這樣的寮吼。OK!那這一段呢?那這一段在講腦寮是什麼東西?82頁的這一段。來,幫忙說明一下。為什麼這一段在講腦寮?好,上台來說。
Carrie	6	(Carrie上台)因為這個時候就是有國際貿易的商品,然後[
Teacher	7	[這時候,是什麼時候?
Carrie	8	嗯...開港過後。
Teacher	9	對,台灣開港以後。吼,OK,然後?
Carrie	10	樟腦就是國際市場貿易比較多的商品[
Teacher	11	[對,所以
Carrie	12	就是比較多的腦寮來專門製作樟腦。然後通常腦寮都設在那個原料樟樹皮。
Teacher	13	對,樟樹。所以在地理位置上面,會比較傾向在台灣哪一個地理位置上面看到?哪邊?
Carrie	14	山地。
Teacher	15	山地,而且是北中南哪一部分的山地?
Carrie	16	北部。
Teacher	17	對,應該在北部比較靠山地的地方會有很多的腦寮。因為在開港後,樟腦是非常重要的國際貿易的商品。好,所以你就可以知道,在那個時代,19世紀後期開港以後,做開樟腦公司的製腦的工作就會有很多人做。OK。好極了!

**Table 5**  
Discussion on the French Revolution from Chang's first lesson.

Agent	Line	Utterance
Teacher	1	好，剛剛贊成法國大革命事必然會爆發的，有沒有人要來發表一下意見？
Dan	2	因為法國人之前他經濟跟財政的問題，還有他政治上面的問題，導致群眾不滿。所以不管他有沒有啟蒙運動，這個不滿累積到一定程度，到最後一定會引發法國大革命。
Teacher	3	所以你的有兩點，第一點，你先排除跟啟蒙運動的關係，所以關鍵的不是啟蒙運動，而是譬如說有饑荒，國家財政問題和貴族教士他們遲遲不釋放出他們的權力，到最後這個臨界點就是法國大革命。你認為是這樣嗎？(Dan點頭)有沒有其他要補充的？(停頓)沒有！好，那認為是偶然的同學有人要來發表一下嗎？(Gary舉手)來請講
Gary	4	就是要產生這樣的情況，一定是有各種偶然的事件才會產生這樣的情況，那就是所有偶然加起來，綜合起來！
Teacher	5	[所以你是說，可能會有這個趨勢，但不一定會 [爆發
Gary	6	[爆發，對
Teacher	7	因為爆發還需要幾個東西？
Gary	8	還需要各種方面，像是人民的感覺，還有知識影響傳播，還有政府，經濟方面。
Teacher	9	所以你說偶然的東西太多了，所以時代是無法完全這樣的分析說一定會產生這樣的結果。
Gary	10	對。
Teacher	11	所以可能會有你說的那種壓力(指向Dan)可能就是不會點燃呀！沒有一個打火機，火苗點下去，你堆再多都沒用呀！你被他說服了嗎？(Dan搖搖頭)沒有！來，那一票同學(Wally舉手)，來請講
Wally	12	就是要有個趨勢，那個趨勢就是必然，然後事情的發生就是偶然的。我想到的是說，就像你把牛奶拿去微波後，立刻拿出來搖一搖，牛奶就會突然，就是噴出來，就是那個趨勢就是那個騷動在，但你沒有給他一個事情，它就不會暴動。
Teacher	13	所以你說的是 [
Wally	14	[就是有點結合剛剛同學說的說法
Teacher	15	好，還有沒有其他意見？沒有其他意見就重新投票...

**Table 6**  
Discussion on the Enlightenment Movement from Chang's second lesson.

Agent	Line	Utterance
Teacher	16	來，我們再來想一想第二個問題：是啟蒙運動導致法國大革命嗎？還是革命導致啟蒙運動？剛剛B說得很好，他認為啟蒙運動的那些學者，並沒有說要廢除掉貴族階級呀！很有道理！所以啟蒙運動真的沒有促成革命嗎？為什麼課本要把啟蒙運動放在法國大革命之前，難道只是啟蒙運動發生時間點比較前面，還是說他們有因果關係？是時序關係還是因果關係？請聽好，有時序不見得有因果！請問一下誰可以幫忙講一下？(Benny舉手)好，你來講
Benny	17	如果今天說，班上很熱鬧冷氣，然後有人說我們來節能減碳，關掉冷氣，然後就是全班都沒有人舉手同意，就是即使你心裡也認為這樣對地球比較好，但你還是不會舉手。
Teacher	18	懂他的意思嗎？(環視全班)
Benny	19	對，這樣他可能覺得是對的，但他不見得敢去做。可是啟蒙運動就是提供了一個不一樣的聲音，然後就好像有人開始這樣做了，我也覺得是對的，就會跟著這樣做，大家懂這意思嗎？
Teacher	20	懂不懂這意思？他的意思是說，這些人是不是曾經有聽過啟蒙運動的這些想法和主張，但不會去做出來，畢竟是少數。但懂到時機發生後，你會往這個方向想，請問一下，有沒有人對這樣的說法有爭議？
David	21	啟蒙運動的宣傳一開始應該只有到知識份子而已，他們有點討厭群眾，所以應該很難在群眾心中埋下因子。
Teacher	22	所以你認為群眾知道的太少，所以他們根本就沒有這種啟蒙的思想？
Benny	23	我覺得我剛剛講的那個，並不是群眾對啟蒙運動的內涵是否真正了解，而是他們心中已經想要反抗，或是推翻現有情況，不管是用什麼方法，不管是用改革還是革命，想改變生活情況，然後有人說國王不一定是對的，然後有人說...有出現這樣反叛的聲音後就會革命，不見得是對「自由平等博愛」有深刻的了解。
Teacher	24	但這種反叛的思想是來自於啟蒙運動的嗎？
Benny	25	這種反叛的思想...(停頓)
Teacher	26	對啊，所以 [
Benny	27	[應該說只是其中一個契機。
Teacher	28	其中一個契機？(停頓)還有沒有人有不同想法？(Fred舉手)來謝謝請講。
Fred	29	就是那個，代表法國大革命的第三階級的領袖是醫生律師、新聞記者，資料上面也寫說他們也是有受到啟蒙運動思想的，所以我就當他們是有受到啟蒙運動影響。那是他們來就是帶動法國大革命。所以我覺得啟蒙運動在這個作用，是讓那些頂頭的人，就是產生這個想法說，舊的制度可能是錯的是可以被改變的。那底下的人不懂，有可能真的不懂，那他們就是覺得生活很痛苦，他們也想改變，但他們不知道怎麼改變，畢竟他們沒有經過啟蒙運動的影響。那那些帶頭的醫師律師記者就有這些影響，有這些想法，他們認為不好就站出來，就帶頭出來改革，那農民就想說這是一個新的契機，那我們就跟著做畢竟現在生活不好，那我們就跟著做這樣。
Teacher	30	所以你在說其實這兩個論點並不違背(Fred點頭)。第一個，你剛剛(指著Fred)講得真好...

## References

- Alexander, R. (2018). Developing dialogic teaching: Genesis, process, trial. *Research Papers in Education*, 33(5), 561–598. <https://doi.org/10.1080/02671522.2018.1481140>
- Alexander, R. (2020). *The dialogic teaching companion*. New York: Routledge.
- Bakhtin, M. M. (1981). The dialogic imagination: Four essays (M. Holquist, ed.; C. Emerson & M. Holquist, trans.).
- Boyd, M. P., & Markarian, W. C. (2011). Dialogic teaching: Talk in service of a dialogic stance. *Language and Education*, 25(6), 515–534. <https://doi.org/10.1080/09500782.2011.597861>
- Boyd, M. P., & Markarian, W. C. (2015). Dialogic teaching and dialogic stance: Moving beyond interactional form. *Research in the Teaching of English*, 49(3), 272–296. <http://www.jstor.org/stable/24398703>.
- Buber, M. (1958). *I and thou* (2nd ed.). Edinburgh: T & T Clark. R. Gregory Smith, trans.
- Chang, C. C. (2020). 探索「混合式對話」—高中歷史教師對話分析架構 [Exploring 'hybrid dialogue'- dialogic history education analysis scheme] [Paper presentation]. In *2020 international conference on education for future citizens, Taipei City, Taiwan*. November.

- Chang, D. S., Kim, Y. J., Chen, H. W., Chen, J. M., Yang, Z. F., Zhao, Z. Y., & Elizabeth. (2001). 論中庸理性：工具理性，價值理性和溝通理性 [On rationality of Zhongyong: instrumental-rational, value-rational and communicative-rational]. *社會學研究 [Sociology Studies]*, 2, 33–48.
- Chen, M. J. (2002). Transcending paradox: The Chinese “middle way” perspective. *Asia Pacific Journal of Management*, 19(2), 179–199.
- Chuang, D. Z. (2019). 從《十二年國民基本教育課程綱要總綱》看中學歷史教育的契機與新挑戰 [Exploring new opportunities and challenges from new National Curriculum]. *思與言 [Thoughts and Words]*, 57(3), 52–64.
- Clart, P., & Jones, C. B. (Eds.). (2013). *Religion in modern Taiwan: Tradition and innovation in a changing society*. Honolulu: University of Hawaii Press.
- Cresswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research*.
- Dafermos, M. (2018). Relating dialogue and dialectics: A philosophical perspective. *Dialogic Pedagogy*, 6.
- Duquette, C. (2015). Relating historical consciousness to historical thinking through assessment. In K. Ericikan, & P. Seixas (Eds.), *New directions in assessing historical thinking* (pp. 51–63). Routledge.
- Gadamer, H. G. (1960). In 2d ed (Ed.), *Truth and method*. London: Sheed & Ward. transl. by Joel Weinsheimer and Donald G. Marshall, 1989.
- Guan, Z. K. (2012). 對話性的問答原型與《論語》對話性的跨文化探析 [the question - answer prototype of dialogism and cross - cultural interpretation of dialogism in Confucius' analects]. 山東師範大學 [Journal of Shandong Normal University ( Humanities and Social Sciences)], 57(4), 65–70.
- Hegel, G. W. F. (2010). *The science of logic* (transl. Edit. By G. di Giovanni). Cambridge: Cambridge University Press.
- Hennessy, S., Calcagni, E., Leung, A., & Mercer, N. M. (2021). An analysis of the forms of teacher-student dialogue that are most productive for learning. *Language & Education*. <https://doi.org/10.1080/09500782.2021.1956943>
- Hennessy, S., Howe, C., Mercer, N., & Vrikki, M. (2020). Coding classroom dialogue: Methodological considerations for researchers. *Learning, Culture and Social Interaction*, 25, 1–19. <https://doi.org/10.1016/j.lcsi.2020.100404>
- Hennessy, S., Warwick, P., & Mercer, N. (2011). A dialogic inquiry approach to working with teachers in developing classroom dialogue. *Teachers College Record*, 113(9), 1906–1959. Available from <http://www.tcrecord.org/content.asp?contentid=16178>. Available from.
- Howe, C., & Abedin, M. (2013). Classroom dialogue: A systematic review across four decades of research. *Cambridge Journal of Education*, 43(3), 325–356. <https://doi.org/10.1080/0305764X.2013.786024>
- Howe, C., Hennessy, S., Mercer, N., Vrikki, M., & Wheatley, L. (2019). Teacher-student dialogue during classroom teaching: Does it really impact upon student outcomes? *The Journal of Learning Sciences*, 28(4), 462–512. <https://doi.org/10.1080/10508406.2019.1573730>
- Hsiao, Y. (2009). 理解學生歷史思維的重要性 [The importance of understanding students' historical reasoning]. *歷史教育 [History Education]*, 14, 87–102. <https://doi.org/10.6608/THE.2009.014.087>
- Hui, Y. (2018). *The question concerning technology in China: An essay in cosmotechnics* (2nd ed.). Falmouth: Urbanomic.
- Husbands, C. (1996). *What is history teaching? language, ideas, and meaning in learning about the past*. Buckingham. Philadelphia: Open University Press.
- Jefferson, G. (1985). An exercise in the transcription and analysis of laughter. In T. Van Dijk (Ed.), *Volume 3. Handbook of discourse analysis*. London: Academic Press.
- Kelle, U., Kühberger, C., & Bernhardt, R. (2019). How to use mixed-methods and triangulation designs: An introduction to history education research. *History Education Research Journal*, 16(1), 5–23. <https://doi.org/10.18546/HERJ.16.1.02>
- Kirkland, R. (2004). *Taoism: The enduring tradition*. Routledge.
- Lee, P. (2005). Putting principles into practice: Understanding history. In M. S. Donovan, & J. D. Bransford (Eds.), *How students learn: History in the classroom* (pp. 31–78). Washington, D.C: National Academies Press.
- Lee, P. (2014). Fused horizons? UK research into students' second-order ideas in history – A perspective from London. In M. K. ster, H. Thünemann, & M. Zülldorf-Kersting (Eds.), *Researching history education: International perspectives and disciplinary traditions* (pp. 170–194). Schwalbach: Wochenschau Verlag.
- Lévesque, S. (2008). *Thinking historically: Educating students for the twenty-first century*. Toronto: University of Toronto Press.
- Lévesque, S., & Clark, P. (2018). Historical thinking: definitions and educational applications. In S. A. Metzger, & L. M. Harris (Eds.), *The Wiley International Handbook of History Teaching and Learning* (pp. 119–148). New York: Wiley-Blackwell.
- Li, L., & Wegerif, R. (2014). What does it mean to teach thinking in China? Challenging and developing notions of ‘Confucian education’. *Thinking Skills and Creativity*, 11, 22–32.
- Lin, T. S. (2019). 文本、文本閱讀與歷史教學：兼論溫伯格的閱讀理論 [Texts reading and history teaching: Wineburg's theory of reading]. *思與言 [Thoughts and Words]*, 57(3), 65–97.
- Littleton, K., & Mercer, N. (2013). *Interthinking: Putting talk to work*. Routledge.
- Lyle, S. (2008). Dialogic teaching: Discussing theoretical contexts and reviewing evidence from classroom practice. *Language and Education*, 22(3), 222–240. <https://doi.org/10.1080/09500780802152499>
- Matusov, E. (2009). *Journey into dialogic pedagogy*. NY: Nova Science Publishers.
- Mercer, N. (1995). *The guided construction of knowledge: talk amongst teachers and learners*. Clevedon, Avon, England ; Philadelphia: Multilingual Matters.
- Mercer, N. (2004). Sociocultural discourse analysis. *Journal of Applied Linguistics*, 1(2), 137–168.
- Mercer, N. (2008). Talk and the development of reasoning and understanding. *Human Development*, 51(1), 90–100. <https://doi.org/10.1159/000113158>
- Mercer, N. (2010). The analysis of classroom talk: Methods and methodologies. *British Journal of Educational Psychology*, 80(1), 1–14. <https://doi.org/10.1348/000709909X479853>
- Miyazaki, K. (2019). Dialogic lessons and triadic relationship among pupils, learning topic, and teacher. *Dialogic Pedagogy: An International Online Journal*, 7. <https://doi.org/10.5195/dpj.2019.239>
- Murphy, P. K., Greene, J. A., Firetto, C. M., Hendrick, B. D., Li, M., Montalbano, C., & Wei, L. (2018). Quality talk: Developing students' discourse to promote high-level comprehension. *American Educational Research Journal*, 55(5), 1113–1160. <https://doi.org/10.3102/0002831218771303>
- National Academy for Educational Research (NAER). (2018). 十二年國民基本教育課程綱要 [Curriculum for 12-year basic education- Social Science]. Retrieved from: [https://www.naer.edu.tw/ezfiles/0/1000/attach/41/pta\\_18535\\_6408773\\_60398.pdf](https://www.naer.edu.tw/ezfiles/0/1000/attach/41/pta_18535_6408773_60398.pdf).
- Nisbett, R. E. (2004). *The geography of thought: How Asians and westerners think differently and why*. New York: Free Press.
- Oakeshott, M. (1962). *The voice of poetry in the conversation of mankind, rationalism in politics and other essays* (pp. 197–247). London: Methuen.
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and policy in mental health and mental health. Services Research*, 42, 533–544.
- Patton, M. (1990). Purposeful sampling. *Qualitative Evaluation and Research Methods*, 2, 169–186.
- Poon, J. S., & Poon, G. J. (2020). 英譯並正解老子道德經：附《道德經》艱深句子正解並白話對譯。 [an English translation and the correct interpretation of Laozi's Tao Te Ching]. Retrieved from: <http://www.vincentpoon.com/laozi-tao-te-ching-viii.html>.
- Rojas-Drummond, S., Torreblanca, O., Pedraza, H., Vélez, M., & Guzmán, K. (2013). 'Dialogic scaffolding': Enhancing learning and understanding in collaborative contexts. *Learning, Culture and Social Interaction*, 2(1), 11–21. <https://doi.org/10.1016/j.lcsi.2012.12.003>
- Seixas, P. (1996). Conceptualizing the growth of historical understanding. In D. R. Olson, & N. Torrance (Eds.), *The handbook of education and human development* (pp. 765–783). MA: Blackwell.
- Seixas, P. (2017). A model of historical thinking. *Educational Philosophy & Theory*, 49(6), 593–605. <https://doi.org/10.1080/00131857.2015.1101363>
- Shen, V. (1994). Confucianism, Taoism and constructive realism. In V. Shen, & T. R. Doan (Eds.), *Philosophy of science and education Chinese and European views* (pp. 107–122). Washington: The Council for Research in Values and Philosophy.
- Sidorkin, A. M. (1999). *Beyond discourse: Education, the self and dialogue*. New York: State University of New York Press.
- Sinclair, J. M., & Coulthard, M. (1975). *Towards an analysis of discourse: The English used by teachers and pupils*. Oxford: Oxford University Press.
- Song, P. F. (2008). 講述中的歷史思維教學：一些可能與問題。 [Teaching historical thinking in lecturing: possibilities and problems]. 師大學報：教育類 [NTNU Academy Journal: Education], 53(1), 175–197. <https://doi.org/10.3966/2073753X2008045301008>
- Starr, D. (2012). China and the Confucian education model. *Universitas*, 21, 1–27.
- van Boxtel, C., & van Drie, J. (2017). Engaging students in historical reasoning: The need for dialogic history education. In M. Carretero, S. Berger, & M. Grever (Eds.), *International handbook of research in historical culture and education: Hybrid ways of learning history* (pp. 573–589). New York: Palgrave Macmillan.

- van Drie, J., & van Boxtel, C. (2008). Historical reasoning: Towards a framework for analyzing students' reasoning about the past. *Educational Psychology Review*, 20(2), 87–110. <https://doi.org/10.1007/s10648-007-9056-1>
- van Drie, J., & van Boxtel, C. (2018). Historical reasoning: Conceptualizations and educational applications. In S. A. Metzger, & L. M. Harris (Eds.), *The Wiley International handbook of history teaching and learning* (pp. 149–176). New York: Wiley-Blackwell.
- Vygotsky, L. (1978). Interaction between learning and development. *Readings on the Development of Children*, 23(3), 34–41.
- Wang, Z. W. (2018). 論《論語》「恕」字的多層次內涵[An analysis of the multiple meanings of "Shu" in the Analects of Confucius]. *鵝湖月刊[Legein monthly]*, 518, 52–64. <https://0-www.airitilibrary.com.opac.lib.ntnu.edu.tw/Publication/PublicationIndex/18133738>.
- Wegerif, R. (2011). Towards a dialogic theory of how children learn to think. *Thinking Skills and Creativity*, 6(3), 179–190. <https://doi.org/10.1016/j.tsc.2011.08.002>
- Wegerif, R. (2013). *Dialogic: Education for the internet age*. London: Routledge.
- Wegerif, R. (2018). A dialogic theory of teaching thinking. In L. Kerslake, & R. Wegerif (Eds.), *Theory of teaching thinking* (pp. 89–104). New York: Routledge.
- Wegerif, R. (2020). Foundations for research on educational dialogue. In R. Kershner, S. Hennessy, R. Wegerif, & A. Ahmed (Eds.), *Research methods for educational dialogue* (pp. 9–26). London: Bloomsbury.
- Wegerif, R., & Yang, Y. (2011). Technology and dialogic space: Lessons from history and from the 'Argonaut' and 'Metafora' projects. *Long Papers*, 312–318.
- Wei, Y. (1996). The Yin and Yang aspects of language. *Working Papers of the Linguistics Circle*, 13, 151–160.
- Wineburg, S. S. (2010). Historical thinking and other unnatural acts. *Phi Delta Kappan*, 92(4), 81–94. <https://doi.org/10.1177/003172171009200420>
- Wu, N. D. (2006). 轉型正義和歷史記憶: 台灣民主化的未竟之業[transitional justice and historical memory: Unfinished business of Taiwanese democracy]. *思想[Reflexion]*, 2, 1–34.
- Zhou, X. (2019). Daoism and dialogism: A dialogue between China and the west. *Culture & Psychology*, 25(4), 517–543. <https://doi.org/10.1177/1354067X19845072>