Not Always a Panacea: History Education and Identity-Building in Taiwan*

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Abstract

We study the impact of history curricula on national identity in Taiwan. The high school curriculum reform of September 2006 separates the history of Taiwan from Chinese chronology and increases Taiwan-oriented content to transmit Taiwanese identity. We document an unintended "backlash" that individuals studying the new curriculum are more likely to hold both greater Taiwanese and Chinese identities. Our analysis suggests endogenous changes in information demand as a prominent mechanism: treated high schoolers show greater identity awareness and acquire more information related to both identities. We further observe consistent attitudinal changes, with milder political views and an increase in votes for median candidates or abstention.

JEL classification: D83, I28, Z10, P00

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"Until the lions have their own historians, the history of the hunt will glorify the hunter."

— *Chinua Achebe*

1 Introduction

There is a long tradition of state elites taking education as a tool for nation-building (e.g., Aghion et al., 2019; Bandiera et al., 2019; Alesina, Reich and Riboni, 2020; Alesina, Giuliano and Reich, 2021; Carvalho, Koyama and Williams, 2024). In light of the pervasive efforts to promote patriotism through school curricula (Alesina, Giuliano and Reich, 2021; Iashchenko, 2023), understanding whether it can work (and why or why not) is of both academic and policy relevance.

This paper examines the history curriculum reform in Taiwan. The conflict between Taiwanese and Chinese identities have been an issue for decades since the political rivalry started between Taiwan and Mainland China (Wachman, 1994; Rigger, 2013). The *de-sinicization* (i.e., elimination of Chinese identity) since 1990 has led to a rapid expansion of Taiwanese nationalism, and the curriculum reform studied in our paper represents an educational policy aimed at further transmitting Taiwanese identity. Our empirical analysis leverages the *95 Curriculum Reform* – the regular-track high school history curriculum reform of September 2006. The new curriculum increased Taiwan-related content sharply and, for the first time, adopted a Taiwan-centric history perspective, whereas in the previous curriculum, Taiwan's history was embedded in Chinese chronology.

Conceptually, whether the reform successfully fostered identity-building can be ambiguous. On the one hand, intensive exposure to Taiwan-related content can be useful in building Taiwanese identity (Cantoni et al., 2017; Fouka and Voth, 2022). On the other hand, high schoolers and their households are not passive recipients of educational content (Bisin and Verdier, 2001; Dessi, 2008; Carvalho, Koyama and Williams, 2024). Sharp changes in history curricula can likely increase identity salience and shift students' information demand (DellaVigna and Gentzkow, 2010), and may also shift the transmission effort from other substitute mechanisms for socialization – e.g., oppositional parents invest more in transmitting oppositional identity to their children (Bisin et al., 2011). These endogenous changes in the supply and demand of identity information can lead to moderation or backlash when significant enough.

Underpinning our analysis is a detailed dataset concerning national identity in 2013, including respondent sentiment on historical events and political attitudes. In particular, we can observe two separate questions eliciting the strength of Taiwanese identity and Chinese identity of an individual, which allows us to move beyond the traditional "feel more X or Y" constraint

susceptible to social-desirability bias. Combining both *cross-cohort* variation (comparing pre- and post-reform school entry cohorts) and *cross-track* variation (comparing respondents who have taken regular-track high school curricula with respondents who have not), we apply a *cohort difference-in-differences* (DiD) strategy within a narrow cohort bandwidth to identify the causal impact of history education on identity-building (Duflo, 2001). Importantly, the cross-cohort variation is sharp: individuals entering high school just one year apart faced similar socioeconomic environments during their high school and later life, but studied entirely different 3-year curricula around the *95 Curriculum Reform* – when the new curriculum change was implemented, people who were in the second year of high school stayed with the old curriculum and were not treated at all. This feature enables us to compare the adjacent cohorts of students and largely attenuates concerns about omitted variables.

We find that studying the new history curriculum leads to an unintended increase in the reported strength of both identities: high schoolers exposed to the new curriculum not only have greater Taiwanese recognition, but also report greater Chinese recognition on average. Despite the limited sample size, our baseline estimates feature strong statistical power.[1] We also present additional checks to enhance the validity of small-sample analysis: (1) the estimates remain stable for different cohort bandwidth choices and thus are not likely to be driven by outliers; (2) we conduct permutation tests to further attenuate the concern over statistical power and spurious correlations.

We then examine two potential underlying patterns: (1) the new curriculum fosters Taiwanese sentiment in one sub-group but induces stronger Chinese sentiment in the other sub-group ("polarizing"); (2) the new curriculum increases the probability of an individual identifying themselves more as both Taiwanese and Chinese ("dual-identity").

Our results indicate the dominant role of the dual-identity pattern. First, using the main dataset, we construct a binary that captures whether an individual recognizes a strong Taiwanese identity in conjunction with a strong Chinese identity based on mean or median cutoffs. We also adopt a more parsimonious design by aggregating observations into group-cohort cells, demonstrating that the negative correlation between Taiwanese and Chinese identities has been mitigated following the introduction of the new curriculum. Second, we use alternative categorical identity measures that allow us to pool more survey waves for a larger-sample analysis. The results show a consistent rise in dual identity holding ("both Chinese and Taiwanese"), with the impact remaining significant across different survey years.

Our second set of analyses focuses on the mechanisms. As described by theoretical studies (Bisin et al., 2011; Carvalho, Koyama and Williams, 2024), other forms of cultural transmission

[1] Taiwan has only about 20 million population, and a representative adult survey usually consists of 2,000 individuals, with approximately 35 observations for each school year entry cohort. Therefore, limiting the analysis to a narrow cohort window around the reform (like in our paper, or in Roland and Yang (2017) and Chen, Lin and Yang (2023)) may lead to a small sample size, a challenge we address in several ways.

– such as from parents, other cultural groups, and students themselves – may exist and can neutralize the impact of educational reforms. We therefore conduct heterogeneity analysis based on these dimensions.

First, we do not find significant heterogeneity by parent ethnicity and ideology. A potential explanation is that high schoolers, unlike younger school-age children (e.g., Fouka, 2020), tend to be less receptive to cultural transmission from their parents. Alternatively, it may result from "repression concerns" (e.g., Gehring, 2022): both pro-Chinese and pro-Taiwanese households perceive a greater threat of repression coming from the other group, as the new curriculum elevates the identity issue, thereby increasing the transmission of a neutral identity. While we cannot explicitly test this explanation, our analysis suggests that the new curriculum does not significantly alter one's concern about invasions, and the response rate to identity-related questions remains similar. Second, we investigate heterogeneity along the geo-political dimension.[2] We find that students from cities dominated by pro-Chinese ideology exhibit increased Taiwanese identity to a greater extent, and students from pro-Taiwanese cities exhibit increased Chinese identity to a greater extent. This finding suggests that high schoolers may not be highly intolerant of oppositional identities and not be passive to external transmission; instead, it promotes the speculation about the endogenous information demand by themselves ("tuning out" as described by Carvalho, Koyama and Williams (2024)).

We present two pieces of evidence supporting the role of endogenous information demand of high schoolers. One, the new history curriculum has heightened identity consciousness: treated schoolers display a greater care for identity-related issues. This indicates that the new curriculum has triggered a preference shift, which, according to persuasion theories, can be accompanied by changes in information acquisition (DellaVigna and Gentzkow, 2010). Two, leveraging a survey on media use, we show that treated individuals are more likely to simultaneously consume both Taiwan-related and China-related information, and to recognize both Taiwanese and Chinese history memories. These combined results suggest the endogenous information demand of high schoolers as a salient mechanism.

We close the mechanism analysis by discussing other prominent explanations outside the identity transmission framework. The history curriculum reform does not correlate with significant changes in educational attainment or labor market benefits (Fuchs-Schündeln and Masella, 2016; Costa-Font, García-Hombrados and Nicinska, 2020). A placebo test based on Asian recognition suggests that the observed results are not attributable to increased general learning of history. Analysis of teacher surveys also indicates no notable shifts in teaching practices. Furthermore, differential interpretations of nationhood do not account for our findings.

[2]The geo-political difference features two important mechanisms for socialization: the social environment one is raised in (e.g., Bisin et al., 2011), and the implementation of local rules. Conceptually, individuals growing up in pro-mainland counties may possess a weaker Taiwanese identity prior, but these counties are also more likely to oppose the transmission of Taiwanese identity.

Finally, we document changes in political attitudes aligned with the dual-identity shift. Across two independent representative surveys, we consistently find that the study of the new curriculum has neutralized the political spectrum: treated respondents possess relatively moderate attitudes toward Taiwan-Mainland tensions. Although more suggestive, they are also more likely to be median-style voters who support "median" candidates or abstain from voting.

Taken together, nation-building through school curricula may not always be as effective as expected. Our findings thus add to the growing discussion associating education with political economics (e.g., Aghion et al., 2019; Bandiera et al., 2019; Alesina, Reich and Riboni, 2020; Alesina, Giuliano and Reich, 2021; Carvalho, Koyama and Williams, 2024). We focus on how educational content – a central element of schooling – shapes identity and political outcomes.[3] There are two related studies which both find an effective impact of curricula on ideology formation. One is the pioneering work by Cantoni et al. (2017), which shows that the socialist politics curriculum in Mainland China has successfully shifted a wide range of elite students' ideology. The other is the concurrent work by Chen, Lin and Yang (2023), which finds that the "Knowing Taiwan" education reform of 1997 has boosted junior schoolers' national identity.[4]

Compared to the work mentioned above, the most important differences are our contrasting findings and the mechanism of information demand. First, to our knowledge, we represent one among the first "ineffective" results of curricular transmission. Second, the novel data leveraged here are much more detailed, allowing us to explore related mechanisms more extensively. Cantoni et al. (2017) find little change in high schoolers' sources for media consumption, but they do not have information on changes in content consumed. We show endogenous information demand among treated schoolers as a mechanism that can counteract the curriculum, in line with cultural transmission models where recipients are not passive (Bisin et al., 2011; Carvalho, Koyama and Williams, 2024). In this regard, we also complement the broader empirical work on cultural homogenization, which primarily emphasizes endogenous information supply from parents and religious groups (e.g., Aspachs-Bracons et al., 2008; Clots-Figueras and Masella, 2013; Lleras-Muney and Shertzer, 2015; Friedman et al., 2016; Sakalli, 2019; Fouka, 2020; Bazzi, Hilmy and Marx, 2021; Blanc and Kubo, 2024).

This paper also speaks to the limited but growing literature on multiple and oppositional

[3] History curricula – the educational content we exploit in this paper – is also of interest, as it has become perhaps the most prevalent instrument for nation-building today. See Jones (2011) for cases in Asian regimes, and Ercikan and Seixas (2015) and Hutchins (2016) for Western cases. More recently, the Minister for Education in Ireland mandated all post-primary school students to study history courses since September 2020 in order to "afford young people the chance to learn from chequered history and appreciate how knowledge of the past can shape the future". In Russia, Putin has actively promoted patriotism through the introduction of new curricula that incorporate narratives about the heroes of the 1812 war and the Great Patriotic War, along with accounts of recent acquisitions of Crimea and the port city of Sevastopol.

[4] It is worth noting that the estimated impact of Chen, Lin and Yang (2023) may be sensitive to the choice of the bandwidth and kernel. Specifically, we find that the regression discontinuity estimates flip signs when adopting the optimal bandwidth compared to their preferred specification that uses a wider bandwidth. As a result, the interpretation of the overall lesson may remain open. This is qualitatively consistent with Hughes and Stone (1999)'s observation.

identities (Shayo, 2009; Fryer Jr and Torelli, 2010; Dehdari and Gehring, 2022; Okunogbe, 2023). Our results emphasize the care required in analyzing observational proxies of identity and political views – e.g., reduced support for one's own cultural group may not necessarily indicate an endorsement for other groups; instead, it might feature changes in salience or co-existence. Therefore, it is important for researchers to investigate behavioral changes as well (Bertrand and Mullainathan, 2001; Bond and Lang, 2019). For policymakers, this is relevant to interpreting polling results. The takeaway is likely to bear implications in other settings, as multiple/ambiguous identities are not unique.[5]

Finally, we speak to the role of collective experience in shaping views and behavior (Dessi, 2008; Maddens, Billiet and Beerten, 2000; Clingingsmith, Khwaja and Kremer, 2009; Kaplan and Mukand, 2011; Depetris-Chauvin, Durante and Campante, 2020; Zubrzycki and Woźny, 2020; Fouka and Voth, 2022). Instead of treating collective memory as given (Belmonte and Rochlitz, 2019), we make progress by focusing on its manipulation and transmission.

2 Empirical Context

The setting under study is the island of Taiwan. The policy experiment we exploit is the *95 Regular Senior High School Curriculum Reform* ("95 Curriculum Reform"), a senior high school (grades 10–12, regular track) curriculum reform undertaken by the Taiwanese government, effective from September 2006. The reform enforced Taiwanese identity transmission.

2.1 National identity in Taiwan

The majority of Taiwanese residents (more than 95%) are of Han Chinese ethnicity, sharing similar genetic ancestry and language with Mainland Chinese.[6] Yet, the conflict and coexistence between Taiwanese and Chinese identities remains a primary issue in Taiwan.

The primary root of the alienation is the political rivalry between Taiwan and Mainland China following the Chinese Civil War (1946-1949) (Wachman, 1994; Roy, 2005; Rigger, 2013). In 1949, the Communist Party of China gained the upper hand and took over Mainland China, forcing the *Republic of China* (ROC) led by the Chinese *Kuomintang* (KMT) Party to retreat to the

[5]For instance, the hybrid identity of Mexican Americans (Keefe, Keefe and Padilla, 1987), the existence of a substantial middle ground between Ukrainian and Russian identities in post-Soviet borderlands (Smith et al., 1998; Wilson, 2002), as well as the rise of identity alienation (Hermans and Dimaggio, 2007). According to Wilson (2002), surveys sensitive to dual identities indicated that approximately 27% of Ukrainian citizens identified themselves as both Ukrainian and Russian in the 1990s. Bénabou and Tirole (2011) also note that immigrants and their descendants "who are locally born and have citizenship but often do not feel British, German, or French", yet "neither do they feel Pakistani, Turkish, or Algerian, having little knowledge of the 'old country' ". In a recent empirical study, Okunogbe (2023) demonstrates that ethnic identity and national identity need not be mutually exclusive in Nigeria, and can in fact thrive together.

[6]While Taiwanese society and Mainland Chinese society share some cultural traits in common, Taiwan was a dependency of Japan between 1895 and 1945 and thus features different political and economic institutions compared to Mainland China (Manthorpe, 2016).

island of Taiwan. In October 1949, the *People's Republic of China* (PRC) was founded in Beijing, marking the start of the long-lasting political and military standoff (Lew and Leung, 2013).

Before the 1990s, Taiwan was effectively a one-party regime under the governance of the KMT, which still cultivated Chinese identity because it intended to retake control of the mainland. However, the United Nations expelled the ROC and transferred China's seat to the PRC in 1971, with more states starting to accept Beijing's regime as the sole legitimate Chinese government. The diplomatic dilemma and authoritarianism triggered the democratization of Taiwan in the late 1970s, which finally transformed Taiwan into a multiparty democracy in the early 1990s. Along with the advent of democratization, the political status of Taiwan gradually resurfaced as a contentious issue. The "restraining Beijing by supporting Taiwan" strategy led by the United States and Japan has further aggravated the cross-strait tension (Tucker, 2005).

The internal and external factors together triggered the rise of Taiwanese nationalism and *de-sinicization* (Hao, 2010, Chapter 3). In 2000, the *Democratic Progressive Party* (DPP) won the presidency, marking the polarization of political winds in Taiwan. The DPP advocates an independent nationhood of Taiwan and has promoted a series of policies to erase Chinese identity. Subsequently, education authorities under the DPP have revised curricula for primary and secondary schools to transmit Taiwanese identity, gradually separating the history of Taiwan from the Chinese chronology (Liu, Hung and Vickers, 2013). By contrast, the mainland government recognizes Taiwan as a province of China. Taiwan's nationhood status and future trajectory (unification with the mainland vs. declaring independence) thus shape the political complexity of Taiwanese society. These empirical patterns are in line with the insight of Alesina, Giuliano and Reich (2021) that rulers tend to take advantage of nationalist education in response to potential threats. To this day, the issue of national identity is still central to the political spectrum in Taiwan, closely associated with Taiwan's party politics and electoral outcomes (Nai-Teh, 2015).

Figure A1 depicts the aggregate trend of national identity in Taiwan from 1992 to 2010, based on three coarse categories (Chinese, Taiwanese, and both).[7] Along with the *de-sinicization*, the share of individuals who recognize themselves as pure Taiwanese has increased, accompanied by a gradual decrease in pure Chinese identity. Nonetheless, approximately 40% individuals still hold a dual or ambiguous identity, identifying themselves as both Taiwanese and Chinese. It is worth noting that, as the poll does not provide descriptive statistics by educational tracks and school entry cohorts, the figure here does not correspond to our identification and cohorts under study; instead, it helps us better understand the broad societal climate leading to the reform. The *95 Curriculum Reform* in 2006 can be seen as an intense attempt to eliminate Chinese recognition and further foster pure Taiwanese identity (Chen, 2008).

[7] Data source: aggregate statistics released by the Election Study Center, National Chengchi University of Taiwan (ESC, NCUT).

2.2 The "95 history curriculum reform"

Education in Taiwan. The education system in Taiwan mandates all students to complete nine years of compulsory education, comprising 6-year primary school and 3-year junior high school education.[8] After graduating from junior high school at around 15 years old, students can choose either to attend senior high school or enter the labor market directly. While the majority of students (95%) continue their education in senior high school, there are two tracks available: regular and vocational. About 54% of students who choose to attend senior high school opt for the regular track, which is focused on preparing students for the college entrance exam after 3 years of study.[9] Accordingly, the study in regular-track high school is *de facto* exam-oriented. An alternative is the vocational track, which lays more emphasis on equipping students with specific professions. Both tracks have the option to continue on to tertiary education. Appendix C provides a visualization of the education system in Taiwan.

The 95 Curriculum Reform. History is one of the compulsory subjects for all Taiwanese high schoolers. The history curriculum for regular track students is more comprehensive than that for the vocational track,[10] with history being a mandatory subject to be tested in the academic college entrance exam. The content in the history curriculum serves as a crucial channel for Taiwanese students to form their self-concepts (Liu, Hung and Vickers, 2013).

In 2004, Chen Shui-bian from the DPP won the presidency and initiated the controversial high school curriculum reform. While other subjects have undergone little change, the history curriculum has been sharply restructured. An explicit goal of the new curriculum is to "help students understand their Taiwanese roots and establish self-identity," which is absent in the previous curriculum's guidelines. The first draft of the new history curriculum was made public in 2003. However, due to the heated debates by historians, it did not come into effect until 2006. The final version of the curriculum guideline is entitled the *95th History Curriculum Guideline for Regular Senior High School* (the "95 curriculum"),[11] in which the history of Taiwan is, for the first time, introduced separately from Chinese history and regarded as the innermost core. In the old history curriculum (the "88 curriculum"), the first-year sequence covers the history of China, containing four chapters regarding Taiwanese history; and the second-year sequence focuses on topics in global history. This structure has been completely reshuffled in the 95 curriculum, with the first semester in Year 1 dedicated solely to Taiwanese history and the second to Chinese history. Meanwhile, the new curriculum adopts a Taiwan-centric history perspective, putting explicit emphasis on Taiwanese roots to promote Taiwanese identity (Chiang, 2009).

[8] See https://english.moe.gov.tw/cp-126-17722-3fb83-1.html (from the Ministry of Education).

[9] Source: authors' calculation based on the statistics up to the academic year 2006. See https://stats.moe.gov.tw/files/analysis/99_all_level.pdf for the official report (in Traditional Chinese). The share of academic track high schoolers remains largely stable (51.5%-54%) during our sample period (as of 2009).

[10] Vocational-track students usually take history courses for one academic year, using a simplified version of the textbook.

[11] The "$95th$" here refers to the 95th year in the Taiwanese calendar, which corresponds to 2006 A.D..

Importantly, although students in the vocational track are also required to take history courses, the significant change in the history curriculum only targeted regular track students. The structure of the vocational track curriculum was still identical to the previous 88 curriculum.[12] Meanwhile, there is no cohort-track-specific reform in college education during that period.[13] Finally, of particular relevance to our identification, the enforcement of the new curriculum is "sharp" instead of "gradual": students entering high school one year apart around the reform studied entirely different 3-year curricula.

2.3 Changes in history curricula

Qualitative evidence. To identify changes in the history curriculum content that are designed to indoctrinate Taiwanese memory, we first conduct a comprehensive comparison between the "95 curriculum" and the old "88 curriculum". The major changes lie in the first-year content, which comprises the history of Taiwan and Mainland China.

First, the 95 curriculum separates the history of Taiwan from China, increasing the Taiwan-related content (and the transmission of Taiwanese identity) significantly. In the old 88 curriculum, content related to Taiwan is scattered in four chapters from *National History*, the first volume of textbooks with a total of nineteen chapters.[14] According to the 88 curriculum, the first volume is used in the first two semesters in which students have 2-hours of lectures per week. Thus, Taiwan-related material took up less than half a semester before the reform. In contrast, the 95 curriculum views Taiwanese and Chinese history as distinct topics, emphasizing a Taiwan-centric history perspective. Under the design of the 95 curriculum, history courses in the first semester solely consist of the history of Taiwan, with 2 hours of lectures per week. The history of Mainland China is no longer regarded as a part of the *National History* but is entitled *History of China* and taught in the second semester. Consequently, Taiwan-related memory has doubled in the new curriculum, covering various topics ranging from the local history to the social development of Taiwan. The material regarding the history of China has been condensed to be taught within one semester, as a detached foreign history.

Second, the construction of self-identity is emphasized in the pedagogical objectives of the 95 curriculum. While both curricula aim to "inspire the interest in history" and lead students to "embrace a multi-cultural community", the 95 curriculum places additional emphasis on helping students "grasp their Taiwanese roots and build self-identity" (Chiang, 2009; Lin, 2005). To eliminate Chinese identity, all material is presented based on a Taiwan-centric history perspec-

[12] The update of the vocational track history curriculum lagged far behind the regular track's, and it did not adopt a Taiwan-centric history perspective until the academic year 2011.

[13] Major educational reforms target at the 95 high school cohort (i.e., the 98 college cohort) can be found from the *Educational Statistics Yearbook of Taiwan* (Page 203 - Page 214): https://stats.moe.gov.tw/files/ebook/Education_Statistics/99/99edu.pdf.

[14] The headlines of the four Taiwan-related chapters (out of nineteen) in the old curriculum are "Development of early Taiwan", "Province building and ceding of Taiwan", "Establishment of Taiwan experience" and "Changes in Taiwan society".

tive, in which the history of Taiwan is treated as "the innermost circle, enclosed in the circle of Chinese history, which is further enclosed in the circle of world history" (Tu, 2004).

In addition, explicit references to national identity are eliminated in the new curriculum. Under the old 88 curriculum, the textbooks refer to the history of imperial and modern China as *Wo-guo* ("domestic/our nation's"); whereas the 95 curriculum extensively uses "China" and "Chinese" when introducing the corresponding historical events and treats them as foreign episodes.

Quantitative evidence. We also conduct a quantitative analysis to compare the old and new history curricula. To frame our analysis, we examine changes in textbooks' content based on two broad categories: Taiwan-related memory and China-related memory. In accordance with the 95 curriculum, we define five subcategories for Taiwan-related memory: institutions (democracy and economy), society, technology, culture, territory and historical memories. With regard to China-related memory, we define three subcategories in accordance with the chronology: prehistory and ancient China, imperial China, and modern China. We count the number of related subsections in each category in the old and new textbooks, respectively.[15]

The statistical results are presented in Table B1, in which the percentage change of each category across curricula is also calculated. The Taiwan-related content has been significantly increased in the new textbooks (Panel A of Table B1). In particular, the content concerning political and economic institutions, as well as the historical territory of Taiwan has increased dramatically. The only exception is the number of topics on the evolution of Taiwanese society, which remains largely unchanged.

In contrast, we see little change in the count of China-related topics (Panel B of Table B1). The material on Chinese history has been compressed into one textbook, with some topics in ancient and imperial China being moderately condensed. The length of material regarding modern China, which contains several Mainland–Taiwan shared historical moments, remains mostly unchanged. However, Mainland China is read as a separate "country" in the new curriculum: compared with the 35 counts in the old textbooks, the explicitly designated expression "our nation" only appears twice in the new textbooks to describe Taiwan.

In sum, the quantitative analysis confirms that the new curriculum represents an intense effort to eliminate Chinese recognition and foster Taiwanese identity, in which Taiwan-related content and the transmission of Taiwanese identity have become dramatically more prevalent.

[15]The "subsection" refers to the fourth structural subdivision of a textbook. For instance: "Part IV - Subversion of Qing Dynasty, Unit II - Reform and Revolution, Section I- Xinhai Revolution, Subsection I - Sun Yat-sen and 'Revive China Society'."

3 Data and Empirical Strategy

3.1 Data and measures

Data source. Our main analyses use two sets of representative surveys: the Taiwan Social Change Survey - National Identity (TSCS 2013), and the China Impact Studies (CIS) from 2012 to 2016 (pooled cross-section). The CIS did not conduct its survey in 2014. The sample size of each wave is approximately 2,100 to 2,500 individuals. Both the TSCS and the CIS are conducted by the Institute of Sociology, National Academy of Taiwan, with independent samples managed by different research groups.

The TSCS (2013) is specially designed for topics on national identity. Different from other waves, it contains an extraordinarily rich set of questions concerning national identity, including the respondent's sentiment toward historical events and political attitudes. Importantly, it elicits the strength of each national identity on a 0 - 10 scale, allowing us to observe both Taiwanese and Chinese identities within an individual. To examine the impact on electoral outcomes, we also pool multiple waves (2012 - 2016) of the TSCS survey. The CIS data covers attitudes toward Mainland China, political axes, and electoral behavior. We can thus utilize the pooled CIS data (2012 - 2016) to corroborate our findings and attenuate small sample issues to some extent. Both surveys provide detailed demographic information that allows us to identify the birth cohort and the education track of each respondent, by which we can determine the curriculum to which one was exposed.

We also use the Taiwan Education Panel Survey (TEPS) and the Taiwan Communication Survey (TCS) for additional analyses. The data are described as they become relevant later.

School entry year cohorts. Taiwanese are strictly required to enroll in primary schools at the age of 6, and the school year in Taiwan starts in September.[16] After completing the nine-year compulsory education (6 years in elementary school, 3 years in middle school), one is eligible to attend senior high school. In this paper, we classify individuals according to the school year cohort based on their birth dates. For instance, students who entered senior high school in September 2006 were generally born between September 2, 1990 and September 1, 1991 and we define them as the "2006 school year cohort". Specifically, the 2006 cohort in regular track senior high school is the first cohort exposed to the new curriculum (as the 95 curriculum was rolled out in September 2006).[17]

Education tracks (treatment and control groups). Both surveys record the detailed ed-

[16] See the *Primary and Junior High School Act* (1979) and the *Compulsory Education Act* (1982) by the Minister of Education in Taiwan.

[17] In the TSCS and the TEPS, the date of birth (year-month) is available, so we can clearly distinguish the school year cohort each respondent belongs to and determine whether one has taken the new curriculum. In the CIS and TCS, we can only observe one's birth year, so we exclude the observations of those born in 1990 (individuals born between January to August belong to the 2005 school year cohort, yet those born in or after September are in the 2006 school year cohort).

ucational attainment of respondents. Exploiting the nature of the college entrance exam and application in Taiwan, we assign individuals with a regular-track senior high school degree or college degree (regular university) to the treatment group, of which the post-2006 academic cohorts studied the new history curriculum. We exclude individuals holding master's or doctoral degrees since we cannot determine which tracks they studied in senior high schools (only 0.68% in our baseline sample).

Grade repetition and track switching are uncommon in Taiwan. A valid concern here is that some vocational-track students may apply to regular universities while some regular-track students choose to enter polytechnic colleges. Nevertheless, before 2011, vocational-track students were required to take the college entrance exam (the same as that of the regular track) if they wanted to apply to a regular university, and history is mandated in the test. As a result, they retook the regular-track history curriculum to prepare for the test. This institutional feature indicates that all students entering regular universities before 2011 were treated.[18] Meanwhile, regular-track students who intend to apply for polytechnic colleges are required to take a gap year to take the *Unified Polytechnic College Entrance Test*. In this scenario, there may be spillover effects that drive the DiD estimates toward zero. The TSCS (2013) provides the respondent's years of schooling, which enables us to test the robustness by excluding high schoolers with more than 16 years of schooling experience.

Measuring national identity, collective memory, and consciousness. Taiwanese and Chinese identities are the key outcomes of interest. The TSCS (2013) includes two separate questions eliciting the strength of Taiwanese identity and Chinese identity respectively: "*Please rate the degree of yourself as Taiwanese* (*Chinese*) *on a scale from 0 to 10, where 0 means 'not at all' and 10 means 'absolutely'.*" Given the standard Likert scale design, we directly use the numbers reported as our main outcome variables.

To complement the usage of ordinal measures, we further utilize a set of binary outcomes directly associated with national memory. The TSCS (2013) elicits the sentiment toward four historical memories: "*Do you think the following historical events are important and should be recognized by the next generation?* (*a*) *The 228 Incident;* (*b*) *The Formosa incident* (*Tangwai democratic movements*); (*c*) *The end of Qing dynasty and the creation of new China;* (*d*) *The victory of the Second Sino-Japanese War.*" The former two events are Taiwan-oriented collective memories, and the latter two are China-oriented collective memories.[19]

In addition, we are able to investigate one's identity consciousness (preferences regarding

[18]Moreover, this circumstance is rare: the authority provided only 2859 vocational-track students with the opportunity to participate in the test in 2011, which accounts for only 2.6% of the vocational-track graduates.

[19]The TSCS and the CIS follow the traditional approach of conducting surveys in Taiwan: when the answering of a question allows for several choices allowing the varying strength of agreement, the interviewer will first elicit a binary attitude of the respondent (positive/negative). In addition, the interviewer reads the question instead of showing the questionnaire to the respondent in TSCS and CIS. These features enable the use of binary dependent variables, alleviating the concern over the usage of subjective ordinal measures (Bond and Lang, 2019).

national identity issues) by taking advantage of the following question in the TSCS (2013): *"Do you find national identity to be an important issue or not?"*

Measuring political ideology. Attitudes toward Mainland China are important ramifications of national identity in Taiwan, which further shape the support for pro- and anti-Mainland policies. We exploit the following survey questions by constructing a binary that is 1 for agreement and 0. Similar questions might be visited in both surveys, so we include all of them in our analysis for robustness.

First, both the TSCS and the CIS contain a pair of questions to examine attitudes towards Taiwan's nationhood: *"(1) Do you agree with the viewpoint that if the socioeconomic and political development in Mainland China is more or less the same as Taiwan, there should be a cross-strait unification? (2) Do you agree with the viewpoint that if it would not lead to wars, we should declare the independent nationhood of the Taiwan island?"*[20]

Second, we investigate how the study of the new history curriculum shifts students' protectionism – their attitudes toward economic cooperation between Taiwan and Mainland China. In the TSCS, the survey question is: *"Now more and more Taiwanese work or invest in Mainland China. Do you think this benefits the development of Taiwan?"* In the CIS, the survey question is: *"Do you agree that the government should encourage economic cooperation with Mainland China?"*

Measuring voting behavior. Finally, we examine whether ideological changes translate into voting behavior. The outcome variables are detailed as they become relevant later.

3.2 Empirical strategy

We estimate a standard cohort difference-in-differences (DiD) to examine the impact of the history curriculum reform.

Cohort difference-in-differences. The first dimension of the difference is from whether an individual has taken the regular-track curriculum. As noted, the treatment group consists of individuals who have received regular-track senior high school education, and the control group contains those who have not. The *95 Curriculum Reform* implemented in September 2006 – which only affected regular track participants – generates the second dimension of variation over cohorts. Thus, we are able to trace out the common cohort trend and compare cohorts born just before September 1990 (pre-reform school year cohorts) who missed out the new curriculum, with those born just in and after September 1990 who have taken the new curriculum.

One might be concerned about socioeconomic shocks, media, and political climates that may differentially affect different tracks or education groups over time. It is worth noting that

[20]This set of questions is widely used by Taiwanese scholars. Earlier surveys in Taiwan directly elicit unconditional preferences from a set of choices (usually consisting of "immediate independence/status quo and independence in the future/status quo forever/status quo and unification in the future/immediate unification"); however, respondents tend to be cautious toward this "non-inclusive" question and are likely to falsify by giving ambiguous responses.

we exploit $Track \times Cohort$ variation rather than $Track \times Year$ variation, meaning that a factor should differentially affect high school entry cohorts within a track to threaten the identification. As noted, the cross-cohort variation we exploit is sharp, as individuals entering high school just one year apart studied entirely different 3-year curricula around the reform, and most time-varying track-specific shocks are unlikely to have sharply different effects across adjacent cohorts of students (Cantoni et al., 2017). That is, a confounding shock would need to have a sharp impact only on regular-track students who entered high school in 2006 (staying from 2006 to 2009), without affecting those who entered in 2005 (staying from 2005 to 2008). We later allow track-specific trends to capture smooth changes in identity across cohorts, and provide additional evidence that our results are not likely to be driven by the heterogeneity of education tracks.

Narrow cohort bandwidth. Moreover, we estimate our model in a narrow cohort bandwidth. The relatively stable socioeconomic environment within a short time window mitigates the presence of potential confounders that may simultaneously correlate with outcome variables and post-reform cohorts. Using a narrow window also alleviates the concern over the group-specific compositional change of demographic characteristics among cohorts (e.g., Roland and Yang, 2017). In our baseline specification, we employ a 10-academic-year bandwidth ([-6,+4] cohorts around the reform time) to obtain a balanced number of estimates in event study plots.[21] We later show that the results are robust to the choice of cohort bandwidth.

Formally, we estimate the following standard cohort DiD:

$$y_i = \beta \times Treat_s \times Post_c + x_i'\theta + \lambda_s + \tau_c + \varepsilon_i \tag{1}$$

where y_i is the dependent variable (i indexes the individual, s the education track, and c the school entry year cohort); λ_s and τ_c are full sets of education track and cohort fixed effects.[22] $Treat_s$ is a dummy that is 1 if the respondent with educational attainment s has taken the regular-track high school; $Post_c$ is a dummy that is 1 for the cohorts entering high school in and after September 2006 when the new history curriculum was implemented. x_i' is a vector of demographic controls, including gender, parental ethnicity (birthplace) fixed effects,[23] and hometown city fixed effects. We allow idiosyncratic errors, ε_i, to be correlated across individuals within the education track level or the cohort level to show robustness.

[21] We could at most extend the bandwidth up to the 2010 cohort (+5), because vocational high schoolers have been able to apply to regular universities without taking an exam in history since the 2011 academic year. Nevertheless, the most recent cohort in the TSCS is the 2009 one (+4 cohort), suggesting this issue may not threaten our identification.

[22] The education fixed effects here include: primary school, junior high school, regular-track senior high school, vocational-track senior high school, junior college, open (remote) junior college, police academy, polytechnic college, and regular university. Table B2 shows that the reform does not alter the likelihood of continuing through tertiary education, suggesting that these tracks are not potential outcomes of the reform. All results remain robust if we simply control the $Treat$ dummy instead of the education track fixed effects.

[23] Parental ethnicity fixed effects include a set of dummies for Taiwanese (native), Mainland Chinese, Kinmen and Matsu residents, and others (separately for father and mother).

Notably, our setting essentially features only two different clusters – the treatment group and control group; therefore, we also use Donald-Lang two-step procedure and Newey-West method to correct the standard error (Donald and Lang, 2007; Newey and West, 1987).[24] Finally, as our specification includes fixed effects, we use OLS as our baseline estimation method; Order Probit is used to test robustness (Neyman and Scott, 1948).

3.3 Descriptive statistics and balance checks

Table 1 provides summary statistics for the demographic characteristics. We have 327 observations within the 10-cohort band in the TSCS (2013): 175 pre-reform respondents, among which 72 have received regular-track high school education; 152 post-reform respondents, among which 59 are exposed to the 95 curriculum. In the CIS pooled sample, we have 449 observations: 316 pre-reform and 133 post-reform respondents. The reason for a larger proportion of pre-reform observations in the CIS data is that there are fewer post-reform cohorts in the earlier waves, as the minimum age of respondents in the CIS sample is 20 instead of 18, and we pool the 2012 - 2016 waves. Therefore, some summary statistics may be slightly different across the two surveys. The sample size of each survey is not large – given that Taiwan's population is only about 20 million, representative adult surveys usually consist of 2,000 individuals, and our analysis limit the number of cohorts; although, if we find significant and robust effects across different datasets, this should indicate the considerable impact of the *95 Curriculum Reform*.

[Table 1 here]

Next, we examine the demographic composition around the curriculum reform. Each panel presents the average demographic characteristics of respondents in each sample, with standard deviations in parentheses. The differences in the mean between the regular-track and non-regular-track respondents are reported in Columns (4) and (7), and the P-values testing whether the difference is indistinguishable from zero are reported in brackets. The TSCS (2013) contains richer demographic information than the CIS. In terms of birthplace, more than 90% of the respondents were born in Taiwan; in addition, around 96% of their either parents originate in Taiwan, implying that there is little variation in ethnic or parental background in the Taiwanese setting.

Finally, we check whether these observable characteristics differ at the $Post \times Treat$ level –

[24] Donald and Lang (2007) proposes a simple two-step procedure to correct the standard errors in the presence of the Moulton problem with a small number of clusters (e.g., canonical 2×2 DiD). We further use the Newey-West method to allow for correlated shocks to the disturbance term to have persistence over 3 cohorts (e.g., Bedard and Kuhn, 2015; Stearns, 2015; Gehrsitz, Saffer and Grossman, 2021); using other lag-specifications yield similar results. In the first step, we aggregate individuals into group (treatment and control) averages and then difference the data across the two groups to obtain a single time series, or use regressions on full samples to obtain conditional differences. In the second step, we regress the difference on an indicator for the post-reform cohort and adopt the Newey-West method to account for serial correlation. While the number of cohorts is on the short side for the Newey-West asymptotics, the bottom line is to show robustness to different ways of adjusting standard errors.

the major source of threats to our identification. Column (8) of each panel shows the mean difference between the regular-track and non-regular-track individuals, across the cohorts before and after the new history curriculum. The P-values testing whether the DiD is indistinguishable from zero are reported in brackets. In Column (9), we also report the conditional DiD estimate using the same set of fixed effects as the one used in our main specification (with educational track and cohort fixed effects). From both survey samples, there is a fairly strong balance, suggesting the absence of discernable compositional changes in these observable characteristics.

4 History Curriculum and National Identity

Figure 1 visualizes the average Taiwanese identity and Chinese identity (observed in 2013) across school entry cohorts. First, we observe a general decline in reported Chinese identity over cohorts in both groups, consistent with the *de-sinicization* trend in Taiwanese society.[25] Second, before the introduction of the 95 history curriculum, the control group exhibits higher Taiwanese identity on average. This pattern echoes political studies documenting that more-educated individuals tend to be less patriotic and more cautious towards nationalism (e.g., Huddy and Khatib, 2007; Theiss-Morse, 2009). Third, the relative jump in identity across adjacent school entry cohorts before/after the reform is sharp, buttressing the relevance of the curricular change, as opposed to track-year gradual changes.

It should come as no surprise that the Taiwanese identity gap mitigates following the *95 Curriculum Reform*. However, while the untreated group continues to follow the downward trend after the reform, we observe a discernable rebound in the strength of the Chinese identity of individuals who have taken the new curriculum, which is at odds with the intention of policymakers.

[Figure 1 here]

4.1 Baseline results

To move beyond the descriptive evidence, we first estimate the average impact of the *95 Curriculum Reform* on Taiwanese identity and Chinese identity separately as specified in Equation (1).

Table 2 reports the OLS results. The dependent variable is self-perceived national identity ranging from 0 (not at all) to 10 (absolutely). Columns (1) and (4) report the standard two-way fixed effect estimates. The cohort fixed effects absorb all unobserved temporal shocks to individuals in a certain cohort, and the education track fixed effects hold constant time-invariant/slow-moving heterogeneity among different tracks. The 95 history curriculum substantially enhances

[25] Specifically, the observed pattern across cohorts is consistent with that younger cohorts were exposed to rising *de-sinicization* (the elimination of Chinese identity and emphasis on Taiwanese roots) to a greater extent during their formative and impressionable years (e.g., Krosnick and Alwin, 1989; Acemoglu et al., 2021).

the strength of both Taiwanese identity and Chinese identity: on average, the new curriculum is associated with a 0.47 (0.39) standard deviation increase in Taiwanese (Chinese) identity.

[Table 2 here]

We conduct several robustness checks to corroborate our main findings.

Compositional changes in demographic characteristics. One threat to the cohort DiD strategy is the presence of time-varying group-specific compositional changes in respondent characteristics that are also correlated with identity formation. First, as Table 1 shows, within a narrow band of cohorts, we see little within-group demographic changes around the reform. Second, in Columns (2) and (4) of Table 2, we further introduce a rich set of predetermined demographic controls, including gender, parental ethnicity fixed effects, and hometown city fixed effects. The magnitudes of DiD estimates remain largely comparable. Furthermore, in Table B3, we allow the impact of receiving regular-track education to vary with observable individual characteristics ($Treat \times Controls$) and the impact of individual characteristics to vary before/after the reform cohort ($Post \times Controls$). These combined results suggest that the impact on national identity is unlikely to be driven by compositional changes in demographic features.

Parallel trends. Although it cannot be observed, we provide two pieces of evidence to buttress the common trend assumption. First, Columns (3) and (6) of Table 2 add group-specific trends to allow for a differential linear cohort trend in each track. In the spirit of Kahn-Lang and Lang (2020), we only use pre-reform observations to estimate group-specific (treatment/control) trends; we then de-trend the dependent variable around the estimated linear trend by groups to obtain the "detrended" outcome and repeat the regression as before. The identification then comes from whether the new curriculum leads to deviations from pre-existing group-specific trends. The inclusion of smooth time trends does not alter the positive identity gaps and even yields slightly larger point estimates.

Second, Figure 2 visualizes event studies using various specifications. The gap is estimated based on Equation (1) but allowing the difference to vary with biennial cohort bins. We see significant jumps in the strength of each identity when moving from the last two cohorts using the old curriculum to the cohorts that studied the new one. Meanwhile, there is no differential pre-trend before the reform.

[Figure 2 here]

Education-related confounders. As with Cantoni et al. (2017), our identification strategy exploits the sharpness of the reform across school entry cohorts rather than a gradual change over the calendar year. Therefore, track-year varying shocks would not necessarily confound. We present three pieces of quantitative evidence. One, as shown in Table B2, the curricular

reform has no discernable impact on students' final educational attainment. Two, Table B4 presents direct evidence that our estimated effects remain robust when considering differential impacts on education level. Further controlling for the interaction between $Post$ and total years of education also maintains robust results. Three, as noted, allowing each track to have its own smooth trend over cohorts does not quantitatively alter the estimates. These results suggest that increased education premium and differential responses by education groups to broader socioeconomic/political shocks are unlikely to threaten our findings.

Sample selection and permutation tests. To examine whether the results are sensitive to the selection of sample bandwidth, we use different numbers of cohorts to re-estimate the model. Figure A2 implies that what we observe is not a result of an outlier cohort.

To enhance statistical power and examine whether our results are driven by spurious correlations, we further conduct random permutation tests (Figure A3). Specifically, we randomly permute the DiD term and re-estimate the equation using the randomly assigned DiD term, with 1,000 iterations for each outcome variable. Comparing the distribution of the permuted coefficients to the main results, we find that the likelihood of the original estimate being a result of coincidence is nearly zero for Taiwanese identity and less than 1.4% for Chinese identity.

Finally, as described, regular-track students (assigned into the treatment group) who intend to apply to polytechnic colleges (assigned into the control group) are required to take a gap year. Table B5 takes this potential spillover into account by excluding observations with abnormal years of schooling, and the estimated coefficients remain virtually unchanged. In addition, we also restrict our samples to those who were still attending college during the survey time – so there is no differential labor market trajectory – and we still obtain similar results.

Alternative methods for statistical inference. Table B6 adopts the wild-bootstrap method as an additional check for small cluster inference (Cameron, Gelbach and Miller, 2008; Roodman et al., 2019; MacKinnon, Nielsen and Webb, 2023). All results remain significant.

Alternative estimation: Ordered Probit. To account for the ordinal nature of the outcome variables (Bertrand and Mullainathan, 2001; Bond and Lang, 2019), we also show our results are robust to the Order Probit estimation in Table B7.

Alternative measures: recognition of history memory. A distinct advantage of our data is that it enables us to explicitly examine individual attitudes toward historical memory. Each dependent variable is a binary that is 1 if the respondent reads the event as "important and memorable", and 0 otherwise. We categorize the four historical events listed in the TSCS into two types: Taiwan-oriented historical memory (the *228 Incident* and the *Formosa Democratic Movement*), and China-oriented historical memory (the foundation of the Republic of China and the *Second Sino-Japanese War*). Appendix D provides a detailed description of these historical events and that how they are presented in the old and new curricula. The first four rows in Figure 3 show that studying under the 95 curriculum has significantly enhanced both Taiwan-oriented

and China-oriented collective memory, adding about 11 percentage points (0.33 standard deviation) to the average probability of recognizing each historical event. The sharpened q-values are reported in brackets to account for multiple hypothesis testing (Anderson, 2008).

[Figure 3 here]

4.2 Dual identity vs. polarization

Thus far, we have established a robust positive association between the reported strength of each identity and the study of the 95 history curriculum. Conceptually, there exist two distinct underlying patterns: (1) within the treated students, the new curriculum fosters Taiwanese identity in one group but induces stronger Chinese identity in the other group ("polarizing"); (2) the new curriculum increases the probability of an individual identifying themselves more as both Taiwanese and Chinese ("co-movement/dual-identity"). This subsection presents results bolstering the dominant role of the dual-identity pattern.

[Table 4 here]

First, we conduct a coarse analysis based on a binary dependent, which is 1 if an individual reports an intense Taiwanese identity (above its group mean) in conjunction with an intense Chinese identity. The mean cutoff is calculated within the treatment group and the control group separately to account for the education-specific differences. As seen in Column (1) of Table 4, the new curriculum increases the likelihood of identifying oneself as both Taiwanese and Chinese. The estimate remains robust if we adopt the group median as the cutoff for the strength of each identity (Column 2).

However, given that both outcomes (Taiwanese identity and Chinese identity) are endogenous variables affected by the same reform – and it is not easy to have additional independent experiments that only affect one variable – we further turn to examine the correlation between two identities to obtain a neater design. To do so, we aggregate the observations by $Treat \times Cohort$ cell (similar to the Donald-Lang approach) and use the cell-specific correlation between the two reported identities as the dependent variable. Conceptually, this measure captures the exclusiveness of the two identities. Column (3) of Table 4 reports the results. The mean of the dependent variable is -0.288, indicating that Taiwanese identity and Chinese identity are generally negatively associated with each other. Importantly, the positive DiD estimate implies that studying under the new curriculum mitigates this antagonistic correlation – that is, treated high schoolers are on average more likely to reconcile with a joint strengthening/co-existence of two identities.

Alternative measures: categorical identity groups. Although the categorical identity measure can suffer more from sensitivity and social-desirability biases, the TSCS contains a related question across multiple waves that allows us to conduct supplementary checks. Specifically,

the survey asks the respondent to identify themselves as one of the following: Taiwanese, Chinese, or both. By pooling data across multiple waves (2010 to 2020), we end up with 1,550 observations, which also helps alleviate the small-sample concern.

Table B8 and Figure A4 present the results. Consistent with our previous findings, the new curriculum significantly increases the likelihood of reporting a dual identity.[26] Figure A5 further allows the impact to vary by number of years after completing the new curriculum. Although the coefficients are not precisely estimated, the heightened dual identity recognition emerges right after studying the new curriculum, and the effect does not significantly diminish within 10 years. This finding aligns with the results of Cantoni et al. (2017), suggesting the short- and mid-term relevance of curricular treatment.[27]

In sum, the evidence above suggests that the dual-identity pattern contributes primarily to the unintended impact of the 95 history curriculum. These combined results also speak to the growing economic identity literature that multiple identities can co-exist and evolve together (e.g., Constant, Gataullina and Zimmermann, 2009; Shayo, 2009; Georgiadis and Manning, 2013; Okunogbe, 2023; Dehdari and Gehring, 2022).

4.3 Understanding mechanisms

In the framework of cultural transmission, the unintended impact of curricular reforms can be attributed to endogenous changes in supply and/or demand for identity-related information. The high schoolers take curricular content and other identity-related information together to form their national identity.

On the supply side, oppositional households and groups may resist indoctrination by the policymaker and actively maintain their own pre-existing cultural identity. Consequently, they may increase their transmission of pro-Chinese information to neutralize the impact of history curricula, while students can be passive recipients (Bisin et al., 2011; Fouka, 2020). Empirically, this predicts that the effect would largely concentrate around students from *ex-ante* pro-Chinese households/regions. Alternatively, as the identity issue has become more salient following the new curricula, both pro-Taiwanese and pro-Chinese households may perceive greater threat of repression from other sides (Gehring, 2022; Blanc and Kubo, 2024), and thus prefer neutral identity stance. In this case, there may not be significant heterogeneity across households or regions.

On the demand side, students may actively seek out alternative forms of socialization, such

[26] It is worth noting that a relatively small share of individuals in our sample identify themselves as Chinese or with a dual identity, reflecting the broader societal trend in Taiwan and potential biases in survey responses when explicitly asking about categorical identity. In the 2013 TSCS survey, among respondents who identified themselves as purely "Taiwanese", 47.52% reported a Chinese sentiment greater than zero for the "0 - 10" Likert-scale question, and 19.86% reported a Chinese score greater than five.

[27] In theory, whether there exist persistent impacts can be ambiguous. On one hand, other shocks could weaken the influence of curricula over time. On the other hand, the endogenous changes in information acquisition and self-socialization, as demonstrated later, may help sustain the influence.

as consuming media and joining online groups formed around other ideologies (Carvalho, Koyama and Williams, 2024). In this case, the dual-identity pattern can likely emerge where there is no strong cultural intolerance (otherwise, self-socialization can lead to polarization). Specifically, the new curriculum emphasizing national identity can make the identity issue more salient – the treated students perceive greater importance of their cultural identity and thus be more cautious or perceptive about it. To better identify themselves, high schoolers may therefore devote more attention, both intentionally and unconsciously, to identity-related content and increase consumption of related information in class and out of class (DellaVigna and Gentzkow, 2010).[28] In this way, tolerant high schoolers may be better informed of the salience of both identities and different narratives, thus increasing dual-identity recognition.

Motivated by these theoretical possibilities, we explore heterogeneity based on parent ethnicity and the social environments surrounding high schoolers, and impacts on individuals' information acquisition, to understand the mechanisms. Finally, there may be other explanations beyond the framework of identity transmission, such as anticipated labor market benefits and increased general learning (Cantoni et al., 2017; Costa-Font, García-Hombrados and Nicinska, 2020). We also conduct additional analyses to investigate such explanations.

4.3.1 Heterogeneity: parent ethnicity and ideology

To study the heterogeneous responses by parent background, we allow the impact of the new curriculum to vary by (1) if both parents grew up in Taiwan, and (2) if both parents favor the independent nationhood of Taiwan. Specifically, we generate a dummy that is 1 for each mediator.[29]

Reactions of oppositional households. The first four rows in Figure 4 report the corresponding regression results. The left panel visualizes the estimated effect on Taiwanese identity, and the right panel visualizes the estimated effect on Chinese identity. Rows 1 - 2 show that there is no discernable heterogeneous effect due to parents' ethnicity. In Rows 3,-,4, we use parents' ideology as an alternative mediator, and the estimates are also similar across groups. The P-values of the corresponding Wald test (for the equality of coefficients) are 0.636 and 0.628 respectively.

[Figure 4 here]

It is also worth noting that our setting features high school adolescents (similar to Cantoni et al. (2017)), who are less receptive to parents' transmission than the school-age children

[28] A canonical underlying rationalization for increased information acquisition is that decision-makers tend to reduce the uncertainty associated with things they care. Besides, the recent behavioral literature also suggests the importance of salience in shaping attention involuntarily – Bordalo, Gennaioli and Shleifer (2022) provides an excellent demonstration on this point: "after discussing whether families are having fewer children, we notice many babies on the street."

[29] About 87.2% of the respondents' both parents grew up in Taiwan, and 43.1% of the respondents' both parents favor the independent nationhood of Taiwan.

studied in existing research (e.g., Fouka, 2020). To better understand the role of parent reaction, Column (1) of Table B9 shows that the reform is associated with greater awareness of parents' identity stance, and the effect is stronger among respondents with non-native parents. These combined results suggest that, consistent with the existing studies, oppositional parents are more likely to resist curricular indoctrination and increase intergenerational transmission of identity. Therefore, the absence of heterogeneity by parent traits suggests that vertical transmission may be less influential for high schoolers, or there may be other channels motivating both pro-Taiwanese and pro-Chinese types to prefer dual identity.

Perceived threats of repression. Given the significance of identity issues in Taiwan, another explanation to consider is that the new curriculum may heighten parents' or students' concerns about repression from opposing groups – as the new curriculum would likely make the identity issue more salient and sensitive – thereby prompting a greater adoption of a neutral stance.[30] This can reconcile why students from both types of households increase their dual-identity holding.

Due to data limitations, we are not able to directly test this explanation. Nevertheless, we provide a tentative exploration by examining students' fear of invasion from the Mainland and their response rates to identity-related questions.[31] If a respondent harbors significant concerns about repression based on their identity stance, we might anticipate a decrease in the likelihood of them answering related questions.

Table B10 presents the results. Based on Column (1), we see that individuals studying the new curriculum do not exhibit significant invasion concerns on average. Columns (2) - (4) further estimate the impact on the likelihood of not answering identity-related questions used in our main analysis. Only one individual did not respond to the Likert-scale identity question, and all estimates are close to zero. Collectively, these results do not rule out the existence of repression concerns, but suggest it might not play a full role in our setting.

4.3.2 Heterogeneity: regional political spectrum

Hometown cities. Individuals growing up in pro-mainland environments may possess a weaker Taiwanese identity prior, but they (and other local individuals and groups) are also more likely to oppose the transmission of Taiwanese identity. Therefore, there may exist both endogenous information supply and demand along the geo-political dimension. To this end, we allow the effect on transmission to vary by the dominant political ideology (pro-mainland vs. pro-independence) in one's hometown city. Specifically, we construct a binary mediator for the hometown city where the pro-independence parties dominated in the 2000 and 2004 general

[30] Accordingly, this channel can be either a result of parents' vertical transmission or students' self-socialization.

[31] The survey question regarding invasion concern is: "To what extent do you worry about the war with Mainland China if Taiwan pursues independence?"

elections.[32] The mean of this hometown ideology dummy is 51.8%.

The fifth and sixth rows in Figure 4 show that the new curriculum is relatively effective in building Taiwanese identity among respondents growing up in *ex-ante* pro-Chinese regions, and there is no salient pushback in favor of Chinese identity, though the estimates are less precise. The 95 curriculum indoctrinates the Taiwanese roots and erases Chinese roots. Thus, the heterogeneity along the geo-political dimension, if any, seems to be more in line with the case in which high schoolers endogenously acquire identity-related information they are less familiar with: following the curricular reform, students from "pro-independence" regions with lower Chinese prior exhibit greater Chinese recognition, and students from "pro-mainland" regions with lower Taiwanese prior exhibit greater Taiwanese recognition.

Mainland media exposure. Relatedly, we also exploit regional differences in exposure to Mainland China's radio propaganda. Mainland China has established a dedicated radio station, "Voice of the Strait", to broadcast pro-Chinese content since 1958. During the period of 95 curriculum reform (2006 - 2010), radio and television still played important roles in media consumption in Taiwan.[33] Following the strategy of Olken (2009), we exploit variation in signal strength due to topographic factors, while holding constant the hypothetical "free-space" exposure (when there are no geographic obstacles between the transmitter and the receiver). The research design thus only leverages plausibly exogenous variation due to topographic factors, rather than proximity to transmitters. Specifically, for each city in Taiwan, we assume that the receiver is located at the center of the city, and pair it with the Mainland transmitter located in Fujian Province. We then use the Irregular Terrain Model (ITM) to calculate both the hypothetical free-space signal and "real-world" predicted signal (Hufford et al., 1982; Oughton et al., 2020).[34]

Table B11 presents the results. Individuals whose hometown cities have greater exposure to Mainland radio propaganda exhibit a more pronounced shift towards Taiwanese identity and a lesser shift towards Chinese identity, though the estimates are not precise. These patterns suggest that increased Mainland propaganda is unlikely to be the primary driver of identity changes; otherwise, we would expect a positive interaction term (*Treat* $\times$ *Post* $\times$ *Mainland signal*) for Chinese identity. Instead, the findings align more closely with the speculation described above, where high schoolers consume less-familiar identity content to update.

[32] We classify parties according to the prevailing categorization during the 2000s. "Pro-independent" parties include those that advocated for Taiwan independence, such as the Democratic Progressive Party (DPP), Taiwan State-building Party (TSP), Social Democratic Party (SDP), Green Party Taiwan, Taiwan Solidarity Union (TSU), and Taiwan Constitution Association (TCA). Other parties adopted a relatively moderate stance, including the Kuomintang (KMT), People First Party (PFP), New Party (CNP), Non-Partisan Solidarity Union (NPSU), and Young China Party (YCP).

[33] According to the National Communications Commission of Taiwan, approximately 63.8% of individuals listened to the radio in 2010, averaging 54.2 minutes per day.

[34] Economists have applied the ITM model in various contexts to study the impact of radio and television (e.g., Enikolopov, Petrova and Zhuravskaya, 2011; Yanagizawa-Drott, 2014; Adena et al., 2015; Durante, Pinotti and Tesei, 2019; Ou and Xiong, 2021; Wang, 2021; Qian, 2024).

Other substitute mechanisms for socialization. Apart from parent transmission and geopolitical differences, one may be concerned about the reaction of other social and cultural groups that relate to identity formation. Differing from other settings (e.g., Sakalli, 2019; Fouka, 2020; Bazzi, Hilmy and Marx, 2021), religious groups and other social organizations play marginal roles in Taiwanese high schoolers' lives.[35] Without the presence of organized religious communities, religious factors in modern Taiwan is of little relevance to identity formation (Frettingham and Hwang, 2017). A review of the related literature also indicates that there are no other social organizations in Taiwan that can effectively engage high schoolers – just as in other East Asian countries, students face fierce competition to stand out in Taiwan's education system.

We later show that there was no significant change in teaching practices following the curriculum reform.

4.3.3 Identity consciousness and information acquisition

Motivated by the above findings, we provide two pieces of evidence in favor of the endogenous change in information demand – the transmission emphasizing Taiwanese identity alters high-schoolers' identity consciousness, leading them to acquire more identity-related information in order to be better informed of their cultural identities.

Identity consciousness (preference shift). We begin by showing that curricular indoctrination alters high schoolers' identity consciousness. The outcome variable is a binary that is 1 if the respondent views the national identity issue as "important" and 0 otherwise ("not important"). The last row of Figure 3 suggests that studying under the 95 curriculum is associated with a 12 percentage point (0.25 standard deviation) higher likelihood of demonstrating a strong identity consciousness, indicating a salient preference shift.

Information acquisition on both identities. If the new curriculum triggers greater care of national identity, then we expect high schoolers to invest more in acquiring related information. First, the fifth row of Figure 3 visualizes the DiD estimate on an augmented dependent variable, which equals 1 only if the respondent simultaneously values both Taiwan-oriented memory and China-oriented national memory noted earlier in the TSCS. Additionally, the sixth row corroborates by using an equally-weighted z-score index that summarizes the recognition of each national memory. These estimates suggest that the *95 Curriculum Reform* is associated with a greater probability of an individual recognizing both types of national memory.

Importantly, high schoolers may obtain information from not only the "manipulated" textbooks but also other sources (e.g., social media). To this end, we use the Taiwan Communication Survey (2015), a representative survey managed by the Ministry of Science and Technology that focuses on political and civic communication, to present direct evidence. To capture only

[35] As highlighted before, the majority of Taiwanese residents are of Han ethnicity. Moreover, most Taiwanese do not have a definite religious affiliation; instead, they only practice some Chinese folk religious traditions, which are in essence a combination of Buddhism and Taoism with a Confucian worldview. According to a survey by Pew Research Center in 2010, 81.7% of Taiwanese practice some Chinese folk religious traditions.

changes in content consumed rather than interest in politics, we also include a control for individuals' expressed interest in politics, measured on a scale of 1 (low) to 5 (high).[36] Columns (1) - (2) of Table 3 indicate that studying under the 95 history curriculum is associated with significantly greater attention to both China- and Taiwan-related messages, in which each dependent variable is on a 5-point integer scale, where 1 refers to "very little attention", and 5 refers to "a great deal of attention".[37] Columns (3) and (4) provide stronger evidence that treated high schoolers are more likely to simultaneously acquire *both* sets of information from the media, speaking to the pattern of memory recognition. Finally, Column (5) runs a placebo test using the consumption of the weather forecast as the outcome and the estimated effect is close to zero.

[Table 3 here]

For robustness, Table B12 further uses data on consumption regarding Taiwan-related and Mainland-related news from the Taiwan Communication Survey (2018), and we observe similar empirical patterns.[38]

Taken together, we observe a significant increase in the perceived salience of identity issues and information acquisition from both narratives, which may induce greater weights on common attributes and promote dual identity. These patterns are consistent with the geo-political heterogeneity documented above, indicating a prominent role of endogenous information demand by recipients.

4.4 Other explanations

In this subsection, we discuss additional channels beyond the framework of identity transmission, suggesting they are not likely to primarily explain our main result.

Increased general learning. A possible alternative interpretation is that the reform simply increased general learning in history, including information on Taiwan and Mainland China. We test this by exploring the impact on Asian recognition – a placebo outcome that is unrelated to Taiwanese vs. Chinese recognition (but also presented in the textbooks).[39] The seventh row in Figure 3 shows that there is no significant impact on one's recognition of Asian roots.

[36] The estimates remain similar when this control is excluded.

[37] The corresponding survey questions are "How much attention do you pay to *pan-blue* (pro-mainland) information posted on media platforms?" and "How much attention do you pay to *pan-green* (pro-independence) information posted on media platforms?"

[38] The corresponding survey question is "Do you frequently consume [...] content in newspapers, television, or social media?" with binary response options.

[39] The history of Asia is presented in the third volume of the textbooks in both the old and new curricula with little change. The corresponding survey question is "How close do you feel to Asia [as an emotional recognition of its history and culture]?" Similar to the construction of other measures, we create a dummy that is 1 for a positive response ("close"/"very close") and 0 otherwise. The survey also contains a similar question on the sentiment toward one's city of residency, and the estimate is also close to zero if we use it as an additional placebo outcome.

Labor market benefits. Recent studies suggest that systematic changes in curricula can have human capital and labor market effects (Fuchs-Schündeln and Masella, 2016; Costa-Font, García-Hombrados and Nicinska, 2020). One may thus wonder if the increase in dual identity holding can be driven by an anticipation of labor market benefits. Table B2 and Table B13 find that the history curriculum reform does not significantly associate with changes in one's final educational attainment, monthly income, or perceived socioeconomic status. While these results do not rule out the existence of the labor market benefit mechanism, they suggest it may not play a dominant role in our setting.[40]

Changes in teaching practices. To understand the enforcement channel, we investigate the reaction of high school teachers, the front-line implementers of the new curriculum. Conceptually, while teachers can input via changing their instructional methods, the primary goal of teaching may not shift: the instruction is still dominantly directed by the textbook content in order to better prepare students for the college entrance exam.[41] To quantitatively study how high school teachers react to the 95 curriculum, we utilize the Taiwan Education Panel Survey (TEPS, 2005 - 2007). Managed by the Ministry of Education and the Ministry of Science and Technology, the TEPS is a longitudinal study that collects information from a representative sample of students and teachers at junior and senior high schools in Taiwan. We employ the history teachers' responses in 2005 (pre-reform) and 2007 (post-reform) to conduct a simple DiD. Columns (3) - (6) of Table B9 present the results. The estimate in Column 3 suggests that the introduction of the new curriculum does not alter regular-track teachers' adherence to the textbook. Column (4) shows that the new curriculum does not have a significant effect on switching to different teaching practices. Columns (5) - (6) further complement the analysis by showing that the time allocation of instructors also experiences little change. Therefore, our baseline results are unlikely to be driven by changed teaching practices.

Interpretation of Chinese identity. Finally, a special concern in our context is how respondents read the term "Chinese identity". If one reads "China" as the "Republic of China" and does not regard the mainland as a part of it, then Chinese identity and Taiwanese identity simply overlap with each other. To eliminate this possibility, Table B14 further controls the "interpretation fixed effects" based on whether one recognizes the mainland regime as a part of "China" (yes/no/ambiguous). Both the point estimates and statistical significance remain virtually unchanged.

[40] Compared to the studies mentioned, in our setting, the change was limited to history curricula, while other subjects and the evaluation system remained constant.

[41] Sung (2020) provides qualitative evidence that, pedagogically, most history teachers avoid infusing their teaching with personal political views; Moreover, they are constrained by heavy teaching loads and performance evaluations.

5 Further Results: Political Inclination and Voting

National identity plays a central role in Taiwan's politics. Since 1992, Taiwan has effectively been a "Green-Blue" two-party duopoly. The "Green" coalition led by the *Democratic Progressive Party* (DPP) has traditionally favored Taiwanese identity and pro-independence ideology. In contrast, the "Blue" coalition led by the *Kuomintang* (KMT) is generally in favor of a stronger linkage with Mainland China. It follows that whether (and if so when) Taiwan should unify with Mainland China or declare its independence remains a tense issue in Taiwan's identity politics. Therefore, the new history curriculum may further associate with political behavior. To attenuate the "house effect" concern, we utilize both the TSCS and the CIS data to corroborate our findings. Considering that political attitudes and voting are generally interacted with more complicated incentives and factors, this section features only a tentative attempt to suggest the broader relevance of curricular transmission.

5.1 Political inclination

First, we examine whether exposure to the new curriculum affects attitudes toward Mainland China. Specifically, we look at one's pro-independence inclination and attitudes toward integration with the mainland. To measure the pro-independence inclination, we exploit a pair of questions that have been widely used in Taiwan's polling: (1) whether Taiwan's regime should declare its independence from China if it would not cause a war; (2) whether Taiwan's regime should unify with Mainland China if sharing similar economy and policy. For each question, we construct a dummy that is 1 for "agree" and 0 for "disagree". Columns (1) - (4) of Table 5 present the results using the TSCS and the CIS data. The pairwise comparison suggests that treated high schoolers tend to possess a relatively moderate stance concerning Taiwan's nationhood: they are more cautious about declaring independence, yet there is little change in the intention of unification. These findings speak to our earlier notion that calls for caution in interpreting single observational proxies – reduced support for radical nationalistic policies may not necessarily indicate an endorsement for pro-mainland policies.

[Table 5 here]

Relatedly, we extend by investigating the impact on protectionism (Maddens, Billiet and Beerten, 2000; Fisman, Hamao and Wang, 2014; Fouka and Voth, 2022).[42] Conditioning on no significant change in the intention of unification, policy preferences on economic cooperation with the mainland might feature an ambiguous or neutral political stance. As shown

[42] While Mainland China has long been Taiwan's top trade partner across the strait and has offered active support and concessions, Taiwan's attitudes toward economic cooperation are, at best, ambivalent even in the face of material gains. Pro-independence politicians fear that the economic integration will create over-dependence on the mainland and thus frame Beijing's concession as a strategy to facilitate unification (Powers and Lin, 2019). However, the economic growth of Taiwan hinges heavily on its trade gain with Mainland China.

in Columns (5) - (6) of Table 5, across different datasets, studying under the new history curriculum is associated with a higher probability of supporting economic cooperation with the mainland. To address concerns about multiple hypothesis testing, Columns (7) - (8) utilize a z-score index as the outcome variable to summarize the aforementioned outcomes, and the results remain robust.

Taken together, studying the new curriculum is associated with a more moderate political position. Since we only compare the "jumps" in outcomes across adjacent school cohorts in the same survey year, the estimates are less likely to be confounded by differential evolvement by education level or changes in identity politics over time. While suggestive, the pattern resonates that the reform promotes a co-recognition of Taiwanese and Chinese identities, which could in turn neutralizes the political spectrum.

5.2 Voting behavior

In Taiwan, a general election is held every four years, in which all citizens over 20 years old with at least 6 months of residency are eligible to vote. Voters elect the president and vice president as a joint ticket from three groups of candidates.[43] The first general election that individuals from the 2006 academic cohort could participate in is the 2012 one. The 2012 and 2013 waves of the CIS elicit voting behavior in the general election of 2012, and its 2016 wave elicits voting behavior in the 2016 one. To increase the power, we also pool all waves of the TSCS that comprise respondents' voting behavior from 2012 to 2016.[44]

We start by excluding individuals who are not eligible to vote from our sample. Next, we classify candidates in each election as "Blue" (pro-mainland), "Green" (pro-independence), and "Median" (relatively neutral position) according to their party affiliations and creeds. Voters, however, are also able to abstain. As we are primarily interested in whether the political spectrum turns more neutral, abstention votes are classified into the same category as votes for "median" candidates in our baseline analysis (we also investigate them separately later). We then define binaries to indicate whether one belongs to each category. For instance, we create a binary for the "Green" vote that is 1 if voting for candidates from "Green" coalition in the general election, and 0 otherwise (including abstaining). Appendix E summarizes the information about presidential candidates and electoral outcomes in the 2012 and 2016 general elections.

The usage of multiple waves from two independent surveys largely alleviates the threat of "house effect" bias and small sample constraint. Another common concern about self-reported votes is over-reporting. While we cannot eliminate the presence of falsehood, we argue that it is less of an issue in our study. First, our identification relies on a DiD exploiting a sharp cut-

[43] In a typical Taiwanese general election since 2008, the affiliations of the three groups of candidates are comprised of DPP ("Green"), KMT ("Blue"), and a third party (with a relatively moderate position).

[44] The difference in the mean of outcome variables between the CIS and the TSCS is thus due to the different weights assigned to the 2012 and 2016 general elections. The 2012-2015 waves of the TSCS elicit voting behavior in the general election of 2012, and the 2016 wave elicits voting behavior in the general election of 2016.

off across cohorts; accordingly, the estimates would not likely be biased unless the falsification was systematically correlated with the study of the new curriculum. Moreover, the existence of over-reporting may drive our estimate of interest (the impact on "median" inclination) toward zero, leading to a lower bound of estimated effects. Second, both the CIS and the TSCS are retrospective general social surveys instead of ex-ante polls. Third, both elections have no "atypical" candidates that may trigger strong incentives for respondents to falsify.

[Table 6 here]

Table 6 reports the results on voting behavior. Studying under the 95 history curriculum adds about 10 percentage points to the probability of voting for median candidates or abstention (Columns 3 and 4). Accordingly, we see a reduction in the probability of voting for "Blue" or "Green" candidates among the treated individuals (although the estimates are less precise). Figure A6 further checks separately the effect on "median" votes vs. abstention and finds that the votes for the "median" candidates contribute more to the moderation result.

The magnitudes of the estimated coefficients adopting different surveys are largely compatible, further bolstering the validity of our findings. The results remain robust to the choice of the cohort bandwidth (Figure A7), as well as controlling for the interaction of $Post$ and college education. Finally, Figure A8 presents event study plots to validate the "jump" in voting outcomes across adjacent treated and untreated cohorts.

In sum, the above exercises provide suggestive evidence that, in line with our baseline results on identity formation, the 95 history curriculum has likely neutralized the political axes, indicating the potentially relevant role of school curricula in shaping socioeconomic and political outcomes.

6 Conclusion

This paper studies the inadvertent impact of history curricula on identity-building. The *95 Curriculum Reform* separates the chronology and designation of Taiwan from the history of China, sharply increasing Taiwan-related historical memory to transmit Taiwanese identity. We find that the new curriculum induces unintended consequences: studying under the 95 history curriculum enhances the reported strength of both Taiwanese and Chinese identities. Our analysis suggests the new curriculum increases high schoolers' identity awareness and incentivizes them to demand more information related to both cultural identities, leading to increased dual-identity recognition. We further observe that treated individuals exhibit more moderate political inclinations.

Collectively, we present novel evidence on the scope of history curricula in nation-building, and thus contribute to the growing discussion on the role of education in shaping attitudes and

socioeconomic outcomes. While the observed backlash pattern can be specific to the episode of Taiwan's *de-sinicization*, our results may hold some general implications. In particular, we highlight recipients' endogenous information demand as a prominent channel capable of counteracting educational indoctrination, speaking to the flourishing theories of cultural homogenization (Bisin et al., 2011; Carvalho, Koyama and Williams, 2024). Furthermore, our results also resonate with the growing literature on multiple identities (Shayo, 2009; Dehdari and Gehring, 2022; Okunogbe, 2023). These insights have applicability to other contexts of identity-building and may help explain the mixed results of curricular reforms.

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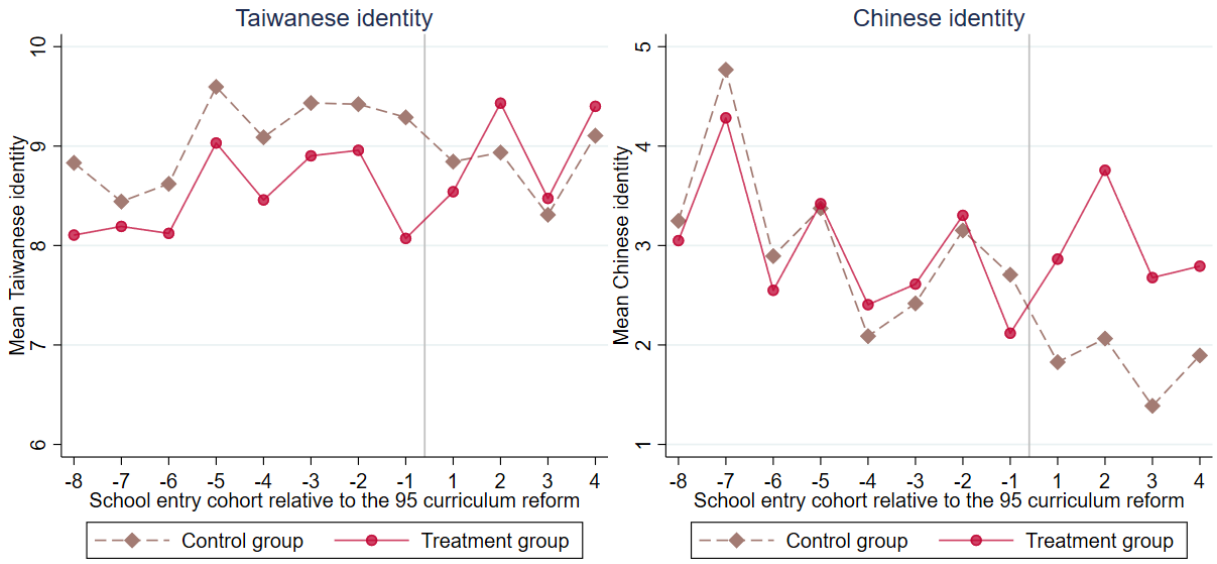
Figures

Figure 1: National identity in Taiwan - treatment vs. control group



Notes: The figure depicts the average reported strength of Taiwanese/Chinese identity of treatment (having attained regular senior high school track education) and control groups across school entry year cohorts. Foreigners are excluded. Each national identity is measured by a Likert scale ranging from 0 (not at all) to 10 (absolutely).

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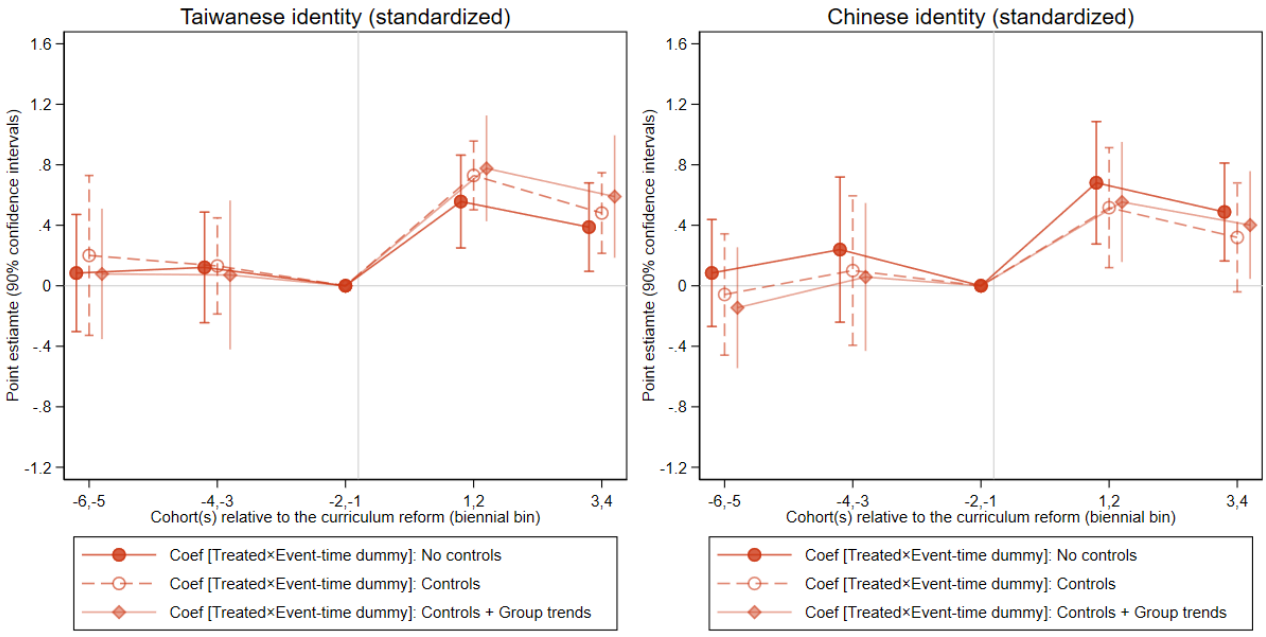
Figure 2: History curriculum reform and national identity gap



Notes: The identity gaps are estimated based on:

$$y_i = \sum_T \beta_T \times DD_{cs}^T + x_i'\theta + \lambda_s + \tau_c + \varepsilon_i$$

where the difference-in-differences (DD) is allowed to vary with biennial cohort bins. Each outcome variable has been standardized to have zero sample mean and unit standard deviation. Controls comprise gender, father ethnicity fixed effects, mother ethnicity fixed effects, and hometown (city) fixed effects. Reporting 90% confidence intervals using educational track clusters.

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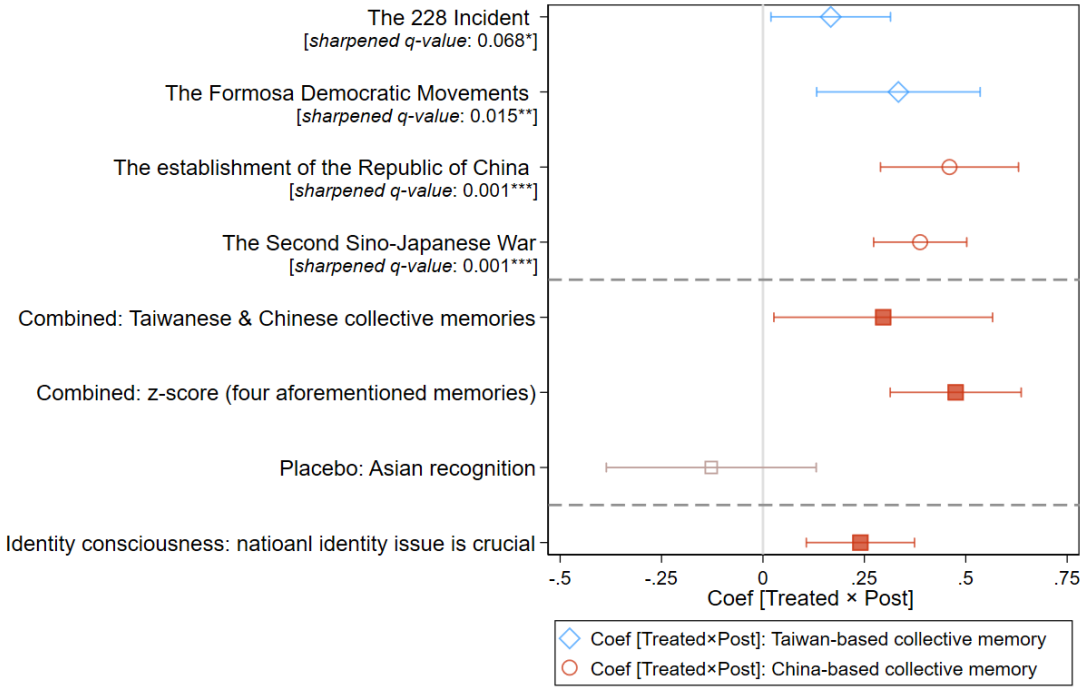
Figure 3: History curriculum reform, national consciousness and national memory



Notes: The figure visualizes the difference-in-differences estimates based on the specification:

$$y_i = \beta \times Post_c \times Treat_s + x_i'\theta + \lambda_s + \tau_c + \varepsilon_i$$

Each row presents the estimate from one separate regression. Each outcome variable is a binary that is one if the response is "important" and zero otherwise; for ease of presentation, we standardize each outcome variable. Controls comprise gender, father ethnicity fixed effects, mother ethnicity fixed effects, and hometown city fixed effects. Sample bandwidth: [-6,+4] cohorts around the reform. Reporting confidence intervals using educational track clusters. The sharpened q-values (following the false discovery rate procedure by Anderson (2008)) are reported in brackets to account for multiple hypothesis testing (Rows 1 - 4); Row 6 also presents the estimate using an equally-weighted z-score index that summarizes the related outcomes in Rows 1 - 4.

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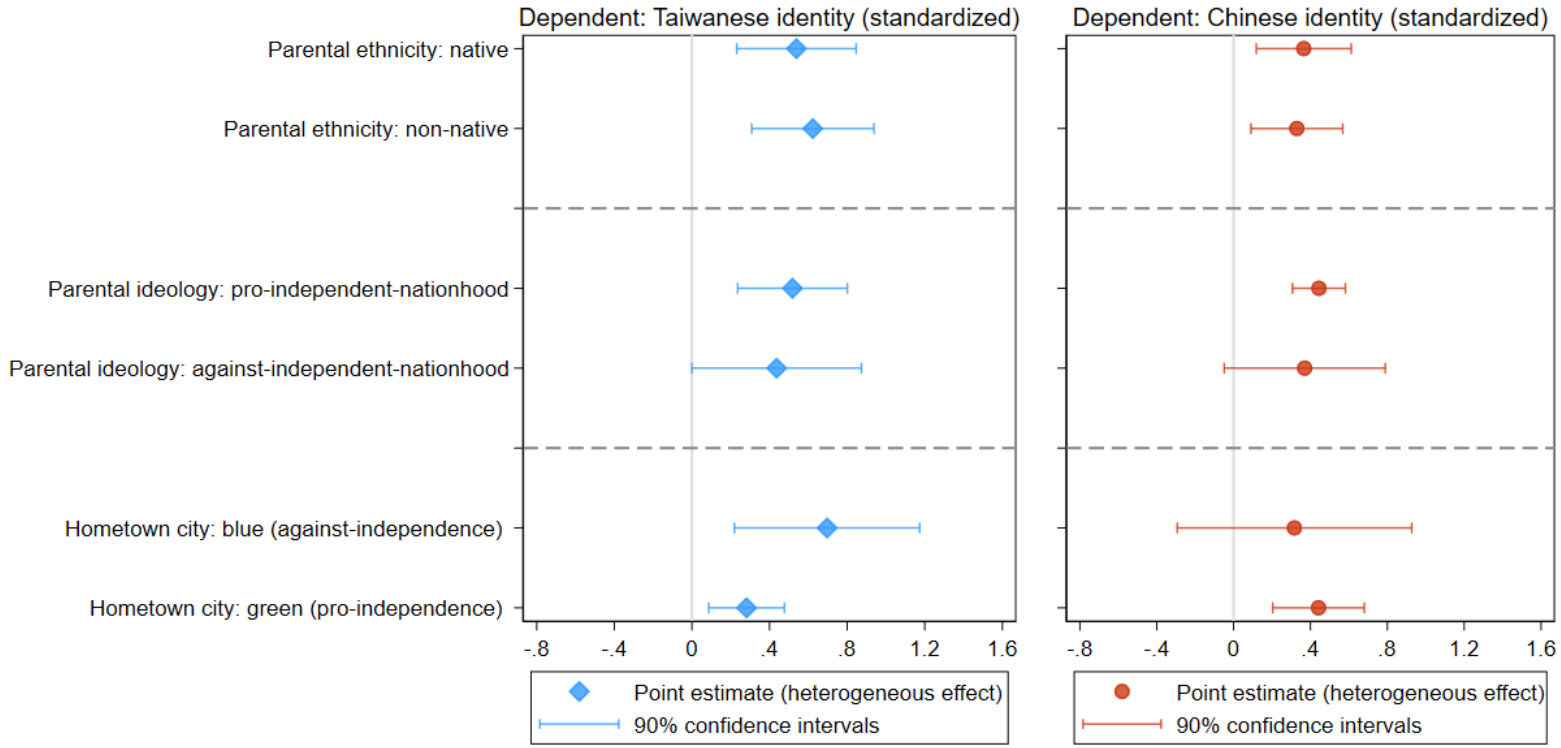
Figure 4: Heterogeneous effects of the history curriculum reform



Notes: The figure visualizes the estimated heterogeneous effects of the 95 curriculum on national identity formation. Each panel presents the results from three separate regressions. The specification is similar to that of Equation (1) but allows the impact to vary by the corresponding mediator variable:

$$y_i = \beta_1 \times Post_c \times Treat_s \times \mathbf{1}_{[Mediator=0]} + \beta_2 \times Post_c \times Treat_s \times \mathbf{1}_{[Mediator=1]} + x_i'\theta + \phi_{Treat \times Mediator} + \psi_{Post \times Mediator} + \lambda_s + \tau_c + \varepsilon_i$$

The mediator in Rows 5-6 is a dummy that is 1 if the pro-mainland party dominates one's hometown city in the 2000 and 2004 general elections. Sample bandwidth: [-6,+4] cohorts around the reform. Reporting 90% confidence intervals using educational track clusters.

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Tables

Table 1: Summary statistics and balance checks

Panel A	All	Pre-September 2006			Post-September 2006			Diff-in-Diff	
TSCS (2013)		Control	Treat	Diff.	Control	Treat	Diff.	Raw	Conditional
	Mean (s.d.)	Mean (s.d.)		[p-value]	Mean (s.d.)		[p-value]	[p-value]	[p-value]
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Male	0.535	0.544	0.458	-0.085	0.559	0.576	0.017	0.102	0.079
	(0.500)	(0.501)	(0.502)	[0.269]	(0.499)	(0.498)	[0.837]	[0.366]	[0.268]
Dialect usage	0.422	0.476	0.403	-0.073	0.452	0.305	-0.147	-0.074	-0.055
	(0.439)	(0.482)	(0.398)	[0.341]	(0.434)	(0.429)	[0.068]*	[0.505]	[0.504]
Religious	0.642	0.718	0.653	-0.066	0.602	0.559	-0.043	0.023	-0.016
	(0.480)	(0.452)	(0.479)	[0.362]	(0.492)	(0.501)	[0.605]	[0.835]	[0.868]
Native	0.948	0.922	0.958	0.036	0.957	0.966	0.009	-0.027	-0.020
	(0.222)	(0.269)	(0.201)	[0.313]	(0.204)	(0.183)	[0.775]	[0.573]	[0.651]
Native (father)	0.969	0.971	0.972	0.001	0.978	0.949	-0.029	-0.030	-0.030
	(0.172)	(0.169)	(0.165)	[0.958]	(0.146)	(0.222)	[0.369]	[0.459]	[0.498]
Native (mother)	0.969	0.981	0.958	-0.022	0.968	0.966	-0.002	0.021	0.033
	(0.173)	(0.139)	(0.201)	[0.417]	(0.178)	(0.183)	[0.957]	[0.612]	[0.394]
Coastal hometown	0.578	0.602	0.597	-0.005	0.548	0.559	0.011	0.016	0.007
	(0.495)	(0.492)	(0.494)	[0.950]	(0.500)	(0.501)	[0.896]	[0.889]	[0.952]
Observations	327	103	72	175	93	59	152	327	327
Panel B	All	Pre-September 2006			Post-September 2006			Diff-in-Diff	
CIS (pooled)		Control	Treat	Diff.	Control	Treat	Diff.	Raw	Conditional
	Mean (s.d.)	Mean (s.d.)		[p-value]	Mean (s.d.)		[p-value]	[p-value]	[p-value]
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Male	0.512	0.522	0.503	-0.019	0.529	0.492	-0.037	-0.019	-0.018
	(0.500)	(0.501)	(0.502)	[0.743]	(0.503)	(0.504)	[0.672]	[0.858]	[0.873]
Native (father)	0.860	0.876	0.877	0.002	0.838	0.800	-0.038	-0.040	-0.043
	(0.348)	(0.331)	(0.329)	[0.965]	(0.371)	(0.403)	[0.571]	[0.603]	[0.621]
Coastal residency city	0.459	0.484	0.484	-0.001	0.368	0.431	0.063	0.064	0.057
	(0.499)	(0.501)	(0.501)	[0.992]	(0.486)	(0.499)	[0.461]	[0.533]	[0.546]
Observations	449	161	155	316	68	65	133	449	449

Notes: The table presents descriptive statistics (mean, standard deviation) of demographic characteristics. Sample bandwidth: [-6,+4] cohorts around the reform. "TSCS 2013" refers to the *Taiwan Social Change Survey* (*National identity*) in 2013; "CIS (pooled)" refers to the *Chinese Impact Studies* (2012, 2013, 2015, 2016). "Dialect usage" is an indicator that is 1 if Taiwanese Hokkien dialect is used in one's daily life; "Religious" is a dummy that is 1 if the respondent holds at least one religion or has some folk religious beliefs; "Native" is a dummy that is 1 if the respondent was born in Taiwan. Standard deviations are in parentheses. In Column (9), the difference-in-differences are estimated conditional on the educational track fixed effects and cohort fixed effects (the same set of fixed effects as the one used in the main specification), with Donald-Lang 2-step adjusted P-values in brackets. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

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Table 2: History curriculum reform and reported national identity

	Taiwanese (0, low - 10, high)			Chinese (0, low - 10, high)		
	(1)	(2)	(3)	(4)	(5)	(6)
Mean of dep. var	8.892	8.892	8.892	2.435	2.435	2.435
Treat × Post	0.604	0.745	0.975	1.248	1.035	1.325
Cluster SEs: Education track	(0.300)*	(0.324)*	(0.324)**	(0.448)**	(0.359)**	(0.359)***
Cluster SEs: Cohort	(0.125)***	(0.197)***	(0.165)***	(0.386)**	(0.359)**	(0.361)***
Donald-Lang Aggregate Est.	0.612	0.800	1.026	1.259	1.069	1.355
Donald-Lang Newey–West SEs	(0.109)***	(0.151)***	(0.098)***	(0.231)***	(0.212)***	(0.234)***
Cohort FEs	Yes	Yes	Yes	Yes	Yes	Yes
Education track FEs	Yes	Yes	Yes	Yes	Yes	Yes
Demographic controls		Yes	Yes		Yes	Yes
Group specific trends			Yes			Yes
Std. dev. of dep. var.	1.575	1.575	1.575	2.757	2.757	2.757
Observations	327	327	327	327	327	327
Data source	Taiwan Social Change Survey - National Identity (TSCS 2013)					

Notes: Unit of observation: individual. $Treat$ is a dummy that is one if the respondent has received regular-track high school education. $Post$ is a dummy that is one if the respondent is in post-September-2006 school entry cohorts (after the curriculum reform). Demographic controls comprise gender, father ethnicity fixed effects, mother ethnicity fixed effects, and respondent hometown (city) fixed effects. Sample bandwidth: [-6,+4] cohorts around the reform. For Donald-Lang 2-step estimators, there are 2 groups (treatment and control) and 10 cohorts; the Newey-West method further adjusts standard errors for auto-correlation (with maximum lag set at 3 cohorts). * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

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Table 3: History curriculum reform and changes in information acquisition

	Attention and media consumption				
	Taiwan-oriented messages (1, low - 5, high) (1)	China-oriented messages (1, low - 5, high) (2)	Binary: attention to both (1) & (2) (3)	Z-score (4)	Binary: weather forecast (placebo) (5)
Mean of dep. var	2.409	2.431	0.209	0.000	0.333
Treat × Post	0.333	0.483	0.180	0.388	0.001
Cluster SEs: Education track	(0.162)*	(0.155)**	(0.035)***	(0.150)**	(0.085)
Cluster SEs: Cohort	(0.204)	(0.186)**	(0.083)**	(0.209)*	(0.098)**
Donald-Lang Aggregate Est.	0.325	0.504	0.180	0.395	-0.039
Donald-Lang Newey–West SEs	(0.145)**	(0.255)**	(0.098)**	(0.158)**	(0.064)
Cohort FEs	Yes	Yes	Yes	Yes	Yes
Education track FEs	Yes	Yes	Yes	Yes	Yes
Demographic controls	Yes	Yes	Yes	Yes	Yes
Std. dev. of dep. var.	1.082	1.080	0.407	1.003	0.472
Observations	329	329	329	329	329
Data source	Taiwan Communication Survey - Political Communication (2015)				

Notes: The outcome variable in Column (3) is a binary that is 1 if the respondent pays particular attention to both China-oriented and Taiwan-oriented messages (using "4 [frequent]" as the cutoff). Columns (4) also presents the estimate based on an equally-weighted z-score index that summarizes the related outcomes in Columns (1) - (3); $Treat$ is a dummy that is one if the respondent has received regular-track high school education. $Post$ is a dummy that is one if the respondent is in post-September-2006 school entry cohorts (after the curriculum reform). Demographic controls comprise gender, father ethnicity fixed effects, mother ethnicity fixed effects, and respondent hometown city fixed effects. To capture changes in content consumed, we also include a control for individuals' expressed interest in politics, measured on a scale of 1 (low) to 5 (high). Sample bandwidth: [-6,+4] cohorts around the reform. For Donald-Lang 2-step estimators, there are 2 groups (treatment and control) and 10 cohorts; the Newey-West method further adjusts standard errors for auto-correlation (with maximum lag set at 3 cohorts). * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

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Table 4: History curriculum reform and identity co-movement

	Strong Taiwanese & strong Chinese recognition		Correlation between two identities
	(1)	(2)	(3)
Mean of dep. var	0.193	0.267	-0.288
Treat × Post	0.174	0.275	0.322
Cluster SEs: Education track	(0.059)**	(0.054)***	-
Cluster SEs: Cohort	(0.078)**	(0.083)***	-
Donald-Lang Aggregate Est.	0.179	0.272	0.322
Donald-Lang Newey–West SEs	(0.094)*	(0.096)**	(0.160)*
Cohort FEs	Yes	Yes	Yes
Education track FEs	Yes	Yes	Yes
Demographic controls	Yes	Yes	-
Cutoff	Mean	Median	-
Std. dev. of dep. var.	0.395	0.443	0.325
Observations	327	327	20
Unit of obs.	Individual	Individual	Treat × Cohort
Data source	Taiwan Social Change Survey-National Identity (2013)		

Notes: "Strong Taiwanese/Chinese recognition" is a binary that is one if the reported identity is above its corresponding cutoff (mean or median). The outcome variable in Columns (1) - (2) is the product of the aforementioned two binaries, which captures whether an individual simultaneously exhibits strong recognition of both identities. $Treat$ is a dummy that is one if the respondent has received regular-track high school education. $Post$ is a dummy that is one if the respondent is in post-September-2006 school entry cohorts (after the curriculum reform). Demographic controls comprise gender, father ethnicity fixed effects, mother ethnicity fixed effects, and respondent hometown city fixed effects. "Cutoff" refers to the within-group (by $Treat$) statistic to define the strength of identity as "strong" or "weak". Sample bandwidth: [-6,+4] cohorts around the reform. For Donald-Lang 2-step estimators, there are 2 groups (treatment and control) and 10 cohorts; the Newey-West method further adjusts standard errors for auto-correlation (with maximum lag set at 3 cohorts). * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

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Table 5: History curriculum reform and political inclinations

	Declaring independence if it would not lead to war (0 disagree,1 agree)		Unification with Mainland if similar economy and policies (0 disagree,1 agree)		Encouraging economic co-operation with Mainland (0 disagree,1 agree)		Z-score: moderation along political axes	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Mean of dep. var	0.633	0.617	0.216	0.126	0.395	0.279	0.000	-0.000
Treat × Post	-0.114	-0.158	0.032	-0.012	0.214	0.107	0.375	0.366
Cluster SEs: Education track	(0.071)	(0.039)***	(0.044)	(0.061)	(0.060)***	(0.052)*	(0.079)***	(0.211)
Cluster SEs: Cohort	(0.063)*	(0.052)**	(0.088)	(0.044)	(0.111)*	(0.048)*	(0.183)**	(0.153)*
Donald-Lang Aggregate Est.	-0.107	-0.155	0.069	-0.022	0.205	0.111	0.415	0.327
Donald-Lang Newey–West SEs	(0.084)	(0.069)*	(0.047)	(0.033)	(0.105)*	(0.038)**	(0.219)*	(0.157)*
Cohort FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Education track FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Data source	TSCS	CIS	TSCS	CIS	TSCS	CIS	TSCS	CIS
Std. dev. of dep. var	0.483	0.487	0.412	0.333	0.490	0.449	1.002	0.992
Observations	327	449	327	449	327	449	327	449

Notes: Columns (7) - (8) present estimates using equally-weighted z-score indices that summarize the three related outcomes in Columns (1) - (6); we switch the signs of the outcomes in Columns (1) - (2) so that the positive direction always indicates moderation along the Taiwan-Mainland policy and political axes. $Treat$ is a dummy that is one if the respondent has received regular-track high school education. $Post$ is a dummy that is one if the respondent is in post-September-2006 school entry cohorts (after the curriculum reform). Demographic controls comprise gender, father ethnicity fixed effects, mother ethnicity fixed effects, and respondent hometown city fixed effects. Sample bandwidth: [-6,+4] cohorts around the reform. "CIS" stands for the *China Impact Studies* (2012, 2013, 2015, 2016 pooled). "TSCS" stands for the *Taiwan Social Change Survey - National Identity* (2013). For Donald-Lang 2-step estimators, there are 2 groups (treatment and control) and 10 cohorts; the Newey-West method further adjusts standard errors for auto-correlation (with maximum lag set at 3 cohorts). * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

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Table 6: History curriculum reform and voting behavior

	Vote for "Blue" candidates		"Median" vote or abstention		Vote for "Green" candidates	
	(1)	(2)	(3)	(4)	(5)	(6)
Mean of dep. var	0.245	0.261	0.414	0.377	0.341	0.362
Treat × Post	-0.079	-0.065	0.155	0.122	-0.076	-0.057
Cluster SEs: Education track	(0.043)	(0.044)	(0.070)*	(0.032)***	(0.083)	(0.028)*
Cluster SEs: Cohort	(0.092)	(0.059)	(0.069)**	(0.031)***	(0.049)	(0.043)
Donald-Lang Aggregate Est.	-0.051	-0.028	0.139	0.105	-0.087	-0.077
Donald-Lang Newey–West SEs	(0.061)	(0.034)	(0.044)**	(0.022)***	(0.026)**	(0.023)**
Cohort FEs	Yes	Yes	Yes	Yes	Yes	Yes
Education track FEs	Yes	Yes	Yes	Yes	Yes	Yes
Survey wave FEs	Yes	Yes	Yes	Yes	Yes	Yes
Data source	CIS	TSCS	CIS	TSCS	CIS	TSCS
Std. dev. of dep. var	0.429	0.440	0.494	0.485	0.475	0.481
Observations	261	1,232	261	1,232	261	1,232

Notes: "Blue" ("Green") vote is a binary that is 1 if voting for pro-Chinese (pro-Taiwanese) candidates in the general election, and 0 otherwise (including abstaining). "Median" vote/abstention is a binary that is 1 if voting for candidates without blue/green party affiliation or abstention. $Treat$ is a dummy that is one if the respondent has received regular-track high school education. $Post$ is a dummy that is one if the respondent is in post-September-2006 school entry cohorts (after the curriculum reform). Sample bandwidth: [-6,+4] cohorts around the reform. "CIS" stands for the *China Impact Studies* (2012, 2013, 2016 pooled), in which respondents self-report their votes (the 2015 wave does not elicit voting information). "TSCS" here stands for the *Taiwan Social Change Survey* (2012-2016 pooled), which elicits respondent votes using both direct self-reported approach and indirect game-based strategy. For Donald-Lang 2-step estimators, there are 2 groups (treatment and control) and 10 cohorts; the Newey-West method further adjusts standard errors for auto-correlation (with maximum lag set at 3 cohorts). * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

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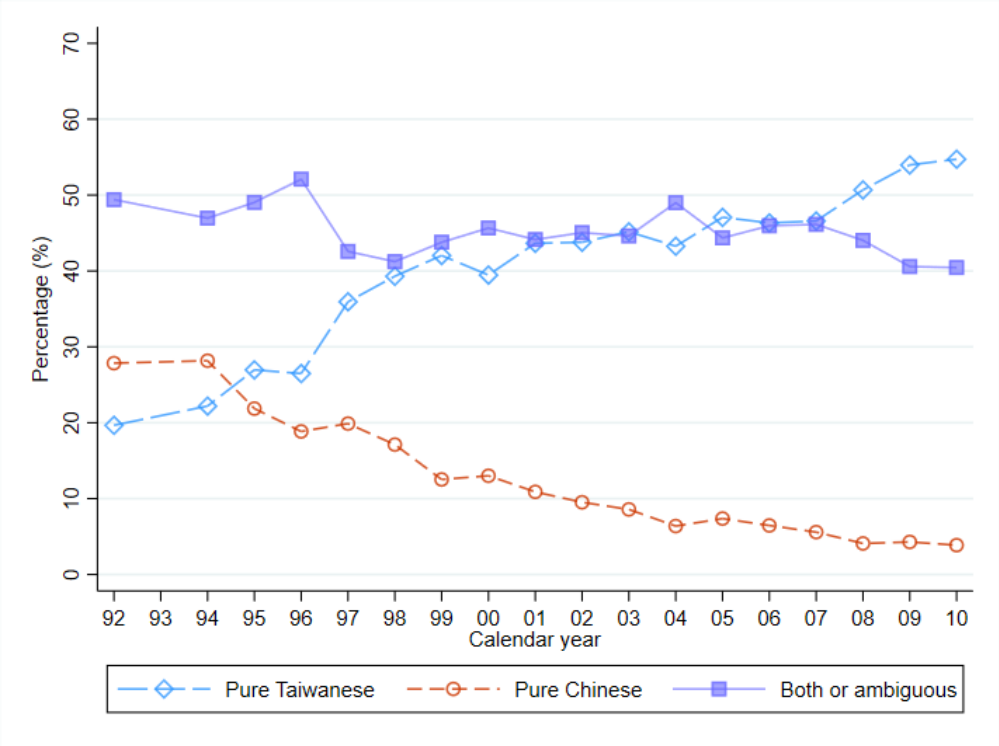
Appendix A Appendix Figures

Figure A1: *De-sinicization* – national identity in Taiwan (1992-2010)



Notes: The figure plots the aggregate share of national identity in Taiwan based on polls from 1992 to 2010. Data source: Election Study Center, National Chengchi University of Taiwan (ESC, NCUT).

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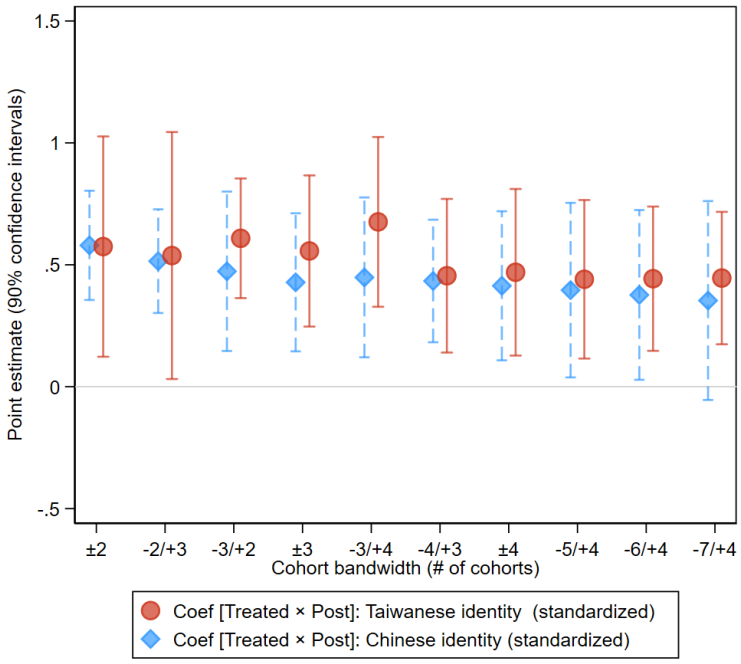
Figure A2: History curriculum reform and national identity – varying bandwidth



Notes: The figure visualizes the regression estimates using varying bandwidths based on the specification:

$$y_i = \beta \times Post_c \times Treat_s + \lambda_s + \tau_c + \varepsilon_i$$

Each outcome variable has been standardized to have zero sample mean and unit standard deviation. See Table 2 for additional notes. Reporting 90% confidence intervals.

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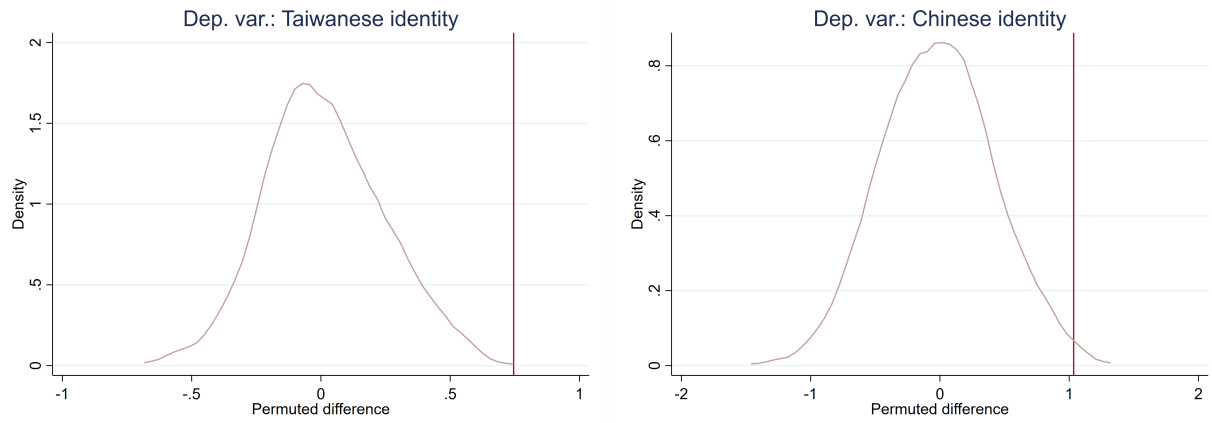
Figure A3: Permutation tests



Notes: The figure visualizes the regression estimates for randomly permuted DiD terms based on the specification (with 1,000 iterations for each outcome variable):

$$y_i = \beta \times Post_c \times Treat_s + \lambda_s + \tau_c + \varepsilon_i$$

See Table 2 for additional notes. The vertical line in each panel represents the corresponding baseline estimated coefficient. The likelihood of the original estimate being a result of coincidence is nearly zero for Taiwanese identity and less than 1.4% for Chinese identity.

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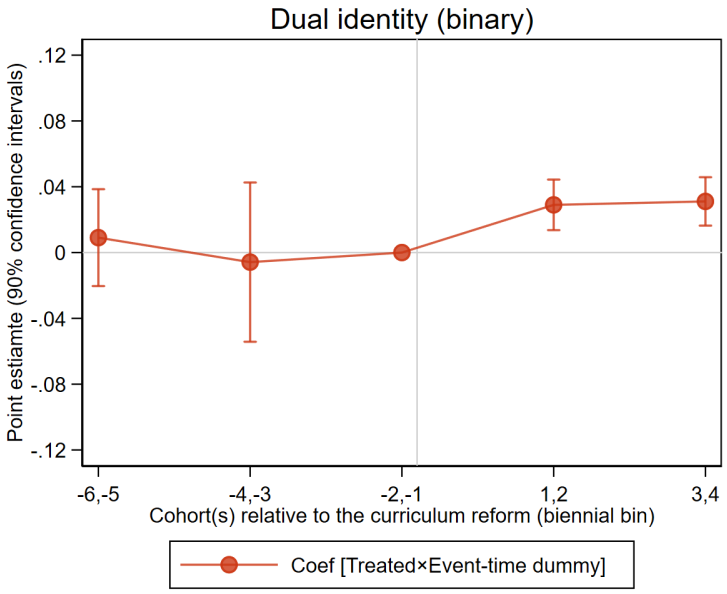
Figure A4: Event study plot on dual identity holding



Notes: The identity gaps are estimated based on:

$$y_i = \sum_T \beta_T \times DD_{cs}^T + x_i'\theta + \lambda_s + \tau_c + \varepsilon_i$$

where the difference-in-differences (DD) is allowed to vary with biennial cohort bins. Controls include survey wave fixed effects. Reporting 90% confidence intervals using educational track clusters.

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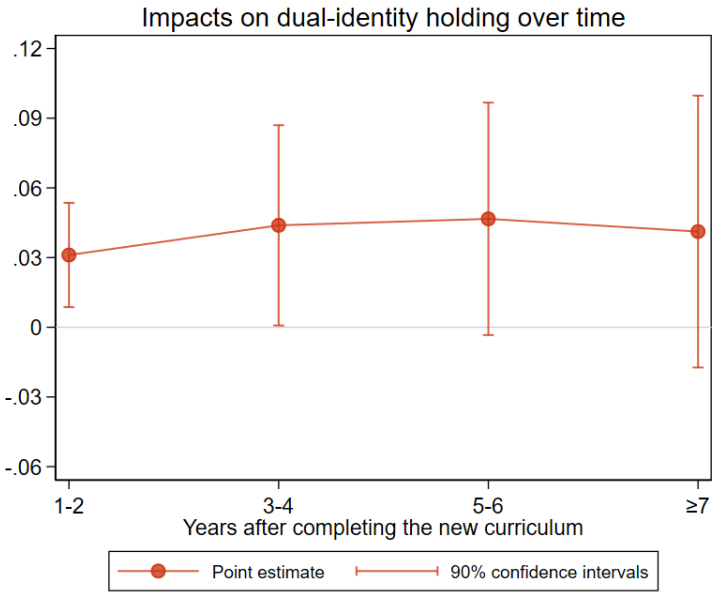
Figure A5: Impacts on dual-identity holding over time



Notes: The figure visualizes the estimated impacts on dual-identity holding over time after completing the new curriculum. The coefficients are estimated based on:

$$y_i = \sum_K \beta_K \times \mathbf{1}_{[\text{K years after high school}]} \times Treat_s + x_i'\theta + \lambda_s + \tau_c + \varepsilon_i$$

Controls include survey wave fixed effects. See Table B8 for additional notes. Reporting 90% confidence intervals.

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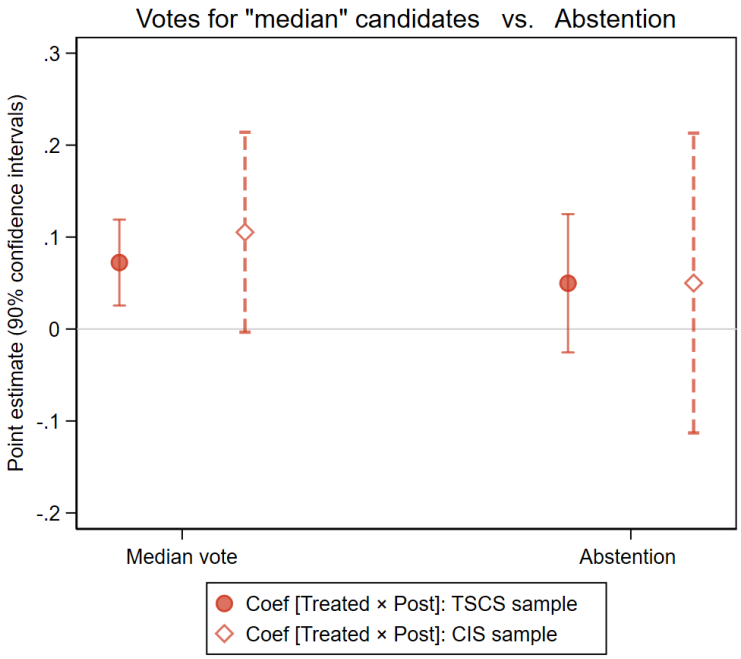
Figure A6: History curriculum reform, turnout, and "median" votes



Notes: The figure visualizes the regression estimates to separately examine the impact on abstention and votes for the "median" candidates, based on the specification:

$$y_i = \beta \times Post_c \times Treat_s + \lambda_s + \tau_c + \varepsilon_i$$

See Table 6 for additional notes. Reporting 90% confidence intervals.

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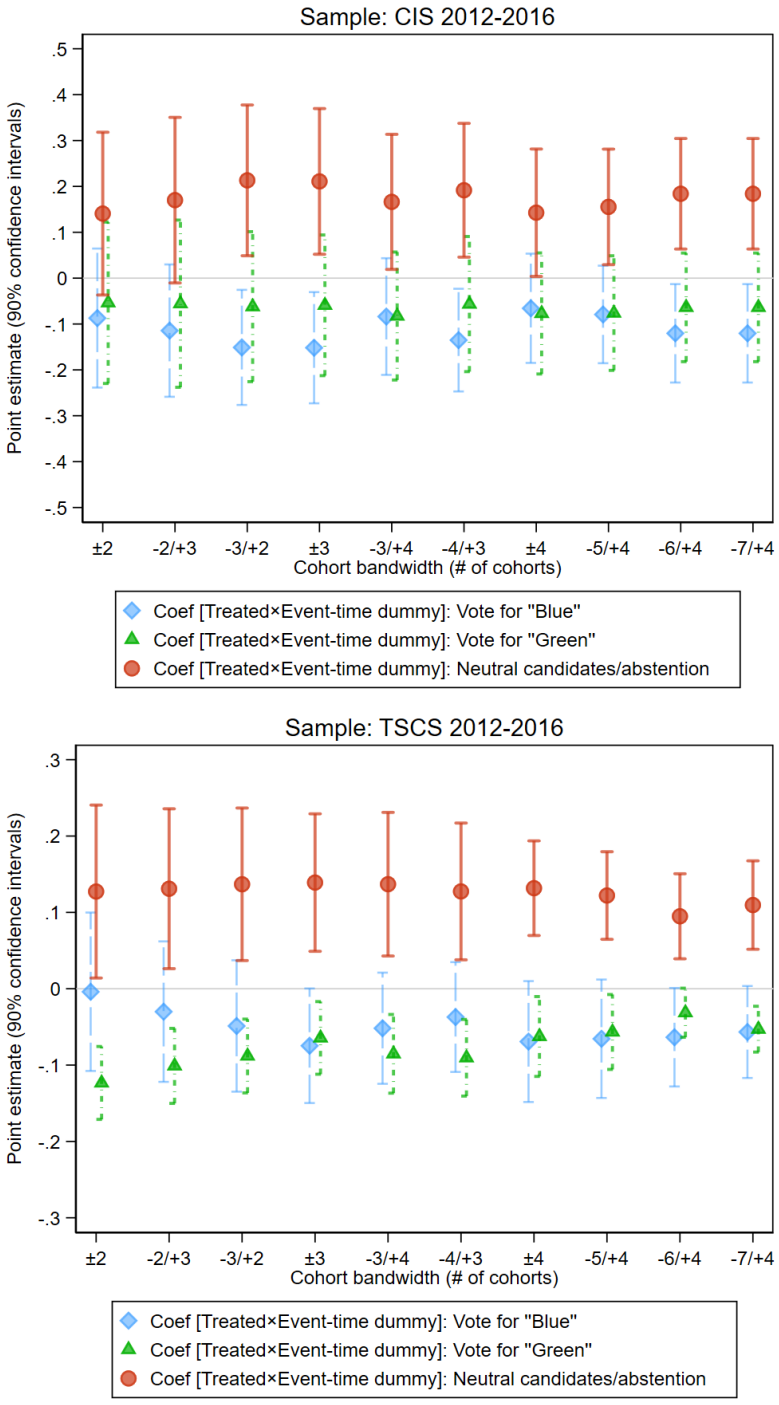
Figure A7: History curriculum reform and voting behavior – varying bandwidth



Notes: The figure visualizes the regression estimates using varying bandwidths based on the specification:

$$y_i = \beta \times Post_c \times Treat_s + \lambda_s + \tau_c + \varepsilon_i$$

See Table 6 for additional notes. Reporting 90% confidence intervals.

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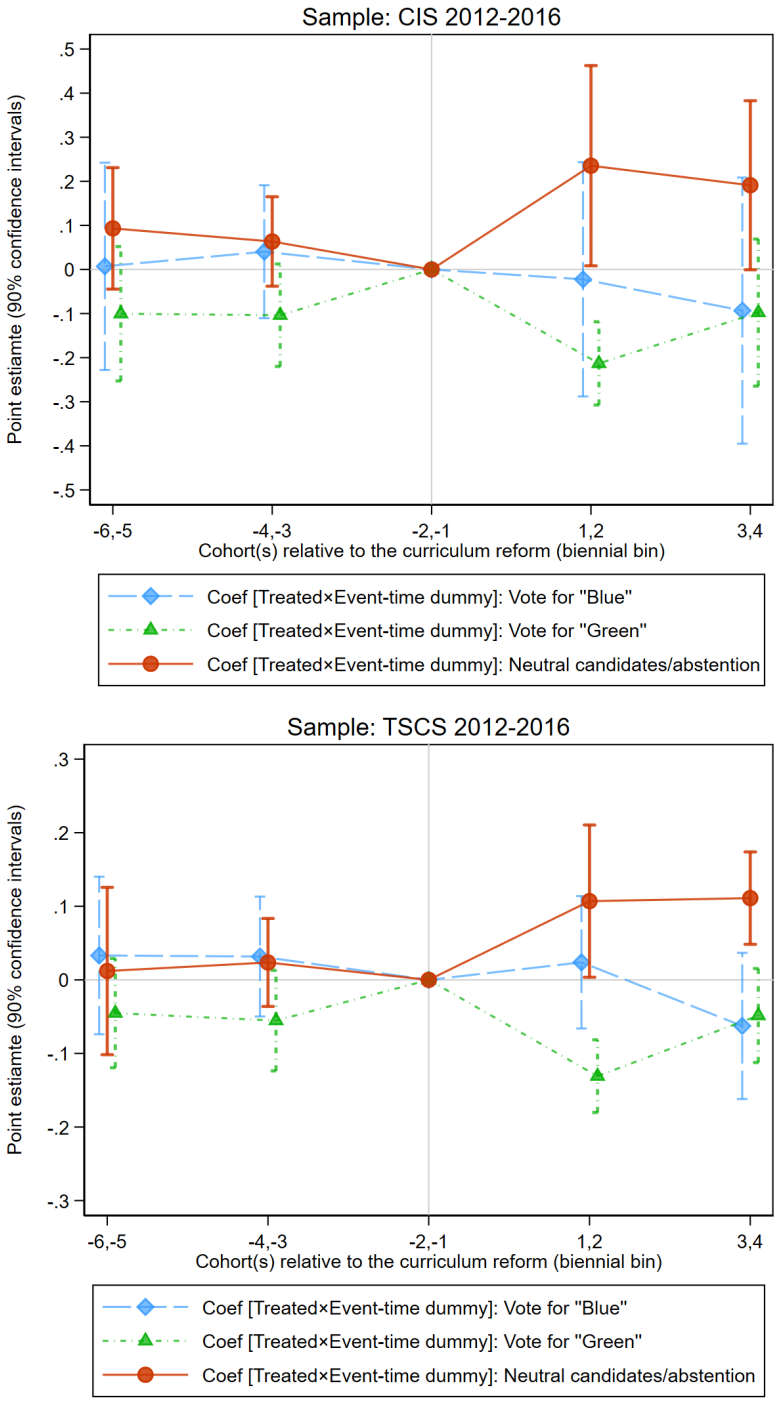
Figure A8: History curriculum reform and voting behavior



Notes: The voting gaps are estimated based on:

$$y_i = \sum_T DD_{cs}^T + x_i'\theta + \lambda_s + \tau_c + \varepsilon_i$$

where the difference-in-differences (DD) is allowed to vary with biennial cohort bins. Reporting 90% confidence intervals using educational track clusters.

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Appendix B Appendix Tables

Table B1: Changes in topic counts in Taiwanese and Chinese history

Panel A: History of Taiwan	**Count in "88" textbooks**	**Count in "95" textbooks**	**Change (%)**
Category A. Institutions			
Political institution	9	32	256
Economy	7	30	329
Category B. Society			
Civil society	4	6	50
Rule of law	2	4	100
Category C. Science and technology			
Architecture	2	5	150
Technology	2	6	200
Category D. Culture			
Language and religion	6	15	117
Customs and lifestyle	3	11	267
Art and literature	6	27	350
Category E. Territory and historical memories			
Race and consanguinity	3	7	133
Historical territory	4	22	450
Myth and legend	1	1	0
National great men	6	6	0
Panel B: History of China	**Count in "88" curriculum**	**Count in "95" curriculum**	**Change(%)**
Category A. Prehistory & Ancient China			
Prehistory	5	3	-40
Xia - Zhou Dynasties	10	9	-10
Eastern Zhou (warring states)	17	14	-18
Category B. Imperial China			
Qin Dynasty	5	5	0
Han Dynasty	4	4	0
Eastern Han - Sui Dynasties	22	20	-9
Tang Dynasty	13	8	-38
Song Dynasty	10	10	0
Yuan Dynasty	2	1	-50
Ming Dynasty	6	5	-17
Qing Dynasty	8	8	0
Category C. Modern China			
First Sino-Japanese War	1	1	0
Xinhai Revolution (the fall of Qing Dynasty)	1	1	0
The founding of the Republic of China	3	3	0
The rise of the Communist Party of China	1	1	0
Second Sino-Japanese War (World War II)	3	4	33
Chinese Civil War	2	2	0
The creation of the People's Republic of China	2	2	0

Notes: The unit of count is *subsection*, which refers to the fourth layer of a textbook. For instance: "Part IV - Subversion of Qing Dynasty, Unit II - Reform and Revolution, Section I- Xinhai Revolution, Subsection I - Sun Yat-sen and 'Revive China Society'." We count the related content in each category in the old and new textbooks, respectively. The version of the new textbooks we use is the "Nan-I" edition (all editions are largely similar in terms of their structure and material but with different publishers). The old curriculum has only one unified version of textbooks.

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Table B2: Curriculum reform and tertiary education

	Whether continuing through tertiary education (indicator)	
	(1)	(2)
Mean of dep. var	0.706	0.788
Treat × Post	-0.053	-0.011
Cluster SEs: Cohort	(0.067)	(0.057)
Donald-Lang Aggregate Est.	-0.032	-0.015
Donald-Lang Newey–West SEs	(0.085)	(0.061)
Cohort FEs	Yes	Yes
Group (treatment/control) FEs	Yes	Yes
Std. dev. of dep. var.	0.456	0.409
Observations	327	449
Data source	TSCS	CIS

Notes: $Treat$ is a dummy that is one if the respondent has received regular-track high school education. $Post$ is a dummy that is one if the respondent is in post-September-2006 school entry cohorts (after the curriculum reform). Sample bandwidth: [-6,+4] cohorts around the reform. For Donald-Lang 2-step estimators, there are 2 groups (treatment and control) and 10 cohorts; the Newey-West method further adjusts standard errors for auto-correlation (with maximum lag set at 3 cohorts). * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

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Table B3: Robustness to additional controls

	Taiwanese (0, low - 10, high)		Chinese (0, low - 10, high)	
	(1)	(2)	(3)	(4)
Mean of dep. var	8.892	8.892	2.435	2.435
Treat × Post	0.745	0.878	1.035	1.150
Cluster SEs: Education track	(0.324)*	(0.192)**	(0.359)**	(0.398)**
Cluster SEs: Cohort	(0.158)***	(0.287)***	(0.301)***	(0.396)***
Donald-Lang Aggregate Est.	0.800	0.964	1.069	1.108
Donald-Lang Newey–West SEs	(0.151)***	(0.187)***	(0.217)***	(0.330)**
Cohort FEs	Yes	Yes	Yes	Yes
Education track FEs	Yes	Yes	Yes	Yes
Demographic controls	Yes	Yes	Yes	Yes
Post × Controls		Yes		Yes
Treat × Controls		Yes		Yes
Std. dev. of dep. var.	1.575	1.575	2.757	2.757
Observations	327	327	327	327
Data source	Taiwan Social Change Survey - National Identity (2013)			

Notes: $Treat$ is a dummy that is one if the respondent has received regular-track high school education. $Post$ is a dummy that is one if the respondent is in post-September-2006 school entry cohorts (after the curriculum reform). Demographic controls comprise gender, father ethnicity fixed effects, mother ethnicity fixed effects, and respondent hometown city fixed effects. In Columns (2) and (4), we interact *Treat* or *Post* with all aforementioned demographic controls. Sample bandwidth: [-6,+4] cohorts around the reform. For Donald-Lang 2-step estimators, there are 2 groups (treatment and control) and 10 cohorts; the Newey-West method further adjusts standard errors for auto-correlation (with maximum lag set at 3 cohorts). * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

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Table B4: Robustness to differential effects by education level

	Taiwanese (0, low - 10, high)		Chinese (0, low - 10, high)	
	(1)	(2)	(3)	(4)
Mean of dep. var	8.892	8.892	2.435	2.435
Treat × Post	0.745	1.058	1.035	0.946
Cluster SEs: Education track	(0.324)**	(0.080)***	(0.359)**	(0.415)**
Cluster SEs: Cohort	(0.197)***	(0.195)***	(0.301)***	(0.500)*
College × Post		-0.323		0.236
Cluster SEs: Education track		(0.273)		(0.607)
Cluster SEs: Cohort		(0.423)		(0.597)
Cohort FEs	Yes	Yes	Yes	Yes
Education track FEs	Yes	Yes	Yes	Yes
Demographic controls	Yes	Yes	Yes	Yes
Std. dev. of dep. var.	1.575	1.575	2.757	2.757
Observations	327	327	327	327
Data source	Taiwan Social Change Survey - National Identity (2013)			

Notes: $Treat$ is a dummy that is one if the respondent has received regular-track high school education. $Post$ is a dummy that is one if the respondent is in post-September-2006 school entry cohorts (after the curriculum reform). Demographic controls comprise gender, father ethnicity fixed effects, mother ethnicity fixed effects, and respondent hometown city fixed effects. *College* is a dummy that is 1 if the individual has received tertiary education. Sample bandwidth: [-6,+4] cohorts around the reform. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

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Table B5: Robustness to restricted samples

	Taiwanese (0, low - 10, high)		Chinese (0, low - 10, high)	
	(1)	(2)	(3)	(4)
Mean of dep. var	8.905	8.905	2.507	2.525
Treat × Post	0.780	0.695	1.017	1.154
Cluster SEs: Education track	(0.369)*	(0.373)*	(0.526)*	(0.529)*
Cluster SEs: Cohort	(0.230)***	(0.223)**	(0.370)**	(0.406)**
Donald-Lang Aggregate Est.	0.819	0.724	1.064	1.171
Donald-Lang Newey–West SEs	(0.195)***	(0.191)***	(0.383)**	(0.367)**
Cohort FEs	Yes	Yes	Yes	Yes
Education track FEs	Yes	Yes	Yes	Yes
Demographic controls	Yes	Yes	Yes	Yes
Sample	Abnormal years of schooling excluded	High school graduates and above	Abnormal years of schooling excluded	High school graduates and above
Std. dev. of dep. var.	1.568	1.575	2.796	2.784
Observations	301	288	301	288
Data source	Taiwan Social Change Survey - National Identity (2013)			

Notes: $Treat$ is a dummy that is one if the respondent has received regular-track high school education. $Post$ is a dummy that is one if the respondent is in post-September-2006 school entry cohorts (after the curriculum reform). Demographic controls comprise gender, father ethnicity fixed effects, mother ethnicity fixed effects, and respondent hometown city fixed effects. Sample bandwidth: [-6,+4] cohorts around the reform. For Donald-Lang 2-step estimators, there are 2 groups (treatment and control) and 10 cohorts; the Newey-West method further adjusts standard errors for auto-correlation (with maximum lag set at 3 cohorts). * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

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Table B6: Alternative statistical inference

	Taiwanese (0, low - 10, high)			Chinese (0, low - 10, high)		
	(1)	(2)	(3)	(4)	(5)	(6)
Mean of dep. var	8.892	8.892	8.892	2.435	2.435	2.435
Treat × Post	0.604	0.745	0.975	1.248	1.035	1.325
Wild-Bootstrap P-value: Education track	[0.000]***	[0.002]***	[0.001]**	[0.009]***	[0.013]**	[0.002]***
Wild-bootstrap P-value: Cohort	[0.000]***	[0.003]***	[0.000]***	[0.023]**	[0.030]**	[0.012]**
Wild-bootstrap P-value: Treat × Cohort	[0.000]***	[0.000]***	[0.000]***	[0.005]***	[0.022]**	[0.008]***
Cohort FEs	Yes	Yes	Yes	Yes	Yes	Yes
Education track FEs	Yes	Yes	Yes	Yes	Yes	Yes
Demographic controls		Yes	Yes		Yes	Yes
Group specific trends			Yes			Yes
Observations	327	327	327	327	327	327
Data source	Taiwan Social Change Survey - National Identity (TSCS 2013)					

Notes: $Treat$ is a dummy that is one if the respondent has received regular-track high school education. $Post$ is a dummy that is one if the respondent is in post-September-2006 school entry cohorts (after the curriculum reform). Demographic controls comprise gender, father ethnicity fixed effects, mother ethnicity fixed effects, and respondent hometown (city) fixed effects. Sample bandwidth: [-6,+4] cohorts around the reform. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

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Table B7: Robustness to Ordered Probit estimation

	Taiwanese (0, low -10, high)		Chinese (0, low -10, high)	
	(1)	(2)	(3)	(4)
Mean of dep. var	8.892	8.892	2.435	2.435
Treat × Post	0.383	0.547	0.555	0.482
Cluster SEs: Education track	(0.288)	(0.330)*	(0.229)**	(0.198)** *Cluster SEs: Cohort*
	(0.111)***	(0.227)**	(0.154)***	(0.158)***
Cohort FEs	Yes	Yes	Yes	Yes
Education track FEs	Yes	Yes	Yes	Yes
Demographic controls		Yes		Yes
Pseudo R^2	0.041	0.105	0.030	0.053
Std. dev. of dep. var.	1.575	1.575	2.757	2.757
Observations	327	327	327	327
Data source	Taiwan Social Change Survey - National Identity (2013)			

Notes: All coefficients are estimated using Ordered Probit regressions. $Treat$ is a dummy that is one if the respondent has received regular-track high school education. $Post$ is a dummy that is one if the respondent is in post-September-2006 school entry cohorts (after the curriculum reform). Demographic controls comprise gender, father ethnicity fixed effects, mother ethnicity fixed effects, and respondent hometown city fixed effects. Sample bandwidth: [-6,+4] cohorts around the reform. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

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Table B8: Categorical identity measures

	Taiwanese (binary)	Dual (both, binary)	Chinese (binary)
	(1)	(2)	(3)
Mean of dep. var	0.845	0.139	0.016
Treat × Post	-0.027	0.034	-0.007
Cluster SEs: Education track	(0.012)**	(0.008)***	(0.001)***
Cluster SEs: Cohort	(0.023)	(0.016)**	(0.004)*
Donald-Lang Aggregate Est.	-0.024	0.033	-0.009
Donald-Lang Newey–West SEs	(0.014)*	(0.018)*	(0.004)*
Cohort FEs	Yes	Yes	Yes
Education track FEs	Yes	Yes	Yes
Survey wave FEs	Yes	Yes	Yes
Observations	1,555	1,555	1,555
Data source	Taiwan Social Change Survey (2010 - 2020)		

Notes: Each outcome variable is a binary indicating whether the respondent identifies themselves with the corresponding identity. The three groups are mutually exclusive. The analysis pools all waves including the related survey question (2010, 2012, 2013, 2014, 2015, 2016, and 2020). $Treat$ is a dummy that is one if the respondent has received regular-track high school education. $Post$ is a dummy that is one if the respondent is in post-September-2006 school entry cohorts (after the curriculum reform). Sample bandwidth: [-6,+4] cohorts around the reform. For Donald-Lang 2-step estimators, there are 2 groups (treatment and control) and 10 cohorts; the Newey-West method further adjusts standard errors for auto-correlation (with maximum lag set at 3 cohorts). * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

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Table B9: Reactions of parents and teachers

	Awareness of others' national ideology		Teachers' perceptions and reaction			
	(1) Parents (binary)	(2) Colleagues and friends (binary)	(3) Adherence to textbooks (binary)	(4) Changes in teaching practice (binary)	(5) Time invested in lesson preparation per day	(6) Time invested in other teaching activities per day
Mean of dep. var	0.696	0.706	0.475	0.483	3.637	3.119
Treat × Post	0.180	-0.080	-0.036	-0.051	-0.216	0.033
	(0.038)***	(0.059)	(0.092)	(0.089)	(0.352)	(0.296)
× Non-native parents	0.486	-0.120				
	(0.109)***	(0.099)				
Cohort FEs	Yes	Yes	Yes	Yes	Yes	Yes
Education track FEs	Yes	Yes	-	-	-	-
Teacher FEs	-	-	Yes	Yes	Yes	Yes
Demographic controls	Yes	Yes	-	-	-	-
Lower interaction terms	Yes	Yes	-	-	-	-
Data source	TSCS - National Identity (2013)		Taiwan Education Panel Survey (TEPS, 2005-2007)			
Std. dev. of dep. var.	0.461	0.309	0.500	0.500	1.798	1.687
Observations	327	327	1,652	1,652	1,652	1,652

Notes: In Columns (1) - (2), $Treat$ is a dummy that is one if the respondent has received regular-track high school education, and $Post$ is a dummy that is one if the respondent is in post-September-2006 school entry cohorts (after the curriculum reform). In Columns (3) - (6), $Treat$ is a dummy that is one if the teacher works in the regular-track high school system, and $Post$ is a dummy that is one for the 2007 wave (post-curriculum-reform). Demographic controls comprise gender, father ethnicity fixed effects, mother ethnicity fixed effects, and respondent hometown city fixed effects. Sample bandwidth: [-6, +4] cohorts around the reform. Standard errors in parentheses are clustered at the educational track level in Columns (1) - (2) and at the school level in Columns (3) - (6). * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

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Table B10: Repression concerns and response rates

	Concern about wars with Mainland (1, low - 4, high)	Did not respond survey question (binary)		
		Concern about wars	Taiwanese identity	Chinese identity
	(1)	(2)	(3)	(4)
Mean of dep. var	2.292	0.012	0.003	0.003
Treat × Post	0.010	0.009	-0.000145	-0.000145
Cluster SEs: Education track	(0.052)	(0.014)	(0.004)	(0.004)
Cluster SEs: Cohort	(0.167)	(0.012)	(0.005)	(0.005)
Donald-Lang Aggregate Est.	0.020	0.015	0.003	0.003
Donald-Lang Newey–West SEs	(0.248)	(0.019)	(0.011)	(0.011)
Cohort FEs	Yes	Yes	Yes	Yes
Education track FEs	Yes	Yes	Yes	Yes
Demographic controls	Yes	Yes	Yes	Yes
Observations	323	328	328	328
Data source	Taiwan Social Change Survey - National Identity (2013)			

Notes: $Treat$ is a dummy that is one if the respondent has received regular-track high school education. $Post$ is a dummy that is one if the respondent is in post-September-2006 school entry cohorts (after the curriculum reform). Demographic controls comprise gender, father ethnicity fixed effects, mother ethnicity fixed effects, and respondent hometown city fixed effects. Sample bandwidth: [-6,+4] cohorts around the reform. For Donald-Lang 2-step estimators, there are 2 groups (treatment and control) and 10 cohorts; the Newey-West method further adjusts standard errors for auto-correlation (with maximum lag set at 3 cohorts). * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

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Table B11: Heterogeneous effects by exposure to Mainland Chinese radio

	Taiwanese (0, low - 10, high)		Chinese (0, low - 10, high)	
	(1)	(2)	(3)	(4)
Mean of dep. var	8.892	8.922	2.435	2.407
Treat × Post	0.745	0.649	1.035	1.174
Cluster SEs: Education track	(0.324)**	(0.038)**	(0.359)**	(0.392)**
Cluster SEs: Cohort	(0.197)***	(0.241)**	(0.301)***	(0.591)*
Treat × Post × Mainland signal (z-score)		0.479		-0.215
Cluster SEs: Education track		(0.235)*		(0.869)
Cluster SEs: Cohort		(0.432)		(0.607)
Cohort FEs	Yes	Yes	Yes	Yes
Education track FEs	Yes	Yes	Yes	Yes
Demographic controls	Yes	Yes	Yes	Yes
Treat × Post × Free-space signal	Yes	Yes	Yes	Yes
Std. dev. of dep. var.	1.575	1.544	2.757	2.744
Observations	327	314	327	314
Data source	Taiwan Social Change Survey - National Identity (2013)			

Notes: $Treat$ is a dummy that is one if the respondent has received regular-track high school education. $Post$ is a dummy that is one if the respondent is in post-September-2006 school entry cohorts (after the curriculum reform). *Mainland signal* represents the predicted signal strength accounting for topographic factors along the transmitter-receiver route. *Free-space signal* represents the hypothetical signal strength when there are no geographic obstacles along the transmitter-receiver route. By controlling for the free-space signal, we mitigate confounding factors such as proximity to the transmitter and distance to the coast. For each city, we assume that the receiver is located at the center of the city, and pair it with the Mainland propaganda radio transmitter located in Fujian Province; We then use the Irregular Terrain Model (ITM) to calculate both the hypothetical free-space signal and "real-wrold" predicted signal (Olken, 2009). Demographic controls comprise gender, father ethnicity fixed effects, mother ethnicity fixed effects, and respondent hometown city fixed effects. *College* is a dummy that is 1 if the individual has received tertiary education. Sample bandwidth: [-6,+4] cohorts around the reform. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

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Table B12: Curriculum reform and information acquisition (additional results)

	Taiwan-related news (binary)	Mainland-related news (binary)	Binary: both (1) & (2)
	(1)	(2)	(3)
Mean of dep. var	0.657	0.076	0.066
Treat × Post	0.136	0.152	0.126
Cluster SEs: Education track	(0.057)**	(0.061)**	(0.052)**
Cluster SEs: Cohort	(0.075)*	(0.070)*	(0.058)*
Donald-Lang Aggregate Est.	0.136	0.148	0.109
Donald-Lang Newey–West SEs	(0.060)**	(0.058)**	(0.031)***
Cohort FEs	Yes	Yes	Yes
Education track FEs	Yes	Yes	Yes
Demographic controls	Yes	Yes	Yes
Observations	307	307	307
Data source	Taiwan Communication Survey-Media Use (2018)		

Notes: Each outcome variable is a binary that is 1 if the respondent frequently consumes related media content ("Taiwanese social news" in Column 1 and "Mainland news" in Column 2). $Treat$ is a dummy that is one if the respondent has received regular-track high school education. $Post$ is a dummy that is one if the respondent is in post-September-2006 school entry cohorts (after the curriculum reform). Demographic controls comprise gender, father ethnicity fixed effects, mother ethnicity fixed effects, and respondent hometown city fixed effects. Sample bandwidth: [-6,+4] cohorts around the reform. For Donald-Lang 2-step estimators, there are 2 groups (treatment and control) and 10 cohorts; the Newey-West method further adjusts standard errors for auto-correlation (with maximum lag set at 3 cohorts). * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

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Table B13: Curriculum reform and labor market outcomes

	Monthly income (in 1,000 Taiwan dollar)		Perceived socioeconomic status (1, low - 10, high)	
	(1)	(2)	(3)	(4)
Mean of dep. var	26.456	26.369	5.244	5.245
Treat × Post	-4.467	-3.444	0.339	0.367
Cluster SEs: Education track	(5.000)	(5.167)	(0.300)	(0.339)
Cluster SEs: Cohort	(3.435)	(2.772)	(0.436)	(0.410)
Donald-Lang Aggregate Est.	-3.677	-3.531	0.137	0.210
Donald-Lang Newey–West SEs	(4.154)	(3.941)	(0.493)	(0.428)
Cohort FEs	Yes	Yes	Yes	Yes
Education track FEs	Yes	Yes	Yes	Yes
Demographic controls		Yes		Yes
Observations	319	319	327	327
Data source	Taiwan Social Change Survey - National Identity (2013)			

Notes: $Treat$ is a dummy that is one if the respondent has received regular-track high school education. $Post$ is a dummy that is one if the respondent is in post-September-2006 school entry cohorts (after the curriculum reform). Demographic controls comprise gender, father ethnicity fixed effects, mother ethnicity fixed effects, and respondent hometown city fixed effects. Sample bandwidth: [-6,+4] cohorts around the reform. For Donald-Lang 2-step estimators, there are 2 groups (treatment and control) and 10 cohorts; the Newey-West method further adjusts standard errors for auto-correlation (with maximum lag set at 3 cohorts). * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

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Table B14: Robustness to different interpretations of "Chinese" nationhood

	Taiwanese (0, low - 10, high)		Chinese (0, low - 10, high)	
	(1)	(2)	(3)	(4)
Mean of dep. var	8.892	8.892	2.435	2.435
Treat × Post	0.745	0.794	1.035	0.912
Cluster SEs: Education track	(0.324)*	(0.311)**	(0.359)**	(0.374)**
Cluster SEs: Cohort	(0.158)***	(0.213)***	(0.301)***	(0.405)*
Donald-Lang Aggregate Est.	0.800	0.844	1.069	0.960
Donald-Lang Newey–West SEs	(0.151)***	(0.187)***	(0.212)***	(0.365)**
Cohort FEs	Yes	Yes	Yes	Yes
Education track FEs	Yes	Yes	Yes	Yes
Demographic controls	Yes	Yes	Yes	Yes
"China" interpretation FEs		Yes		Yes
Std. dev. of dep. var.	1.575	1.575	2.757	2.757
Observations	327	327	327	327
Data source	Taiwan Social Change Survey - National Identity (2013)			

Notes: $Treat$ is a dummy that is one if the respondent has received regular-track high school education. $Post$ is a dummy that is one if the respondent is in post-September-2006 school entry cohorts (after the curriculum reform). Demographic controls comprise gender, father ethnicity fixed effects, mother ethnicity fixed effects, and respondent hometown city fixed effects. "China" interpretation fixed effects absorb whether an individual recognizes the mainland regime as a part of "China" (year/no/ambiguous). In Column (3) - (4), we interact *Treat* or *Post* with all aforementioned demographic controls and the "China" interpretation fixed effects. Sample bandwidth: [-6,+4] cohorts around the reform. For Donald-Lang 2-step estimators, there are 2 groups (treatment and control) and 10 cohorts; the Newey-West method further adjusts standard errors for auto-correlation (with maximum lag set at 3 cohorts). * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

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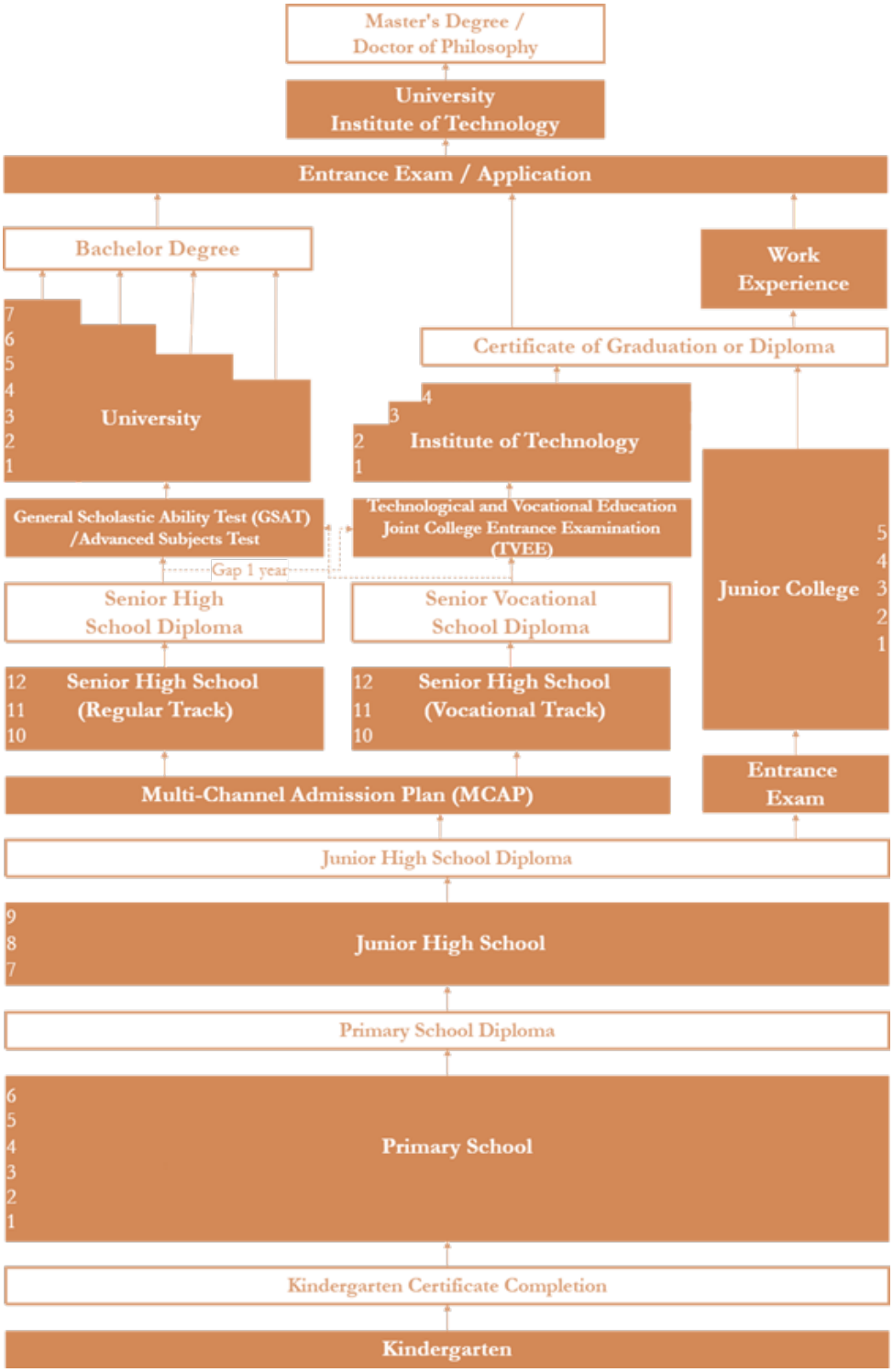
Appendix C Education system in Taiwan



Notes: This figure provides a visualization of the Taiwanese education system to provides necessary information for our empirical context. Not all study patterns are included.

Appendix D Historical events

The 228 Incident. On February 28, 1947, a mass movement against autocracy and dictatorship broke out in Taiwan. The main reasons for this uprising were the corruption of the military, the shortage of commodities, and severe unemployment. The masses employed measures like strikes and marches to revolt against the government, but were finally suppressed by the military and failed to achieve the goal of democracy. The blasting fuses and evolvement of the 228 Incident are presented in detail in both the 88 and 95 curricula.

The Formosa Democratic Movements. Taiwan was effectively a one-party state under the governance of the *Kuomintang* (KMT) before the 1990s. The Formosa democratic movement was an organized and prepared political contest between Taiwan's non-party forces and the KMT authorities that broke out in December 1979. The movement caused dramatic impacts on the political and cultural ideologies of Taiwanese society, highlighting the demand for diversification and liberalization. The movement formed the basis for the present-day *Democratic Progressive Party* (DPP), the head of the "Green" coalition. The discussion about the Formosa movement has been markedly increased in the 95 curriculum.

The creation of the Republic of China (ROC). On January 1, 1912, the establishment of the ROC marked the end of the Qing dynasty, and Sun Yat-sen was elected the first president. The establishment of the new regime was brought about by the collapse of Qing Dynasty and the invasion of capitalist powers. In both the 88 and 95 curricula, the revolution to overthrow the old ruler and the ideologies advocated by the new government are introduced.

The victory of the Second Sino-Japanese War (World War II). On August 15, 1945, Japan's unconditional surrender marked the victory of the eight-year-long Second Sino-Japanese War. In this war, the KMT and the *Chinese Communist Party* (CCP) cooperated efficiently, in which the KMT fought on the front battlefield and the CCP was on the battlefield behind the enemy. The evolvement and background of the Second Sino-Japanese war are elucidated in both the old and new curricula from a perspective in which Mainland and Taiwan island constitute an entity to combat invaders (but the new curriculum treats Mainland China as a detached regime and emphasizes more the innermost role of Taiwanese roots).

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Appendix E Taiwanese general elections

2012 Taiwanese General Election			
Nominee	Tsai Ing-wen (蔡英文)	Ma Ying-jeou (馬英九)	James Soong (宋楚瑜)
			
Party	Democratic Progressive Party (DPP)	Kuomintang (KMT)	People First Party (PFP)
Running mate	Su Jia-chyuan (蘇嘉全)	Wu Dun-yi (吳敦義)	Lin Ruey Shiung (林瑞雄)
Popular vote	6,093,578 (45.63%)	6,891,139 (51.60%)	369,588 (2.77%)
Eligible voters: 18,086,355; Turnout: 13,452,016 (74.38%)			
2016 Taiwanese General Election			
Nominee	Tsai Ing-wen (蔡英文)	Eric Chu (朱立倫)	James Soong (宋楚瑜)
			
Party	Democratic Progressive Party (DPP)	Kuomintang (KMT)	People First Party (PFP)
Running mate	Chen Chien-jen (陳建仁)	Wang Ju-hsuan (王如玄)	Hsu Hsin-ying (徐欣瑩)
Popular vote	6,894,744 (56.12%)	3,813,365 (31.04%)	1,576,861 (12.83%)
Eligible voters: 18,782,991; Turnout: 12,448,302 (66.27%)			
Political stance	1. Taiwan-centric ideology and independent nationhood 2. Ensuring cross-strait stability	1. Recognizing the "1992 Consensus" ("one China principle") but differing in its interpretation 2. Promoting cooperation and ties with Mainland	1. Maintaining the status quo, sticking to the Constitution (neither "Blue" nor "Green") 2. Seeking for sustainable and peaceful development

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