

A study of the renewed *Kyōiku kanji*: An attempt to quantify the relative importance of 1,026 *kanji* using Japanese-Language Proficiency Test (JLPT) levels

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This study investigates an original database of 1,026 Kyōiku kanji, which was revised in 2017 and implemented in elementary schools in 2020, as well as the new “Guideline for Character Style and Form in the Japanese Jōyō kanji,” announced in 2016, which promotes the distinction between “standard forms” and “tolerated forms.” In addition, three issues specific to the era of the Internet are discussed. This database’s special feature quantifies the correspondence between the vocabulary list (more than 9,000 words) of the Japanese-Language Proficiency Test and the Kyōiku kanji. As an example of the effective uses of this database for students, a kanji data book for Japanese language learners was created, which has been available to students at Geneva University since Autumn 2020. In this data book, depending on the level of deviation values, 1-star to 5-star notations were used to prioritize the memorization of kanji.

1 Introduction

This study investigates a database of the official Japanese list of the 1,026 *Kyōiku kanji* (or, “education Chinese characters”). Learners have access to comprehensive information via the Internet, such as the *kanji* database. However, due to information overload it may be difficult to identify useful and important data for the purposes of learning *kanji*. Therefore, the aim of the study is to identify the relative importance of each *Kyōiku kanji* and reduce the burden on the learners. Even though the list of the *Kyōiku kanji* is not intended for overseas learners of Japanese, the “Guideline for Character Style and Form in the Japanese *Jōyō kanji*” (2016) can also be beneficial for overseas learners. Therefore, the relative importance of *Kyōiku kanji* has been quantified using the vocabulary list of the Japanese-Language Proficiency Test (JLPT) test designed for overseas learners.

2 Background and previous work

2.1 Teaching kanji at Geneva University

Before analyzing the renewed *Kyōiku kanji*, another original database of 1,078 *kanji* extracted from the two volumes of the Japanese grammar textbook¹ is presented as a prototype, because the adoption of this prototype database from my previous study (Obataya, 2021) has been utilized in the current work.

First, I will give an overview of my *kanji* teaching at Geneva University. The following lists the documents that were created from the database.

- Document A: Glossary of *kanji* from *Minna no Nihongo* in two volumes (two bound and illustrated booklets with 248 pages, used in my *kanji* classes)
- Document B: Introduction to the specificity of *kanji* writing (additional document is projected on the screen during my classes and available on my Moodle space)
- Document C: Glossary of the contrast between the 1,078 *kanji* and the corresponding simplified Chinese characters of the People's Republic of China (document available on my Moodle space)
- Document D: Summary of Document C (document, composed of 66 slides, available with the quiz sheets on my Moodle space)

Although documents C and D are not directly related to the current study, the creation of these documents has improved my understanding of the “character fonts” issue, which will be discussed further (see 3–4).

In 2013,² I began using two original booklets (Document A) that list, by chapter, all *kanji* that appear in the two volumes of the standard Japanese grammar textbook.³ Each chapter subdivides the characters into the following categories:

- a) *kanji*, to know actively, namely, reading and writing (input and output)
- b) *kanji*, to know passively, namely, read-only (input only)

Thus, to reduce the burden on learners, the *kanji* that need to be memorized was prioritized. This type of restriction was based on the method adopted in *the Tobira gateway to advanced Japanese 800 basic kanji* (Oka, Mayumi et al, 2010).

I added additional information to accompany the original illustrations, as shown in the examples from Documents A and B (**Figures 1–3**).

1 *Minna no Nihongo I* (French translation, 2nd ed., 2013) and *Minna no Nihongo II* (French translation, 2nd ed., 2015) are used in the department of East Asian Studies at Geneva University.

2 From 2013 onwards, I have been teaching a class on “*kanji*” to first- through third-year undergraduate students.

3 Initially, a database was created for the first edition of *Minna no Nihongo I* and *II* (published in 1999). The data was updated after the publication of their second edition (*Minna no Nihongo I* in 2013 and *II* in 2015).

Figure 1 The table of contents from Document A

『みんなの日本語』I (2nd edition) L.1-25

L.1 人先生学会社行大何来名前／方教師員銀医者研究病院歳初願失礼韓電氣 L.2 本書開手時車土英語日話／碎雜誌
 新帳刺鉛筆計傘机産達世佐藤鈴伊井 L.3 食所売圀地下円百千万見／室堂事務議受付部屋洗階段自動販機靴場阪催紳 L.4
 起寢休強今分半午後朝晝夜映画每月火水木金／働勉終郵便局因館美術晚試驗曜變番号兵 L.5 帰校飛歩友彼女家
 週去年子園勞／駅船鉄幹線軌達族誕次普通急特甲城昭憲皇 L.6 飲吸読買写真肉魚野果物茶牛酒紙店花／撮卵菜紅乳
 庭宿題 L.7 切送貸借習消父母／賀状荷符 L.8 静有親元利小古愚暑熱寒冷難易高安低忙楽白黒赤青町活仕杯
 良山苔／暇桜寮閑寺奈富士侍紫酸 L.9 好上料理旅音歌絵字漢細間用主夫妻内少全早速殘度／嫌球舞伎約束奥然念
 謡 L.10 男犬猫池窓公右左中外近東京／象箱藏庫棚喫乘昇隣略 L.11 台枚回両兄弟姉妹天空／封筒留航漬汁
 L.12 遠遅多暖温涼甘辛重輕春夏秋冬雨雪港海界祭身／簡單季節曇燒豚葉疲祇苑 L.13 結欲広狭川末正注文定
 待別／遊泳迎婚散釣沖繩 L.14 開閉持取伝呼使止住座立入出砂問答信曲／降塩糖往 L.15 置作造知表服品市役
 独皆思／資割製經濟齒橋俳 L.16 浴押始若長短明暗体頭髮顏目耳口足背線神引田記戸婦都／換鼻証確認梅預振
 込照 L.17 竟忘私返心配業張葉丈危保險着痛血肩折／脱禁煙健康吐病秘腰盲腸醉 L.18 集捨運予現味祈課馬原
 走逆投伸向北道／彈趣故鄉跳 L.19 泊掃除眠弱練相調乾無統化能柔劍才落踊／濯撲葛飾齋娘華漫圍碁將棋盆
 L.20 要修君太客樣似合／僕郎 L.21 言勝負不交価放夢意最久首総村等幼支／牧姫吉職府臣稚看護警察署
 L.22 眼鏡帽弁当探賃和布団里衣／袋帯 L.23 渡差点角駐建路橫断坂踏進／触寂湯降聖德法隆 L.24 直連紹介
 案説準備越菓玉祝卒香／贈價暮典熨斗 L.25 考舍億頑老育門就再／勤專離 一二三四五六七八九十

『みんなの日本語』II (2nd edition) L.26-50

L.26 拾絡財平接片怖収可具申／診搜燃瓶缶宇宙彰彥瀬屬源祖 L.27 鳥声波形例由昔抜宅共／飼數縫染縮尺
 L.28 選偉景色容力值給組息娘実参加西徒管南／誘央荻窪藥費量 L.29 破汚掛替皿類枝側辺指倒穴欠／
 環割氏網震壁針態膨腐凍 L.30 並植戻決周隅非常丸器貯域情報檢救／復授講義玄閣廊樓灯避慌崩崖津緊責 L.31 統
 発式泉數工械科係律管芸／總展覽葬遺環境哲宗 L.32 成功敗格晴陽風際夕困生恋愛石雲札島／星胃占牡率雷虹
 濕蒸梔仙畿松江州鹿兒那霸 L.33 逃守席同規則反悲識粧／騷締徐募罰標嚴素漂劑 L.34 磨質矢印黃材個混油粉板
 包飯流／紺載適煮揚炊酢丁桂扇 L.35 咲治登歴史許設光草仲寄姿積／根志朱殊忠影 L.36 過必絕對紀珍榮／汽
 勢養更含炭脂肋豆 L.37 招頼輪米官仏匹突件追爆助／褒翻譯麥泥棒豪彫懸宮甚殺擊衝拐墜沈沒 L.38 退岸輪整冊双性
 優齡位列斜 L.39 死硬軟取代途洋／複邪魔操伺 L.40 測量到談裏績犯面算／傷崎裸縱柄 L.41 祖孫幸氏／興猿
 房陸浦裝携禪精 L.42 政戦争の論命查福打／沸詰扶則液卓緩 L.43 增減謝誠 L.44 泣笑濃厚厚淚倍順編／滑序綠
 隱刈 L.45 領以惱鳴皮射券種解／膚泌尿咽喉麻処箋錠 L.46 届因床他 L.47 吹亡贊／擬 L.48 録責任我慢／鋸
 塾 L.49 召存停胞賞演弥敬尊 L.50 拜私博応援惑迷惑／謙讓

Figure 2 is an example of one of the original illustrations, showing several *kanji* corresponding to the roots of a tree. Figure 3 shows the document in PDF format, as projected onto the screen in class. I drew the main information from Document A and added the Japanese idioms underlined in green, as well as the *pinyin* and the corresponding Chinese proficiency test level, underlined in blue. When the two languages have the same form, *pinyin* is noted on the right side highlighted in blue. When there was a graphic difference between the two languages, the right side shows not only the *pinyin* but also its Chinese counterpart.⁴

4 Many of the students at Geneva University, who must choose two majors for their bachelor's degree, take two Asian languages as their primary subjects. "According to a survey of 92 students enrolled in the programs conducted in 2012, students experienced difficulties in simultaneously learning Japanese and Chinese without any prior knowledge of them; although this has not precluded a number of students from choosing Japanese and Chinese as their main subjects even today" (Obataya, 2018, p.2). On average, between 2010 and 2018, about 20% of the students chose Japanese and Chinese.

Figure 2 Example of an original illustration from Document A

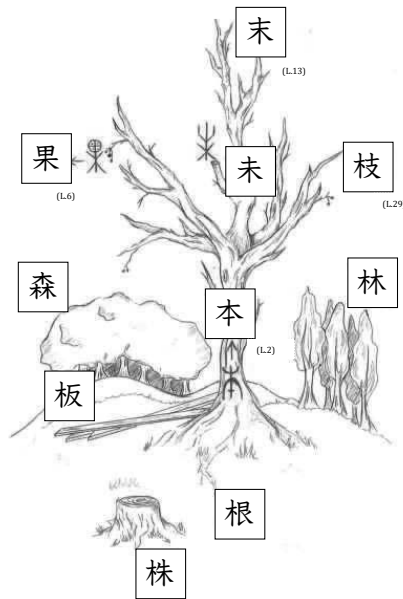


Figure 3 Examples from Document B⁵



6. 音 [音] オン^w, イン^h [訓] おと、ね [英] sound 1 yin1 HSK3
 ②指事 p.58 JLPT N4 音楽 music 音(L.23) sound 子音 consonne 母音 voyelle
 ④形声 p.58 JLPT N3 本音を吐く dévoiler ses véritables intentions
7. 歌 [音] カ [訓] うた、うたう [英] song, sing 2 ge1 HSK1
 ④形声 p.58 JLPT N4 歌 song 歌います(L.18) sing 歌手 chanteur(se)
8. 絵 [音] カイ^h, エ^w [英] picture, drawing, painting 2 hui4
 ④形声 p.58 JLPT N3 絵 picture 絵本(L.41) picture book 絵はがき(L.41) picture postcard 絵の具 paint 絵画 painting
9. 字 [音] ジ [訓] あざ [英] character, letter 1 zi4 HSK1
 ④形声 p.58 JLPT N4 漢字 Chinese character

5 The illustrations along the upper side of this figure are from a series of books written by Hisao Miyashita, titled *Kanji ga tanoshikunaru hon* [A book that makes kanji fun], Tokyo, Japan: Taro Jiro-sha, 3rd volume (2nd ed., 2006), p.58, 2nd volume (2nd ed., 2006), p.27 and p.30.

Figure 4 Examples of the Database Based on *Minna no Nihongo I* and *II*⁶

[a]	[b]	[c]	[d]	[e]	[f]	[g]	[h]	[i]	[j]	[k]	[l]	[m]	[n]	[o]	[p]	[q]	[r]	[s]	[t]
Serial No.	CH.	No.	JP Kyokasho-tai font	On-reading	Kun-reading	[JP] Meanings	JLPT level	Similarity degree Form	Notes	JP stroke	CH stroke	511 list		Pinyin	HSK level	Notes: (1) reason of classification (2) representative example	Similarity degree Sense	[CH] Meanings	
1	1	1	人	ジンh、ニンw	ひと	human beings, people, individuals	N5	A	1		2	2	○	ren2	1		A	person, Homo sapiens, homme, man	
2	1	2	先	セン	さき	forward	N5	A	1		6	6	○	xian1	3		A	first, former, previous	
3	1	3	生	セイh、ショウw	いきる、いかす、いける、うまれる、うむ、おう、はえる、はやす、き、なま	life, live	N5	A	1		5	5	○	sheng1	1		A	life, living, lifetime; birth; to be born	
4	1	4	学	ガク	まなぶ	study, learn	N5	A	1		8	8	○	xue2	1		A	learning, knowledge; school	
5	1	5	会	カイh、エw	あう	meet	N4	A	1		6	6	○	hui4	1		C	assemble; meeting	
652	17	22	健	ケン	すこやか	healthy, health	N1	A	4	9th and 10th (JP) / 9th (CH) stroke order	11	10		jian4	3		A	healthy, health	
653	23	6	建	ケンh、コンw	た.てる、た.つ	build	N4	A	4	7th and 8th (JP) / 7th (CH) stroke order	9	8	○	jian4			A	build, establish, erect, found	
654	6	23	庭	テイ	にわ	garden, yard	N3	A	4	8th and 9th (JP) / 8th (CH) stroke order	10	9	○	ting2			A	court	
736	12	23	单	タン		simple, one, single	N3	B	4		9	8		dan1	3		A	single	
737	18	18	弹	ダン	ひく、はずむ、たま	bullet, twang	N1	B	4		12	11		dan4			A	ball; pellet; bullet; bomb; play	
738	17	14	着	チャクh、ジャクw	きる、きせる、つ.く、つ.ける	arrive, wear, counter for suits of clothing	N4	B	4		12	11	○*	zhe0 / zhao2	2/3	Parts of word: JP<CH. The usage of the counter is different.	D	catch, prominent, works	
739	23	2	差	サ	さす	distinction, difference, variation	N3	B	4		10	9		cha4/c hai1	3/4	Parts of word: JP<CH. CH has the meaning "mislead". JP: 誤導する / CH: 誤. JP: 差す / CH: 指出. JP: 相違を差す / CH: 相違を差す	D	difference; dissimilarity; mistake; slightly, comparatively, a bit	
805	30	17	復	フク		restore, return to, revert, resume	N2	C	2	a part, 統合	12	9		fu4	3	CH contains the meaning of 「復」 (JP).	D	complex	
806	39	8	複	フク		duplicate, double, compound, multiple	N2	C	2	a part, 統合	14	9		fu4	4	CH contains the meaning of 「復」 (JP).	D	complex	
###	6	4	買	バイ	かう	buy	N4	NS	4		12	6	○*	mai3	1		A	buy	
1018	3	3	売	バイ	うる、うれる	sell	N4	NS	4		7	8	○*	mai4	2		A	sell	
###	6	3	読	ドクw、トクh、トウh	よむ	read	N5	NS	4	言 /	14	10	○*	du2	1	CH has the meaning "study".	B	reading, read	

6 This database is available for students on my Moodle space.

The two booklets (Document A) based on the database (see **Figure 4**) have been used as a textbook for first- and second-year bachelor students at Geneva University.

The graphic, semantic, and phonetic resemblance between Japanese and Chinese ideographs in this database was analyzed in four previous works (Obataya, 2018a, Obataya, 2018b, Obataya, 2019a, and Obataya, 2019b). Using the *Kyōiku kanji* as the corpus, my previous study investigated the mutual phonetic similarity between Japanese and Chinese ideographs (Obataya, 2021).

3 The database change from *Minna no Nihongo* to the renewed *Kyōiku kanji*

3.1 Why was the *Kyōiku kanji* chosen?

The database used in my previous research was a commercial textbook for foreign learners of Japanese. However, in this study, another database was created from the official *kanji* list for instruction that Japanese students learn in elementary school. The *Kyōiku kanji* (literally “education *kanji*”)⁷ is an official Japanese list of 1,026 *kanji* (see **Figure 5**) and associated readings, revised in 2017 and implemented in Japanese elementary schools starting in the academic year 2020. This list was chosen for my new database not only because it is a recently modified official list but also because it is versatile.

3.2 Tolerated forms of *kanji*, given in the guidelines communicated in 2016

The 2017 revision of the *Kyōiku kanji* with 20 *kanji*⁸ was the first revision to take place in 30 years. It is also important to note that the document entitled “Guideline for Character Style and Form in the Japanese *Jōyō kanji* (“regular-use Chinese characters”) was announced around the same time as the guidelines for teaching *kanji*⁹. Since the *Kyōiku kanji* is a subcategory of *Jōyō kanji*, this guideline also applies to the former. This guideline was issued in response to the issues that emerged as people began to have more opportunities to encounter various character styles via the Internet. As I will discuss further, some commercially available *kanji* and Japanese language textbooks in Japan place a strong emphasis on this new “instruction” on character style and form. For example, it

7 *Kyōiku kanji* is a common name. Its official name is *Gakunenbetsu kanji haitōhyō* (学年別漢字配当表, or “list of *kanji* by school year”). This list is developed and maintained by the Japanese Ministry of Education. *Kyōiku kanji* is a subset of the 2,136 characters of *Jōyō kanji* (modified in 2010).

8 The following 20 *kanji* were added: 茨、媛、岡、潟、岐、熊、香、佐、埼、崎、滋、鹿、縄、井、沖、栃、奈、梨、阪、阜. All are used in Japanese prefecture names.

9 It is possible to download this 231-page document. It is accessible at http://www.bunka.go.jp/seisaku/bunkashingikai/kokugo/hokoku/pdf/jitai_jikei_shishin.pdf [cit. 2021-01-17]. See also the *Handbook of New Japanese expressions in writing* (2019), 149–160.

Figure 5 List of *Kyōiku kanji***1st year 80 kanji**

一^ア右^カ雨^カ兩^カ王^カ音^カ下^カ火^カ花^カ貝^カ學^カ氣^カ九^カ休^カ玉^カ金^カ空^カ月^カ犬^カ見^カ五^カ口^カ校^カ左^カ三^カ山^カ子^カ四^カ糸^カ字^カ耳^カ七^カ車^カ手^カ十^カ出^カ女^カ小^カ上^カ森^カ人^カ水^カ正^カ
生^カ青^カ夕^カ石^カ赤^カ千^カ川^カ先^カ早^カ草^カ足^カ村^カ大^カ男^カ竹^カ中^カ虫^カ町^カ天^カ田^カ土^カ二^カ日^カ入^カ年^カ白^カ八^カ百^カ文^カ木^カ本^カ名^カ目^カ立^カ力^カ林^カ六^カ

2nd year 160 kanji

引^ア羽^カ雲^カ園^カ遠^カ何^カ科^カ夏^カ家^カ歌^カ画^カ回^カ會^カ海^カ繪^カ外^カ角^カ樂^カ活^カ間^カ丸^カ岩^カ顏^カ汽^カ記^カ婦^カ弓^カ牛^カ魚^カ京^カ強^カ教^カ近^カ兄^カ形^カ計^カ元^カ言^カ原^カ戸^カ古^カ午^カ後^カ
語^カ工^カ公^カ広^カ交^カ光^カ考^カ行^カ高^カ黄^カ合^カ谷^カ国^カ黒^カ今^カ才^カ細^カ作^カ算^カ止^カ市^カ矢^カ姉^カ思^カ紙^カ寺^カ自^カ時^カ室^カ社^カ弱^カ首^カ秋^カ週^カ春^カ書^カ少^カ場^カ色^カ食^カ心^カ新^カ親^カ
函^カ數^カ西^カ声^カ星^カ晴^カ切^カ雪^カ船^カ線^カ前^カ組^カ走^カ多^カ太^カ体^カ台^カ地^カ池^カ知^カ茶^カ昼^カ長^カ鳥^カ朝^カ直^カ通^カ弟^カ店^カ点^カ電^カ刀^カ冬^カ当^カ東^カ答^カ頭^カ同^カ道^カ読^カ内^カ南^カ肉^カ
馬^カ売^カ買^カ麦^カ半^カ番^カ父^カ風^カ分^カ聞^カ米^カ歩^カ母^カ方^カ北^カ每^カ妹^カ万^カ明^カ鳴^カ毛^カ門^カ夜^カ野^カ友^カ用^カ曜^カ来^カ里^カ理^カ話^カ

3rd year 200 kanji

悪^ア安^カ暗^カ医^カ委^カ意^カ有^カ員^カ院^カ飲^カ運^カ泳^カ駅^カ央^カ横^カ屋^カ温^カ化^カ荷^カ界^カ開^カ階^カ寒^カ感^カ漢^カ館^カ岸^カ起^カ期^カ客^カ究^カ急^カ級^カ宮^カ球^カ去^カ橋^カ業^カ曲^カ局^カ銀^カ区^カ苦^カ
具^カ君^カ係^カ輕^カ血^カ決^カ研^カ鼎^カ庫^カ湖^カ向^カ幸^カ港^カ号^カ根^カ祭^カ皿^カ仕^カ死^カ使^カ始^カ指^カ齒^カ詩^カ次^カ事^カ持^カ式^カ実^カ写^カ者^カ主^カ守^カ取^カ酒^カ受^カ州^カ拾^カ終^カ習^カ集^カ住^カ重^カ宿^カ所^カ暑^カ助^カ昭^カ消^カ商^カ章^カ勝^カ乘^カ植^カ申^カ身^カ神^カ真^カ深^カ進^カ世^カ替^カ昔^カ全^カ相^カ送^カ想^カ息^カ速^カ族^カ他^カ打^カ对^カ待^カ代^カ第^カ題^カ炭^カ短^カ談^カ着^カ注^カ柱^カ丁^カ帳^カ調^カ
追^カ定^カ庭^カ笛^カ鉄^カ軛^カ都^カ度^カ投^カ豆^カ島^カ湯^カ登^カ等^カ動^カ童^カ農^カ波^カ配^カ倍^カ箱^カ畑^カ発^カ反^カ板^カ皮^カ悲^カ美^カ鼻^カ筆^カ水^カ表^カ秒^カ病^カ品^カ負^カ部^カ服^カ福^カ物^カ平^カ返^カ
勉^カ放^カ味^カ命^カ面^カ問^カ役^カ藥^カ由^カ油^カ有^カ遊^カ予^カ羊^カ洋^カ葉^カ陽^カ様^カ落^カ流^カ旅^カ両^カ緑^カ礼^カ列^カ練^カ路^カ和^カ

4th year 202 kanji

愛^ア案^カ以^カ衣^カ位^カ茨^カ印^カ英^カ榮^カ媛^カ塩^カ岡^カ億^カ加^カ果^カ貨^カ課^カ芽^カ賀^カ改^カ械^カ害^カ街^カ各^カ覺^カ渦^カ完^カ官^カ管^カ閑^カ觀^カ頤^カ岐^カ希^カ季^カ旗^カ器^カ機^カ議^カ求^カ泣^カ給^カ拳^カ
漁^カ共^カ協^カ鏡^カ競^カ極^カ熊^カ訓^カ軍^カ郡^カ群^カ徑^カ景^カ芸^カ欠^カ結^カ建^カ健^カ驗^カ固^カ功^カ好^カ香^カ候^カ康^カ佐^カ差^カ菜^カ最^カ崎^カ材^カ崎^カ昨^カ札^カ刷^カ察^カ參^カ産^カ散^カ殘^カ氏^カ司^カ試^カ
兒^カ治^カ潁^カ辭^カ鹿^カ失^カ借^カ種^カ周^カ祝^カ順^カ初^カ松^カ笑^カ唱^カ燒^カ照^カ城^カ繩^カ臣^カ信^カ井^カ成^カ省^カ清^カ静^カ席^カ積^カ折^カ節^カ説^カ淺^カ戰^カ選^カ然^カ争^カ倉^カ巢^カ束^カ側^カ統^カ卒^カ孫^カ
帶^カ隊^カ達^カ單^カ置^カ仲^カ冲^カ兆^カ低^カ底^カ的^カ典^カ伝^カ徒^カ努^カ灯^カ働^カ特^カ徳^カ枋^カ奈^カ梨^カ熱^カ念^カ敗^カ梅^カ博^カ阪^カ飯^カ飛^カ必^カ票^カ標^カ不^カ夫^カ付^カ府^カ阜^カ富^カ副^カ兵^カ別^カ辺^カ
変^カ便^カ包^カ法^カ望^カ牧^カ未^カ滿^カ未^カ民^カ無^カ約^カ勇^カ要^カ養^カ浴^カ利^カ陸^カ良^カ料^カ量^カ輪^カ類^カ令^カ冷^カ例^カ連^カ老^カ勞^カ録^カ

5th year 193 kanji

庄^ア圀^カ移^カ因^カ永^カ嘗^カ衛^カ易^カ益^カ液^カ演^カ応^カ往^カ桜^カ可^カ仮^カ価^カ河^カ過^カ快^カ解^カ格^カ確^カ額^カ刊^カ幹^カ慣^カ眼^カ紀^カ基^カ寄^カ規^カ喜^カ技^カ義^カ逆^カ久^カ旧^カ救^カ居^カ許^カ境^カ均^カ
禁^カ句^カ型^カ經^カ潔^カ件^カ險^カ檢^カ限^カ現^カ減^カ故^カ個^カ護^カ効^カ厚^カ耕^カ航^カ鉦^カ構^カ興^カ講^カ告^カ混^カ查^カ再^カ災^カ妻^カ採^カ際^カ在^カ財^カ罪^カ殺^カ雜^カ酸^カ贅^カ士^カ支^カ史^カ志^カ枝^カ師^カ
資^カ飼^カ示^カ似^カ識^カ質^カ舍^カ謝^カ授^カ修^カ述^カ術^カ準^カ序^カ招^カ証^カ象^カ賞^カ条^カ状^カ常^カ情^カ織^カ職^カ制^カ性^カ攻^カ勢^カ精^カ製^カ稅^カ責^カ績^カ接^カ設^カ絕^カ祖^カ素^カ綫^カ造^カ像^カ增^カ則^カ
測^カ屬^カ率^カ損^カ貸^カ態^カ團^カ斷^カ築^カ貯^カ張^カ停^カ提^カ程^カ適^カ統^カ堂^カ銅^カ導^カ得^カ毒^カ独^カ任^カ燃^カ能^カ破^カ犯^カ判^カ版^カ比^カ肥^カ非^カ費^カ備^カ評^カ貧^カ布^カ婦^カ武^カ復^カ復^カ仏^カ粉^カ
編^カ弁^カ保^カ墓^カ報^カ豐^カ防^カ貿^カ暴^カ脈^カ務^カ夢^カ迷^カ綿^カ輪^カ余^カ容^カ略^カ留^カ領^カ歷^カ

6th year 191 kanji

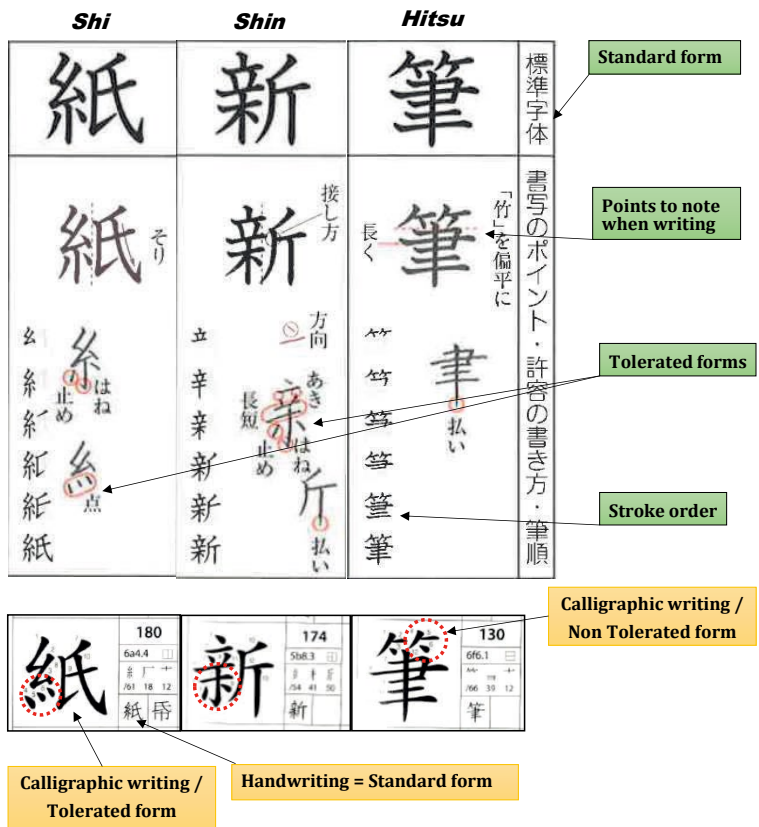
冒^ア異^カ遺^カ域^カ宇^カ映^カ延^カ沿^カ恩^カ我^カ灰^カ扞^カ革^カ閣^カ割^カ林^カ干^カ卷^カ看^カ簡^カ揮^カ危^カ机^カ貴^カ疑^カ吸^カ供^カ胸^カ鄉^カ勤^カ筋^カ系^カ敬^カ警^カ劇^カ激^カ穴^カ券^カ絹^カ權^カ憲^カ源^カ嚴^カ
己^カ呼^カ誤^カ后^カ孝^カ皇^カ紅^カ降^カ鋼^カ刻^カ穀^カ骨^カ困^カ砂^カ座^カ濟^カ裁^カ策^カ冊^カ蚕^カ至^カ私^カ姿^カ視^カ詞^カ誌^カ磁^カ射^カ捨^カ尺^カ若^カ樹^カ收^カ宗^カ就^カ衆^カ從^カ縱^カ縮^カ熟^カ純^カ処^カ署^カ
諸^カ除^カ承^カ將^カ傷^カ障^カ蒸^カ針^カ仁^カ垂^カ推^カ寸^カ盛^カ聖^カ誠^カ舌^カ宣^カ專^カ泉^カ洗^カ染^カ錢^カ善^カ奏^カ窓^カ創^カ裝^カ層^カ操^カ蔵^カ藏^カ存^カ尊^カ退^カ宅^カ担^カ探^カ誕^カ段^カ暖^カ值^カ宙^カ忠^カ
著^カ庁^カ頂^カ腸^カ潮^カ賃^カ痛^カ敷^カ展^カ討^カ党^カ糖^カ屈^カ難^カ乳^カ認^カ納^カ腦^カ派^カ拌^カ背^カ肺^カ俳^カ班^カ晚^カ否^カ批^カ批^カ儀^カ腹^カ奮^カ並^カ陞^カ閉^カ片^カ補^カ暮^カ寶^カ訪^カ亡^カ忘^カ棒^カ枚^カ
幕^カ密^カ盟^カ模^カ訳^カ郵^カ優^カ預^カ幼^カ欲^カ翌^カ乱^カ卵^カ覽^カ裏^カ律^カ臨^カ朗^カ論^カ

is possible to read 11 pages extracted from this guideline in the Sanseidō Editing Office, *Handbook of New Japanese Expressions in Writing* (2019). Moreover, Kume Isao, *A Guide to Teaching kanji – Study Guideline Compliance* (2017), followed the guidelines by including a column for the “standard forms” and a column for the “tolerated forms.”

The upper part of **Figure 6** shows the new guidelines with the “standard forms” as well as the “tolerated forms.” At the top, the standard form points to notes when writing, tolerated forms, and stroke order for these three *kanji* examples.¹⁰ It should be noted that there are cases where there is no “tolerated form,” such as the *kanji* “*Hitsu*.” At school, the “standard form” is taught for handwriting.

The lower part of **Figure 6** shows the same three *kanji* that are presented in a French book on learning *kanji*, a book that places the calligraphic forms at the forefront.¹¹

Figure 6 Examples of “standard forms” and “tolerated forms” in the guidelines, contrasted with a *Kanji* learning book



10 *Hitsu* (p.63), *Shin* (p.49), *Shi* (p.48) in Kume, *A Guide to Teaching Kanji – Study Guideline Compliance* (2017), (8th ed.)
 11 *Hitsu* (p.89), *Shin* (p.95), *Shi* (p.96) in Hadamitzky, Durmou, Mochizuki (2017), (7th ed.).

The two images for these three *kanji* are mostly identical in shape, with slight variations. For the *kanjis* *Shi* and *Shin*, calligraphic forms are tolerated in the guidelines. However, for the *kanji* *Hitsu*, the shape of the sixth stroke is not identical,¹² and it is not tolerated. The last case illustrates that calligraphic forms are not always tolerated and is a useful example for teachers, as to why they must realize that there is still a tolerance limit for the *kanji* forms.

The most important point of these guidelines is to reduce the burden (specifically, the mental burden) on learners by presenting both the standard form of *kanji* and a tolerated form.

3.3 Jō-on and Jō-kun: limited “official” readings

One of the difficulties students face when learning Japanese is the complexity of Chinese ideograms used in Japanese, called “*kanji*.” Generally, *kanji* can be read by Japanese speakers in the Japanese way (“*kun’yomi*,” henceforth referred to as *kun*-reading) as well as in the (original) Chinese way (“*on’yomi*,” henceforth referred to as *on*-reading). Furthermore, a *kanji* sometimes has two, three, or more *on*-readings (such as *go-on*-reading, *kan-on*-reading, and *tō-on*-reading) because *kanji*’s phonetics have evolved differently over centuries depending on the epoch and region (see **Figure 7**).

In *Kyōiku kanji*, the readings of each *kanji* were limited to *Jō-on* (常音) or *Jō-kun* (常訓) (*on*-reading or *kun*-reading of regular use).¹³ For example, in **Figure 7**, the readings

Figure 7 Examples of *kanji* that have different *on*-reading types (Yano, 2012, p.42)¹⁴

	呉音 <i>Go-on</i>	漢音 <i>Kan-on</i>	唐音 <i>Tō-on</i> (宋音 <i>Sō-on</i>)
京	きょう kyō (東京)	けい kei (京城)	きん kin (南京)
経	きょう kyō (読経)	けい kei (経済)	きん kin (看经)
行	ぎょう gyō (行列)	こう kō (行動)	あん an (行宮)
外	げ ge (外科)	がい gai (外交)	うい ui (外郎)
頭	ず zu (頭痛)	とう tō (没頭)	じゅう jū (饅頭)
明	みょう myō (明年)	めい mei (名月)	みん min (明朝)

12 The direction of the sixth stroke in a radical called “*takekanmuri*,” a “bamboo” radical, is different from the calligraphic form and the handwriting form.

13 For the selection of these *Jō-on* or *Jō-kun* in my database, I referred to *Shin Kango Rin* (second edition) (by Tai-shukan Shoten).

14 Obataya, 2020, p.5.

of 京(きん, *kin*) and of 経(きん, *kin*) are not taught in *Kyōiku kanji*. Nowadays, when there are many opportunities to encounter exhaustive *kanji* information via the Internet and other sources, learning only a limited number of readings according to the *Kyōiku kanji* could be an effective learning strategy for foreigners.

Figure 8 shows an example of *kanji* outside of regular use. The *kanji* “撞” is classified as *Jinmeiyō kanji* (人名用漢字, *kanji* used in names)¹⁵ and is not used very often. It is, therefore, not assigned *Jō-on* or *Jō-kun*. However, there are three readings of Chinese origin: トウ (*tō*), ドウ (*dō*), and シュ (*shu*). These kinds of readings (字音, *Ji on*) that are not assigned to *Jō-on* are outside of regular use and considered low priority readings for memorization.

Figure 9 shows three degrees of priority for multiple readings: readings appropriate for learning in primary, middle, and high schools. Thus, in the *Kyōiku kanji*, the readings are restricted to several degrees.

Figure 8 Examples of *kanji* that have no *Jō-on* nor *Jō-kun*¹⁶

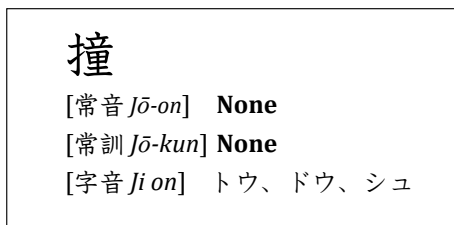
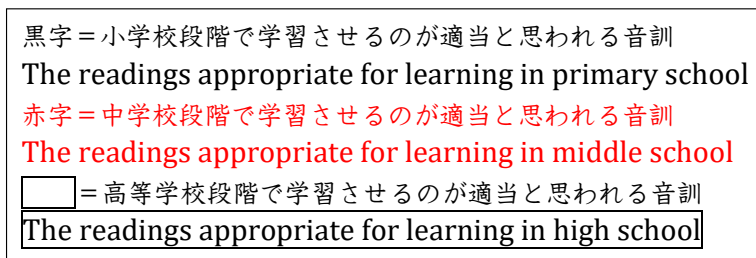


Figure 9 Several degrees of the priority of multiple readings¹⁷



15 *Jinmeiyō kanji* (literally, “Chinese characters for use in personal names”) are a set of 863 Chinese characters used in names.

16 It is the information extracted from *Shin Kango Rin*.

17 Kume Isao, *A Guide to Teaching Kanji* (2017, p.7).

3.4 A new phenomenon in kanji learning in the era of the Internet

In the era of the Internet, online resources are very useful when searching for information. However, if there is too much information, it may reduce the motivation to learn. It is important to note the three phenomena that were not seen before and that could affect *kanji* learning to show why the *Kyōiku kanji* list is so useful for foreign *kanji* learners.

3.4.1 Problems created by the difference between character fonts and handwriting

Several commonly used fonts (in particular, *Mincho-tai* font and *Gothic-tai* font) have different shapes than the “handwriting” that Japanese students learn in school. Recently, however, it is often the case that self-learners have learned these *kanji* shapes incorrectly.

Figure 10 illustrates some incorrect examples of handwriting. The first and second columns in **Figure 10** are the most used fonts, *Gothic-tai*, and *Mincho-tai*. Self-learners, who use the Internet as their main source, sometimes imitate these fonts to learn the shapes of *hiragana* (one of the Japanese syllabaries) and *kanji*.

The third font, *Kyōkasho-tai* (literally, “school textbook” style), is the closest to the “handwriting” taught in Japanese schools. The first column on the right is an “incorrect” pattern of writing by a first-year student, who probably learned the forms of the characters from the *Gothic tai* or *Mincho-tai* via the Internet.

Figure 10 Some patterns of the imitation of character fonts in handwriting



3.4.2 The problem of predominantly Chinese fonts

There is another problem that could not occur in Japan. When Japanese fonts are not installed on the computer or mobile phone, Chinese fonts¹⁸ are automatically used to replace Japanese *kanji*. **Figure 11** shows an example of this phenomenon. The standard

18 For this character, the traditional Chinese character (繁体字) and the simplified character (简体字) are the same. Originally, the characters introduced in Japanese were traditional Chinese characters such as 繁体字, which are still in use in Taiwan. These characters were simplified in their respective cultures (e.g., in the 1950s in the People’s Republic of China). In Japan, traditional Chinese characters are not typically taught in schools any longer.

Figure 11 Example of an automatic change of a Japanese font to a Chinese font

shape accompanying information for the *kanji* “Umi (sea)” from a book that follows the latest guidelines is indicated on the right.¹⁹ There is no tolerated form for this *kanji*. On the left, a part of the page is extracted from a book on Japanese vocabulary²⁰ where the same *kanji* “Umi” appears twice, but in different forms. The “sea” circled at the bottom is the standard form, but the “sea” at the top is in Chinese font. It was most likely changed automatically to the Chinese font during the editing process.

3.4.3 The problem of the exhaustive feature of Internet information

To search for *kanji* reading, foreign *kanji* learners refer to commercial *kanji* books²¹ or the Internet. However, Internet *kanji* dictionaries that provide “exhaustive” information might be excessive for beginners and, thereby, reduce their motivation.

For example, **Figure 12** shows how the *Kyōiku kanji* limits the number of readings. The left part illustrates the *Kyōiku kanji* 京 and two associated readings.²² The right shows the search result of this *kanji* on Jisho.org. In *Kyōiku kanji*, there are no *kun*-reading and only two *on*-readings. However, the *on*-reading ケイ highlighted in red is the *on*-reading that should be taught in junior high school (see **Figure 7**) so that elementary school students only need to learn *on*-reading キヨウ. However, four readings are displayed on the Internet: one *kun*-reading and three *on*-readings (see also **Figure 7**).

Thus, the number of readings to be learned, assigned to each *Kyōiku kanji*, is quite limited, proving beneficial to foreign *kanji* learners.

19 Kume, 2017, p.45.

20 Collectif (2016). *Dictionnaire visuel japonais*, Paris, France: Larousse, p.73.

21 In France, there are two books specialized to *kanji* learning: Hadamitzky, Durmou, and Mochizuki, *Kanji to kana* (7th ed. 2017) and Seelenbinder-Mérand, *Kanji kakitai ! - Ecriture et apprendre les kanji* (3rd ed. 2019).

22 Kume, 2017, p.10.

Figure 12 *Kanji* readings: *Kyōiku Kanji* and *kanji* search websites on the Internet

4 Analytical approach

4.1 The calculation of the frequency of *Kyōiku kanji* usage

The current database's special feature quantifies the correspondence between the vocabulary list (about 9,300 words²³) of the JLPT and the *Kyōiku kanji*. For foreign Japanese learners, the JLPT is the most objective indicator of their Japanese language proficiency level. Nowadays, it is possible to quickly search the JLPT levels of *kanji*, vocabulary, and grammar items on the Internet. Therefore, by producing a cross-reference between the *Kyōiku kanji* and JLPT levels, I could quantify the importance of each of the 1,026 *kanji* and present a visualized and objective data to learners of the Japanese language.

The frequency of use (importance) of each *Kyōiku kanji* was calculated according to the JLPT word list. The JLPT word lists are now out of print²⁴ and are, thus, difficult to use for foreign learners of Japanese. However, this data is often used in *kanji* search sites on the Internet.

First, the word usage of each *kanji* was investigated. Here, 9,292 words (which contain the *kanji* investigated) in the list of previous JLPTs²⁵ were separated into three categories according to their pronunciations: *on*-reading, *kun*-reading, and others. All five levels were counted differently to reflect the frequency of this *kanji* according to the lev-

23 This is a cumulative total number; the precise number is 9,292 words. This is because words that contain more than one *kanji* are counted more than once. The non-cumulative total number is 5,905 words.

24 The Japan Foundation and Japan Educational Exchanges and Services (2007). *Japanese-Language Proficiency Test: Test Content Specifications* (Revised Edition).

25 In the previous JLPT (= Old Japanese Language Proficiency Test Levels 1–4), before the revision of the JLPT (= Levels N1–N5) in 2010, the “Test Content Specifications” was published to help the candidates (The Japan Foundation and Japan Educational Exchanges and Services, 2007). This book contained a word list, *kanji* list, and grammar list, respectively classified into four different levels. The current JLPT does not publish such a book; therefore, to determine the new JLPT levels for the current work, I referenced the Jisho.org website and Jonathan Waller's JLPT Resources page. According to Waller (<http://www.tanos.co.uk/jlpt/aboutjlpt/>), the new JLPT N1 is equivalent to the old JLPT 1, JLPT N2 is equivalent to the old JLPT N2, JLPT N3 is halfway between the old JLPT 2 and JLPT 3, JLPT N4 is equivalent to the old JLPT 3, and JLPT N5 is equivalent to the old JLPT 4.

Figure 13 Example of a calculation of a *kanji*²⁶

	[c]	[e]	[g]	[h]	[o]	[k]	[f]
<i>Kyokasho-tai</i> font	<i>Kun</i> -reading	JLPT Word list	JLPT Word list (reading)	Calculation of points (JLPT levels)	Proportion of <i>On</i> -reading (%)	<i>On</i> -reading	
社	やしろ yashiro					97	シャ sha
1	kaisha	会社	かいしゃ	5			
2	shakai	社会	しゃかい	4			
3	shachō	社長	しゃちょう	4			
4	jinja [jin+sha]	神社	じんじゃ	4			
5	shinbunsha	新聞社	しんぶんしゃ	4			
6	shakaikagaku	社会科学	しゃかいかがく	2			
7	shasetsu	社説	しゃせつ	2			
8	shōsha	商社	しょうしゃ	2			
9	nyūsha	入社	にゅうしゃ	2			
10	shakō	社交	しゃこう	1			
11	shataku	社宅	しゃたく	1			
12	shussha	出社	しゅつしゃ	1			
13					32		
14	yashiro	社	やしろ	1			
15					1		

els of difficulty designated by the JLPT. For example, the word in N1, the highest proficiency level in JLPT, was calculated as 1 point, whereas the word in N5, the easiest in JLPT, was calculated as 5 points. It was assumed that the easier a *kanji* is, the more frequently it is used. For example, twelve words use the *kanji* 社 by pronouncing it as /sha/. All the word scores were counted according to the difficulty levels and added to the total score. There is only one word that uses *kun*-reading, /yashiro/, categorized in N1. Therefore, the score of *kun*-reading for this *kanji* was 1.

4.2 Adjustments of data in accordance with the current usage of *kanji*

When entering the JLPT word list information into the database, some adjustments were made in accordance with the current usage of *kanji*. Since the data on the Internet is very comprehensive, many readings are found in searches, but some are rarely used. It is one of the negative aspects of the Internet's scope with regard to language learning. In the database of this study, such words were set aside and not counted. The *kanji* that tend to be written in *hiragana* at present were not counted. Instead, they are listed as seen in the section surrounded by the dotted line in Figure 14. For example, *kanji*, 何, was not included in the JLPT list with the pronunciation of /ka/. Therefore, "Not on the JLPT list for *on*-reading" was indicated (see Figure 14).

26 Obataya, 2019b, p.8.

Figure 14 Cases of the *kanji* that tend to be written in *hiragana* at present

何	なに, なん <i>nani, nan</i>			0	カ <i>ka</i>
	如何(いかに)、如何に(いかに)、如何にも(いかにも)、何れ(いずれ)、何時(いつ)、何時か(いつか)、何時でも(いつでも)、何時の間にか(いつの間にか)、何時までも(いつまでも)、何時も(いつも)、如何にして(いかにして)、如何にしても(いかにしても)、何処(どこ)、何処か(どこか)、何方(どなた)、何れ(いずれ)、何故(なぜ)、何故なら(なぜなら)				音読み単語 JLPTリスト になし
1	何	なに	5		
2	何の	なんの	5		
3	何か	なにか	3		
4	何も	なんにも	3		
	如何(いかに)、如何に(いかに)、如何にも(いかにも)、何れ(いずれ)、何時(いつ)、何時か(いつか)、何時でも(いつでも)、何時の間にか(いつの間にか)、何時までも(いつまでも)、如何にして(いかにして)、如何にしても(いかにしても)、何処(どこ)、何処か(どこか)、何方(どなた)、何れ(いずれ)、何故(なぜ)、何故なら(なぜなら)				Not on the JLPT list for on-reading
	何で	なんで	5		
	何でも	なんでも	5		
	何とか	なんとか	3		
	何しろ	なにしろ	2		
	何々	なになに	2		
	何分	なにぶん	2		
	何となく	なんとなく	2		
	何とも	なんとも	2		
	何気ない	なにげない	1		
	何卒	なにとぞ	1		
	何より	なにより	1		
	何だか	なんだか	1		
17	何だかんだ	なんだかんだ	1		
18	何て	なんて	1		
19	何と	なんと	1		
20	何なり	なんなり	1		
			43		

4.3 Creating a database and its significance

Appendix 1 shows some extracts from the database of the renewed *Kyōiku kanji*, which consists of 15 components, [a] to [o]:²⁷

- [a]: school year (1–6)
- [b]: Serial number by school year
- [c]: *Kanji* on *Kyōkasho-tai* font
- [d]: JLPT levels (N1–N5)
- [e] *kun'yomi* (Japanese reading)
- [f]: *on'yomi* (Chinese reading)
- [g]: JLPT word list.
- [h]: JLPT word list (reading).
- [i]: JLPT word list: French translation.
- [j]: JLPT word list: English translation.
- [k]: Proportion of the *on'yomi* (%)²⁸
- [l]: Radical

27 Obataya, 2018, p.6–7 (modified).

28 This value was used in the previous study to quantify the phonetic resemblance between Japanese and Chinese (see Obataya, 2019b).

[m]: The name of the radical (French).

[n]: Name of the radical (English)

[o]: Calculation of points (JLPT levels)

The basic information of *kanji* and its JLPT levels²⁹ are included from columns [a] to [j], whereas the information of the radical is noted in columns [l] to [n].

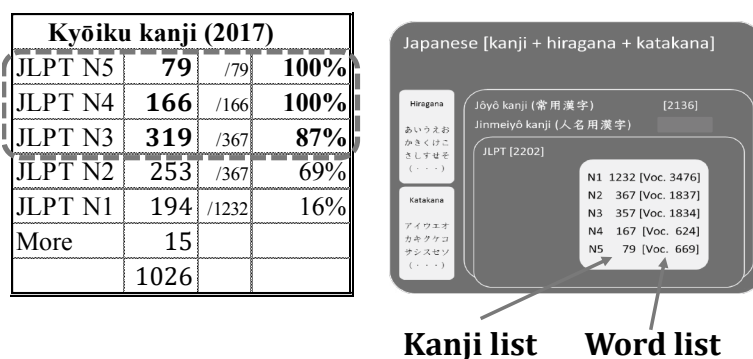
5 Findings

5.1 Creating a comparison chart of Kyōiku kanji and JLPT levels

The analysis of the database (**Figure 15**) showed that the *Kyōiku kanji* covers not only 100% of the *kanji* in JLPT N5 and JLPT N4, but also 87% of the *kanji* in JLPT N3. The *Kyōiku kanji* comprised 46% of all JLPT levels (1,026/2,211). According to this figure, learners can estimate their own level of *kanji* knowledge.

In comparison with the prototype of the database (on *Minna no Nihongo I* and *II*), the prototype contains 779 *Kyōiku kanji* (1,078 *kanji* in the two volumes of textbooks), or 76% of 1,026 *Kyōiku kanji*.

Figure 15 The Number of *Kyōiku kanji* that are covered in the JLPT levels and quantities of *kanji*, categorized into five levels of JLPT



5.2 Quantification of the relative importance of Kyōiku kanji in order of deviation

Based on the “calculation of points (JLPT levels)” of column [o], a ranking of 100 important *kanji* according to the order of the deviation value was created (see **Figure 16**). As expected, most of the *kanji* are those learned in the first or second grade of elementary

29 JLPT has two different lists: a *kanji* list and a word list. For this database, in column [d], the *kanji* list’s JLPT level is noted, and, in the column [g], the word list’s JLPT level.

school in Japan, but there were also six *kanji* that were appropriate for learning in the fourth grade: 付、不、無、産、成、差 .

Incidentally, in comparison with the previous database, “付,” “不,” “無,” “産,”

Figure 16 A ranking of 100 *kanji* in order of their importance

Ranking	[a]	[b]	[c]	[o]	Deviation						
1	1	66	日	227	143	50	2	61	作	61	68
2	1	1	一	167	116	51	2	159	理	61	68
3	1	56	大	165	115	52	2	16	外	60	68
4	3	170	物	159	112	53	2	84	心	60	68
5	1	36	出	154	110	54	2	70	自	59	68
6	1	41	人	153	110	55	2	148	明	59	68
7	1	11	学	137	103	56	2	43	後	58	67
8	1	12	气	135	102	57	2	156	曜	58	67
9	1	44	生	132	100	58	2	9	家	57	67
10	1	34	手	124	97	59	2	109	長	57	67
11	1	39	上	120	95	60	3	152	発	57	67
12	1	7	下	119	94	61	1	51	先	56	66
13	2	54	合	112	91	62	2	83	食	56	66
14	2	138	分	104	88	63	1	33	車	55	66
15	2	104	地	103	87	64	3	124	着	55	66
16	1	59	中	102	87	65	3	6	意	54	65
17	3	69	事	99	85	66	3	38	業	54	65
18	2	51	行	97	85	67	1	38	小	53	65
19	2	13	会	96	84	68	3	77	取	53	65
20	2	20	間	96	84	69	1	74	本	52	64
21	1	20	見	94	83	70	2	116	点	51	64
22	1	27	子	87	80	71	1	78	力	50	63
23	1	68	年	87	80	72	4	81	産	50	63
24	2	113	通	84	79	73	1	22	口	49	63
25	4	165	付	83	78	74	2	112	直	49	63
26	2	143	方	78	76	75	3	88	所	49	63
27	3	137	度	78	76	76	3	165	品	49	63
28	1	67	入	76	75	77	1	43	正	48	63
29	2	155	用	76	75	78	2	71	時	48	63
30	2	1	引	75	75	79	4	109	成	48	63
31	1	16	金	74	74	80	2	88	数	47	62
32	1	76	目	74	74	81	3	86	重	47	62
33	2	93	切	72	73	82	1	17	空	46	62
34	2	157	来	69	72	83	2	48	交	46	62
35	4	163	不	67	71	84	2	117	電	46	62
36	2	120	当	66	71	85	3	101	真	46	62
37	1	75	名	65	70	86	2	44	語	45	61
38	1	77	立	65	70	87	2	106	知	45	61
39	2	81	場	65	70	88	1	14	休	44	61
40	2	102	体	65	70	89	2	32	教	44	61
41	4	183	無	65	70	90	2	125	道	44	61
42	1	18	月	63	69	91	3	118	代	44	61
43	2	79	書	63	69	92	2	6	何	43	60
44	3	131	定	63	69	93	2	97	前	43	60
45	3	144	動	63	69	94	3	175	味	43	60
46	1	42	水	62	69	95	3	177	面	43	60
47	1	72	文	62	69	96	2	52	高	42	60
48	3	72	文	62	69	97	2	56	国	42	60
49	2	58	今	61	68	98	3	24	感	42	60
						99	3	74	者	42	60
						100	4	70	差	42	60

and “差” are *kanji* learned in *Minna no Nihongo I*, while “成” is a *kanji* learned in *Minna no Nihongo II* (付 I-L.3, 不 I-L.27, 無 I-L.19, 産 I-L.2, 成 II-L.32, 差 I-L.23).

6 Cross-referencing between the renewed *Kyōiku kanji* and the JLPT levels – effective use of the database

A comprehensive database is difficult for students to use as is. Therefore, the database was edited into a data booklet (about 250 pages, French version) and made available on Moodle, accessible only to our students.³⁰ Appendix 2 shows some pages from the booklet (English version).

In addition, based on the aforementioned overall scores in the database, deviation values were assigned to all *Kyōiku kanji*. Depending on the deviation level, 1-star (☆) to 5-star (☆☆☆☆☆) notations were used to prioritize the *kanji* for memorization: 1 star (40–55), 2 star (56–70), 3 star (71–85), 4 star (86–100), and 5 star (101–).

7 Discussion

7.1 General Discussion

This study supports the findings of Obataya (2018, p.15), which showed that teachers should help students obtain useful data extracted from large amounts of data and instruct them on how to use it practically and effectively while learning. By using JLPT levels and the deviation value, the quantification of the current database will be beneficial for all foreign learners of the Japanese language, making their study more effective and preventing obstacles related to learning.

7.2 Limitations and Recommendations for Future Research

This study has some limitations. First, there is still room for further analysis of this database. To address these limitations, different kinds of rankings could be made, for example, *kanji* with many readings, *kanji* with only one reading, and *kanji* with many strokes is often used. Second, the database of the *Kyōiku kanji* should also be compared not only with *Minna no Nihongo* but also with other series of Japanese language textbooks, for example, *Genki* or *Tobira*.³¹

30 Currently, it is only available in French and has been available to students since the autumn semester of 2020. The English version, currently under preparation, would be helpful for all Japanese learners, both abroad and in Japan, because there are also people in Japan who have never learned Japanese and feel the need, as adults, to learn the language. According to a Japanese editor who oversees a series of Japanese textbooks, some learners would like to have *kanji* learning materials for adults as most textbooks, such as *Kumon* and *Shogakukan*, are geared toward children and are very difficult to get a hold of.

7.3 Theoretical and Practical Implications

The findings have several theoretical and practical implications. As for the theoretical implications, this study confirmed that by using the JLPT levels, the importance of each *Kyōiku kanji* could be quantified. Regarding practical implications, if the distinction between the “standard forms” and the “tolerated forms,” whose systematic guidelines did not exist prior to 2016, is focused on, teachers could explain the Japanese “unique” forms of *kanji* to learners in a more concrete way.

8 Conclusion

8.1 Review of the Study Aim and Objectives

As to the research problem, cyberspace provides access to comprehensive information, such as the *kanji* database. However, due to information overload, it may be difficult to identify useful and important data in relation to the purposes of learning *kanji*. There is a need to develop an effective teaching method for evaluating the priority of *kanji* information. Recently, the *Kyōiku kanji* in Japan has been revised, and new guidelines have been added. Therefore, this study aimed to identify the relative importance of each *Kyōiku kanji* and reduce the burden on learners.

Regarding objectives, even though the list of the *Kyōiku kanji* is not intended for overseas learners of Japanese, the “Guideline for Character Style and Form in the Japanese *Jōyō kanji*” is, nevertheless, beneficial to them. Therefore, the renewed *Kyōiku kanji* was analyzed by creating a cross-reference to the word list of the JLPT, the test constructed for overseas learners.

8.2 Synthesis of the Main Findings.

The main findings are divided into two parts: the quantification of the relative importance of each *Kyōiku kanji* and the effective visualization of the database. First, in an attempt to quantify the importance of each *kanji*, the results showed that through the correspondence of the data between *Kyōiku kanji* and the JLPT levels, learners can estimate their own level of *kanji* knowledge. Second, with the creation of the visualized data book, learners can effectively learn *kanji*.

31 Banno, Eri, et al., *Genki: An Integrated Course in Elementary Japanese I, II and Tobira – Gateway to Advanced Japanese*, series of Japanese language textbooks are as well-known as *Minna no Nihongo*. Currently, *Tobira* is only available in advanced levels, however, its elementary and intermediary levels are scheduled to be published in 2021.

Appendix 1 An example of the database on the renewed *Kyōiku kanji*

[a]	[b]	[c]	[d]	[e]	[f]	[g]	[h]	[i]	[j]	[k]	[l]	[m]	[n]	[o]	
School year	Serial No	Kyokasho-tai font	JLPT Kanji	Kun-reading [常訓]	On-reading [常音]	JLPT word list	JLPT word list (reading)	JLPT word list French translation	JLPT word list English translation	Proportion of the on-reading (%)	Radical (Clé)	Name of radical (Clé): French	Name of radical: English	Calculation of points (JLPT levels)	
1	1	一	N5	ひと、ひとつ	イチw、インh					68	一	いち	un	one, horizontal stroke	
1	1	1				一	いち	un, une	one					5	5
1	1	2				一日	いちにち	un jour, une journée	one day					5	5
1	1	3				一番	いちばん	numéro un, la première place, le premier, la première; le plus, le moins; jeu, tour, combat	number one; best; game, round					5	5
1	1	4				もう一度	もういちど	encore une fois	once more; again					5	5
1	1	5				一度	いちど	une fois	once; one time					4	4
1	1	6				一時	いちじ	une heure; une fois; à un moment donné; autrefois; avant;	one o'clock; once; for a while					3	3
1	1	7				一度に	いちどに	à la fois; d'un seul coup	all at once					3	3
1	1	8				万一	まんいち	si par hasard	by some chance; emergency					3	3
1	1	9				一々	いちいち	ex. いちいち説明する expliquer point par point /	one-by-one, separately; each and every, without omission					2	2
1	1	10				一応	いちおう	en tout cas; à titre provisoire	though not quite satisfactorily; tentatively					2	2
1	1	11				一段	いちだん	(encore) plus; davantage	more, much more; step, level					2	2
1	1	12				一流	いちりゅう	de premier ordre	top grade, leading					2	2
1	1	13				一概に	いちがい	en règle générale	unconditionally, as a rule					1	1
1	1	14				一見	いちげん	première visite à l'auberge, au restaurant, etc. sans présentation	first visit to inn, restaurant, etc. without an introduction					1	1
1	1	15				一同	いちどう	tout le monde	all present, all of us					1	1
1	1	16				一部	いちぶ	une partie; un exemplaire	one part; one copy (e.g. of a document)					1	1
1	1	17				一部分	いちぶぶん	une partie	one part					1	1
1	1	18				一別	いちべつ	séparation	parting					1	1
1	1	19				一面	いちめん	une face; un aspect	one face; one aspect					1	1
1	1	20				一樣	いちよう	uniforme; même	uniform, even					1	1
1	1	21				一律	いちりつ	uniformément	uniform, even					1	1
1	1	22				一連	いちれん	une série de (〜の)	series, chain					1	1
1	1	23				第一	だいいち	premier	first, foremost, most important					1	1
1	1	24												52	
1	1	25				一緒	いっしょ	ensemble; même	together; at the same time; same					5	5
1	1	26				一生懸命	いっしょうけんめい	de toutes ses forces	with all one's might, with utmost effort					4	4
1	1	27				一杯	いっぱい	plein, rempli; un verre	amount necessary to fill a container, drink; full					4	4
1	1	28				一家	いっか	une famille, un foyer	a family, a household					3	3
1	1	29				一種	いっしゆ	une sorte, un espèce	species, kind					3	3
1	1	30				一瞬	いっしゆん	un moment, un instant	instant, moment, for an instant					3	3
1	1	31				一生	いっしょう	une vie	whole life, a lifetime					3	3
1	1	32				一層	いっそう	davantage; encore	much more; rather					3	3
1	1	33				一体	いったい	donc; mais; tous ensemble	(what) the heck, (why) in the world, (who) on earth; unity					3	3
1	1	34				一致	いっち	concordance	coincidence; conformity					3	3
1	1	35				一般	いっばん	généralité	general; ordinary					3	3
1	1	36				一方	いっぽう	l'un; l'autre	one (of two), the other; on the one hand					3	3
1	1	37				同一	どういつ	même, identique	identical, same					3	3
1	1	38				唯一	ゆいいつ	seul, unique	only, unique					3	3
1	1	39				一斉	いっせい	simultanément, en meme temps	simultaneous, all at once					2	2
1	1	40				一旦	いったん	une fois	once					2	2
1	1	41				一定	いってい	fixe; constant	fixed, constant					2	2
1	1	42				統一	どういつ	unité; unification	unity, unification					2	2
1	1	43				一括	いっかつ	en bloc	lumping together, summing up					1	1
1	1	44				一気	いっき	d'un (seul) trait	one breath					1	1

Appendix 2 Examples of pages from the data book

常音・常訓のみ収録

1-1

— —

イチ、イツ
ひと、ひとつ
one

1 stroke

5

★★★★★

(116)

—	—	—	—	—	—	—	—
---	---	---	---	---	---	---	---

JLPT レベルに相当 (5 ≒ N5)

いち	one	5	いっしょ	together ; at the same time ; same	5	おとどい	day before yesterday	5
いちにち	one day	5	いっしょうけんめい	with all one's might, with utmost effort	4	おととし	year before last	5
いちばん	number one ; best ; game, round	5	いっぱい	amount necessary to fill a container, drink ; full	4	ついたち	first day of the month	5
いちど	once more ; again	5	いっか	a family, a household	3	ひとつ	one	5
いちど	once ; one time	4	いっしゆ	species, kind	3	ひつ	one month	5
いちじ	one o'clock ; once ; for a while	3	いっぴき	instant, moment, for an instant	3	ひとり	one person	5
いちどに	all at once	3	いっせい	whole life, a lifetime	3	ひとこと	single word ; a few words	3
まふいち	by some chance ; emergency	3	いっ層	much more ; rather	3	ひとりひとり	each (person) ; one by one	3
いちいち	one-by-one, separately ; each and every, without omission	2	いったい	(what) the heck, (why) in the world, (who) on earth ; unity	3	さきおととい	two days before yesterday ; three days back (ago)	2
いちおう	though not quite satisfactorily ; tentatively	2	いっせい	coincidence ; conformity	3	ひとお	roughly ; (more or less) everything	2
いちばん	more, much more ; step, level	2	いっぴん	general ; ordinary	3	ひつま	for the present ; though not quite satisfactorily	2
いちぱう	top grade, leading	2	いっほう	one (of two), the other ; on the one hand	3	ひとやす	(short) rest	2
いっぴん	unconditionally, as a rule	1	どういつ	identical, same	3	ひとりごと	soliloquy, monologue	2
いっどう	all present, all of us	1	いっせい	only, unique	3	ひとりでに	by itself, automatically	2
いちぶ	one part ; one copy (e.g. of a document)	1	いっさい	simultaneous, all at once	2	ひといき	one breath ; doing without stopping	1
いっぶん	one part	1	いったん	once	2	ひとま	single layer	1
いっべつ	parting	1	いっぢょう	fixed, constant	2	ひところ	once, some time ago	1
いっめん	one face ; one aspect	1	いっいつ	unity, unification	2	ひとすじ	one long straight object (e.g. strand of hair, beam of light)	1
いっよう	uniform, even	1	いっかつ	lumping together, summing up	1	ひとめ	glance	1
いっりつ	uniform, even	1	いっく	one breath	1			
いっれん	series, chain	1	いっく	at a stroke, with a single swoop	1			
いっさい	first, foremost; most important	1	いっさい	all ; absolutely (not)	1			
			いっしん	one's whole heart	1			
			いっぺん	whole region	1			
			いっばい	one defeat	1			
			いっぺん	complete change	1			
			いっじつ	single, simple	1			

音読み「イチ」

音読み「イツ」

特別な読み方 + 訓読み

空しい (むなしい) = 常用外

書き順フォント : « IwatShinKyokasho »

1-17

空 空

クウ そら、あ、く、あける、から sky

4 stars (62)

空しい (むなしい)
空く (すく)

8 strokes

くうき	air	4	あ	空く	to be empty ; to be vacant, to be free	5
くうこう	airport	4	あ	空ける	to empty ; to move out ; to leave (temporarily)	5
こうくう	aviation, flying	3	そ	空	sky	5
か	fictitious, imaginary	2	ま	空き	space ; vacancy	3
くうそう	fantasy	2	か	空	emptiness, vacuum, blank	3
くうくわ	sky, air, mid-air	2	か	空っぽ	empty, vacant, hollow	2
しんくう	vacuum, hollow, empty	2	あ	空き間	vacancy, room for rent or lease	1
くうぶく	empty stomach, hunger	1	おお	空	wide open sky,	1
じゆうくう	high-altitude sky, upper air	1	おお	大空	firmament	1

1-18

月 月

ゲツ、ガツつき moon, month

5 stars (69)

教科書体 明朝体 ゴシック体

4 strokes

げつようび	Monday	5				
こんげつ	this month	5	せいねんげつび	birth date, DOB		2
せんげつ	last month	5				
らいげつ	next month	5	ひとつき	one month		5
さらいげつ	month after next	4	まいつき	every month		5
げつよう	Monday	3	つき	moon ; month		3
としつき	months and years	3	としつき	months and years		3
げつぎゅう	monthly salary	2	つきひ	time, years, days		2
げつまつ	end of the month	2	みやづき	new moon, crescent moon		2
せんせんげつ	month before last	2	つきなみ	commonplace, conventional		1
かげつ	months (period of)	1				
げつしき	monthly tuition fee	1				
げつふ	monthly installment (instalment), monthly payment	1				
まんげつ	full moon					

1-19

犬 犬

ケン いぬ dog

4 stars (43)

4 strokes

いぬ dog 5

6th year

6-1	胃	胃 胃	丨 冂 月 田 田 田 胃 胃 胃 9 strokes	胃					
	イ stomach	N2 ★ 42	胃 stomach 3						
6-2	異	異 異	丨 冂 田 田 田 田 田 田 田 異 11 strokes	異					
	イ こと to differ, to vary	N1 ★ 47	異常 strangeness, abnormality, disorder 3 差異 difference, disparity, gap 1 驚異 wonder, miracle, amazement, prodigy 1 異論 different opinion, objection 1 異動 change (personnel), transfer 1	異性 the opposite sex 1 異見 different opinion, objection 1 異議 objection, dissent, protest 1 異なる to differ, to vary, to disagree 3					
6-3	遺	遺 遺	丨 冂 冂 中 艹 艹 艹 艹 艹 書 貴 貴 貴 遺 遺 15 strokes	遺					
	イ bequeath, leave behind, reserve	N1 ★ 42	遺跡 historic ruins (remains, relics) 1						
6-4	域	域 域	一 十 土 土 土 土 土 土 域 域 域 11 strokes	域					
	イキ range, region, limits, stage, level	N2 ★ 45	地域 area, region 3 区域 limits, boundary, domain, zone, sphere 2 流域 drainage basin, rivin basin, valley 2	域外 outside the area 1 領域 area, domain, territory, field, range, region 1					
6-5	宇	宇 宇	丨 宀 宀 宀 宀 宇 6 strokes	宇					
	ウ eaves, roof, house, heaven	N2 ★ 42	宇宙 universe, cosmos, space 3						
6-6	映	映 映	丨 日 日 日 日 日 日 映 映 7 strokes	映					
	エイ うつる、うつす、はえる project, reflect	N4 ★ 50	映画 movie, film 5 映画館 movie theater, cinema 5 反映 (light, image, situation, attitude, etc.), reflecting 2 映写 projection 1 映像 image 1	うつす to project, to reflect 2 うつる to be reflected, to harmonize with; to come out (photo), to be projected 2 はえる to shine, to glow; to look attractive, to look nice 1					

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