

Research into Chinese Character Learning and Teaching Strategies



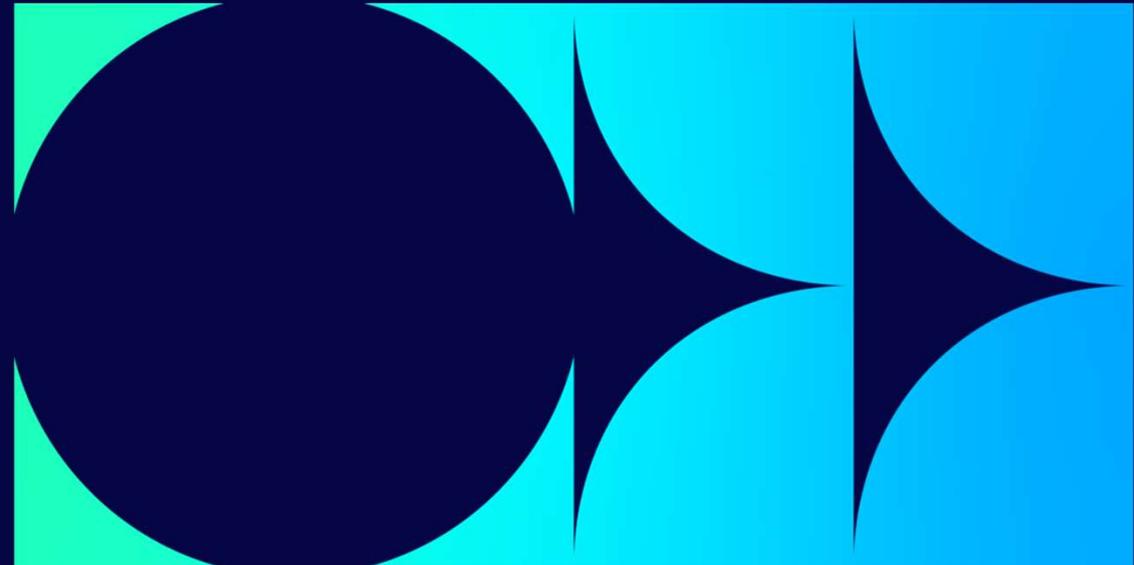
Dr Kan Qian
阚茜

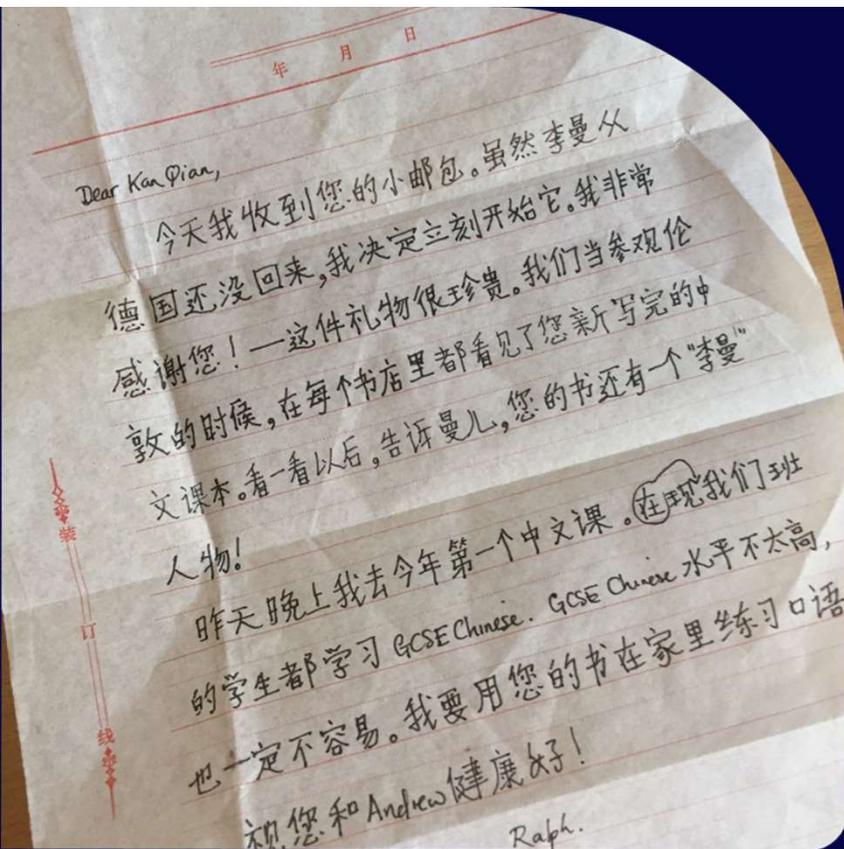
The Open University
英国开放大学

Richard McCurry
理查德

Newby Chinese

Chinese Language Teaching Training Day April 2024





Overview

- Warming up
- Underpinning framework of the previous studies – definition and categories of 2nd language learning strategy
- Findings from previous studies on character learning strategies – Shen (2005), etc
- Emerging new strategies – Kan et al (2018)
- Thinking outside the box – learner and teacher perspectives
- Q&A and Discussions

What do you think are the top three character-learning strategies by Chinese learners?

Go to *menti.com*,

enter the code **3885 1759**



What do you think are the top three character learning strategies used by Chinese learners?

Enter a word

25

Enter another word

25

Enter another word

25

Submit

Click [here to view the result](#)

Previous research on learning strategies

Definition and categories

Underpinning framework of the previous studies



Most Chinese character learning strategy studies have been guided by Oxford's (2003) definition of second language learning strategies.

Definition:

The 'specific behaviours or thoughts learners use to enhance their language learning' (2003, 1),

Six categories (2003, 12- 15):

- cognitive (e.g. learning radicals, making connections between the sound and script)
- metacognitive (e.g. preview learnt characters before class)
- memory-related (e.g. write each new character stroke by stroke in the correct order)
- compensatory (e.g. focus on learning characters in context)
- affective (e.g. getting high scores and praises)
- social (e.g. share on social media; practise with language exchange partners)

Most studies have been conducted in HEI campus university settings and from f2f learner perspective.

One of the most influential study to date on character learning strategies was conducted by Shen (2005) with 95 university non-native speakers ranging from beginners to advanced learners surveyed.

30 commonly used strategies among all levels were identified, of which:

- 25 were cognitive strategies
- 5 were metacognitive strategies

Amongst the top ten strategies, the top two are to cope with the difficulty of tone production and lack of connection between characters and pronunciation.

Shen (2005)

Shen's strategy inventory of 59 items (2005) has been widely adopted by later researchers

Table 1
Commonly used character learning strategies by learners of Chinese

Strategy represented	<i>M</i>	<i>SD</i>	Cum.%*
3. Repeats the sound when the character is first introduced	4.15	0.90	92.1
2. Pays attention to the tone and associates it with pinyin	3.89	0.99	91.0
48. Previews the new words before class	4.09	1.07	91.0
9. Writes the character down when it is first introduced	4.20	1.10	88.8
17. Finds equivalent word from the native language	3.93	1.14	88.8
49. Previews the new words the night before class	3.93	1.13	88.8
57. Reviews newly learned words by writing them many times	3.99	1.18	88.8
5. Visualizes the character	3.89	1.06	87.6
7. Pays attention to how the character is used in context	3.79	1.06	87.6
11. Checks reference sources for character's meaning (in various contexts)	4.02	1.22	87.6
59. Reviews words by going over notes, example sentences	3.75	1.13	85.4
19. Determines if one character in a new compound word has been learned before	3.73	1.12	84.3
33. Quiz myself	3.64	1.16	84.3
4. Looks at strokes and associates them with a similar character Already learned	3.73	1.12	83.1
24. Says the character and visualizes it	3.54	1.10	83.1
1. Listens carefully when the new character is first introduced	3.56	1.11	80.9
6. Recognizes radicals which have been learned	3.83	1.25	80.9
10. Pays attention to stroke order	3.48	1.08	80.9
15. Determines how new characters are used in conversation	3.27	0.99	75.3
13. Uses the new character orally in a sentence	3.09	1.07	73.0
21. Reads the new character out loud and associates its sound with meaning and shape	3.24	1.10	73.0
23. Says the character when writing it	4.33	3.42	73.0
18. Finds out the meaning of the radical in the character	3.29	1.25	71.9
26. Finds the connection between the new character and previously learned radicals in terms of sound, meaning, and shape	3.28	1.20	71.9
14. Asks others how they use a particular character in sentences	3.53	2.58	69.7
55. Reviews newly learned words before class and quizzes, and on weekends	3.20	1.36	68.5
22. Memorizes the sound first, then the meaning and shape	3.17	1.30	67.4
8. Associates the sound of a character with its meaning and shape	3.01	1.20	66.3
36. Does homework first before memorizing the new characters	3.16	1.42	66.3
43. Listens to conversation by native speakers	3.06	1.38	65.2

Main strategy categories for beginners

- memory-related strategies
- cognitive strategies

Disagreement regarding learning radicals as a strategy for beginners

- Shen (2005) points out that learning each radical or main component 'would not be perceived as useful' (2005, 61) due to their limited orthographic knowledge.
- Jiang and Zhao's study (2001) was another influential study (n = 138 CFL beginners) which also reported that beginner learners focused more on the shape of the whole character, followed by repeating sounds and stroke order. They also found that learners from alphabetical language background relied more on phonological cues in recalling characters.
- However, quite a few studies on beginner CFL learners indicated that the knowledge of semantic-phonetic components was more useful than other strategies in recognising characters (e.g. Taft and Chung 1999; Wang, Perfettis and Liu, 2003).

Emerging new strategies in the digital age

Kan et al (2018)

Research aim

- (i) identify changing practices when character learning is assisted by mobile technology; and
- (ii) analyse the underlying causes for the changing practices.

Research context

Open University distant adult learners of *beginners' Chinese* module (30 credits); challenges of learning learning Chinese at a distance; the advance of technology and language learning tools.

Research questions

What strategies do beginner distance learners of Chinese use when learning characters assisted by mobile technology? Can the potential of smart mobile technology influence character learning strategies?

Research methods

Methods: online survey, learning diary and email interviews with UK-based distance learners of beginners' Chinese

Process: 22 were recruited to take part in a 8-week project; and divided into two groups: book group and app group, using the predecessor of Chinese@OU app: *Chinese Character First Characters* which includes about 400 characters introduced in OU's Beginners' Chinese course.

Survey questions

- 32 character learning strategy items, of which 21 items were based on Shen's 30 common strategies (2005).
- Some of Shen's items were combined as they were judged to be similar in meaning and a few were removed as they did not apply to distance learners.
- the 11 different items in our study were based on some items from Shen's 59 items (2005, 65–66) as well as on comments by previous OU students who exchanged their ideas about character learning in the dedicated course forum.

Comparison of Kan et al (2018) ranking with Shen (2005, 57) ranking

Ranking/Strategy group	Item No	Our strategy items	% score $\geq 3^*$	Shen's top 30 ranking and item wording
1 (Metacognitive)	Q11**_10	<i>I test myself to check if I have learnt the character(s)</i>	100% (100%)	13 'Quiz myself'
2 (Memory)	Q10***_1	<i>I repeat the sound when the character is first introduced</i>	88% (92%)	1
3 (Metacognitive)	Q10_13	<i>I try to find a connection between the new character and previously learned characters</i>	88% (91%)	24 'Finds the connection between the new character and previously learned radicals in terms of sound, meaning and shape'
4 (Cognitive)	Q10_12	<i>I try to visualise the character and compare it with a familiar shape</i>	88% (84%)	8
5 (Social)	Q11_6	<i>I listen to conversation by native speakers</i>	75% (64%)	30
6 (Metacognitive)	Q11_14	<i>I use an online dictionary to find out how the character is used in context</i>	75% (54%)	[not in top 30]
7 (Compensatory)	Q11_13	<i>I focus on how the character is used in context</i>	75% (72%)	9
8 (Cognitive)	Q10_3	<i>I practice the tone and associate it with pinyin</i>	75% (75%)	2
9 (Cognitive)	Q11_1	<i>I say the character when writing it (either on digital device or paper)</i>	63 (63%)	22
10 (Metacognitive-Cognitive-)	Q10_7	<i>I use pinyin input on my computer/digital device to choose/identify new characters</i>	63% (50%)	[not in top 30]
11 (Cognitive)	Q10_6	<i>I focus on the phonetic component (the part that indicates the pronunciation)</i>	50% (42%)	[not in top 30]
12 (Cognitive)	Q11_3	<i>I listen to the sound and try to associate its sound with meaning and shape</i>	50% (36%)	28 'Associates the sound of a character with its meaning and shape'
13 (Cognitive)	Q10_2	<i>I listen carefully to the pronunciation of the new character before I write it</i>	50% (58%)	16
14 (Metacognitive)	Q10_5	<i>I try to pronounce it myself by looking at pinyin first, and then listen to the model pronunciation</i>	50% (66%)	[not in top 30]
15 (Memory)	Q10_8	<i>I write/draw each new character stroke by stroke (on paper or on digital device) many times</i>	50% (58%)	4 'Writes the character down when it is first introduced'
16 (Metacognitive)	Q10_11	<i>I preview all the new characters in each lesson/session before going into a particular one</i>	50% (50%)	[not in top 30]
17 (Memory)	Q11_5	<i>I try to memorise the stroke order first, then the sound and meaning</i>	50% (36%)	18

Kan et al (2018) main findings

Strategies not in Shen's study

- Use online dictionary to find out how the character is used in context (**ranked 6th**)
- Use pinyin input to choose/identify characters (**10th**)
- Focus on the phonetic component (**11th**)
- Pronounce it myself, and then listen to the model pronunciation (**14th**)

4 out of top ten: due to the convenience of new technology

- regularly testing oneself (**1st**)
- Using online dictionaries (**6th**)
- watching video to hear conversation by native speakers (**email interview**)
- using online dictionaries and using pinyin input on digital devices to identify new characters (**10th**)

Kan et al (2018) main findings

Other new strategies mentioned in email interviews

new strategies, not reported in previous studies, that fall into 'social' and 'affective' categories:

- reusing characters used by friend, checking with Chinese speakers through WeChat,
- impressing a Chinese friend

Future research on these two strategies to examine if:

- they are motivational strategies just for distance learners; or
- if they work for all CFL learners.



Thinking outside the box

- learner and teacher perspective



BRIGHTON
COLLEGE

United Kingdom School of the Decade

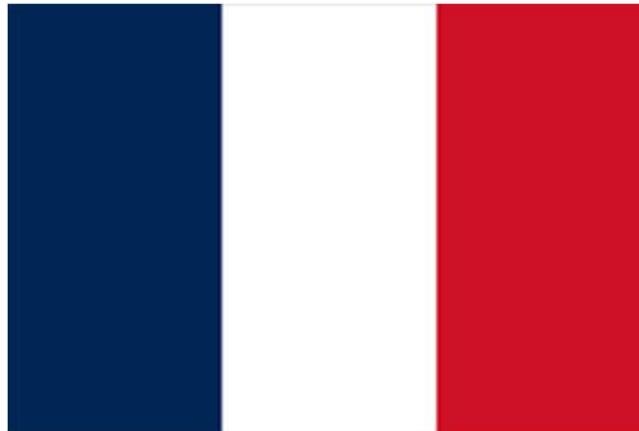
The Sunday Times





94% dropout rate

Orton & Scrimgeour









Amateurs talk strategy.
Professionals talk logistics.

— *Omar N. Bradley* —

牙銀大牙亞

牙似大牙亚

似大 亚



A man with dark hair and a beard, wearing a dark blue quilted vest over a white shirt, is looking down at a large white sign he is holding with both hands. The sign has the text "STOP DOING WHAT DOESN'T WORK" written in bold, dark blue, sans-serif capital letters. The background is a plain, light gray wall.

**STOP DOING
WHAT
DOESN'T WORK**



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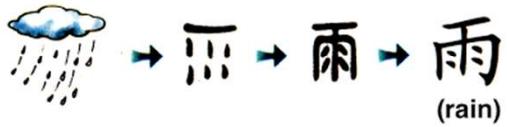
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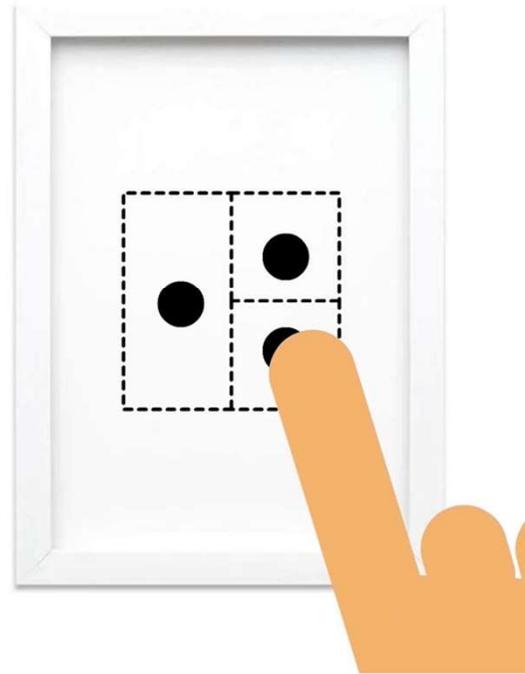
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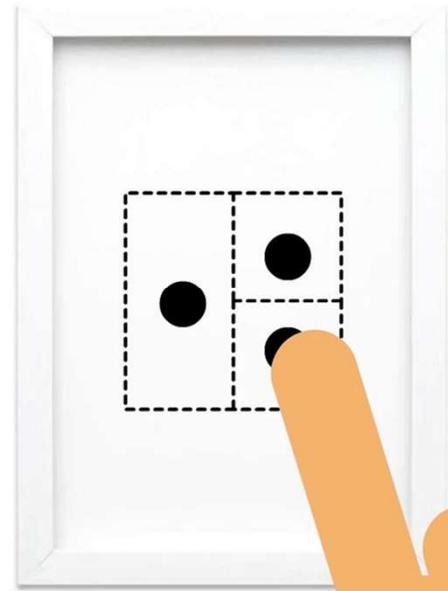
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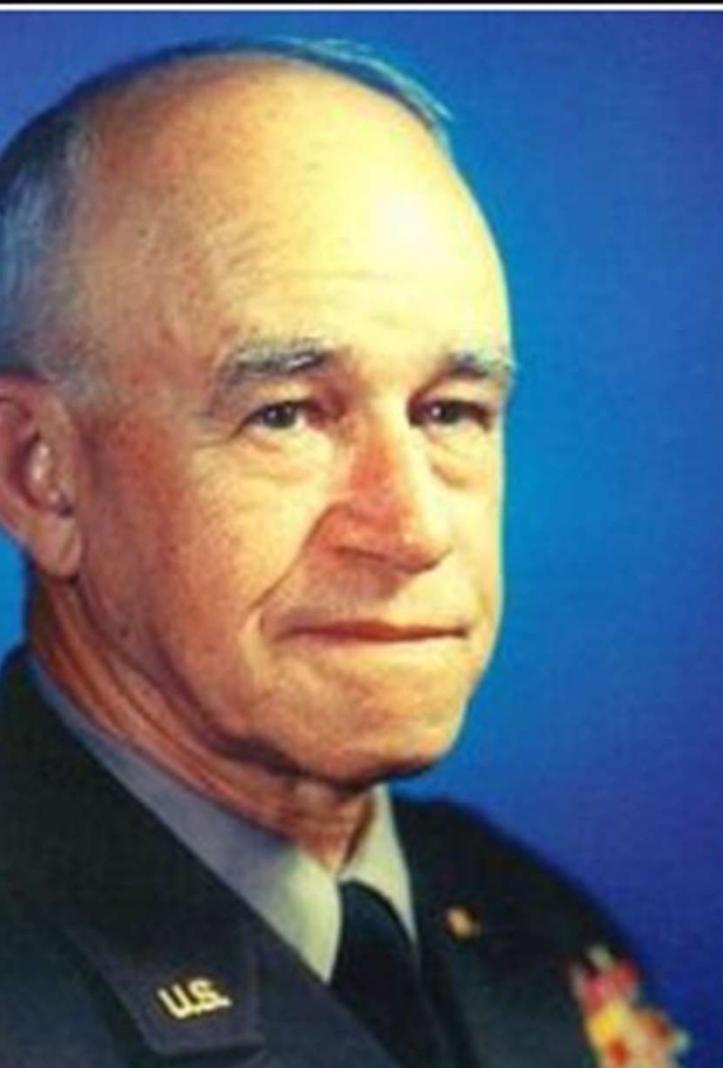
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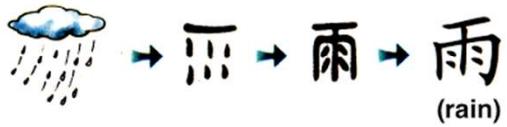
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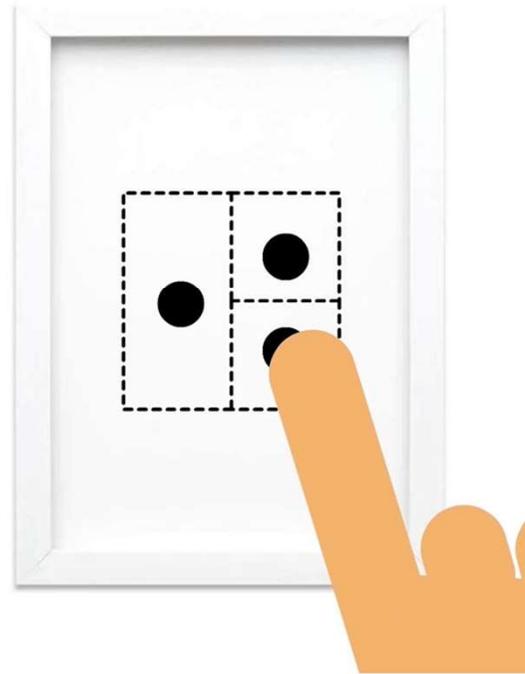


Amateurs talk strategy.
Professionals talk logistics.

— *Omar N. Bradley* —



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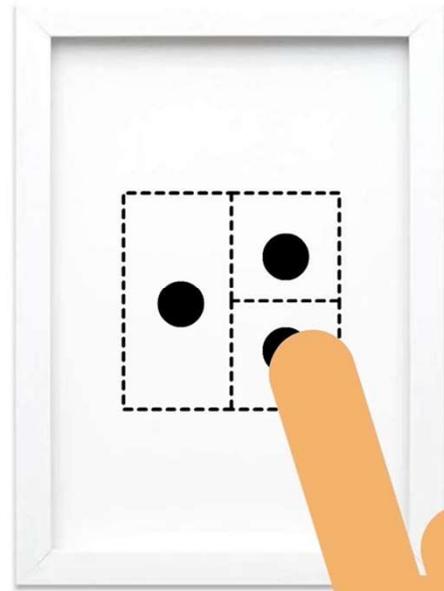


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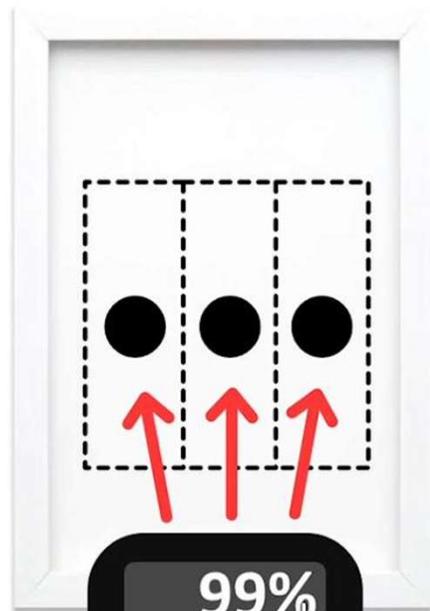


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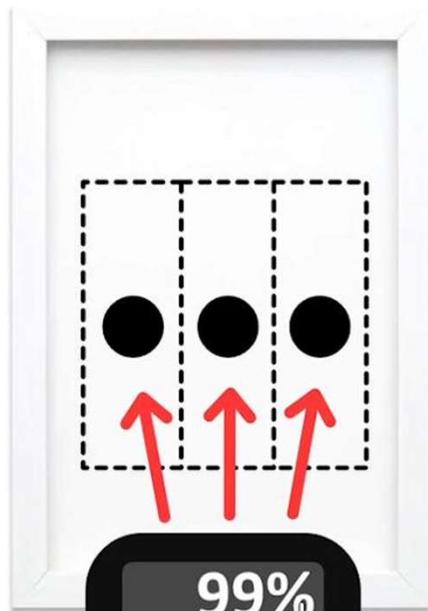
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1. 禁止回收







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hou²



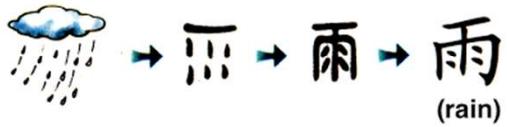


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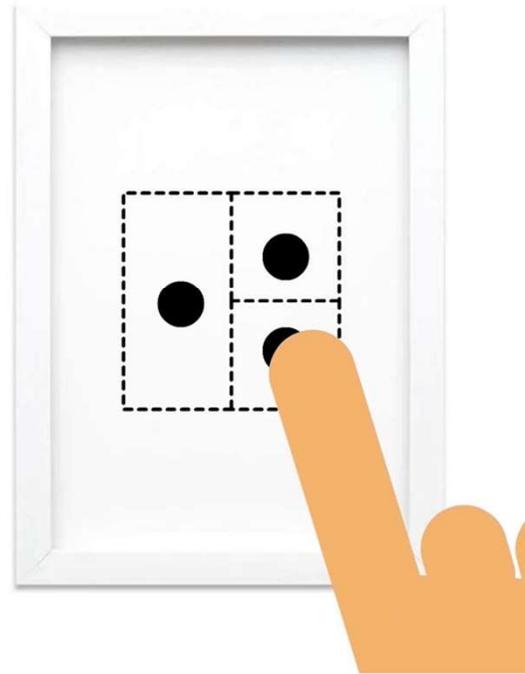








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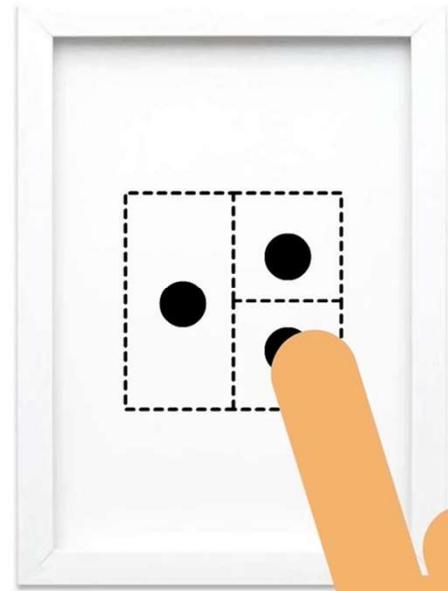


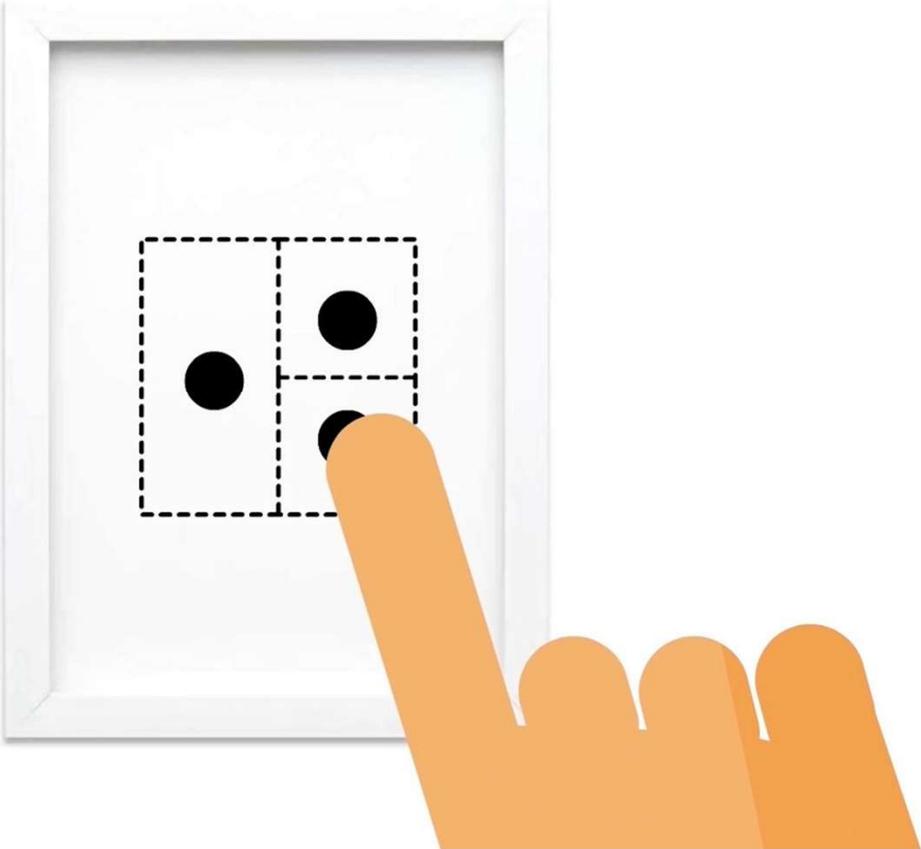
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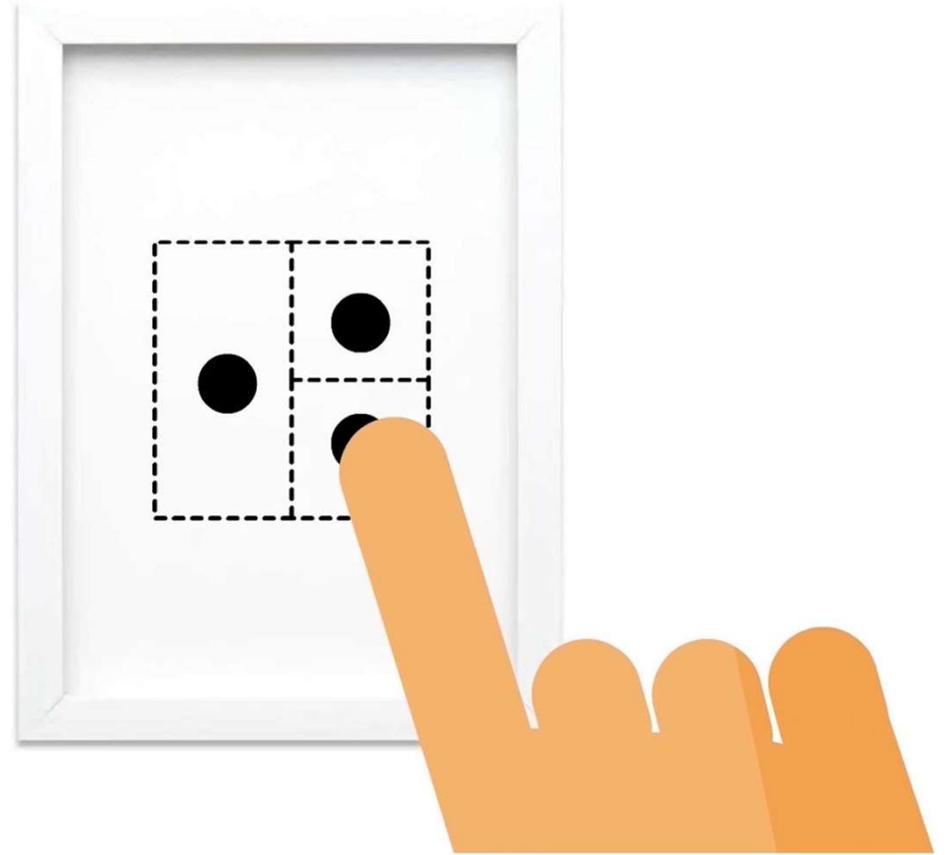


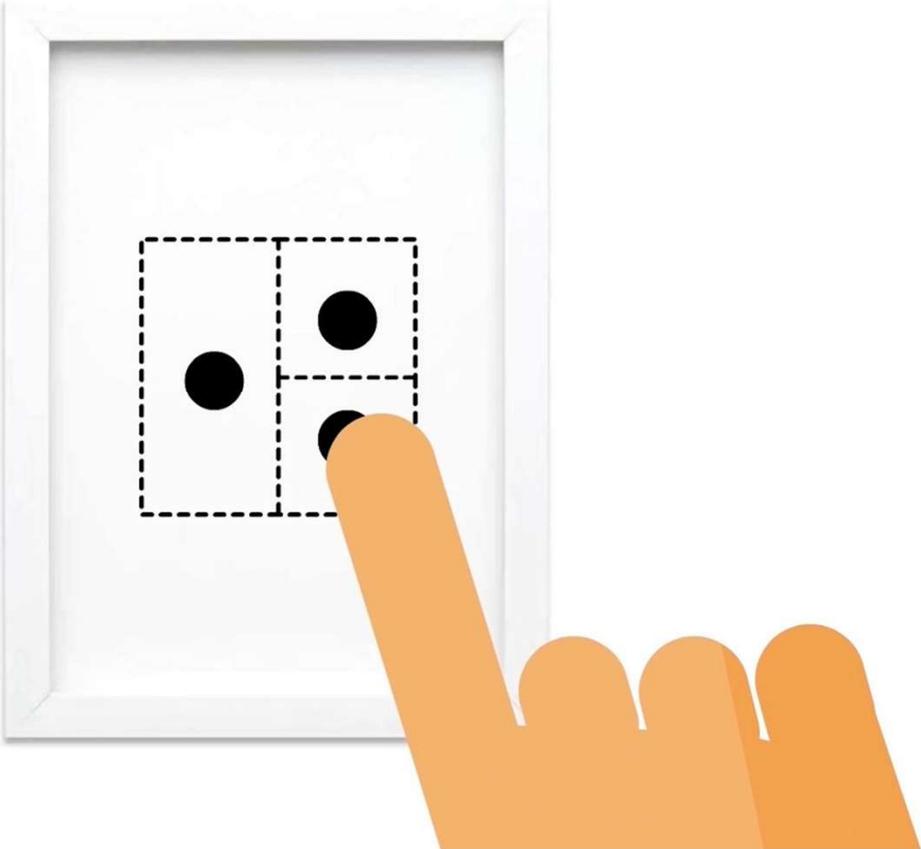
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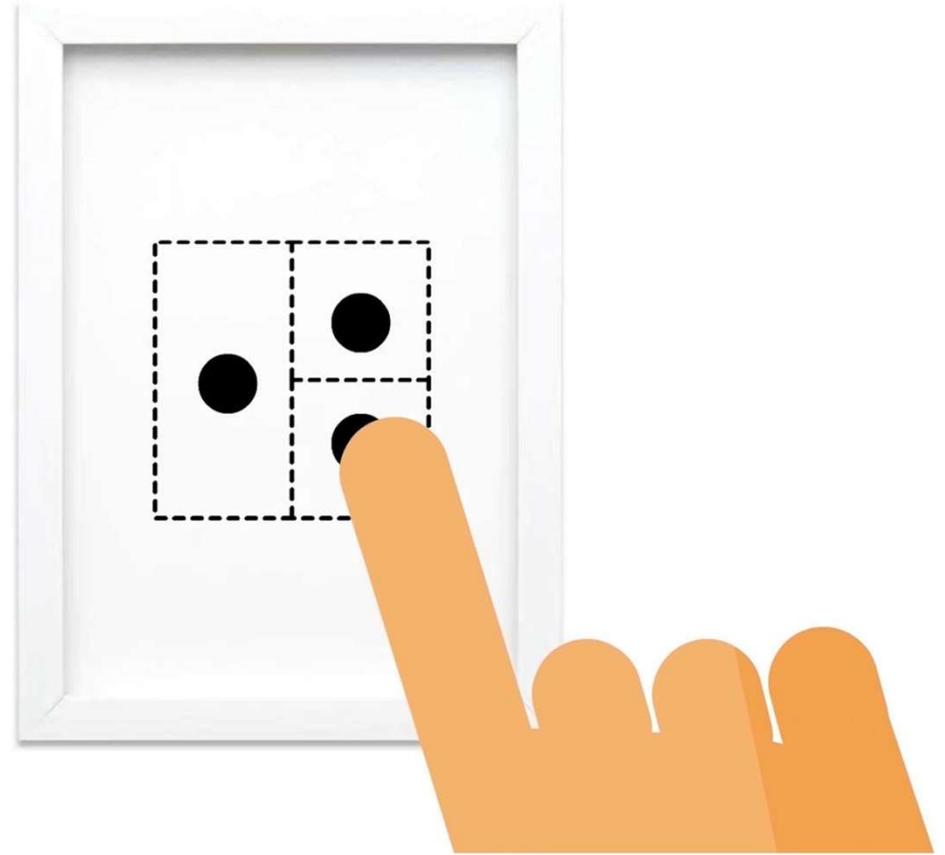
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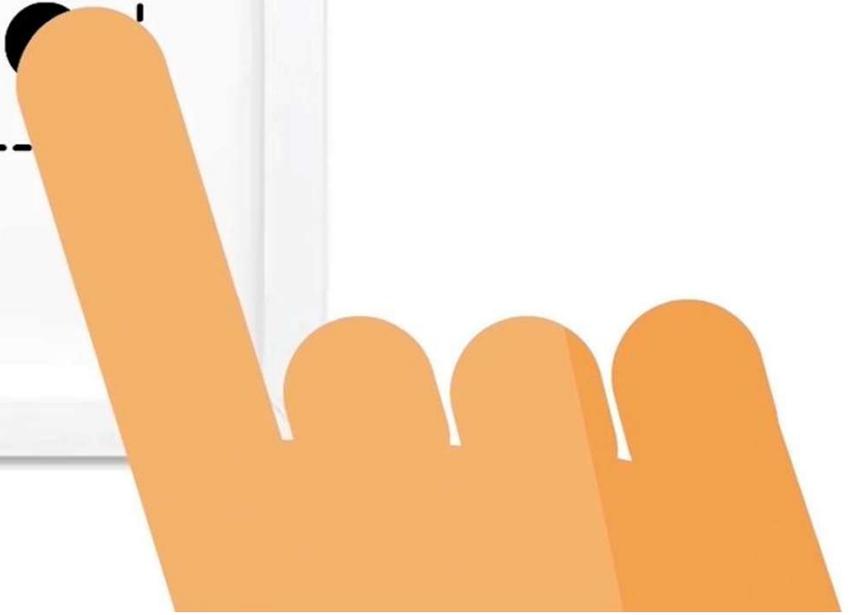
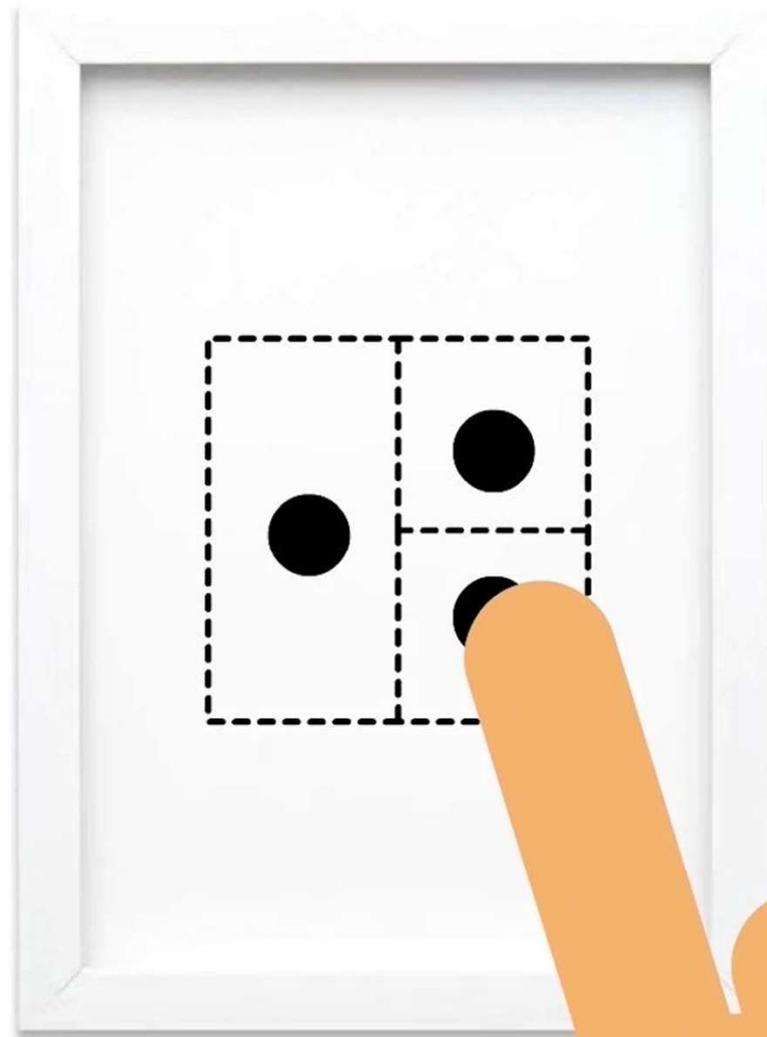




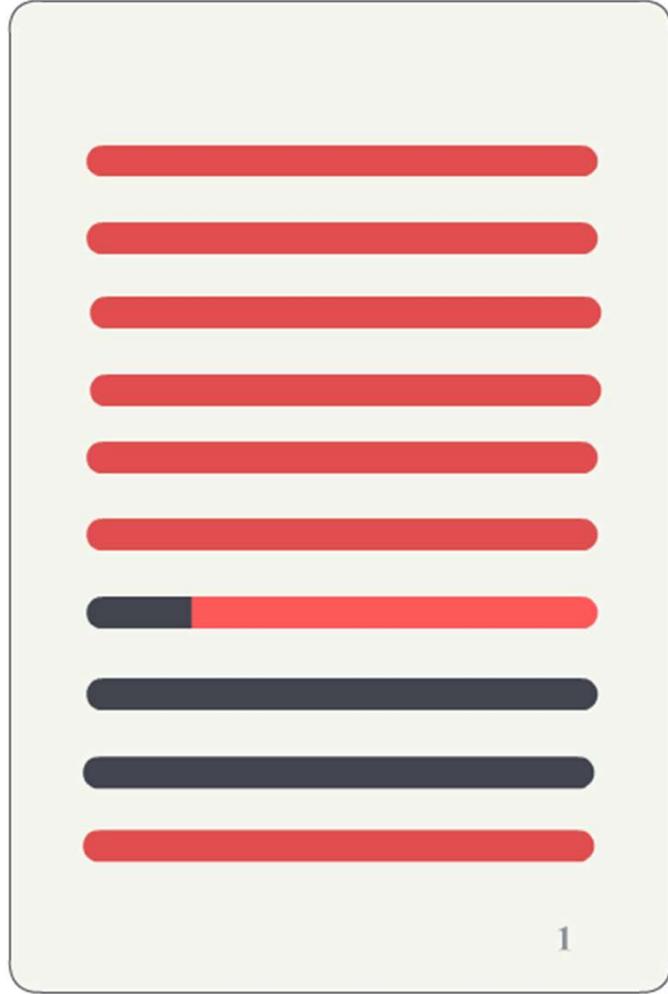




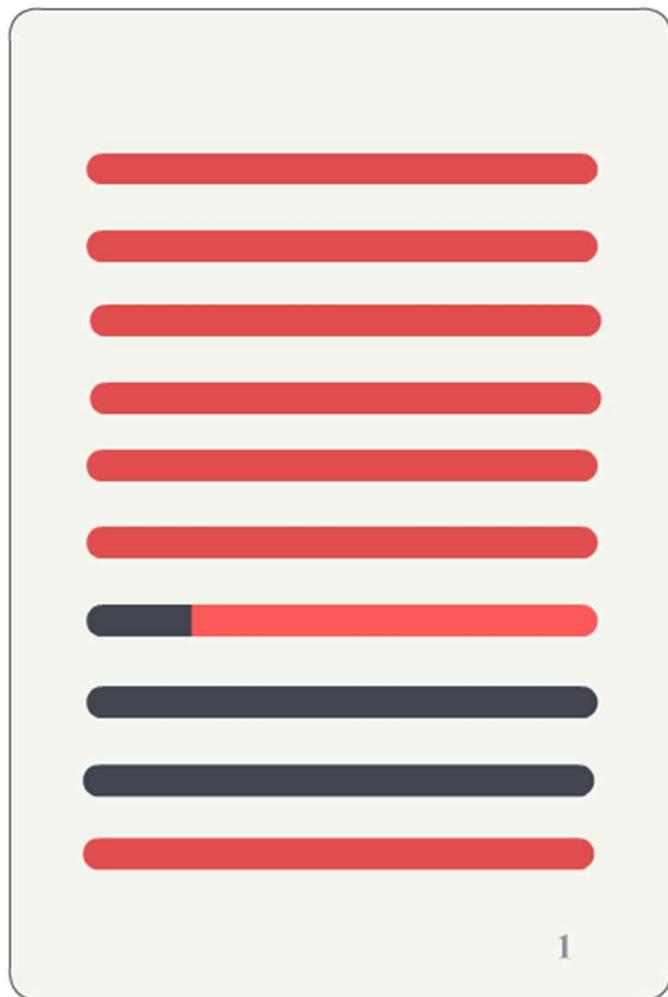






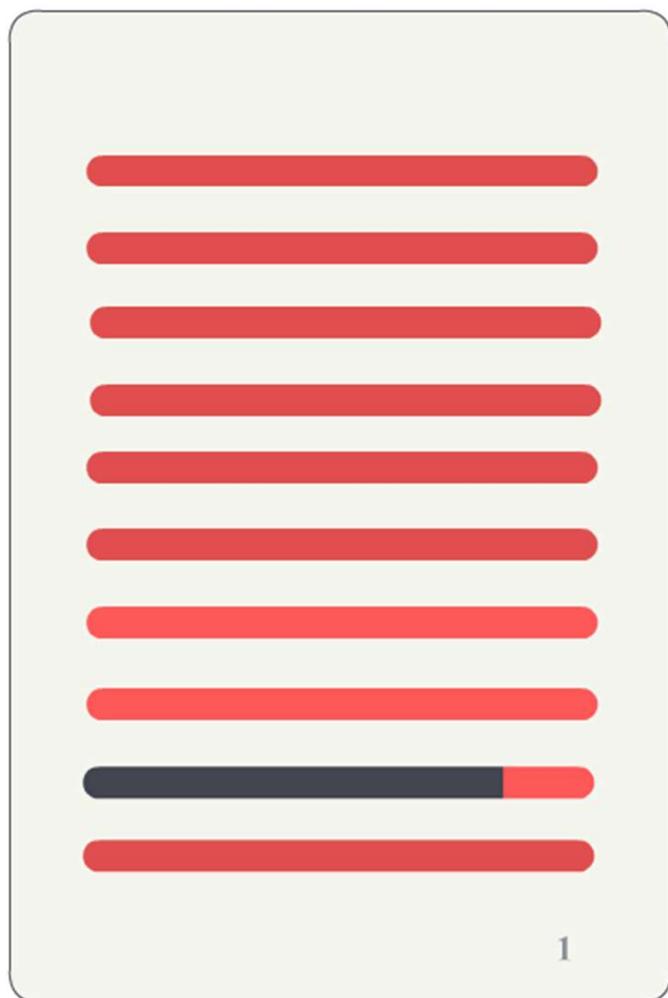


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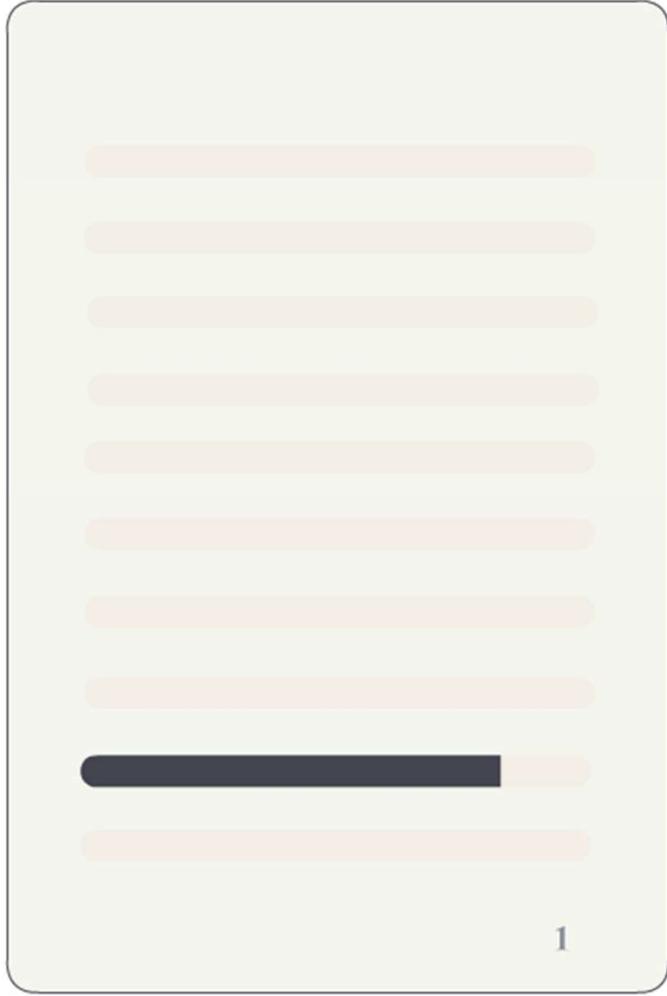


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Shen et al called B.S.

Shen et al called B.S.

Mostly unfunctioning system!

餐恨浪限银腿娘食退狼跟根眼很

Spot 5 differences in 20 seconds

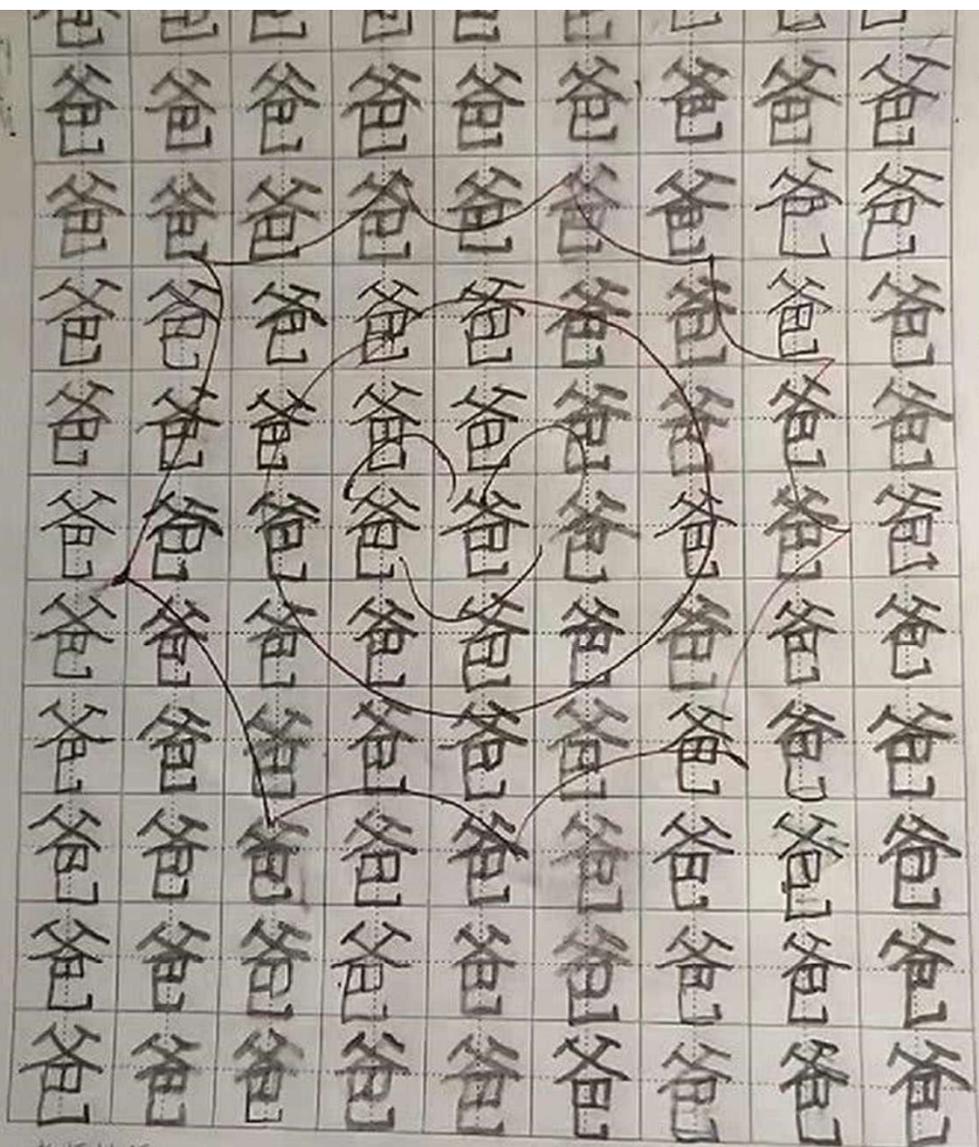


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餐恨浪限银腿娘食退狼狼跟根眼很

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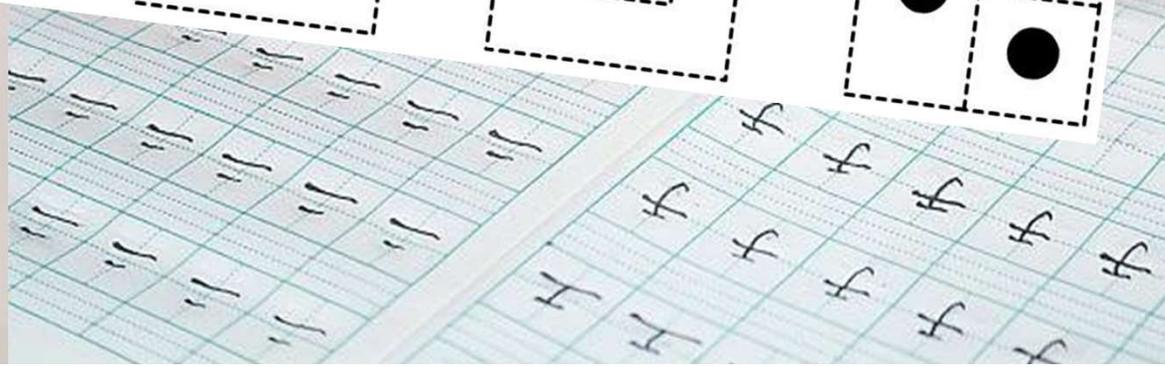
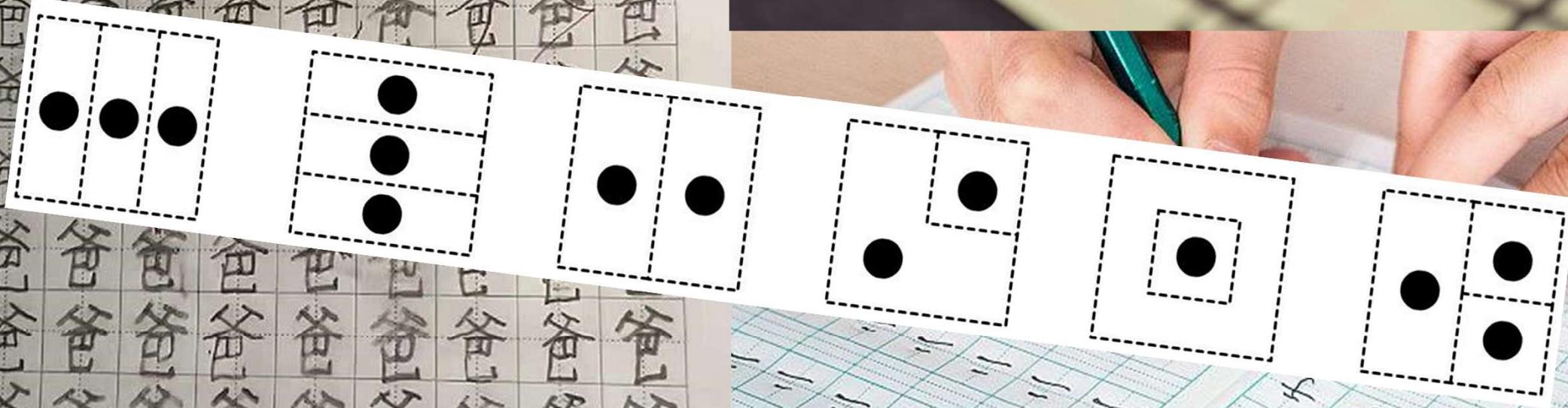
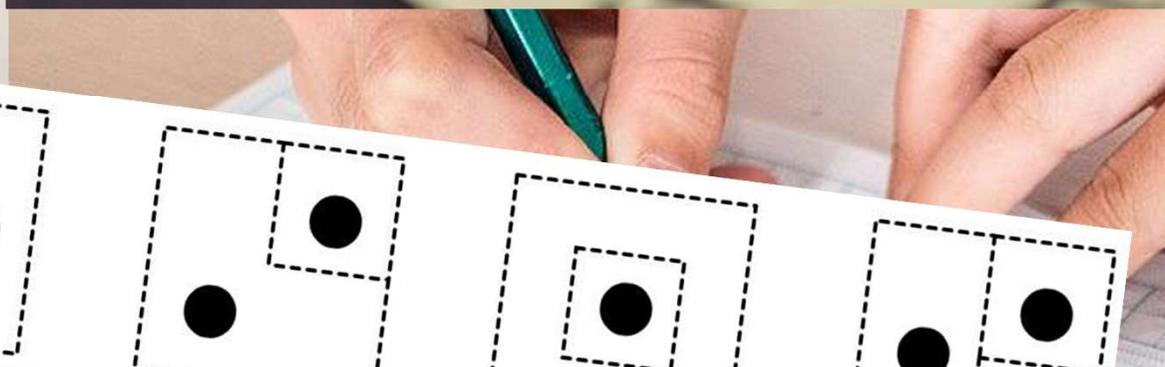
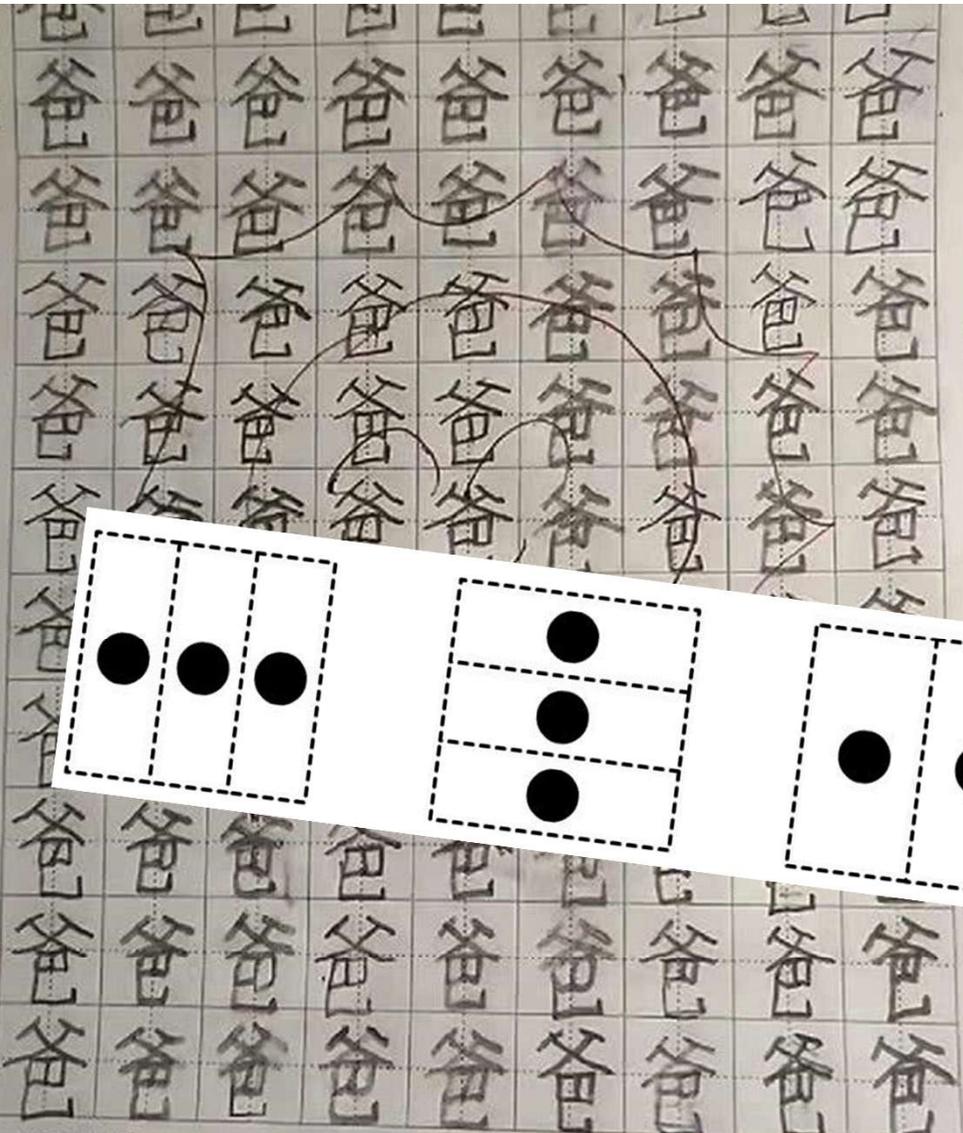




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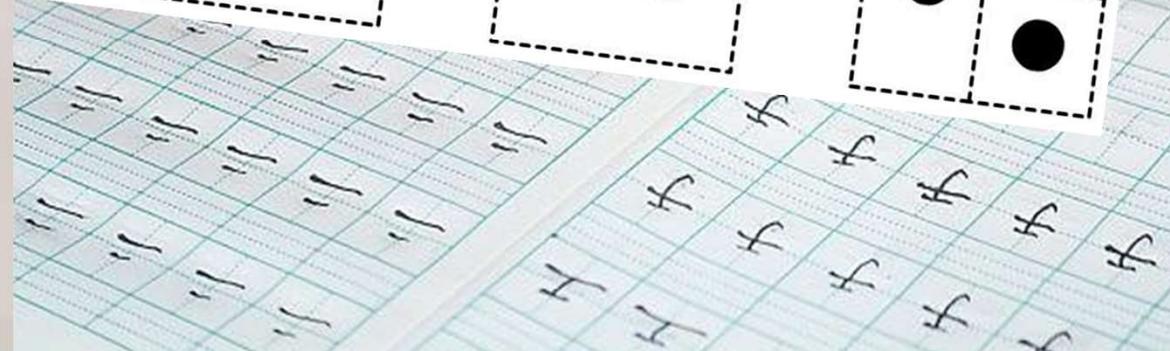
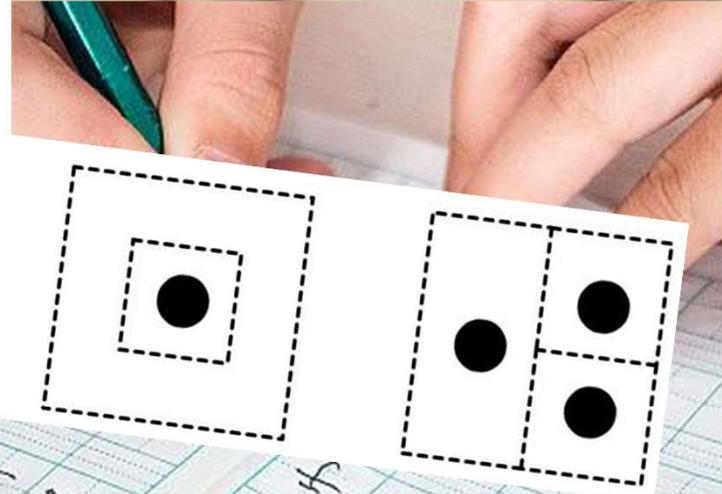
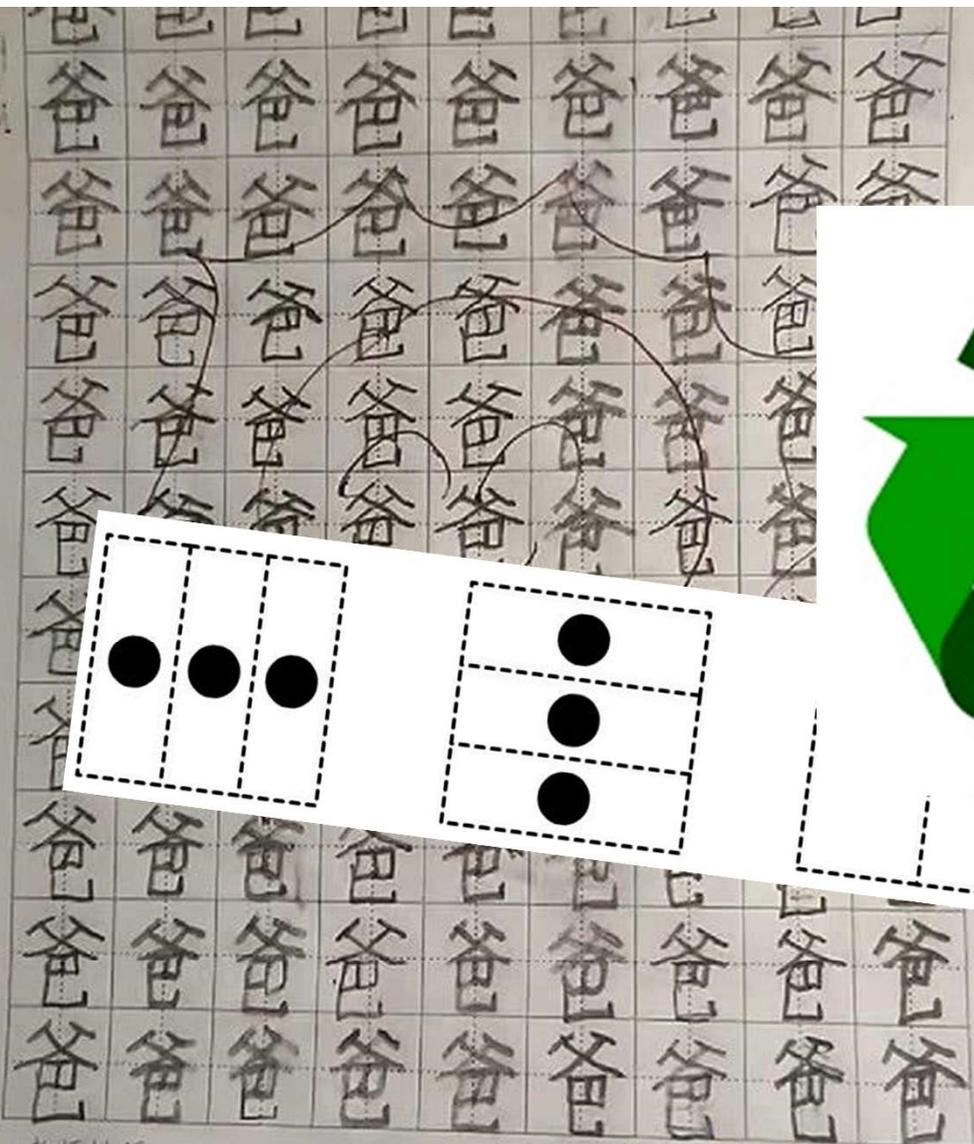
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Spot 5 differences in 20 seconds



餐恨浪限银腿娘食退狼跟根眼很

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餐恨浪限银腿娘食退狼跟根眼很





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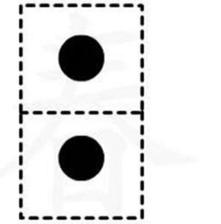
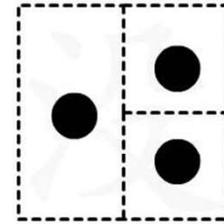
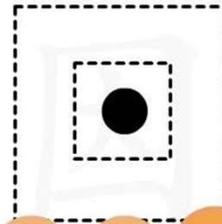
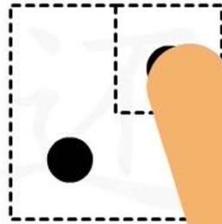
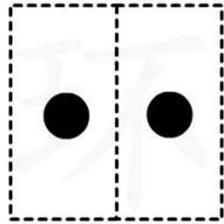
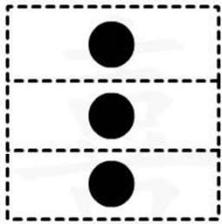
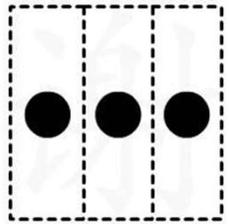


狠很恨狼眼根退食

很好

Hěn hǎo
Very good





Spot 5 differences in 20 seconds



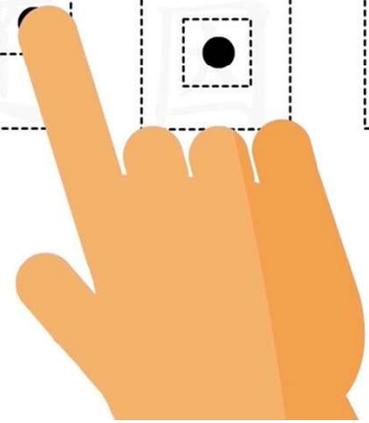
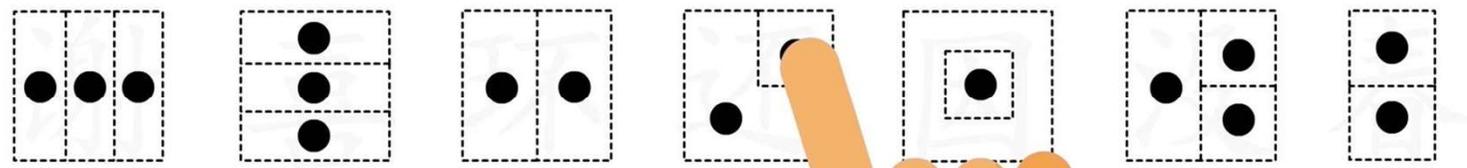
很好

Hěn hǎo
Very good

主 羊 月 卓 兴 夫 吕 良



主 羊 月 卓 兴 夫 吕 皇



主 羊 刃 卓 兴 夫 吕 皇



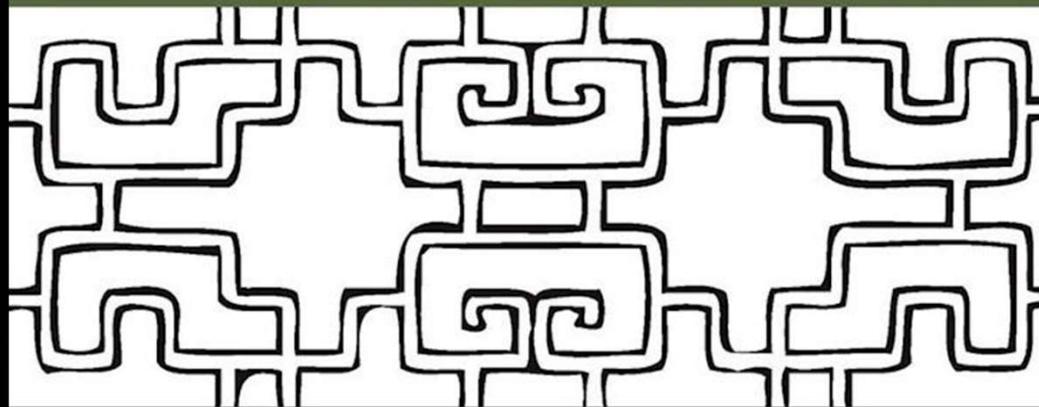
Shen et al called B.S.

Deep *un-nameable* orthographic knowledge



Teaching Chinese as a Second Language

The Way of the Learner



Jane Orton and
Andrew Scrimgeour

After 6 years of learning Chinese in primary school students were asked to describe a Chinese character

A Chinese character is really bad because it has little marks like little lines

It's a bunch of lines

A whole lot of lines going everywhere to make a word

Very difficult to write because they have lots of fiddly parts

A Chinese character uses strokes and drawn from top to bottom and left to right

Lots of lines that started off looking like pictures but over the years has changed

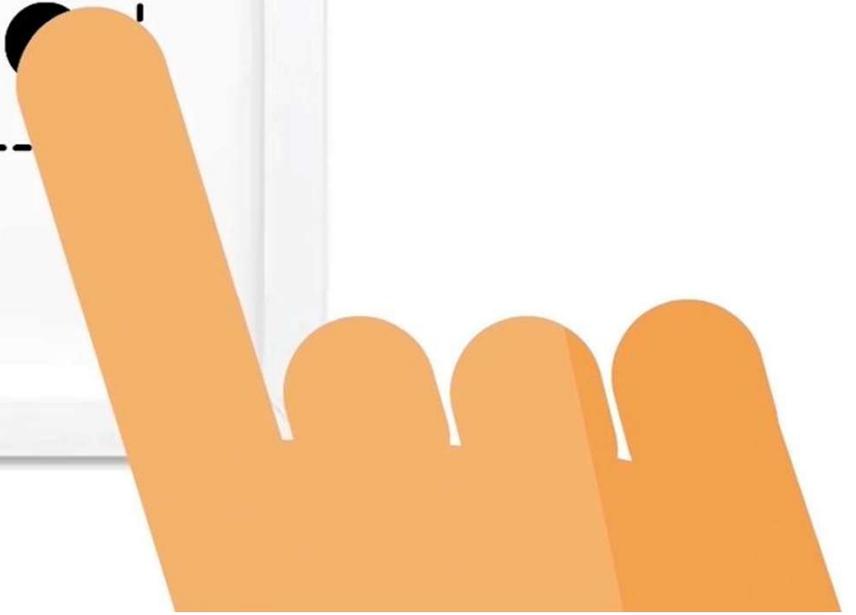
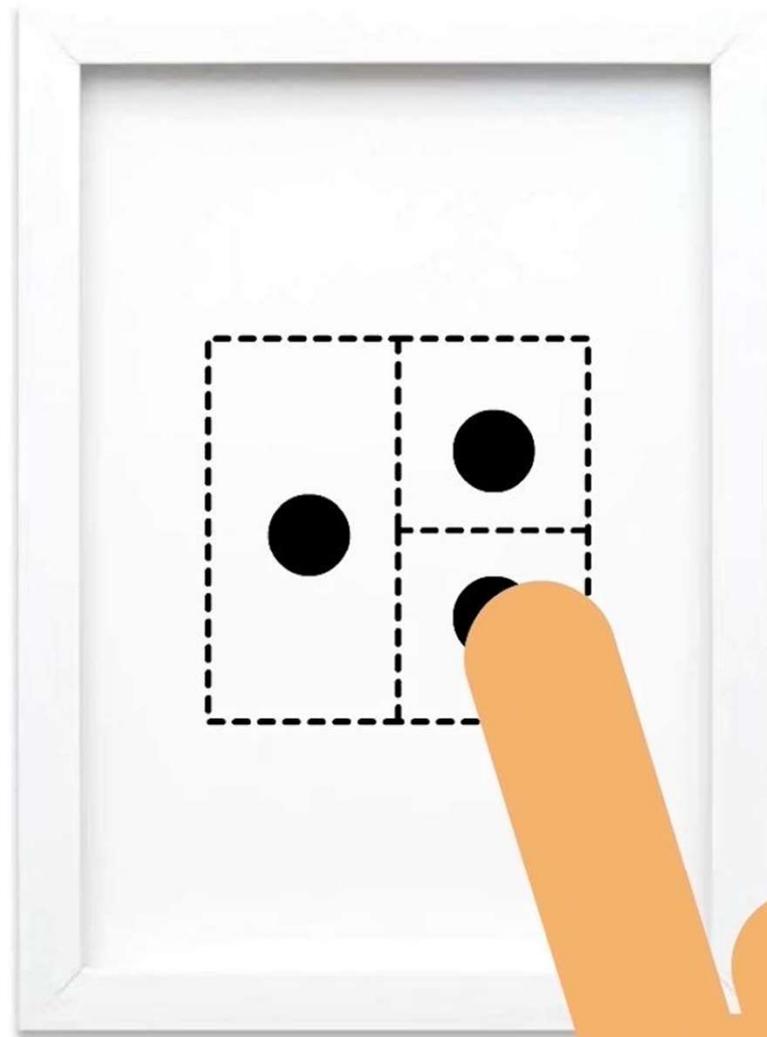
Student studied **6 years** in *intensive immersion* Chinese program
Maths, Science + Geography all taught in Chinese

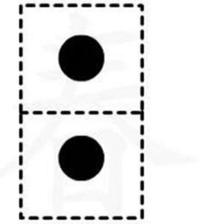
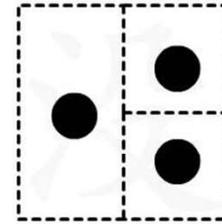
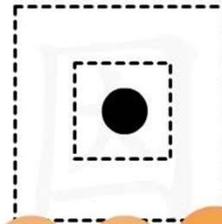
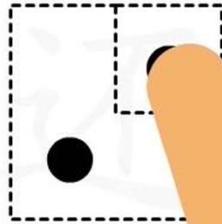
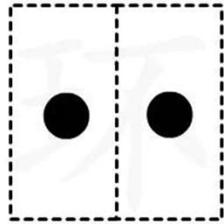
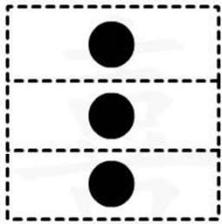
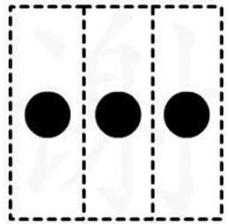
Author:

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Student:

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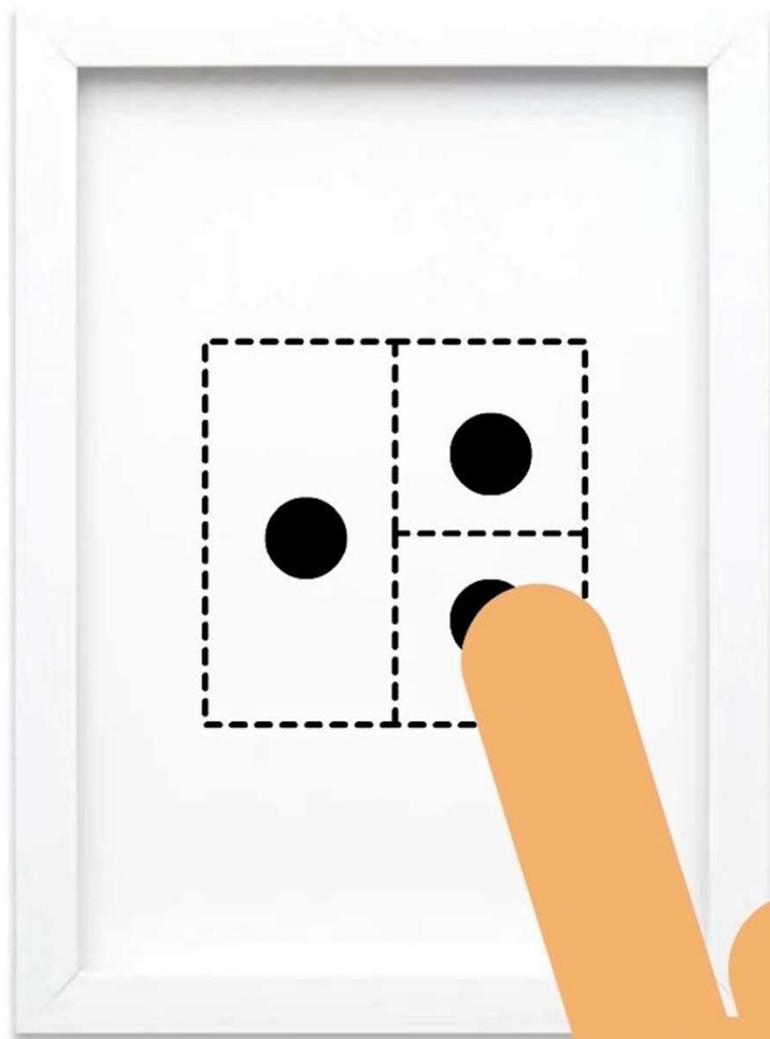




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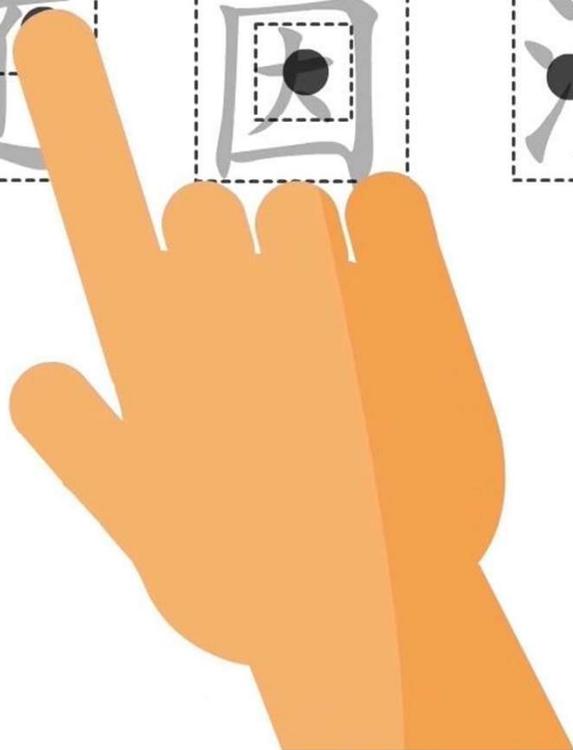
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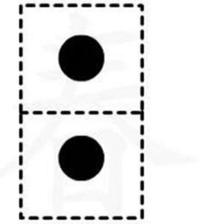
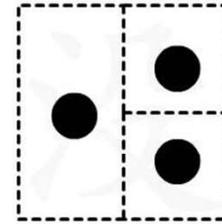
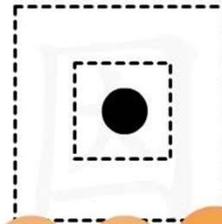
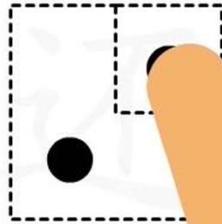
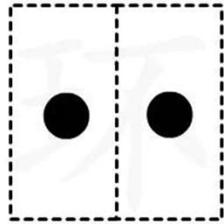
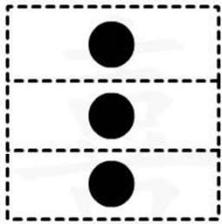
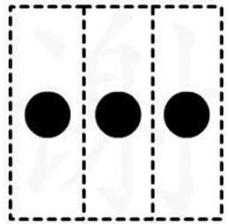
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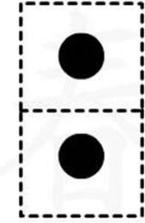
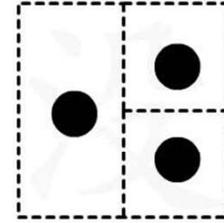
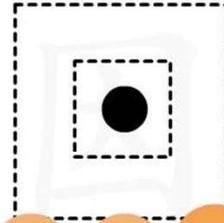
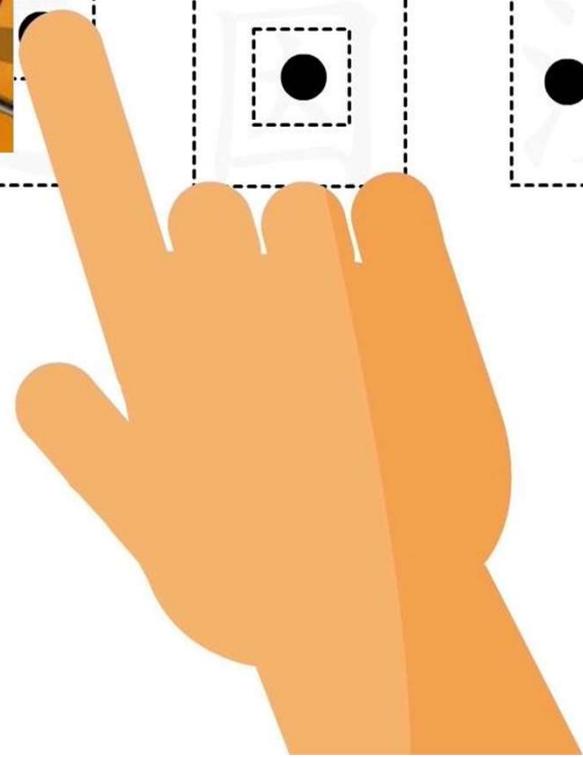
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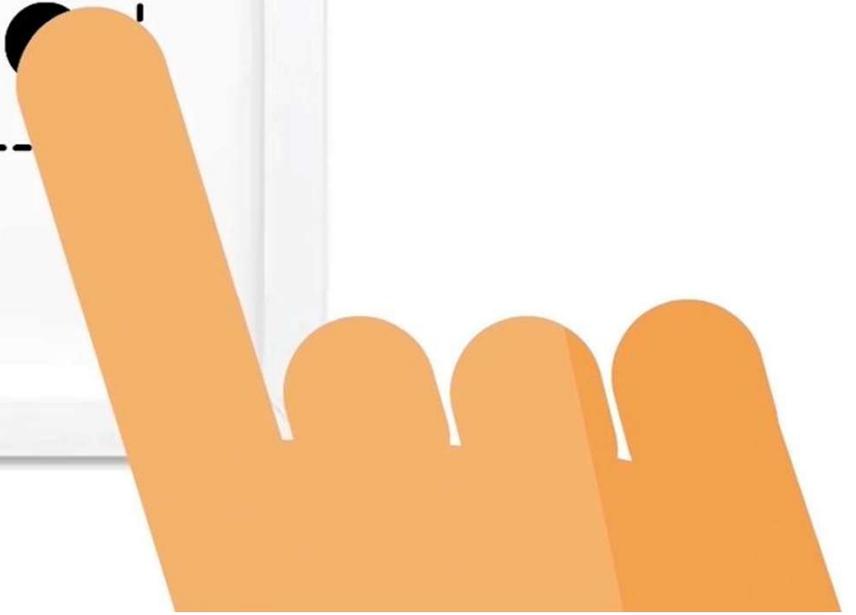
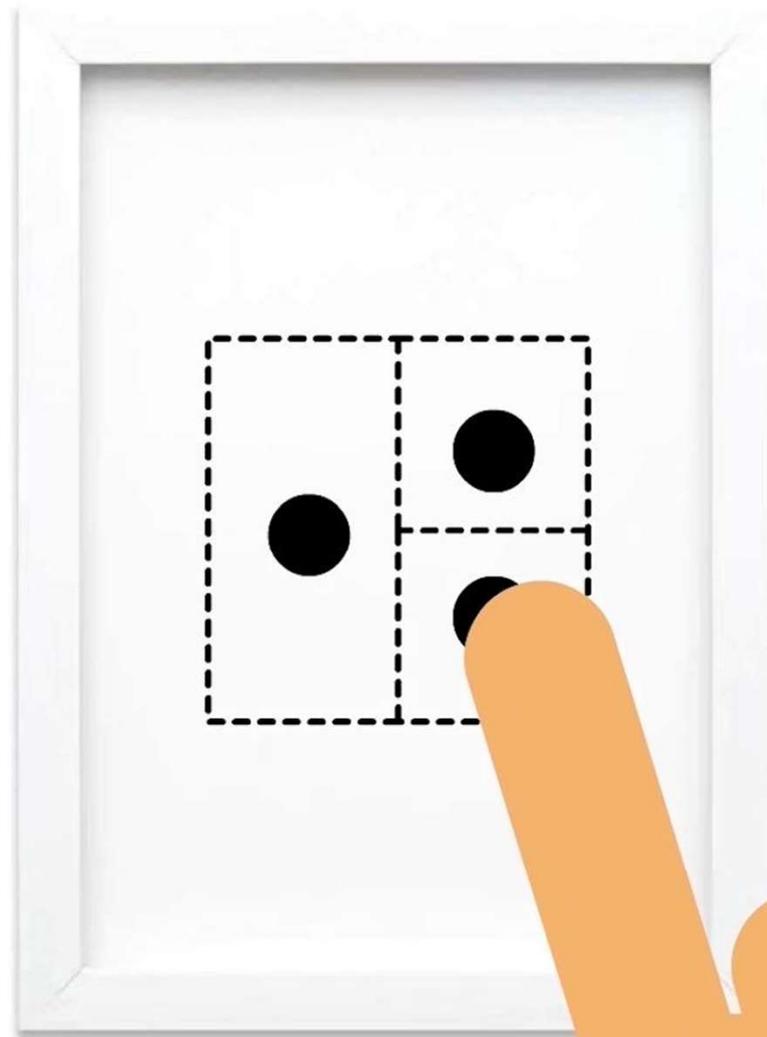
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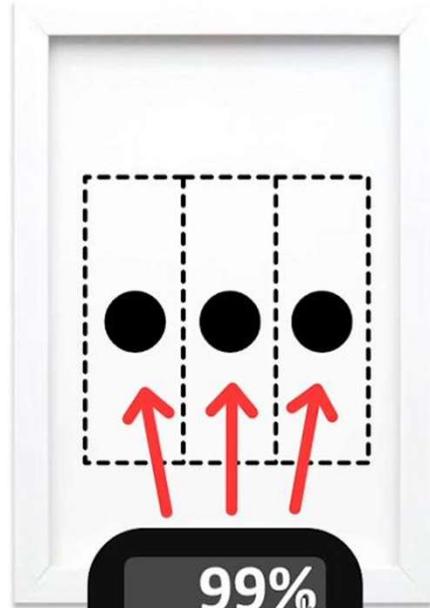


Spot 5 differences in 20 seconds

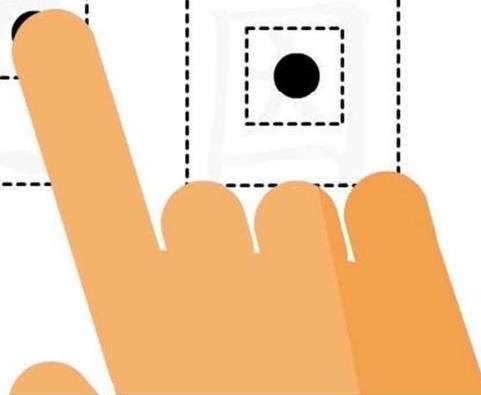
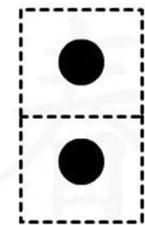
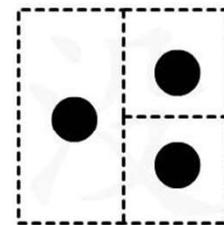
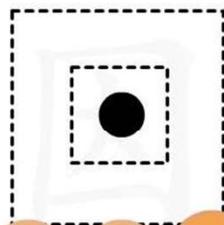
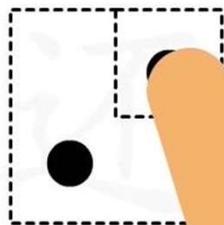
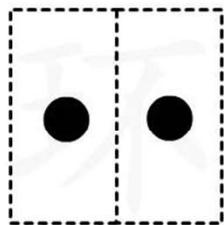
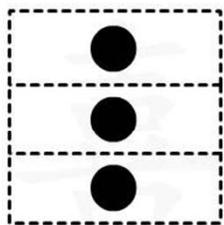
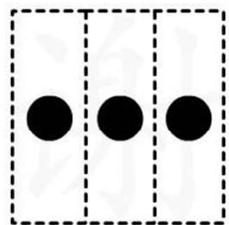


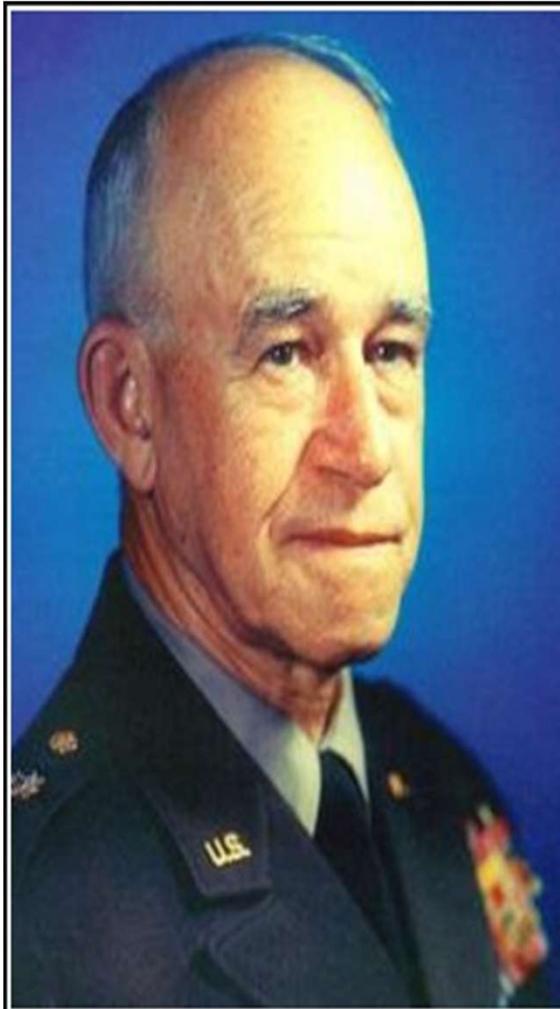


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Amateurs talk strategy.
Professionals talk logistics.

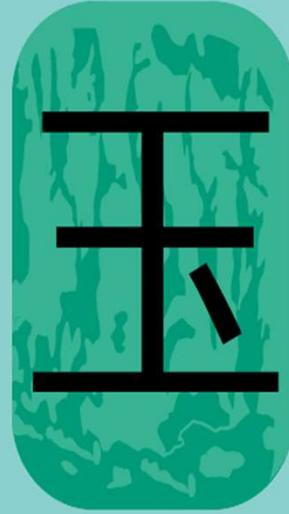
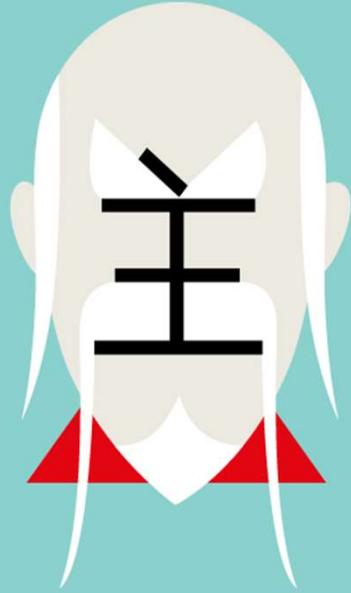
— Omar N. Bradley —

AZ QUOTES

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Multiplayer

Connected Players

1 Million

10 Million

50 Million

[https://www.youtube.com/watch?
v=Z8hzhwbqgDE](https://www.youtube.com/watch?v=Z8hzhwbqgDE)

Q & A

Discussion/Recommendations:

What next?

Character learning strategies (learner perspective):

- using existing inventory (revise and add) to do some research
- have open-ended questions and ask students what other strategies they use
- any new emerging categories (some categories may overlapping)
- use Richard's approach and find out how your students think about Richard's approach
- embed Virtual Exchange into your programme and use it as a motivational strategy

What next?

Character teaching strategies (instructional strategies)

- using existing inventory (inventory used in IOE research 2019)

Procedure related (Preston, E. 2018) (N:12):

- Most teachers introduce characters and pinyin at the same time, but some teachers choose textbooks that do not print pinyin over characters
- When teaching characters, majority teach stroke -> radical -> whole; but four think stroke order unnecessary; 80% think teaching radicals are vital
- Re how to teach radicals, some do it systematically (raise their orthographic awareness), whilst others do it when they appear in the course.

Action research?

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Thank you

