

Animated Manga for Teaching and Learning Kanji

Resource, Results and Reflections

Nina Langton and Nikki Krogfoss,
University of British Columbia Okanagan Campus
May 21, 2011

UBCO Beginning Japanese

- Textbook: *Genki I*
- JPST 100 – 58 kanji
- JPST 101 – 87 kanji
- 15 new kanji every 2 weeks
- Recognition, form, meaning of kanji

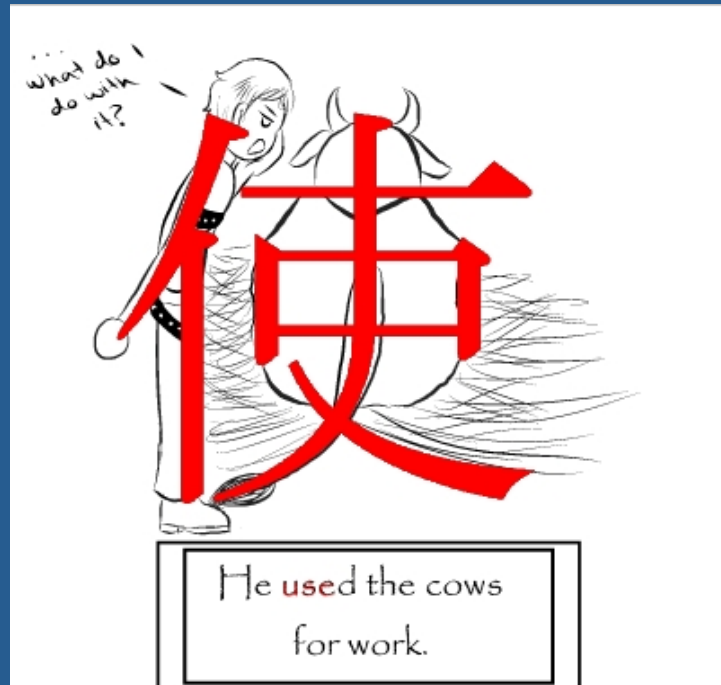


Inspiration

- Nikki's JPST 201 manga project
- Rowley's "Pictographix"
- Heisig's "imaginative memory"
- Smolensky "Kanjichain" plot mnemonics
- Berube et al. "Kanji in MangaLand"

Pilot project

- Kanji from each chapter of *Genki*
- Animated manga with narration viewed online
- Print version



Multimedia Instruction & Learning

- designing presentations in ways that help learners construct mental images (Mayer, 2005)
- “active cognitive processing” during learning – selecting and organizing relevant verbal and pictorial information into mental representations, and integrating these with prior knowledge

Basic Principles

- People learn better from words and pictures than from words alone
- People learn better when words and pictures are physically and temporally integrated
- People learn better from graphics and narration than from graphics and text
- People learn better from conversational voice than from formal style

Dual Channel Processing

- Visual and auditory channels – independent but interconnected (Paivio)
- Each channel has limited capacity for processing information
- Additive effect of having information coming in through 2 different channels

Cognitive Load

- Learning = changes in long-term memory (Sweller, 2005)
- the store of information in LTM constitutes expertise
- Working memory can hold about 7 items of information and process 2 – 4 of these
- Duration of working memory is about 20 seconds

Creating the Story

- Kanji in chapter – what jumps out?
- Look for common theme for story
- Start building story around easier kanji, then incorporate more difficult ones
- For existing stories (Tanabata), work kanji into storyline
- Incorporate Japanese customs and culture
- Incorporate Japanese words or phrases
- Rough sketch / storyboard

Technical

- Good copy on Wacom Intuos4 Tablet using Manga Studio Debut 4.0



Technical

- Add text and shading
- Record and save screen drawing on BSR
Screen Recorder 5
- Add sound with Audacity
- Merge, edit and add sound effects using
Windows Movie Maker
- Upload to YouTube

Input Enhancement

- multimedia can be used to enhance input to increase the likelihood of “noticing” (Schmidt) or focusing on certain aspects of the target language. (Plass and Jones, 2005)
- “... with the colour changing of the kanji, kind of like an alarm, alert, alert, this is what you’re supposed to be paying attention to, it kept me from staring at just how cute the picture was. It got me right on the kanji.” (M)

Lack of physical and temporal integration

- “So if you knew the kanji already, then you knew where in the sentence it was when it was flashing... but then there were others where I didn’t know it, so I was like, what part of the sentence is this?” (Bee)
- “Assuming that you looked at them prior and it’s just a refresh of your memory of what it actually is... but without having looked at them, there’s no way you could tell which one was the kanji they were talking about.” (Daniel)

Animation – Help or Hinder?

- “Animations are often too complex or too fast to be accurately perceived” especially for learners with little prior knowledge. Learners should have control over stopping, reviewing, etc. (Tversky, et al, 2002)
- “...the kanji is drawn really quickly and it just kind of flashes and it’s gone, so you’re like “what was that?” (Astrid)

Processing Demands

- Animation may impose on learners excessive information processing demands (overwhelming) and reduce the extent to which learners engage in valuable processing activities (underwhelming). (Lowe, 2003)
- “The fact that it’s being drawn means you’re forced to look at it for a certain amount of time... and at the same time, sometimes the drawing is too complicated, so all you’re doing is watching the drawing, so you’re not actually looking at the kanji.” (Bee)

Motivation and Engagement

- “Affect and motivational factors mediate learning by increasing or decreasing the amount of cognitive resources that students invest on the learning task at hand.” ” (Park et al, 2011)
- “The higher investment of cognitive resources fostered by the interestingness of the additional information combined with the lower cognitive demands imposed by a mixed modality learning environment led to the optimal use of students’ limited working memory resources. (ibid.)

Comments on Seductive Details

- “I really liked how it actually showed them drawing them in real time, that was cool.” (Daniel)
- “It kind of kept me on the picture.” (M)
- “Well the animation is fine, going fast, I like how it gets drawn fast like that, because then it’s not all, no pun intended, it’s not ‘drawn out’.” (Astrid)

Mnemonics and Long Term Retention

- “...whereas imagery-based mnemonic devices produce substantial benefits for learning and immediate recall, there exists no direct evidence indicating that they confer long-term advantages when forgetting is evaluated.” (Wang and Thomas, 1992)
- “...instruction in the use of mnemonic strategies should emphasize the ability of learners to discover and apply their own mnemonic cues.” (ibid.)

Self-generated Mnemonics

- “recently I’ve realized that maybe it would be easier to learn them if I made sentences that I could put them in and stories and stuff.” (Bee)
- I have an artistic mind, but it’s hard for everyone to come up with their own pictures that will go well and actually have a story that will make sense. So maybe it would be easier, but at the same time it probably wouldn’t in the long run. You’d spend so much time trying to figure out a picture that made sense with a story that you’d actually remember that you wouldn’t get your homework done.” (Astrid)

- “It makes me think of how I could have incorporated it better, like what could I have drawn or made in that room that would have made it fit?” (Daniel)

Links to animated manga

Genki chpts 3,4,5

<http://kanji-animations.webs.com/apps/videos/videos/show/10976896-ch-3-the-hundred-yen-store>

Chpt 7 <http://www.youtube.com/watch?v=NIBVf7AybWM&feature=related>

Chpt 10 <http://www.youtube.com/watch?v=zR5NRDBmT5Y&feature=related>

Chpt 12 <http://www.youtube.com/watch?v=EGtAbaHLZkM&feature=related>

Comments, suggestions, questions?

Thank you

ご清聴ありがとうございました。