

Evaluation Brief EB22

Selinda Research Associates, Inc.

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Spring 2009 Off-Site Testing of Pronunciation of Unfamiliar Words

Summary of Testing: An inventory was taken to identify all potential unfamiliar and/or difficult-to-pronounce words that appear on the MYT and DTT waysides. A total of 37 words was identified (see below). Each word was printed on a “flashcard” and tested individually with a small sample (six) of adult respondents, all of whom had a college degree. For each word it was noted (a) if the respondent read it quickly, smoothly, and pronounced it accurately; (b) if they hesitated or stumbled; and/or (c) if they mispronounced the word or gave up. For each mispronounced word, respondents were shown a possible phonetic spelling of the word. These phonetic spellings were revised as necessary until the respondent could accurately pronounce the word. The words which were not pronounced smoothly by respondents (and/or created difficulty for them) are marked on the inventory below.

Limitations: This was done with a very small number of respondents due to time constraints, and needs further testing. All respondents were college graduates who spoke English as a first language. Many visitors to the rim don't fit this profile, so it will be important to test the words with (a) non-college graduates (including children), and (b) visitors who speak a language other than English as their first language. Finally, not all phonetic spellings were tested, so many of the suggestions below will need to be tested before being used.

Recommendations:

1. When preparing the prototype waysides for the May on-site visit, include the accompanying phonetic spelling after *every* occurrence of *each* of the difficult words identified on the inventory below. Note that many words show up on multiple signs.
2. During on-site rapid-prototyping in May:
 - a. Note any time a visitor stumbles over any word (whether or not it is included on this list).
 - b. If the troublesome word appears to be inhibiting meaningful conversation in any way, and the word doesn't have an accompanying phonetic spelling, add a pronunciation guide immediately following the word (or above/below it as necessary) using the post-it tape.
 - c. If the word already has an accompanying phonetic spelling but visitors are still having difficulty, ask the visitor group to work with you to find an alternate phonetic spelling that works better.
 - d. Use the suggested pronunciations below when available, but revise these as necessary.
 - e. Continue testing phonetic spellings until visitors are able to smoothly, quickly, and accurately read the text.
3. Note that it is also likely that once on-site we will find some of the words we thought needed phonetic spellings won't. These should be noted as well, and tested without their accompanying pronunciation guide.

words likely to be difficult	to include on signs	suggested phonetic spellings to be tested on-site
Ancestral		an-SESS-trul
Cambrian		CAM-bree-un
Cenozoic		sen-o-ZO-ic
Chasm		KAZ-mm
Coconino	X	co-co-NEE-no
Cyclic		SIK-lik
Earthquakes		ERTH-kwake
Ediacaran	X	EEE-dee-a-krin
Evolution		ev-o-LOO-shun
Glacial		GLA-shul
Gneiss	X	NICE
Granaries		GRAN-er-eez
Gypsum		GIP-sum
Havas	X	HAAV-a-su
Interglacial		in-ter-GLA-shul
Kaibab	X	KI-bab
Maricopa	X	mar-i-COPE-a
Mesozoic		mess-o-ZO-ic
Metamorphism		met-a-MORF-iz-mm
Muav	X	MOO-av
Multicellular		mul-tie-SEL-u-lar
Organisms		oar-gan-IZ-ims
Paleo-Indians		pae-lee-o-IN-dee-uns
Paleozoic		pae-lee-o-ZO-ic
Phanerozoic	X	fan-er-o-ZO-ic
Plateau		plaa-TOE
Proterozoic	X	pro-ter-o-ZO-ic
Puebloans		PWEB-lo-ins
Sedimentary		sed-i-MEN-ta-ree
Sediments		SED-i-ments
Tapeats	X	ta-PEETS
Toroweap	X	TOR-o-weep
Travertine		TRAV-er-teen
Trilobites		TRY-lo-bites
Unconformity		un-cun-FORM-i-tee
Volcanism		VAUL-kun-iz-mm
Yavapai	X	ya-va-PIE