NEW BRAIN RESEARCH ABOUT FLES
(FOREIGN LANGUAGE IN ELEMENTARY SCHOOL)

"We were interested in determining which systems of the brain grow fastest at different ages. We were using MRI scans to see dramatic, localized growth, in children scanned repeatedly between ages 3-15. There was a region of extraordinary growth, between ages 7-11, in the isthmus of the language area at the cortex. There was also prominent growth in the language cortex itself, suggesting a key maturational phase in brain regions that support the learning of new languages. Equally surprising was a dramatic shutting-off of this growth just after puberty, at ages 13-15. It was like seeing a wildfire of growth that just stops. As you know, this makes a lot of sense in the context of second-language acquisition, as brain researchers and educators have known for years that a 'critical period', in which children are most efficient at learning new languages, ends around puberty. Of course that doesn't mean to say that you can't pick up these skills later, it will just be harder to do because the brain is less 'plastic' (i.e. less able to adapt, reorganize, and make new connections) than during a period of dramatic tissue growth. The new imaging research seems to reveal a physical process in the brain that is likely to correspond to the ending, around the age of puberty, of period of maximum efficiency in learning new languages."

Paul Thompson's communication to Gladys Lypton 10/2/00

Article reference:

Thompson, P. M., Jay Giedd, et al, "*Growth Patterns in the Developing Brain Detected by Using Continuum Mechanical Tensor Maps*", Nature, March 9, 2000. 190-193