

Los Angeles Times

HEALTH Powered by: HEALTHKEY

LOCAL U.S. WORLD BUSINESS SPORTS ENTERTAINMENT HEALTH LIVING TRAVEL OPINION SHOP Weekly Ad

BOOSTER SHOTS MEDICINE FITNESS & NUTRITION MENTAL HEALTH HEALTHCARE CANCER HEART AWARENESS

HEALTH TOPICS: CELL PHONE RADIATION | VACCINE LAWSUITS | GASTRIC BYPASS | ANCIENT GRAINS

Bilingualism good for the brain, researchers say

The skill helps improve multitasking and prioritizing, and helps ward off early symptoms of Alzheimer's disease, experts say.

advertisement



Elena Marqueto-Kelly teaches an advanced Spanish class for first- to third-graders. A group of bilingual parents have organized Sunday school at Blair East Elementary School in Pasadena to expose their children to the language. (Axel Koester, For the Times / February 27, 2011)

More Los Angeles Times Health



Keeping sleep apnea sufferers' airways open



Bilingualism good for the brain, researchers say



Other routes to HIV drug assistance



What to consider about weight-loss surgery



Over-the-counter devices probably won't help sleep apnea

The Latest | NEWS AS IT HAPPENS



Oil resurges on Middle East woes; stocks slide, gold hits new high - *L.A. Times - Business* 03/01/2011, 12:11 p.m.

Bell police union says baseball game memo is 'much ado about nothing' - *L.A. Now* 03/01/2011, 12:07 p.m.

Supreme Court rejects 'personal privacy' for corporations in Freedom of Information Act case - *L.A. Times - Business* 03/01/2011, 12:04 p.m.


Inmate found dead at Los Angeles County's Central Jail - *L.A. Now* 03/01/2011, 11:56 a.m.

The Believer's book award finalists include Grace Krilanovich - *Jacket Copy* 03/01/2011, 11:49 a.m.

2214 262 tweets 2

Share retweet

RELATED

 Should children learn a second language?

By Amina Khan, Los Angeles Times
February 26, 2011 | 8:02 p.m.

E-mail Print Share Text Size

2,214 people like this. Be the first of your friends.

Does being bilingual give young children a mental edge, or does it delay their learning?

It depends on who you ask.

Bilingual education is regarded by some in education policy circles as little more than a half-baked technique of teaching students whose native language is not English. Though it takes many forms, bilingual education programs usually involve teaching students in both their native languages and in English. How much each language is used, and in which academic contexts, varies by program.

But neuroscience researchers are increasingly coming to a consensus that bilingualism has many positive consequences

ADS BY GOOGLE

Masters in TESOL Online

Earn your Masters in TESOL Online at USC. Learn More.

m at .u.sc.edu/TESOL

1 Trick to Improve Memory

Top Researchers Discover Trick to Improve Memory & Focus. Read More.

www.TotalFitness.com/Memory-Loss

Having Memory Problems?

Free Alzheimer's Consultation Confidential remedy options

www.prriresearch.com

for the brain. Several such researchers traveled to this month's annual meeting of the American Assn. for the Advancement of Science in Washington, D.C., to present their findings. Among them:

- Bilingual children are more effective at multi-tasking.
- Adults who speak more than one language do a better job prioritizing information in potentially confusing situations.
- Being bilingual helps ward off early symptoms of Alzheimer's disease in the elderly.

These benefits come from having a brain that's constantly juggling two — or even more — languages, said Ellen Bialystok, a psychology professor at York University in Toronto, who spoke at the AAAS annual meeting. For instance, a person who speaks both Hindi and Tamil can't turn Tamil off even if he's speaking to only Hindi users, because the brain is constantly deciding which language is most appropriate for a given situation.

This constant back-and-forth between two linguistic systems means frequent exercise for the brain's so-called executive control functions, located mainly in the prefrontal cortex. This is the part of the brain tasked with focusing one's attention, ignoring distractions, holding multiple pieces of information in mind when trying to solve a problem, and then flipping back and forth between them.

"If you walk into a room, there's a million things that could attract your attention," Bialystok said. "How is it we manage to focus at all? How does our mind pay attention to what we need to pay attention to without getting distracted?"

To test one's ability to identify pertinent nuggets while being bombarded with extraneous information, scientists use something called the Stroop test. Subjects are presented with a word for a particular color and asked to identify the color of ink it's printed in. So if the word is "blue" and it's printed in blue, no problem. If, on the other hand, the word "blue" is printed in red, they have to sort out which piece of information — the color of the ink, or the color being spelled out — is the one they need.

"This is extremely hard to do, because it's terribly difficult to block out the information from the word," Bialystok said.

In monolingual speakers, this kind of mental curveball will add 240 milliseconds to their reaction time — a significant delay, in brain reaction terms. Bilingual people, on the other hand, take just 160 extra milliseconds to sort this out. Bialystok theorizes that it's because they're used to prioritizing information in potentially confusing situations all day.

Bilingual speakers rarely use the wrong language with a monolingual speaker. But if the listener also knows both languages, speakers can switch between them to most accurately express their thoughts.

When bilinguals prepare to speak, their brains seem to inhibit one language while using the other, said Pennsylvania State University psychology professor Judith Kroll, who also spoke at the conference. This effect, she added, is much more noticeable when the speaker chooses their weaker language instead of their dominant one.

This ability to quickly block the momentarily irrelevant language is a mental workout that enhances the brain's executive control functions.

Learning to juggle two languages in the brain is a skill that probably deserves credit for bilinguals' cognitive advantages — although, researchers emphasize, this doesn't mean they learn any better than people who speak only one language. But it does keep the brain more nimble, allowing bilingual people to multitask better, pick out key information faster and more effectively ignore surrounding distractions.

Those advantages aren't just useful for schoolchildren — they last over the course of a lifetime. A study published last year in the journal *Neurology* surveyed 211 patients diagnosed with Alzheimer's and found that those who spoke only one language saw the onset of their first symptoms four to five

Save. Share. Connect.

RSS »



Twitter »



Facebook »



Mobile »



Alerts »

MOST VIEWED | MOST COMMENTED

Watson, the 'Jeopardy!' champ, loses to Rep. Rush Holt

Christian Dior firing designer John Galliano

Yemen's embattled president blames Israel and the United States for 'destabilizing the Arab world'

Christina Aguilera arrested on public-drunkenness charge in West Hollywood

Supreme Court rejects 'personal privacy' for corporations in Freedom of Information Act case

3 NATO troops killed in Afghanistan

New 'Dancing With the Stars' cast announced

Suze Rotolo dies at 67; Bob Dylan's girlfriend was on iconic album cover

'King's Speech' helps restore Weinsteins to film royalty

11 Indian Muslims sentenced to die for train fire that killed 60 Hindus

Get the Health Report Newsletter

The latest weekly health updates and research.

See a sample | Sign up

Get Alerts on Your Mobile Phone

Mobile Phone (required)

Sign me up for the following lists:

- BREAKING - News as it happens
- ENVELOPE - The awards insider
- ENTERTAINMENT - Hollywood news and buzz
- SPORTS - Alerts and scores

Southern California Moments »

years earlier than their bilingual peers. While knowing two languages doesn't fight the disease, it does strengthen those parts of the brain that are susceptible to dementia's early attacks, allowing them to withstand the assault much longer.

Yet public schools are moving away from bilingual education, and have been for some time. In part, this shift has been fueled by political beliefs, as the children who speak multiple languages typically come from immigrant families.

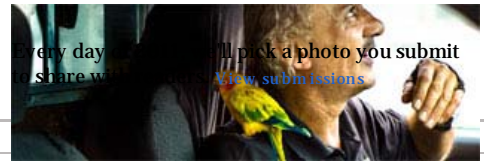
"Bilingualism has always been a political hot-button issue just one step removed from immigration," said Kenji Hakuta, a psycholinguist at Stanford University's School of Education.

With schools focused on getting children to speak English as quickly as possible, parents who want their children to reap the benefits of being bilingual should be sure to continue speaking their native language in the one setting they can control: the home.

"You're basically in a society in which English is the language of power," Hakuta said. If parents switch back and forth between English and another language, he added, they're "likely to raise a monolingual English speaker."

amina.khan@latimes.com

Copyright © 2011, Los Angeles Times



Inside The Times



Evening Land Vineyards' eccentric yet grounded vintner



Money options on your travels abroad



How to get Gwyneth Paltrow's Oscars glow



Offbeat Traveler: Devil's Pool at Victoria Falls

ADS BY GOOGLE

Masters in TESOL Online

Earn your Masters in TESOL Online at USC. Learn More.

mat.usc.edu/TESOL

1 Trick to Improve Memory

Top Researchers Discover Trick to Improve Memory & Focus. Read More.

www.TotalFitness.com/Memory-Loss

Having Memory Problems?

Free Alzheimer's Consultation Confidential remedy options

www.priresearch.com

E-mail Print

Digg Twitter Facebook Read This Later Share

Comments (36)

[Add / View comments](#) | [Discussion FAQ](#)**JoeSexPack** at 9:20 AM February 28, 2011

No link to a study & no explanation of methods, only taking researchers words at face value to support a political point with which the the author agrees.

Delays Alzheimers symptoms? Need to present the sample groups, control & sort for demographic diff's, obviously.

Helps multi-tasking? Due to recognition of word/color symetry? Ha ha ha! Take that abstract construct out of an ivory tower & actually have the subject do multi-tasking instead. But that's too easy & makes too much sense, right?

Of course, if a study drew an opposite conclusion, that bilingualism slows learning & inhibits excellence in one language by dividing mental resources, the LA Times would likely not publish it. Or would doubt it based on the complete lack of evidence presented here.

Don't get me wrong, I think speaking more than one language is an advantage, but that's my opinion. To say there are medical, behavior or IQ benefits needs supporting data that was pointedly excluded from this propaganda article.

Ann Common at 8:17 AM February 28, 2011

Then why are their test scores so poor?

viejo70 at 12:41 PM February 27, 2011

xusoixem: only an idiot would write such an ignorant comment. I don't normally use name calling; however, I can't think of a polite way of saying that you are so far removed from reality or so stoned out of your mind that you can't see what is right in front of you. I am going to help you understand that in the State of California which has a very large population of Latinos, not just Mexicans, Spanish is a very important language for all of the citizens to learn. Just because they speak Spanish doesn't make them Mexican no more than speaking English makes you English. We also hear that this is America so speak American, they do. America goes from the Canadian border all the way to the tip of South America. I agree that we all need to speak the same language so that we can communicate ideas, but that in no way means they should give up their native language or their culture. We have the riches culture of diversity which allows us to visit all Countries of the World without leaving our own United States of America. So instead of thinking that you are above and smarter than the rest, take a break and learn that those kids don't have your advantage. I grew up in trhe fields of Southern California and had a hard time getting a good job and an education; however, I managed to work my way through College with a wife and three children to get my BS degree.

Comments are filtered for language and registration is required. The Times makes no guarantee of comments' factual accuracy. Readers may report inappropriate comments by clicking the Report Abuse link. Here are the full legal terms you agree to by using this comment form.

Booster Shots

Obese? Sometimes you just have to hear it from someone in a white coat to believe it

Sugary soft drinks: How much is too much?

Sugary drinks and high blood pressure -- a link?

If your mother has Alzheimer's disease, your brain is at greater risk, researchers say

End-of-life decisions can take a toll on surrogate decision-makers

Latest Health Stories

Rising status of women linked to more smoking
| [Updated 55 minutes ago](#)

Obama offers governors some flexibility on healthcare law

Playboy Mansion bacteria points to Legionnaires' disease outbreak

Deep brain stimulation therapy gives man relief from uncontrollable tremors

Paralyzed former prep athlete sees premium health coverage run out

In Case You Missed It...



Milan Fashion Week
Fall/Winter 2011 coverage



Small businesses face
several tax changes



Academy Awards 2011: Red
carpet arrivals



Other routes to HIV drug
assistance



Offbeat Traveler: Devil's
Pool at Victoria Falls

[More spotlights...](#)

[Horoscopes](#)

[LATMG Media Kit](#)

[Events](#)

[About Us](#)

[Site Map](#)

[Contact Us](#) | [Help](#)

Los Angeles Times

[Coastline Pilot](#) | [Daily Pilot](#) | [Huntington Beach Independent](#) | [Valley Sun](#) | [Burbank Leader](#) | [News Press](#) | [KTLA](#) | [Hoy](#) | [Brand X](#) | [LA, Los Angeles Times Magazine](#) | [ZAP2it](#)

[Baltimore Sun](#) | [Chicago Tribune](#) | [Daily Press](#) | [Hartford Courant](#) | [Los Angeles Times](#) | [Orlando Sentinel](#) | [Sun Sentinel](#) | [The Morning Call](#)

[Terms of Service](#) | [Privacy Policy](#) | [About Our Ads](#) | [Los Angeles Times, 202 West 1st Street, Los Angeles, California, 90012](#) | [Copyright 2011](#) [www.latimes.com/about](#)

A Tribune Newspaper website