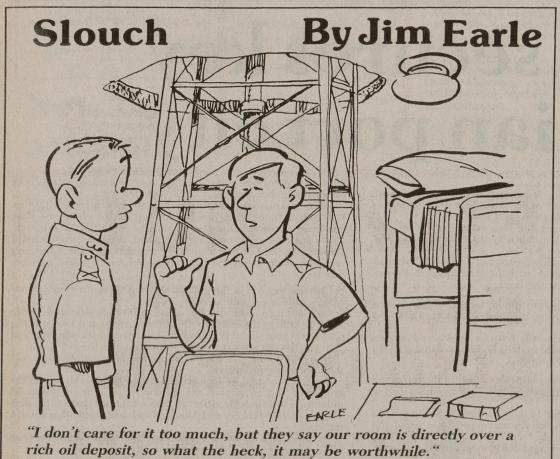
VIEWPOINT

THE BATTALION TEXAS A&M UNIVERSITY

OCTOBER 6, 1980



Education should allow for brain growth rates

By PATRICIA McCORMACK

A new explanation for why some children lag in school, then suddenly spurt in learning ability has been put forth — the theory that brain tissue does not always grow at a steady rate.

For school administrators, teachers, and parents, as well as kids, the theory of irregular brain growth raises all sorts of questions. Some

Should a child's school curriculum be geared to brain growth and pauses - strong during the growth periods, easy during the

Since kindergarten may be too late to do right by a toddler's brain under circumstances envisioned by this theory, when should a parent attempt to enrich a pre-school child's brain? And with what? Nonsense stuff in periods of pause and Plato and calculus in time of growth?

The theory is discussed in a report in "The School Administrator," put out by the American Association of School Administrators,

Noting that the theory of irregular growth onflicts with the old notion that the brain grows at a constate rate, Conrad Toepfer and Richard Mills say some changes in curriculum may be called for. Toepfer is from the University of Georgia, and Mills is president of the

"We have held this myth, as I call it, that the brain grows on a constant continuum and the object of teachers has been to challenge youngsters on the cutting edge of this continuing growth," Toepfer said. "However, the brain does not grow on a continuum but rather in a series of stages. If a youngster is in a plateau or period of no growth and we attempt to push him beyond his neurological capacity to think, he goes into a turn-off situation.

Toepfer, associate professor of middle school education, said research about these things "gives us some very frightening information."

'That is," he said, "a child's emotional turnoff is such that even when he comes to the next period of great brain growth, he is not going to succeed because he has the feeling that he is a failure and no matter how hard he tries on the level the school expects of him, he can't cut it."

Here, from the report, are questions and answers on the theory called "brain growth

periodization" Q. What is brain growth periodization?

"It is a term that ... now identifies a scientific fact: that the brain does not grow on a constant continuum as we have assumed in education. Research from neurobiology, biophysics, biology, cadaver and autopsy have confirmed that the brain grows at certain times with intervening plateau periods. This is highly fixed for between 85 and 90 percent of all youngsters of average or above average ability.

Q. When do these plateaus or spurts occur? "Eighty-five to 90 percent of youngsters go through brain growth spurts between the ages of 3 and 10 months, 2 and 4 years, 6 and 8 years, 10 and 12 years, and the last one we ever have is 14 to 16-plus years of age, which coincides with the transformation of pubescence." Q. What happens during brain growth?

"The maturation of the synapses and the extension of the synapses is taking place. During the periods of great growth, we have been able to identify the telegraphy that connects synapses, the axons which are the sending impulses, and the dendrites which are the receiving impulses, grow and branch and length tremendously. It's the physical development of new neural networks during the brain growth periods which is the phenomena that has to relate to how youngsters can learn. And this happens for between 85 and 90 percent of kids of average or above average ability during these

What does this mean for teachers?

A. "In every place we have done research it is quite clear if you do teach youngsters in terms of when they can be challenged and when they can't, the achievement and maturation of thinking skills is astounding.

Q. Are there sex differences in terms of brain growth stages?

.. between 11 and 12 years of age, which is the last half of the 10-to-12 brain growth stage, girls outgain boys three to one in brain growth. This reciprocates in favor of boys between 14 and 15, which is the first half of that last brain growth stage. The National Institute of Education ... is trying to investigate the problems of women and mathematics. One of their concerns is that despite the fact that women are innately more intelligent than men, boys outperform girls and men outperform women about three to one in serious studies of the analytical and theoretical areas beginning in high school, continuing into college and entering into the professions.

Q. Do findings about brain growth spurt and no growth periods impact on Head Start prog-

A. "Most Head Start programs occur between 4-6 years of age, a period of plateau. Where Head Start programs are given to children between 6 and 8, period of brain growth, there is continuing educational gain.

Q. What about implications for pre-school children?

A. "It might be that the public school or some children between the ages of one and four, two and four. But we know the 2-4 period is a period of great brain growth and if we do the best of what can be done — such as in the really good Montessori Schools — this might be a clue."

By Jim Earle Hot dogs meant to be round

By DICK WEST

WASHINGTON — My neighbor Flintstopp

If Mother Nature had intended hot dogs to be flat, she would have given us square buns,' he told me over his backyard grill.

A traditionalist from the tip of his heat-resistant mittens to the bow of his "Chief Cook and Bottle Washer" apron, Flintstopp was sorely offended by a Johns Hopkins University study of hot dog configuration.

The main conclusion drawn by researcher Susan Baker was that flat franks would be safer for children, a number of whom choke on hot

Moreover, her report indicated that flat hot dogs would be less likely to roll off the grill into the charcoal briquettes.

Radical findings of this type go down hard for orthodox hot dog reactionaries like Flintstopp.

Actually, contrary to the impression harbored by some of the more dedicated defenders of the hot dog status quo, there is nothing hallowed about the cylindrical shape of frankfur-

It is true the basic design dates back to the Middle Ages. But architectural perfection was a minor consideration, if that. Those exemplar franks were made by stuffing meat into sheep intestines. Ergo, they took that general conformation, which was the line of least resistance.

The hot dog as we know it — that is, the frank on a bun — did not come into existence until 128, or 113 or 78 years ago, depending on which authority you consult.

Some historians say the hot dog was invented in 1867 by Charles Feltman, a Coney Island pie salesman, who, being a native of Frankfurt, Germany, called his creation a frankfurter

(Had Feltman been born in Hamburg, Germany, he presumably would have called it a

Other historians claim the first hog on not constructed until 1902 and that it was that name by Tad Dorgan, a San Francisconist, because it reminded him of a inviting me Hope sta

Call

Ar

loc

FALL

AND

SPE

PER

AT TI

· DI

• GL

• NO

· YC

• IP

YE

Still other historians insist the hot do tril shots. invented in 1883 by Anton Ludwig Feuch Hope the ger, a St. Louis sausage monger.

If you get deeply involved in this cont sy, as I have done, you can even find claim the name "hot dog" stemmed from "hum implications" that they were made from

meat.

The Johns Hopkins study said it had proven that flat hot dogs were technology limmy. Steep that Loan believe that. With the advices, Daniel Control of the control o cellulose casings, hot dogs no longer new Martin jokes, Danielow the contours of sheep intestines.

But you do

But as so often happens with emoscription tissues, the upshot probably will be a compunderstand ise. I look for eventual agreement on a handed to kno hot dog, still elongated in the traditional Martin drin hot dog, still elongated in the traditional ner but with six flat sides.



It's your turn

Research shouldn't hinder teaching

Lately a question has been bothering me, What is the purpose of a university?" Asked a few years ago, I would have answered without hesitating, "To provide students with a proper education." Now, however, it is evident that research plays an important role as well. The problem here is which one is more important?

To the students the obvious answer is education. Also, it would prove difficult to have research without educated people. Some instructors seem to disagree, however, by conveying an obvious attitude of indifference in the classroom and out. Since more money is available in most research rather than in teaching, it is understandable for their desire to work in that area. Learning is not made easier though, when these instructors reveal their apparent lack of concern for the students. After all, most of us are here for an education and it is within our rights to achieve this goal. Now it seems that those who are "indispensible" as teachers, i.e. (Oct. 2) Dr. Brown, and underplay research's importance are refused tenure. In all fairness, the instructors here mainly for research, who care less about teaching, should be treated

Yet even the high officials of this university reveal a problem defining education's importform of organized education is going to begin for ance (as noted in the article concerning Hubert and Miller). A board of rich, power-hungry members evidently has received the right to withdraw the education system's power, placing it in the research area instead. What, besides deterioration in quality, effect will this

By Scott McCullar

action have on the education system? Where are the funds supporting this move coming from (will the former students appreciate this money

As a student at Texas A&M I'd like to be accurately informed on this matter. It seems our leaders need to reevaluate the university's goals in order to provide definite information. The education system should be expanded, not hindered in growth.

Tina L. Hrncir '82

We're basically OK

This letter is one we feel needs to be written

and all pessimistic Ags should pay attention. Lately there have been numerous criticisms

concerning Mike Mosley and the football team, the way people conduct themselves at concerts are not perfect, as we are not. Besides you and yell practice, and even Grandpa Reagan not appreciate our non-reg two percenter and Smilin' Jimmy.

We feel that some people, regardless of creed, race or non-reg and military status on campus would complain or critically state the

problems concerning the price of rice in It takes all types to make the world fund guess we are a couple of Ags that are perfect as others and hope we will not be mned for that. We have both been gu neglecting tradition and even the cardina yelling at concerts but we hope we destined for Satan's chamber for this. Ev someone, while straightening their hal they must play mother or good BOY a critical of our every error we so viso commit.

Our opinion is that everyone is basically and their actions are not meant to be harm anyone else. We surly hope next time we some tradition someone doesn't take it sively. If we do, don't play Joe Good A condemn us for it, nothing annoys us more hope you will look in the mirror and realize or action (as it has been stated). So worry your own faults and keep on swimmin'.

Brian Day Mike Wei

THE BATTALION

USPS 045 360

Dillard Stone Managing Editor Asst. Managing Editor **Rhonda Watters** Scott Haring Becky Swanson Richard Oliver City Editor Sports Editor Asst. Sports Editor Focus Editor Ritchie Priddy . Scot K. Meyer Lynn Blanco, Gwen Ham, Todd Woodard off Writers..... Jennifer Afflerbach, Kurt Allen, Nancy Andersen, Marcy Boyce, Mike Burrichter, Pat Davidson, Jon Heidtke, Uschi Michel-Howell, Staff Writers.

MEMBER

Debbie Nelson, Liz Newlin, Cathy Saathoff, Cartoonist Scott McCullar

..... Pat O'Malley **EDITORIAL POLICY**

The Battalion is a non-profit, self-supporting newspaper operated as a community service to Texas A&M University and Bryan-College Station. Opinions expressed in The Battalion are those of the editor or the author, and do not necessarily repre-sent the opinions of Texas A&M University administrators or faculty members, or of the Board of Regents. Questions or comments concerning any editorial should be directed to the editor.

LETTERS POLICY

Letters to the Editor should not exceed 300 words in le and are subject to being cut if they are longer. The editoreserves the right to edit letters for style and length, make every effort to maintain the author's intent. Each must also be signed, show the address and phone

Columns and guest editorials are also welcome, and a subject to the same length constraints as letters. Addr inquiries and correspondence to: Editor, The Battalion Reed McDonald, Texas A&M University, College Statio

The Battalion is published daily during Texas A&M's fall spring semesters, except for holiday and examination pe Mail subscriptions are \$16.75 per semester, \$33.25 per year and \$35 per full year. Advertising rates furnished

Our address: The Battalion; 216 Reed McDonald Build Texas A&M University, College Station, TX 77843.

United Press International is entitled exclusively to the for reproduction of all news dispatches credited to it. Rig roduction of all other matter herein reserved. econd class postage paid at College Station, TX 7784

Warped





