## New studies may be key for lefties

By CONNIE RAE

The way in which a left-handed person holds his pen when writing may be indicative of an unusual visual-neural wiring system, according to Lee C. Smith of Erindale College.

Smith, a resident of Riverspray Road in Mississauga, did his fourth year thesis on left-handed people under the supervision of psychology professor Morris Moscovitch.

People who write with their right hands are reasonably predictable people, he says. It is thought the left side of their brain controls language and the right side controls special skills such as recognition of faces, and space relationships such as distances and reading maps. These people respond quickest to stimuli in the right visual field

Lefties, however, don't follow such a predictable dominancy pattern. It is thought that those who write in a non-inverted position (with their hands below the line) are wired just like right-handed people but in an op-

They respond quickest to stimuli in the left visual

However, Smith's tests indicated that inverted lefties, like right-handed people, also responded quickest to stimuli in the right visual field.

For the laboratory study Smith used 36 undergraduate students — half were male and half were female. There were 12 right-handed people, 12 left-handed people who wrote in the non-inverted position (hand below the line of writing) and 12 inverted writers who held their hand above the line of writing. Subjects responded to visual, auditory and touching stimuli by pressing buttons as soon as the stimuli were perceived

Laboratory tests indicated that the only dis-crepancy (measured in thousands of a second) was in the visual testing. Non-inverted writers were slower (by a slight fraction of a second) in responding to visual

Smith says previous studies have indicated that inverted lefties responded slightly slower in all three fields, indicating a different motor-muscle output. But since Smith's tests indicated only a discrepancy in the visual field, Smith speculated that perhaps inverted lefties have a complicated visual wiring system.

These people may be receiving reversed spacial information and perhaps the brain has adapted by putting the visual messages through a complicated neural process to correct the improper image so it adjusts to what the rest of the world sees. This could account for the time lapse in the visual process, Smith says.

They have adapted, but the problem may manifest itself in inverting the hand so that a different set of muscles are used in writing.

"The visual system could be telling the motor system what to do, that is to curl the hand to compensate for the backwards instruction of the motor system, Smith conjectures

The problem may manifest itself in other subtle ways. Children with this problem may have more dif-ficulty correcting mirror writing, and adults may occasionally reverse letters, for instance writing 'prolbem" instead of "problem."

Left-handed people have been neglected simply because 87 per cent of the population is right-handed, and psychologists are interested in what makes the majority tick. But the incidence of left-handedness is sufficient to stimulate Smith who wishes to go into neuro-

Earlier research indicates the embryo develops a bias to left or right development and may mean that left-handedness is a genetic factor. Other tests suggesting brain damage as a factor don't seem to bear

Smith's tests seem to indicate that inverted lefties have the same side of their brain developed as the righthanded population

Perceiving that there may be a problem in the visual area, gives us a focus from which to work, he



Sealed tenders submitted in the tender envelope provided will be received by the Purchasing and Supply Division, Treasury Department, City of Mississauga, Ninth Floor, Univac Building, 55 City Centre Drive, Mississauga, Ontario, until 2:00 p.m., E.D.S.T.

TUESDAY, JULY 4th, 1978

for the following: TR-35-1978

Grading and Seeding; Construction of Pathways; Supply and Planting of Trees at Kogaydawin Trail/Sheridan Creek Greenbelt.

A Public Tender Opening will be held at One City Centre Drive, Mississauga, Ontario, on Tuesday, July 4th, 1978, at 2:30 P.M., E.D.S.T.

Contract documents, specifications, tender envelope and blank Form of Tender may be obtained from the Purchasing and Supply Division, Treasury Department, City of Mississauga, Ninth Floor, Univac Building, 55 City Centre Drive, Mississauga, on payment of \$25.00 which is non-refundable.

Tenders will be available for pick up on Thursday, June 22nd, 1978.

The Tender must be accompanied by a certified cheque and/or Bid Bond in the amount of 5% of the total Tender, payable to the City of Mississauga. Also a 100% Performance Bond

Lowest or any Tender not necessarily accepted.

Terence L. Julian City Clerk 16877 (86712)



spirited youth employed under a Young Canada son, Doug McCullough, Barry M. Works project. Shown are Brad Lavelle, Karen Frey and Joanne Grindley top.

Fantasy and Fairytales Ink. are a group of Smith and Ken Ardito, front and Shelley Robinson, Doug McCullough, Barry Mathews, Michelle

## Plays in the park add to summer fun

Times Staff Writer The youngsters playing in our parks and visiting our libraries are going to get a treat this summer. Eight committed young teenagers are staging a series of plays aimed at the small fry and will be performing in Mississauga — at no charge to their delighted audiences.

Ken Ardito discovered acting when he took theatre arts at Lorne Park Secondary School. His voice is natural

for the stage.

Brad Lavelle, another dedicated member, is enrolled in Ryerson's acting course and says he'd starve if it would help him have the acting and

directing career he wants.

These are just two of the eight members of the cast of Fantasy and Fairytales and they will be making the rounds all summer

The idea for the group came from Steve Lee, a theatre arts teacher at Lorne Park Secondary School. Students applied for and received a Canada Works Grant and they held auditions for the one additional person

allowed in the grant. Doug McCullough was chosen from twenty

who auditioned. The group will play to the City of Mississauga parks and recreation day camps, public libraries, community centres, the Lake Aquitane opening, Mississauga Hospital and, hopefully, when the grant expires in six weeks, they can be paid to perform at the Canadian National Exhibition.

READY TO GO
The group develops original material. They have five basic shows arranged with themes including pollution, appreciation of music, responsibility and true love or commitment.

The works all have subtle moral messages. One piece on prejudice shows a popular extra-terrestrial being who talks and walks differently and is picked on by an unpopular normal character.

For further information about the project, call Brad Lavelle at 274-2914 or Doug McCullough at 278-0421. Their office will be at Lorne Park Secondary School from June 26 to August 1.

