



Robin Trimarchi/Daily Nebraskan

Janice Hayes, UNL student and city council candidate

Student in running for City Council seat

By Adeana Leftin
Staff Reporter

Wife, mother of two, part-time bookkeeper and full-time UNL student Janice Hayes has many roles in life. Now she's hoping to add another: city councilwoman.

Hayes, a 39-year-old financial counseling major at the University of Nebraska-Lincoln, has announced her candidacy for City Council in Lincoln's southwest district.

She said she thinks she has a good chance of winning.

"I think I have an excellent chance if people hear my issues," Hayes said.

One of Hayes' biggest platforms is opposi-

tion to the proposed convention center in downtown Lincoln.

Hayes said the center would take unnecessary tax money and land from small businesses and industries, which are needed to provide jobs for the unemployed.

"A convention center would not do anything for the majority of the people," she said.

Another issue Hayes opposes is expanding the library in the southeast district.

Hayes said her district and the northwest district do not have libraries, so building libraries in those districts should take priority over expanding the southeast library.

Hayes is running against Mary Searcy, Dale Young and incumbent Jo Gutsell.

Hayes said that although she doesn't have political experience, she has the qualities to handle the position.

"I'm new to politics and I probably can't learn to be a politician," she said.

Hayes has been in the work force for 26 years, including 15 years of accounting experience that she feels makes her "budget conscious."

She said that because few UNL students live in the southwest district, her election does not depend on a large student vote.

But, she said, many things the council does affect the university. Students who help with her campaign would be pleased with her votes, she said.

Graduate program targets educators of junior high level

By Kelly Ann Kennedy
Staff Reporter

The University of Nebraska-Lincoln Teachers College has developed the only graduate studies program in the nation that focuses on the needs of middle-level educators, according to a professor.

Alfred Arth, a professor of education in the Center for Curriculum and Instruction, said the Nebraska Middle Level Leadership Program will address the needs of middle-level educators, who work with children between the ages of 10 and 14.

"Our program is different than any other program offered," Arth said. "It focuses on four different levels. We offer the middle-level program which is backed up by our four-year undergraduate program, master's degree and doctorate degree."

He said the program will address 10 points: empowerment, development of a mission statement, creation of an effective school-building climate, educational equity, interdisciplinary teams, cooperative learning, coordinating curriculum, establishment of school-community relations, program assessment and staff development.

The course is scheduled this summer, from June 24 to July 5. Arth said he expects to have 10 Nebraska educators enrolled in the course, including school principals and leaders who deal with middle-level students.

The program has been developed over the past two years with field studies in nine cities throughout Nebraska, Arth said.

Although junior high schools have existed for decades, Arth said, teachers still are not specifically trained to work with junior high children.

Junior high educators usually are trained to teach at the high school or elementary school levels and then must adjust as they see fit to work with children ages 10 to 14, he said.

"Children at this age are very passive-aggressive. Our teachers need to learn how to work around that," Arth said, because junior high is a very powerful time for teachers to influence students.

"The key is they have to belong and our teachers need skills to help this occur," he said.

Method to improve ethanol yield earns patent

By Jean Lass
Staff Reporter

A University of Nebraska-Lincoln faculty member and his partner last month engineered their way into receiving the five millionth patent for developing a way to improve the efficiency of ethanol production.

Tyrrell Conway, an assistant professor of biological sciences at UNL, along with Lonnie Ingram, a professor at the University of Florida, applied for the patent August 31, 1988, after three years of genetic engineering research.

"I'm very excited about having the process patented, and it being the

five millionth patent was a bonus," Conway said.

Although it took three years of research to invent a process for improving the efficiency of ethanol production, Conway said, he and Ingram conceived the original experiment and analyzed the positive results in one week.

"The experiment was so successful that we knew we had hit on something that was going to be very useful," he said.

The process combines the properties of two kinds of bacteria — *Zyomonas mobilis* and *Escherichia coli* — to speed up ethanol production. Conway said he and Ingram in-

serted the gene from *Z. mobilis*, which is a bacterium responsible for efficiently converting polysaccharides into ethanol, into the bacterium *E. coli*. *E. coli* synthesizes a number of sugars not normally used by alcohol-producing organisms such as yeast and *Z. mobilis*.

"Genetic engineering allows us to extend traditional methods and use sugars that cannot currently be converted into alcohol or ethanol," Conway said.

When he started genetic engineering in 1985 as a post-doctoral research associate with Ingram at the University of Florida, he said, he did not know his work in genetic engi-

neering would be used later on for ethanol production.

"Genetic engineering allows us to make advances more rapidly than by traditional approaches, and Mother Nature hasn't seen fit to provide us with bacteria that increases ethanol production," Conway said.

Conway's goal is to make new bacteria in the lab that can speed up the process so Nebraska can use corn resources and lower the cost of ethanol per gallon.

"If we switch from our dependence on foreign oil to ethanol as an alternative fuel, we would need to increase ethanol production 100-fold,"

he said.

Right now, Conway said, 100 billion gallons of petroleum gasoline are burned every year in the United States, but only a billion gallons of ethanol are made.

Corn production only would have to be increased four-fold, he said, to make up the 100-fold increase in ethanol production.

Conway said UNL will benefit from his research because faculty members will have access to the technology and "they have the best interests of Nebraskans in mind."

The other benefit is that any future patents will be held by UNL, he said.

Copyright

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materials earlier — it doesn't seem to be that difficult," Streckfuss said.

He said publishers probably will decide to charge royalties and students in turn will have to pay more for the packets.

Streckfuss also predicted that the cost of the packets will increase eventually because Kinko's will have to cover costs of obtaining permission to print copyrighted material.

"Considering the ruling and the effect it could have had, this (Kinko's

move) makes it less of a burden," he said.

Stricklin said he thought Kinko's decision to cover the cost of obtaining permission to print the material was a "very smart thing to do."

"It helps the students, and the name of the game is how we can make this material available to the students as easily as we can," he said.

Stricklin said he thinks he will not be affected greatly by the decision, but said professors who use more current material in their packets might have problems submitting them early enough to be approved for use.

NEWS BRIEFS

Statewide tornado drill to include UNL

As part of Tornado Awareness Week, the University of Nebraska-Lincoln will participate in a statewide tornado drill after a simulated warning is sounded at 10:30 a.m. on Wednesday.

The Civil Defense sirens and the UNL internal building alarm systems will be activated, although

Advisers available for graduate students

The Graduate Studies Office in the Administration Building will be open Saturday from 8 to 11:30 a.m. to assist graduate students with early registration for summer ses-

not all UNL buildings are equipped with the alarms. A warning message also will be carried over local television and radio stations.

Drill participants will be asked to proceed to the nearest designated shelter area and remain there until the drill is successfully completed, after 5 to 10 minutes.

Advisers will be available and no deposit is required to pre-register.

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