

Biology department aided by Eisenhower program

by Cathy Houdek

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SCSU biology department grants this spring total \$99,421. The three grants are a part of the reauthorization of the federal Elementary and Secondary School Act, created by the Eisenhower program.

According to the Eisenhower Professional Department Program abstract plan, the program's goals are to build on research findings which focus on discipline-based knowledge and effective subject-specific skills.

According to Patty Simpson, professor of biological sciences, the three grants are Let's Get Physical! Science and Math for Primary Teachers, \$44,763, Environmental Earth Studies: An Investigative Approach To Scientific Issues \$44,672, and Preparing Elementary Science Teachers for Tomorrow's Schools, \$9,986.

Simpson said The Minnesota Higher Education Services Office receives federal money every year that can be used by colleges and universities in the state for special programs. The programs are specifically designed for the preparation of teachers.

Simpson worked together with Jean Hoff, professor of earth sciences, in submitting, Environmental Earth Science: An Investigative Approach To Scientific Issues and Preparing Elementary Science Teachers for

Tomorrow's Schools. the According to the objective sheet for the Eisenhower Program this year it has two categories. the first one, called Professional Development In-Service in Mathematics and Science, has to do with in-service teachers, who are already in the field. The other program is for preservice teachers, who are undergraduates. The program for preservice teachers is Professional Development Preservice Projects in Mathematics and Science.

"Jean and I are pleased that we have the opportunity to work with area teachers. It gives us the opportunity to offer something to local teachers we wouldn't be able to without the federal support," Simpson said.

For Environmental Earth Studies: An Investigative Approach to Scientific Issues, Simpson and Hoff plan on bringing 30 Minnesota teachers (grades five through 10) with backgrounds in Earth, biological, environmental, or general science to SCSU for a summer workshop.

The project includes recruitment of teachers participants from all over Minnesota. Giving attention to teachers in rural areas and minority students during spring. The summer workshop is a three-week program involving training in science content and inquiry skills.

"A couple of things we're looking for content-wise are topics such as water quality and solid waste management. Our teacher

participants and their students will be able to investigate in their own classrooms," Simpson said.

The Eisenhower Program objective sheet stated the workshop's focus will be on four levels: science content, issue awareness, issue investigation and issue remediation.

Understanding of the scientific concepts needed to explore these topics will be developed during field and classroom studies. Teachers will be introduced to resources available to aid in building content level. After the training, participants will work in small groups to explore specific issues.

Simpson said teachers will design a hypothesis and collect primary and secondary data. They will also analyze data to answer research questions. Participants will then present the results of their data to class.

According to the objective sheet, after these presentations, the Minnesota Graduation Standards will be revisited by the class. Teachers will spend the rest of the time planning the implementation of one or more graduation standards in their classes during the fall of 1998. The workshop instructors will assist in this implementation through classroom visits and Internet communications.

Simpson said she and Hoff will continue to work together to submit future grants for the biology department.