Career Education and Teacher Education

Growing up to work is an underlying concept of civilized generations but somehow, over time, learning has come to be thought of as something that happens only in schools. The relationship between school and work has become confused, in the view of the recognized leader in career education, Dr. Sidney P. Marland, Jr.

The interrelationships between learning and school and work are examined in the September issue of Viewpoints, bulletin of the School of Education, Indiana University, entitled "The Challenge of Career Education to Teacher Education." R. Bruce McQuigg, organizer of IU's university-wide system of career education in teacher education programs, illustrates how what has already shown to be beneficial at the elementary and secondary levels is equally viable in teacher education programs. Many of the concerns of education are akin to those of business, industry, and labor, McQuigg points out, and it is in career education that these mutual goals come together. McQuigg's contributions also emphasize infusion rather than addition as the process by which career education is introduced into the curriculum.

Successful career education in the teacher education program at IU-East in Richmond is provided as a model for educators interested in developing such programs. Professional recognition must accompany efforts to develop such programs before any real progress can occur.

The authors in this issue also deal with one of the most exciting aspects of career education: the enthusiasm shown by both students and their parents. When it becomes clear that career education is not just a guise for vocational education and that career education does not threaten the liberal arts component, educators, parents, and students alike begin to realize that career education establishes a foundation for informed decision making about occupational goals.

The November issue also includes Marland's "Career Education Update" address given to the Commissioners' Conference on Career Education in Houston last fall.

This issue of Viewpoints is available for $2 per copy (with quantity discounts) from the Publications Office, School of Education, Indiana University, Bloomington, Indiana 47401.

Schools of Choice

The Los Angeles City Schools have introduced two new schools of choice—Center for Enriched Studies and the Open Structure Magnet School. The center will have an enrollment of 450 pupils—fourth through eighth grades. There will be 16 teachers on the faculty including a curriculum coordinator. The center will feature an interdisciplinary approach to education, and many classes will be ungraded. Also, team teaching and creative approaches to the basic skills will be part of the educational program.

The open structure school will have 200 students, first through sixth grades. There will be nine faculty members including a teacher-coordinator. The school will have flexible scheduling and team teaching, and will utilize large groups of parents and volunteers. The pupils will be required to assume responsibility for their own learnings as well as the learning of a fellow student. There will be an emphasis on children assisting children to learn.

The racial and ethnic ratio established by the board for magnet schools will allow for an enrollment of not more than 60 percent combined minorities or white students.

Immunization Laws

The State of Nebraska Department of Health plans a campaign to strictly enforce the Nebraska law requiring school children under the age of 12 to be immunized against measles, rubella, poliomyelitis, diphtheria, pertussis, and tetanus. The law provides that children must be immunized before being permitted to attend any Nebraska school unless a parent or guardian presents a written statement that the child should not be immunized.

According to Bill Pack, immunization coordinator for the Nebraska Department of Health, statewide enforcement has not been good. Past outbreaks of measles and other preventable diseases have caused needless absenteeism. The intent of the campaign is to help keep students in school. Recently, there has been national con-
cern that the current gradeschool children are not being adequately immunized and that we shall suffer widespread outbreaks of preventable diseases. The Nebraska Health Department intends to work with schools to see that their law is strictly enforced.

Writing Assessment

Recently the Bloomington (Minnesota) School District conducted a writing assessment of fourth-, eighth-, and eleventh-grade students in the district. The assessment used national testing items to measure Bloomington students' writing. Staff and citizens developed the test, which has been selected by Minnesota Department of Education for use by school districts throughout the State of Minnesota to test student writing. Students wrote in the following areas: recording information, responding, expressive and persuasive writing—the different purposes for which one writes. In composition, the committee decided to assess unity, punctuation, spelling, and word usage and agreement.

It was found that the ability to record information with completeness, clarity, and coherence was a moderately strong writing trait of Bloomington students. Bloomington students were capable of writing accident reports and recording telephone messages. Eighth- and eleventh-grade students needed more completeness in recording telephone messages to the level of citizen-staff standards. The staff-citizen committee developed minimum and maximum expectations for the test items.

It was found that responding was a strong writing trait for Bloomington students. Students could write thank-you notes and letters, and they could address envelopes. Eleventh-grade students showed a need for better skills in writing letters for job application. Persuasive writing was a weakness with the Bloomington students. The students did not clearly present their points of view and elaborate reasons to support them.

Other observations about the assessment were that the students used good mechanics of writing. They exhibited good quantity of writing, word choice, capitalization, sentence construction, and use of end marks. Spelling, use of awkward sentences, and punctuation in students' own writing were areas for needed improvement.

Nebraska's Rolling Resource Center

Nebraska is using a large motor home loaded with homemade and commercial materials to help with the education of handicapped learners. The Resource Center parks in front of a school, and educators working with handicapped children use the Center to preview materials. They exhibited good quantity of writing, word choice, capitalization, sentence construction, and use of end marks. Spelling, use of awkward sentences, and punctuation in students' own writing were areas for needed improvement.

Science Study Aid—SSA

Agricultural Research Service (ARS) scientists and high school teachers have combined their skills to create innovative science units. These classroom-tested aids are complete teaching units; each consists of a teacher's section (materials list, back- ground information, suggestions for implementation) and a student's section (background reading, investigations, questions for thought, suggestions for outside reading, and additional activities). Student investigations are based on current USDA research programs and techniques—most can be carried out using standard laboratory equipment or improvised equipment found in the home, supermarket, or hardware store. The units are not copyrighted and may be produced for classroom use.

Dehydration for Food Preservation—determine the best solution for the osmotic dehydration of apple slices; build an emergency water purifier. (Suggested for grades 9-12.)

Mushrooms, Nature's Recyclers—Study fungi and the effect they have on common waste material found in and around the home and school. (Suggested for grades 7-12.)

Carbohydrates: The Major Energy Source for Living Things—Identify carbohydrates using ARS research techniques. (Suggested for grades 11-12.)

Plant Pigments—Analyze the physical factors that affect color changes in plant foods during processing and preparation for consumer use. (Suggested for grades 9-12.)

Tannin: Nature's Filter—Investigate how well agricultural by-products remove metal pollutants from water. (Suggested for grades 9-12.)

Lysozyme: The Cooperative Enzyme—Isolate an enzyme in its crystalline state from egg white. (Suggested for grades 10-12.)

Fermentation: Activities of a Fabulous Fungus—Collect, record, and interpret data on the effect of temperature in yeast fermentation. (Suggested for grades 7-10.)

Each unit costs $1.25, or all seven may be purchased for $4.95 (postage and handling included). California residents add 10 percent sales tax. Send checks or money orders to Woodworks, P. O. Box 5106, Richmond, California 94805. Allow four to six weeks for delivery.
Cadre Approach to In-Service

The Oregon Department of Education is using a new approach to in-service education which, according to the Edugram published by the Oregon Department of Education, is being called the "cadre approach." Through this concept, the department recruited knowledgeable, creative, and enthusiastic practitioners. The staff then prepared these cadre participants to conduct competency-based in-service sessions for others based on local and regional priorities.

Eleven cadre teams with 325 members have been equipped with a variety of training activities. Cadres include such areas as: Career Awareness (elementary); Career Exploration (grades 7-10); Individualized Instruction (secondary and community college); Cooperative Work Experience (secondary); Career Guidance (secondary and community college); Music Careers (K-12); Cluster Implementation (secondary); Personal Finance (secondary); Career Information System (secondary and community college); and Student Organizations. Each cadre has a person designated to provide technical assistance and coordination.

Further information is available from Dick Holloway, Personnel Development Specialist, Oregon Department of Education, 942 Lancaster Drive, NE, Salem, Oregon 97310.

Error-Free Writing

An error-free paper from each secondary student in Fairfax County Public Schools is the outcome expected from a carefully planned writing program designed and created by English teachers. According to Betty Blaisdell, writing in the Fairfax Schools Bulletin, a book entitled Guide for Teaching Writing in the Fairfax County Public Schools has been issued. It offers a program for successful writing through a defined process that stimulates the students' best efforts as they select and limit their topic, generate ideas and focus on purpose, organize and develop ideas, and refine them through editing and revising.

The Guide describes not only the process of writing but also the measurable objectives at each grade level that implement the process. In addition, it provides supportive material for teachers, administrators, and students to ensure that all understand what is to be done and how it is to be done. It includes basic instructional aims for each grade level, teaching strategies, evaluation guides, and cross-references to instructional materials.

The basic principle of the program is that composition is a three-phase process that students must master in order to become increasingly self-confident and effective in all their writing.

The pre-writing phase stimulates students to think, generate ideas, and focus on a purpose.

The composing phase calls for students to refine their main ideas, organize the supporting material, and develop the relationships among the ideas into a good, readable draft.

The post-writing phase requires that the students revise for clarity and completeness, edit for sentence structure, usage, mechanics, and spelling errors, and evaluate for overall effectiveness.

The Guide identifies the forms of writing that students should practice at each grade level, seven through twelve, as well as the skills that students should master according to the teachers of Fairfax County. A checklist guide for evaluating the overall writing program of each teacher is another feature of the book.

Inquiries should be directed to Betty Blaisdell, English Language Arts Curriculum Specialist c/o Fairfax Schools Bulletin, 10700 Page Avenue, Fairfax, Virginia 22030.

Early Reading Resource

Teaching Early Reading is a new reading in-service resource prepared by the Division of Educational Redesign and Renewal of the State of Ohio Department of Education. The material is designed to assist kindergarten through primary grade teachers in providing full reading experiences for children.

The ready reference designed for quick retrieval of information suggests ways to develop reading readiness, provide a positive learning climate, create a language development curriculum, and use corrective instruction to prevent reading difficulties. Methods for improving word recognition and comprehension skills of early readers are emphasized. A self-corrective pretest aids in identifying sections that correspond to individual interests or instructional needs. To facilitate use of the resource for group study, a teacher guide is included. Both soft-bound and hard-back copies have been produced. The hard-bound edition contains a cassette tape that provides an orientation to the resource materials.

Information may be available from Nancy A. Eberhart, Director, Division of Educational Redesign and Renewal, Ohio State Department of Education, 65 South Front Street, Columbus, Ohio 43215.

Retired Teacher Writes

Miss Florence Sprenger, 81, retired as a teacher in 1962, still continues to be dedicated to the Los Angeles City Schools. According to Spotlight, published by the Los Angeles City School District, she has just completed a two-volume history of Manual Arts High School entitled Spirit of the Toilers. Volume One covers the years from 1909 to 1938 and is now available. The second volume dealing with the time span from 1939 to 1962 is at the printers. The Spirit of the Toilers tells of the many changes in education over the years at Manual Arts High School and is an "intimate saga" of the many famous alumni of the school.

Miss Sprenger taught English at Manual Arts from 1934 until her
Calculators in Elementary Schools

Can hand-held calculators be used in elementary schools? How early could/should they be used? Would children grow bored with them? Would their use result in the neglect of math skills? These and similar questions have been the focus of Fred Weaver and Jim Moser of the Math Research Group at the Wisconsin R&D Center.

According to an article in the Wisconsin R&D Center News, both Weaver and Moser are convinced of the importance of children learning how to solve problems—not just 3x5, but problems that require children to think about how the problem must be set up. Because of the fact that computers compute instantly, one of the benefits that the researchers see in them is that they can save time needlessly spent on adding and subtracting and give students more time for learning how to think through problem situations and approaches to them.

Fred Weaver has spent some time each semester during the past four years with children ranging from second to seventh grade in Madison, Wisconsin schools. Moser has been working recently with second graders. Children used the calculators for checking answers to paper and pencil calculations and for playing number games designed to teach familiarity with the calculators as well as basic addition and subtraction facts.

Early results of the limited and informal research indicate clearly that elementary school children can operate calculators and that they were not bored with them. Weaver and Moser are also fairly sure that frequent use of calculators can help students learn basic arithmetic facts—2x2, 3+3, 8-7, and so on. Their belief that even more important benefits are possible has led them to undertake a formal study with 200 second- and third-grade students at Orchard Ridge and Falk Elementary Schools in Madison.

“What I’m doing is investigating the long-term effect of using a calculator on a regular basis,” Moser says. “We want to know what happens to the child who has a calculator to use every day for a long period of time. We want to know how that affects children’s ability to do and to learn the traditional computations that youngsters are expected to perform.” Next steps may lead to actual curriculum modification, materials development, and appropriate training for teachers.

Anyone wishing further information may write to Fred Weaver and Jim Moser c/o Wisconsin R&D Center News, 1025 W. John son Street, Madison, Wisconsin 53706.

Standard Transmission Vehicles in Driver Education?

Should the schools use standard transmission vehicles in driver education? In the past few years, the energy crunch and increased availability of a variety of driver education vehicles have caused school people to consider the use of standard transmission vehicles in the regular driver education courses.

John W. Palmer, writing in Montana Schools, published by the Montana Office of Public Instruction, has generated a list of key questions that he identifies as necessary to answer before the stick shift vehicle can become a successful part of any driver education program.

1. What type of standard transmission vehicle would be most conducive for learning the basics of shifting?
2. What advantages and disadvantages do different types of standard transmission vehicles present?
3. What type of special equipment is necessary for safe and efficient learning in standard transmission vehicles?
4. Which students would be allowed to use this vehicle?
5. When in the learning sequence should students become involved with this type of vehicle?
6. What procedures unique to stick shift vehicles need to be established?

Citizen Education

A recent issue of Link, published by the Social Science Education Consortium, reported results of an examination of the topic of Citizen Education by its membership. Recommendations, directed to policymakers, include the following:

1. The need for reform in citizen education should be accorded national recognition by elevating this concern to the status currently enjoyed by the effort to improve reading skills, to provide vocational instruction, to impart knowledge about careers, and to “mainstream” handicapped persons.
2. Nationwide assessments of citizen activity and capability should be undertaken so as to identify current strengths and weaknesses and to provide a baseline for judging the efficacy of future interventions aimed at ameliorating current deficiencies. To be fully effective, efforts at reform must take into account prior efforts in citizen education as well as available knowledge about both child and adolescent development.
3. Any inclination to prescribe a single national solution to deficiencies in citizen education should be resisted. A wide range of alternative efforts should be undertaken by a variety of groups at the local, regional, and national levels. Local communities should be encouraged to appraise citizen education efforts and to recommend improvements as seem appropriate, given their own assessments of local needs and priorities according to values of fair play and human rights in a complex regional, national, and global society.

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4. One or more mechanisms that enable alternative efforts to share their experiences and that promote rigorous evaluation of the effects of their work should be created and maintained.

5. At the same time that efforts are mounted to improve programs aimed at promoting responsible citizens, efforts should be given to increasing the responsiveness of social—especially governmental—institutions. Both existing and new government programs and agencies should be assessed for their openness to citizen participation.

6. Because citizen education is a continuing concern, educational programs on behalf of citizen education should be viewed as long-term efforts rather than quick solutions to an immediate but easily resolved problem. Funding for school-based citizen education programs should become part of general school aid formulas and not depend on single purpose authorizations only.

Clothing Bank

A cooperative venture between the Tucson Unified School District and parent organizations provided nearly 2,000 students with about 17,500 articles of clothing. Students who otherwise would be unable to obtain clothing are referred to the Clothing Bank by the principal of their school. “This can be at the request of a parent, teacher, counselor, or attendance officer who became aware of a child’s clothing needs,” said Patricia Risley, manager of the clothing bank.

The establishment is open from 9 a.m. to noon on school days. Children are taken from their schools to the bank, where parent volunteers outfit each student with needed articles of clothing. Items to stock the bank are obtained either as donated serviceable pieces from individual contributors and local merchants or through cash purchases.

The funds to run the clothing bank are obtained through donations and also from the proceeds of an annual movie shown at each school. The film is usually a Walt Disney feature. Last year $5,258 was raised to support the project.

The Clothing Bank has found that the most needed items of clothing are jeans, shirts, and jackets for boys in sizes 6-18; slacks and jeans for girls in sizes 8-12; and coats or jackets in sizes 6-8. Used clothing should be in good condition, for only minor repairs can be made.

Fire Fighting Class

A pilot course in fire fighting will be instituted in Edmonds, Washington, this year. The class, called “Fire Service,” has been set up as a one-year vocational program. Its aims, according to an article in Your Public Schools, published by the Washington State Superintendent of Public Instruction, are to teach fire fighting, fire prevention, fire investigation, emergency medical services, and dispatching. Students will leave the instructional experiences with sufficient skill to become a dispatcher, insurance company investigator, or fire fighter.

William Luepold, a former Seattle Fire Department fire fighter, is the instructor. He has previously taught at Seattle and Green River Community Colleges. Representatives from Edmonds, Lynwood, Mountlake Terrace, and District 1 fire departments are members of the Fire Service Advisory Committee and helped plan the curriculum.

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