

DOCUMENT RESUME

ED 043 075

CG 005 872

AUTHOR Tunneborg, Patricia W.
TITLE Evolution of a Human Ecology Curriculum from Home Economics: A Proposal for High Schools.
INSTITUTION Washington Univ., Seattle. Bureau of Testing.
PUB DATE Jul 70
NOTE 23p.
EDRS PRICE MF-\$0.25 HC-\$1.25
DESCRIPTORS Curriculum, *Curriculum Development, *Disadvantaged Youth, *Ecology, Educational Needs, Home Economics, *Home Economics Education, Secondary Education, *Student Participation, Vocational Education

ABSTRACT

Proposed is the development of an ecology curriculum at the secondary school level by home economics instructors in conjunction with teachers in biology, health, social science, etc. To combat the decline in enrollment in home economics and the complaint of irrelevance of traditional cooking and sewing courses, home economics teachers are urged to redefine their field as human ecology, an academic discipline with legitimate vocational programs attached such as food preparation, day care, community service.
(Author)

ED043075

Evolution of a Human Ecology Curriculum
from Home Economics:
A Proposal for High Schools

Patricia W. Lunneborg

U.S. DEPARTMENT OF HEALTH, EDUCATION
& WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED
EXACTLY AS RECEIVED FROM THE PERSON OR
ORGANIZATION ORIGINATING IT. POINTS OF
VIEW OR OPINIONS STATED DO NOT NECES-
SARILY REPRESENT OFFICIAL OFFICE OF EDU-
CATION POSITION OR POLICY

Bureau of Testing
University of Washington—Seattle

ED0 43075

Bureau of Testing
University of Washington

July 1970

Evolution of a Human Ecology Curriculum

from Home Economics:

A Proposal for High Schools

Patricia W. Lunneborg

Proposed is the development of an ecology curriculum at the secondary school level by home economics instructors in conjunction with teachers in biology, health, social science, etc. To combat the decline in enrollment in home economics and the complaint of irrelevance of traditional cooking and sewing courses, home economics teachers are urged to redefine their field as human ecology, an academic discipline with legitimate vocational programs attached such as food preparation, day care, community service.

Bureau of Testing Project: 0670-100

Evolution of a Human Ecology Curriculum from Home Economics:

A Proposal for High Schools

The mission behind this report was narrow and specific: to assess the course content, objectives, and methodology in Child Development in terms of relevance to students at Seattle's Garfield High School. It was undertaken as part of a larger project in Consumer and Homemaking Education funded by the Seattle Public Schools which began in April 1970 with consultants working with teachers and students at Garfield, and ends in August with teachers and consultants planning the curriculum for four semester courses to be taught 1970-71: Consumer Education I and II, and Human Development and Relationships I and II. The motivation behind the project is much more difficult to define, but the "socio-economically disadvantaged" character of Garfield's student body was mentioned several times in the project proposal with the implication that particularly disadvantaged youth need courses in consumer education and child development.

Primarily two factors lie behind the global nature of this evaluative report. First, it did not take a very long time to discover that Garfield's lagging enrollment in Child Development had nothing to do with the "content, objectives, and methodology" adopted by the teacher. Because the course is taught in the setting of a real preschool with students involved with head teacher, parent coordinator, parents, two through four-year-olds in addition to their Garfield instructor, it represents a model training laboratory in human behavior. Secondly, however, the assignment was accepted with the understanding that this course could only be studied within the total situation which is Garfield and that perhaps much of homemaking education needed overhauling. Thus, rather than nit-pick at Child

Development or expound on social-psychological theories which might explain Garfield's malfunctioning, it seemed much more responsible to focus on the future direction of home economics in secondary education.

Home Economics at Garfield. Data in the form of written classroom observations in all kinds of classes and student surveys were gathered by four University of Washington (UW) undergraduates, three in psychology, one in home economics.¹ The survey was administered to 54 home ec students without knowledge of their names and concentrated on reasons for interest (or lack thereof) in the home economics curriculum. Fourteen students had completed Child Development at Garfield; there were 42 females, 12 males; 44 students were black, 7 white, 3 orientals. Their mean age was 17 and there were 24 seniors, 17 juniors, and 13 sophomores.

Given that home economics is considered by the State of Washington to be vocational education, it is noteworthy that the least given reason for being enrolled in a home ec class was "it will definitely help me get a job in that field." Students were primarily in home ec because it was "useful personally." With respect to a host of reasons for taking child development specifically, not one student gave "to get a job working with children." Those taking the course said they did so because they got along well with children; those not in the course speculated that students took child development out of pure interest in the subject matter. And why do more students not take child development? "They're just not interested" occurred again and again. When possible reasons for lack of interest were

¹ Research assistants: Wanda Hackett, Benjamin Johnson, Kurt Johnson, Vintonne Naiden, Deanna Sneed

presented, the fourteen child development students said the most important reason was that it "is a course for women," while the rest of the sample thought the location across at Horace Mann School discouraged enrollment. To a lesser extent they mentioned that the information about the course was poorly written up and, in fact, those not in the course had little memory for the description given in the Program Planning Guide, October 1969. While there was significantly greater interest in day care and nursery school jobs among those who had had child development, it is important to realize that a majority (30 of the 54) of the group would not work in this area even if their services were in great demand.

Backing up the evidence from observations in regard to the highly satisfactory teaching of the child development course, these students were unanimous in feeling that it had been 'very enjoyable' and near unanimity in the conviction that it had been 'very useful' in preparing them to be preschool teacher's assistants. The most often given recommendation for the future was that students have a greater role in planning and teaching the course. Hiring male and female student assistants in the summer when teachers are hired to plan the next year, and during the year to share teaching duties, is highly recommended. Having students write brief suggestions as a class assignment cannot really be called "student involvement."

Inasmuch as all 54 students were enrolled in at least one of the eight home ec courses given at Garfield spring '69, it is not surprising to find this group significantly preferring home ec to academic courses (English, American history, music, biology, and mathematics). Nonetheless, the stereotype which appeared earlier, that child development was thought to be a course for women, appeared again with regard to the issue of who should take

home economics. Male students significantly more than females thought it should just be required of women. Only one female student agreed; the rest of the women said it should be required of both sexes (22) or not required of anyone (27).

With regard to why their friends had dropped out of Garfield, these students gave decline in interest as the first reason for males, second for females. The second most cited reason among male dropouts was that they had to get a job to support their families, and the most cited reason among female dropouts was pregnancy. The last item of the survey lends support to the notion that Garfield teachers are held in high regard (particularly they were felt to be intelligent and unprejudiced) and have little to do personally with the waning interest in school so apparent in so many ways.

Many hours of observation in child development classes only confirmed the methods adopted for teaching by the Garfield instructor with Seattle Community College preschool head teacher. The week-by-week children's curriculum devised to introduce new materials to build on previous materials was available to students so that they could plan their individual participation in preschool accordingly. Giving students responsibility for the operation of the preschool was probably the best all-round method but even more real responsibility is recommended. All observers reported that students felt there was nothing for them to do when parents attended. Unless students are trusted, they will not learn that they are trustworthy but the opposite. The teacher's tactic of instructing before and after preschool, gently relating her lesson to recent interaction between students and children, was excellent

as was her continuous quest for new and interesting experiences and assignments for students. Initially field trips should be taken by teacher and students until self-reliance replaces fear of strange places and people far removed from the central community. The absence of a 5-year old lesson plan ploddingly being repeated was an asset. Inasmuch as different preschool curricula exist for regular students and the culturally disadvantaged, one feature of future courses is that students can see several of these programs in Seattle and learn how different curricula are judged as to their effects. Harrison Early Childhood Education classes, for example, are to use the three programs from Ypsilanti: cognitively-oriented, language training (Bereiter-Englemann), and unit-based.

All teachers in home economics neglected to visit homes and work with parents--specifications of vocational education teachers. The reasons seem to be fear of physical harm visiting in the surrounding community and uncertainty about the purpose of the visits or what was to be accomplished with parents. Until teachers can develop some utility in home visitation, they should not arbitrarily be expected to comply. Good use of the time presently would be to have home ec staff observe and constructively critique each other, which might make them feel more of a team.

Reasons for Low Enrollment in Child Development. If the problem is not lack of course relevance to the disadvantaged, then what is it? It is the same thing wrong with most city high schools across the country. Students are rebelling against the whole set-up. The atmosphere at Garfield was one of tension, discontent, acting-out, and disruption, but most of all, general malaise. Absenteeism and dropping out were high and hard on those left behind. While they were bodily still there, these students went about the

business of going to school listlessly, apathetically, mentally depressed. Low morale cannot be brushed aside as not really getting at the cause of the unrest, for once it is a fact of life, it in turn affects the best designed course taught by the most sensitive, dedicated teacher. While the physical location of child development was one cause of low enrollment, curiously the separation of the preschool portable from the dispirited main building was considered positive by the students who were enrolled--they liked getting away from it all. Low morale seemed to be causing not only students to stay away from school but teachers as well. Turnover and transfer in the last 2-3 years among faculty and administrators at Garfield were said to be much higher than at other schools. Concomitant with a shifting, diminishing body of students and faculty, those who remained in the situation seemed isolated from one another. There was no sense of cohesion or solidarity at Garfield and despite its racially-mixed composition, blacks stuck with blacks, white transfers with their own group, teachers with their kind of teacher. Incidentally, the division of the school autumn 1970 into two widely separated, noninteracting faculties can be expected to only widen the gap between everyone at Garfield.

Much has been written and publicized about Garfield this spring and sadly the following picture seemed valid: mutual mistrust and antagonism between administration and faculty, frustration of teachers with students, rules and regulations for everyone old-fashioned and ridiculous by today's standards (e.g., contrast John Adams in Portland with Garfield), and overwhelming futility. Many students had not yet in life seen anything work for them so that hustling, making it anyway you can, finally becomes the only way to overcome despair. If you can't help all that, what can you do? Ready?

The earth is facing a crisis that involves the water you drink, the air you breathe, the roads you drive along, your home, the size of your family and your outlook on life. What we do about the crisis affects the way you—and your children—will live.

Biologists see three possible courses of action. The first involves accepting pollution and adapting to it. "Man," according to Dr. René Dubos of Rockefeller University, "can adapt to almost anything. I am sure that we can adapt to the dirt, pollution and noise of New York City and Chicago."

Northern Europeans have adapted to polluted air by developing chronic lung diseases; it is the leading cause of death in England. People who live near the Boeing airplane plant in Seattle have adapted to the production-line noise by having impaired hearing. On Indian reservations some Americans have adapted to the spectacle of their children starving to death.

And the possibility of adapting in the future? Professor Lemont Cole of Cornell University says, chillingly, that the world can continue to produce and consume as it does—if we cut the population from its present level of 3½ billion down to one billion.

The second possibility is to retreat to a pre-waste, pre-technological society. Some pollution-protectors have already established communes that are subsistence farms. But subsistence farming cannot feed the entire world.

ECOLOGGY

THE
NEXT
REVOLUTION:
HOW
IT
WILL
CHANGE
YOUR
LIFE

It would place a billion people limit on population.

And how many people can even conceive of giving up twentieth-century comforts and safeguards? Dr. Lee S. DuBridge, President Nixon's science adviser, told a conference in Los Angeles recently: "I strongly reject the idea that we have to destroy our technological civilization, deflate and decrease the standard of living, to improve the quality of life. There may be a few who would like to return to the days of the caveman, but most of us believe that men live healthier, more pleasant lives than they did ten thousand years ago, or even one hundred years ago."

Scientists estimate that the world population may grow to six or eight billion by the year 2000. To support this number at a level that is both human and humane, we will have to look to a third possibility: a revolution in our way of life. The drive toward an unpolluted America may bring some of the hardest changes you have ever had to make.

You'll be a more careful consumer every day of your life. You know all about avoiding unnecessary throw-aways, using cars as little as possible, buying products in returnable packages. As Pogo says, "We have met the enemy, and they is us."

But don't overrate individual misdeeds. It's unfair to accuse humans of causing pollution in their daily ac-

POOR ORIGINAL COPY - BEST
AVAILABLE AT TIME FILMED

tivity," says Professor Donald Mandell of Sarah Lawrence University. "Humans produce 200 million pounds of waste a year but the mining industry alone causes 1.1 billion tons."

You'll band together in consumer groups. Demonstrations and consumer boycotts have persuaded manufacturers to change designs, and have influenced legislation. Organizations can pressure distributors to eliminate useless packaging (individually-wrapped crackers and slices of cheese, for example). They can also prod lawmakers to tax action and outright prohibition of pollutants.

You may eat different food. Suburban sprawl limits the amount of land used for crops. To increase the food supply, some experts have suggested growing fungi and algae as new sources of protein ("The problem is that algae now makes people gag"), duplicating photosynthesis to make artificial food, or learning to use inedible parts of food, like cellulose.

If you want more than two children, you may have to adopt them. It is expected that if in the future each couple has two children or less, the population will stay stable.

Many people consider population control the most urgent aspect of ecology. "Too many cars, too many factories, too much detergent, too much pesticide, inadequate sewage treatment plants, too little water, too much



carbon dioxide—all can be traced to too many people," says Professor Paul Ehrlich of Stanford University.

Not everyone agrees. "North America, the Soviet Union and Africa have room to expand," says one expert.

"The population problem is real and phony at the same time," says Professor Mandell. "There is a limit to the number of people that the earth can support, but no one knows what it is. I think that by the year 2000, unless we have completely new sources of food, we are certainly going to have serious problems concerning further population growth."

Those less optimistic about new means of growing food advocate population control by contraception, abortion and later marriage, which postpones the first child. It has been suggested that the government tax couples for each child instead of allowing a deduction, or give a tax credit for each year a well-to-do couple is childless and grant an allowance to poor families who don't have children.

Limiting the population can affect your role as a woman. Anthropologist Margaret Mead says, "Women cannot be rewarded by a lifetime of housekeeping and childbearing. The bulk of a woman's life will have to be a public life. Houses will be smaller and more convenient. They will have built-in beds, benches, bookcases, dressers. Paintings will be rented. There will be no cellars or attics in which to keep (continued on page 82)

here, and I'll give you . . .

She didn't know why her hands were shaking. Ridiculous. His were shaking too, she noticed. And the way he was looking at her!

"We may have to take the situation slowly and let it build," she said.

"Would you say that conditions were favorable?"

"Most favorable."

"I will see you in exactly two weeks, Linda. And you'll find a letter from me when you get home."

"Wonderful."

"Lin-dal" her mother was calling from the hotel.

It was time to leave. He had not kissed her, or even reached for her hand but she could feel his presence.

"Good-bye for now," he whispered.

She didn't say good-bye. ■

ECOLOGY

continued from page 47

possessions. To simplify housekeeping, we'll take the washing machine out of the kitchen, make it smaller, put it in the bathroom for each person to do his wash while taking a bath. . . . There will be rental services for sheets and towels. Entertaining will be taken out of the home. People will use public rooms for children's parties and cocktails as we now do for weddings and funerals. . . . Women will use more prepared foods. . . . Gourmet cooking will be restricted to Sunday."

You may have to revise your ideas about work. Philosopher R. Buckminster Fuller has said, "We must do away with the absolutely specious notion that everybody has to earn a living. Instead of earning, there may be learning, and education may come in pulses throughout life."

If you live in the suburbs or a small town, you'll be driving a different kind of car. Since automobile exhaust causes sixty percent of air pollution, some suggest banning the internal combustion engine in favor of a gas turbine, a steam engine or an electric motor. While all of these can work, none is now practical.

"The fact is that no one has yet invented a replacement for the internal combustion engine that has adequate performance, reliability and safety, or that can be produced at a reasonable cost and requires a minimum of maintenance," says Dr. DuBridge.

meantime, the automobile in-

continued on page 84

dustry is trying to develop a low-emission engine, and Senator Gaylord Nelson of Wisconsin has introduced legislation authorizing up to \$50,000,000 to be spent on design. "This will be an expensive research and retooling dilemma for the automobile industry, and in the end it is likely that future cars will be more expensive and have less power," says Senator Alan Cranston of California.

If you live in a congested city you may do without a car altogether. "The car and the city just don't go together," says Jerry Kretschmer, chief of New York City's Environment Protection Administration. Studies conducted by the Regional Planning Association show that pedestrians move three times as fast as cars in midtown Manhattan.

Besides walking and bicycling relatively short distances, wealthy or hurried people may take taxis. But the cabs will be half the conventional length and have a top speed of forty miles an hour. Beyond that, the answer is good mass transit.

Reverend James W. Skehan, director of Boston College's Environmental Center, doesn't think we can ban the automobile yet. "The public transportation picture in big American metropolitan areas like New York and Boston is pretty dismal in comparison with that of any good European city. We just don't have adequate mass transportation, so it's senseless to talk about asking or forcing people to give up their cars.

"What all of us can do is to press our legislators to apply some of the returns from our gasoline taxes to subsidies for mass transportation facilities. By law, about a third of the cost of a gallon of gas goes for taxes, and at present these millions of dollars are poured right back into highway construction and related highway services."

You may fly less. Heavy air traffic has clogged existing airports, and the creation of new ones would mean less land for recreation and farming and more noise for homes in their paths.

Short-haul air trips—those of 250 miles or less—account for as much as forty-three percent of the traffic, yet save very little time because of long trips to the airport and landing delays. The Regional Planning Association has suggested substitutes: speeding up existing trains (American trains still drag along at sixty to ninety miles per hour, while a conventional French electric locomotive achieved a speed of

building automated highways that would plug in vehicles over an automatic guideway for a high-speed trip between cities; high-speed trains that would move over an air cushion, and trains propelled by a combination of gravity and pneumatics.

The RPA also believes that "large aircraft, far from being the bane that some journalists make it to be, is one of the strongest factors in reducing the need for big airports."

You may use less air-conditioning, fewer electrical gadgets. Air-conditioning is the biggest single cause of increased consumption of electricity and the need to build new power plants. Mr. Kretschmer is against buildings encased in glass and steel that demand the use of air-conditioning, and Dr. Dubos points out that no one yet knows the effects of air-conditioning on biological rhythms.

The generation of power can cause pollution as it employs the combustion of fossil fuels (although New York's Consolidated Edison Company has shown that it is possible to cut back on the emission of sulphur dioxide). Nuclear energy raises the danger of an increased radiation level. Power produced either way results in residual heat. Released in streams, it may kill off fish. Released into the ocean, it may spoil the shore line.

You won't be using harmful pesticides. The Department of Agriculture has banned all nonessential uses of DDT by the end of 1970. A bill before Congress proposes to forbid the use of seven other potentially harmful chlorinated pesticides.

Will such a prohibition mean a horde of insects or blighted crops? Agriculturists now are trying to develop disease-resistant plants and abandon the use of sprays altogether.

You may find laundry and dishwashing a little harder. Right now the polyphosphates, which comprise up to half of laundry detergent and ninety percent of dishwashing compounds, soften water and keep dirt from redepositing. However, phosphates don't dissolve. They nourish algae in the streams, which then grow into vast green algae mats; these suck oxygen from the water and starve off the fish. Algae also foul up beaches and give drinking water an unpleasant taste.

Canada has already forbidden the use of detergents with phosphates. So may the United States.

Chemists have synthesized a nitrogen-based compound already being used in a Swedish detergent. Another substitute, polyelectrolytes, contains only carbon, hydrogen and oxygen, which can be derived from natural sources such as starch, as well as from petroleum derivatives.

You may own fewer things. Instead of owning two cars or perhaps three, families may have to restrict themselves to one car or none in order to cut down on air pollution. Outright prohibition or enormous landing fees may eliminate private planes (except in areas like North Dakota and Montana) and thus help prevent airport jams. There may be a ban on the motorboat because it creates noise, emits oil and disturbs the water. Instead of vacation homes owned by individuals, there may be group ownership or renting in order to avoid ruined shore lines.

You may return to old habits of thrift. People may save newspapers to be recycled into newsprint; little boys may once again earn pocket money by collecting the deposit on returnable beer and soda bottles. The old-style returnable glass container makes about nineteen trips to the market, and at the end, the bottle manufacturer melts the material down to make new bottles. Nonreturnable cans litter the highways, contribute to the growth of garbage heaps and cost an estimated ten to sixty cents each to pick up.

Henry Ford II reports that new "fragmentizing equipment . . . has led to a substantial increase in the number of retired cars processed for recovery of iron, steel and other materials."

You may see today's garbage become tomorrow's product or industry. Currently, it is cheaper to pour dirty chemicals and acids into the ground or the sea or to boil them away into the air, than to extract the impurities. If the law forbade dumping, the manufacturer would either discontinue production or recycle.

Garbage could also turn into a useful product. Professor Barry Commoner of Washington University, St. Louis, has suggested the development of small-scale composting plants to convert garbage into useful organic materials. Mr. Kretchmer says, "In Europe they are using refuse incineration as a source of power. . . . The new incinerator at the Brooklyn Navy Yard will convert garbage into steam."

money you save by buying less and saving more may come in handy. Anti-pollution devices may raise the cost of plant construction, and this will be passed along to the consumer. The automobile industry already produces a device that cuts down on emissions. It costs \$32 in a 1970 Chevrolet.

As the economist "Adam Smith" says, "In the manufacture of whatever is necessary to cut down our contaminants, there is a happy recourse for the manufacturer: raise the price."

You may pay higher taxes. Senator Nelson has estimated that cleaning up the environment will cost the country \$275 billion over the next thirty years, or as much as the country now spends on defense in four years.

You may find more power in the hands of the Federal government. States and localities, acting independently, cannot coordinate policy on land use, conservation, mineral resources, packaging, dumping of garbage and other pollutants. Federal regulations will be needed to clean up the environment, but they also may, on occasion, abridge individual freedom.

You may find yourself or your husband changing occupations occasionally. The removal of most hydrocarbons, carbon monoxide and nitrogen oxide from automobile exhausts as President Nixon has proposed requires the removal of lead from gasoline.

No one knows how such a change will affect the lead industry. If lead miners are put out of work, who will feed their families? Such problems of economic dislocation do not faze Jerry Kretchmer: ". . . The economy is so resilient that I always think there are ways to solve a problem."

Every time the government prohibits the manufacture of a product, many people will be put out of work. Either with government aid or without it, they may have to retrain.

You may have to reorder your priorities. According to Senator Nelson, "American acceptance of the ecological ethic will involve nothing less than achieving a transition from the consumer society to a society of 'new citizenship'—a society that concerns itself as much with the well-being of the present and future generations as it does with bigness and abundance. It is an ethic whose yardstick for progress should be: Is it good for people?" ■

Human Ecology. As the preceding article from the July 1970 Ingenue, a teenage girls magazine, illustrates, young people are paying greater attention to an increasing body of knowledge than the older generation--ecology. As the implications of the ecological revolution are spelled out, home economics educators should be saying, "But that's consumer education, foods, child development, home management, etc." Indeed it is, because the home is where for man the whole business of ecology begins--in his relationships to other members of the household and to his home environment. But home economists should accept that their area of concern is no longer so narrowly defined as in the past--that home economics is not just a very limited piece of a greater whole--but that it can legitimately broaden its sphere of influence within that greater whole. It is proposed that while the "Home and Family Life Study Offerings" described in the 1970-71 Garfield Program Planning Guide proceed as planned, that Garfield's home economics teachers begin to work with other faculties to establish a new curriculum in which their area of competence is perhaps best described as human ecology.

To start with, those others might include the interior design instructor in the art program, social studies teachers of sociology, psychology, and contemporary problems, the teachers of "Environmental Literature" and "Health Education" (which covers "mental health, drug use, consumer health, family life or sex education'), and most importantly, the biology faculty who say they now emphasize "Ecology--biology dealing with the mutual relations between organisms and the world around them." Outside resources close at hand (June 1970 Seventeen lists many agencies nationwide) include Prof. Aldon D. Bell, director of UW's Division of General and Interdisciplinary

Studies where an ecology curriculum is sprouting, and William J. Stocklin, director of the Northwest Environmental Education Center at Western Washington State College where a kindergarten through 12th grade environmental education curriculum is being developed. This Center is planning a model workshop for autumn 1970 to train teachers. Summer quarter at UW Dr. Ronald Millard in bioengineering taught A&S X404 (3 credits), Environmental Factors and Ecology for Educational Programs, for teachers interested in establishing ecological programs in public schools.

Guidelines for the sub-areas under human ecology appropriate for high school could start with a study of college home economics departments which have already undergone the transition, e.g., the New York State College of Human Ecology at Cornell University which "focuses on the individual and his reciprocal relationships with other men and technology in the settings most critical for human development: the family, home, and community." Of appeal to Garfield teachers in this reorganized college has been the inclusion of many programs directed toward the problems of the disadvantaged in the inner city. The College has five departments: (1) Consumer Economics and Public Policy, which has as its central concern the well-being of the consumer in society; (2) Human Development and Family Studies, which emphasizes the interaction of the individual and family with broader environmental influences such as neighborhood, school, and cultural groups; (3) Design and Environmental Analysis, which applies knowledge from the social sciences, physical sciences, and the arts to improve man's functional relationship with his immediate physical environment; (4) Community Service Education, which prepares professionals for community service in a variety of formal

and informal teaching situations; and (5) Human Nutrition and Food, which seeks to improve man's knowledge of the relationships among food, nutrition, and health.

Implicit in reorganizing traditional home ec in high school under the rubric "human ecology" is rejection of traditional statutes which imply that "housewife" is an occupation and degrade women while subtly depriving men by requiring that women alone must be exposed to management of resources, personal and family relations, etc. (Fathers are parents, too.) Explicit should be the fact that human ecology is an academic discipline which may nonetheless be linked with true vocational outcomes, e.g., Project FEAST (Food Education and Service Training) makes food preparation legitimately vocational. As has been suggested regarding development of an ecology curriculum, FEAST is produced by cutting across departmental lines tapping home economics, business-math, and English. As the Seattle Times (July 16, 1970) said, "In effect, Project FEAST is a vocationally oriented program taught by academically oriented teachers." Nobody at Garfield expected Meal Management to land him a job, but FEAST graduates can realistically expect such an outcome.

One positive feature of the 1970-71 Program Guide is the distinction between career-opportunity and other, "general" courses-- truth in packaging certainly ought to begin in the home economics department. Unfortunately, the distinction was not maintained in a list of "Career Opportunities" where misleadingly Consumer Education and Homemaking were included with FEAST and Child Day Care. The other area the Guide singled out for vocational training through home ec courses was fashion construction. The on-the-job work

experience described for all three is critical. One research assistant made the following suggestion: "A boutique could be set up by the fashion construction classes. Here they could not only learn how to make clothes, but how to set up a business and work with the public. The teacher would work closely with the students and the students would be responsible for handling the shop. Whatever profits were made could be split equally among all workers. To get the store on its way a fashion assembly could be put on. In the summer it might be possible to have students work in the shop and get paid through the Neighborhood Youth Corps program." She also supported the proposal to establish a day care program at Garfield for children of faculty and students run by Garfield day care students which the writer agrees would help solve several problems at the same time.

While the notion that child development at Garfield might lack relevance for the disadvantaged was not borne out, the home economics program of 1969-70 as a whole did lack relevance, relevance for any school, relevance for today. One of the general complaints students are making everywhere about their education is that it has not kept pace with the rest of society. It must be admitted that much of home economics observed at Garfield looked little different from what was taught twenty years ago. The research assistants particularly felt that the system had failed to realize that knowing how to cook and sew is just not very important in America today. Ready-made meals and clothes are cheaper than doing it from scratch. As homemaking skills, cooking and sewing are no longer considered vocational but avocational, and indeed the students involved in these classes were doing it because to them it was fun. As the male chairman of home economics

at Central Washington State College recently said:

There is a danger, I believe, that home economics may be relegating itself to the periphery of the family life movement, concerned mainly with matters of food and clothing and the management of woman's time and domestic skills. But in the second half of the twentieth century these are not the fundamentals of family living. Teaching girls how to cook and sew is no more 'education for family living' than training boys in carpentry and how to fix the toaster. (Baker, 1969)

At the same time that some subject matter seemed clung to after it had outlived its usefulness, other areas hadn't taken on a broader prospective and grown when they should have. Presumably this recognition prompted both this autumn's addition of Consumer Education I and II and the designation of I as part of the state requirement. Spending is not only a matter of individual and family well-being, but of the welfare and stability of society as well. Not only should society's needs have a greater influence on what is taught as academic home economics, but on vocational training as well. If there is a need for finely sewn, expensive, individually tailored clothes (which there now is and will continue to be in our affluent society), then train boutique craftsmen. But don't teach sewing because it has always been in the curriculum, ignoring the vocational possibilities or lack thereof.

It is essential, above all, for educators themselves to say "no" to the feminine mystique and face the fact that the only point in educating women is to educate them to the limit of their ability. Women do not need courses in "marriage and the family" to marry and raise families= they do not need courses in homemaking to make homes. But they must study science--to discover in science; study the thought of the past--to create new thought; study society--to pioneer in society.
(Friedan, 1963, p. 354)

While home economists would quarrel with this point of view, they cannot argue its current vogue among young people. As long as home economics is seen as preparation for being a housewife and young women are saying "I don't want to be just a housewife," enrollment in home ec courses will decline, and the issue of relevance will be real. Feichtner (1969) found in a sample of high school women that only 7% saw home economics as training to earn a living; the rest had the preparation-for-homemaking image. As to why there were not more college home economics majors, she concluded that high school home ec teachers were having little influence on their pupils. At the secondary level it is therefore important to develop true vocational programs having appeal for both sexes. Needed are aides and technicians in the areas of health, social welfare, recreation, outdoor management, appliance repair, hotel/restaurant, community service, day care education, etc.

The academic and applied research image of home economics has also suffered because of the growth of women's magazines and the popularization of its subject matter, and because manufacturers on their products and advertising on TV have taken teaching on themselves. But academicians themselves have become enmeshed in the minutia of homemaking. Think of the impression created by the curious co-ed who looks up Home Economics in UW's library card catalog. She is told to see also:

Cookery	Household appliances	Servants
Cost and standard of living	Household appliances, elec.	Sewing
Dishwashing	Household linens	Storage in the home
Entertaining	Household pets	Ventilation
Food	Laundry	Visiting housekeepers
Furniture	Marketing	
Heating	Needlework	
House furnishings	Receipts	

Why shouldn't she say, "Is that all there is?"

Homemaking knowledge and skills exist in varying degrees in everyone over three. In requiring a year of home economics of every female student, the system ignores the great individual differences in competence in the home among students. Not only should instruction become even more individualized, but a comprehensive examination should be constructed, the passing of which should satisfy the state requirement until it is done away with. Examples of such tests used in evaluation and for advanced placement may be found in: Denver Public Schools. Evaluation devices in home economics for junior high school. Denver, Colorado: Denver Public Schools, 1963.

Education for the Disadvantaged: Should It Be Different? Garfield teachers were continually confronted with students who wouldn't do the following things: come to class, be on time, stay the entire class period, read the text, participate in class discussion, do homework assignments, take tests, respect the rights of others for quiet or a civil exchange, eat only in the lunchroom, clean up, etc., etc. The teachers appeared to have passively accepted these negative behaviors about which they may have known, but with which they obviously were not taught to cope.

Garfield teachers were continually confronted with students who felt the following ways: worthless, stupid, inferior, ugly, helpless, bad, talentless, etc. Teachers felt compassion in the face of such personal despair and praised wherever they could and denied whenever they could to students that students should feel so hopeless. While immediate reward is obviously necessary to break down a self-image of failure as is the expectation of success in students, sometimes teachers were condescending and patronizing without wanting to be and without knowing that they were. Witness the number of students who graduated in June without having been in attendance half the time.

On the one hand teachers did not seem to be able to avoid developing a missionary attitude at Garfield, as one research assistant said, "Many of these teachers are operating on the principle that they are doing these students a favor," while students were unable to suppress their culture in which "the hero is by and large the brother who messes with the system and gets away with it." Students should be made more and more a part of the system so that messing is more obviously self-destructive. Disadvantaged teaching has to be different, as anyone who has taught at or observed in a school like Garfield knows. The problem is how to have programs to deal with the "special needs of the disadvantaged" without the negative slur and condescension that attend words like culturally deprived and underprivileged? How can you enrich someone without thinking of him as deficient? Three recommendations appear repeatedly in the literature on this problem: changing the school in line with student demands, in-service training for all school personnel in minority history, recruitment of experienced minority teachers. Teaching methods are only right if students learn. Teachers should not be afraid of charges of incompetence, lax discipline, overrelevance. If students learn better by nontraditional techniques, such changes are not vulgar nor condescending.

Parting Comment. Fleck (1970), chairman of home economics at New York University, said the 1970's will require home economics educators to be flexible, alert to change, and innovative. "Professionally, there will be a strong focus on the team approach, especially in education, dietetics, social welfare, and in industry. Home economists must define clearly their unique contribution to a team and communicate this convincingly to other team members. In this way their place on the team will not readily be

challenged and the image of home economics will be enhanced." (p. F-29)
By staking their claim in the domain called ecology, high school home economics teachers can bring new life to an old field dedicated to meeting human needs and best utilizing the world's resources.

References

- Baker, L. G. The enigma of men in home economics. Journal of Home Economics, 1969, 61, 371-373.
- Feichtner, S. Why aren't there more home economics majors? What's New in Home Economics, 1969, 33, 14-15
- Fleck, H. Surging into the seventies. Forecast for Home Economics, 1970, 15, F-15 and F-29.
- Friedan, B. The feminine mystique. New York: Dell, 1963.

Appendix A

Author's Bibliography

1964

- "Relations among Social Desirability, Achievement, and Anxiety Measures in Children." Child Development. 35: 169-182. 1964.
- "The Relationship of Social Desirability to Other Test-Taking Attitudes in Children." (With C. E. Lunneborg) Journal of Clinical Psychology. 20: 473-477. 1964.

1966

- "The LSAT: A Survey of Actual Practice." (With D. Radford) Journal of Legal Education. 18: 313-324. 1966.
- "Relations of Background Characteristics to Success in the First Year of Law School." (With C. E. Lunneborg) Journal of Legal Education. 18: 425-436. 1966.
- "The Utility of EPPS Scores for Prediction of Academic Achievement among Counseling Clients." (With C. E. Lunneborg) Journal of Counseling Psychology. 13: 241. 1966.
- "The Differential Prediction of College Grades from Biographic Information." (With C. E. Lunneborg) Educational and Psychological Measurement. 26: 917-925. 1966.
- "The Prediction of Different Criteria of Law School Performance." (With C. E. Lunneborg) Educational and Psychological Measurement. 26: 935-944. 1966.

1967

- "Undergraduate Preparation and Success in Law School." (With C. E. Lunneborg) Vocational Guidance Quarterly. 16: 196-200. 1967.
- "Improving Prediction of Academic Achievement for Transfer Students." (With C. E. Lunneborg) Personnel and Guidance Journal. 45: 993-995. 1967.
- "EPPS Patterns in the Prediction of Academic Achievement." (With C. E. Lunneborg) Journal of Counseling Psychology. 14: 389-390. 1967.
- "Relation of Delayed Entrance to College Achievement." (With C. E. Lunneborg) Journal of Counseling Psychology. 14: 390-391. 1967.
- "Uniqueness of Selected Employment Aptitude Tests to a General Academic Guidance Battery." (With C. E. Lunneborg) Educational and Psychological Measurement. 27: 953-960. 1967.
- "Pattern Prediction of Academic Success." (With C. E. Lunneborg) Educational and Psychological Measurement. 27: 945-952. 1967.

1968

- "Roe's Classification of Occupations in Predicting Academic Achievement." (With C. E. Lunneborg) Journal of Counseling Psychology. 15: 8-16. 1968.
- "Birth Order, Aptitude and Achievement." Journal of Consulting and Clinical Psychology. 32: 101. 1968
- "Where Have All the Baccalaureates Gone?" American Psychologist. 23: 826-827. 1968. (Comment)

1969

- "Architecture School Performance Predicted from ASAT, Intellectualive and Nonintellective Measures." (With C. E. Lunneborg) Journal of Applied Psychology. 53: 209-213. 1969.
- "Predicting Success in Community College Vocational Courses." (With C. E. Lunneborg) Journal of Counseling Psychology. 16: 353-357. 1969.
- "Sex Differences in Aptitude Maturation during College." Journal of Counseling Psychology. 16: 463-464. 1969.
- "Deviations from Predicted Growth in Abilities for Male and Female College Students." (With C. E. Lunneborg) Journal of Educational Measurement. 6: 165-172. 1969.

1970

- "Relations between Aptitude Changes and Academic Success during College." (With C. E. Lunneborg) Journal of Educational Psychology. 61: 169-173. 1970.
- "Stereotypic Aspect in Masculinity-Femininity Measurement." Journal of Consulting and Clinical Psychology. 34: 113-118. 1970.
- "Prediction of Multiple Aspects of the Community College Experience." (With C. E. Lunneborg and R. Greenmun) Measurement and Evaluation in Guidance. 2: 234-242. 1970.
- "Factor Structure of MF Scales and Items." (With C. E. Lunneborg) Journal of Clinical Psychology. 26: 360-366. 1970.
- "A Factor Analysis of the Core Elements of the CEEB Comparative Guidance and Placement Battery." (With C. E. Lunneborg and R. Greenmun) Educational and Psychological Measurement. 30: 387-392. 1970.
- "An Attempt at Predicting Long-Term, Nonintellective Indices of Community College Study." (With C. E. Lunneborg and R. Greenmun) Educational and Psychological Measurement. 30: 399-403. 1970.
- "EPFS Patterns and Academic Achievement in Counseling Clients." Educational and Psychological Measurement. 30: 393-398. 1970.
- "Undergraduate Psychology Field Work--the Unwashed Take Over." American Psychologist. In press.