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AGRICULTURAL TEACHER EDUCATION IN DENMARK AND NORWAY

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To one who is well acquainted with agricultural teacher preparation in other European countries, the systems in Denmark and Norway will not sound strange. But when viewed from the American experience, they are, indeed, different.

To understand teacher preparation, one needs to understand the kinds of schools in which the teachers will work. There are thirty agricultural schools in Denmark and forty-two in Norway. Very little agriculture is taught in the common school, and that taught is more from the standpoint

The author spent two months in the summer of 1967 visiting agricultural schools, agricultural colleges, folk high schools, and teacher training colleges in Denmark and Norway.

of general education than occupational training. Some of it reminds one of the nature study that held such a strong place in rural elementary schools in this country a generation ago.

The agricultural schools are residential in nature and accept only students over eighteen years of age. To understand the agricultural school, it is necessary to look at the education and experiences its enrollees have had before arriving.

Denmark

Everyone (since 1814) is required to complete seven years of elementary education in Denmark. Beyond the seventh grade, there are essentially three tracks. The technical curriculum and the general curriculum are simply extensions of the first seven years through grade ten. A third curriculum is the Realskole, an academic curriculum which is often located with the elementary school.

Most farm boys leave school after the seventh or eighth grade, however, the number continuing beyond is increasing. City youngsters usually remain through grade nine, since a ninth grade education is required for admission to many vocational and commercial schools.

The gymnasium (upper secondary school) is strictly academic in its orientation, and only about 10 per cent of the youth attend it. It is oriented toward preparation for the university, and Danes usually consider completion of it approximately equivalent to one or two years of liberal arts college in America.

At the time when they are eligible to leave school, at age 14 or 15, few of those who will later attend agricultural college have made such plans. Most plan to farm. They begin then to gain the required farm experience. There is a long tradition in Denmark of acquiring farm experience, not only on the home farm, but on at least two other farms, as well, each lasting from six months to a year. Many of the young men, especially those who later attend agricultural college, will have worked on three or four and sometimes as many as five different farms, in order to gain a wide variety of farm experience. These may involve dairy farms, hog farms, grain farms, and others in Denmark; it is quite common to work on farms in other countries particularly France, England, Germany, and occasionally Canada. While gaining the farm experience, the young person is paid a regular hired hand wage, currently about 1,000 kroner (\$140) a month plus room and board in Denmark.

At age 19 every young man in Denmark must serve 14 months in one of the military services. After completing military service, many young men will attend a folk high school, of which there are about 70 in Denmark. These are residence schools attended by young people, mostly 18 - 25 years old. The curriculum consists of traditional general studies, and no examinations, grades or degrees are awarded. Terms vary -- five months, seven months and some as many as nine months.

Thus by the time a young man attends an agricultural school, he is likely to be 22 or 23 years of age. The agricultural school is much like the folk high school in its setting, atmosphere and other ways, with the exception of the curriculum. Agricultural schools are usually located in rural areas, and normally have farm land, but the students do little or none of the farm work. This is done by a hired man. It is assumed that students have had the necessary practical experience in farming when they arrive, and all of their time is spent on what is referred to as "theory." The in-class instruction tends to be theoretical, but most subjects include field trips where instruction is quite practical. For example, a course in farm management would include several visits to better farms in the area to discuss with the farmers their techniques of management.

Most of the students in the school are planning to return to the farm and as soon as possible to buy a farm. In each agricultural school, however, there are several young men each year who are preparing to enter the College of Agriculture in Copenhagen. In addition to the regular agriculture courses, they also study German and English, since a reading knowledge of these two foreign languages is necessary for admission to the College of Agriculture. It should be explained that this requirement is necessary for in a country with less than five million people there cannot be enough books in each specialized subject printed in the Danish language. Students must rely on texts printed in other languages for much of their study.

The agricultural schools, like the folk high schools, also give no examinations, no grades and no degrees. However, graduates are given a certificate of attendance which is often useful when they later apply to a bank for a loan for farming purposes.

The Royal Veterinary and Agricultural College (hereafter referred to as College of Agriculture) is located in Copenhagen in what was the suburbs in 1858 when it was established.

Applicants must have completed two to three years of farm experience and at least six months at an agricultural school. They may be admitted without taking the entrance exam if they completed the Realskole or gymnasium; however, since many applicants have completed less than 10 years of schooling, they take the entrance examination. In the fall of 1967, it admitted 100 students out of 225 who took the entrance examination.

The College offers curricula in agricultural economics, agricultural engineering, plant science, animal husbandry, dairy industry, veterinary science, horticulture, forestry and landscape architecture. The course is four years in length, recently increased from three and one-half years. The curriculum does not include study of non-agriculture subjects such as history, sociology, and other general education courses found in college curricula in the U. S. All study is devoted to agriculture and related science subjects.

Upon completion of the College of Agriculture, most of the graduates become teachers, extension agents, or work in agricultural cooperatives which number into the hundreds in Denmark. If one is employed as a teacher, he may be permitted to serve as an apprentice teacher in another school, if the headmaster of the agriculture school wishes, usually for about three months.

In short, there is no regular plan for providing preparation in pedagogy for agriculture teachers in Denmark. The graduates usually recognize the need for it and may later attend a summer school at a folk high school where pedagogy is taught on a short term basis.

Approximately 10 per cent of the College of Agriculture graduates enroll for postgraduate work, a program requiring a minimum of two and one-half years and usually three to four years, leading to the licentiate. Few teachers or prospective teachers pursue the licentiate; those who do so are preparing for college level teaching or research. In Denmark, the doctorate does not involve a program of formal study; it consists of presenting a thesis and defending it, first before a committee, then before the entire faculty and visitors. The doctorate normally comes only after several years of experience following formal study, and is not held by most of the professors and teachers in the College of Agriculture.

In a four-year undergraduate program, devoted solely to agriculture, much more agricultural subject matter can be taught than in American universities where teacher education curricula provide approximately two years equivalent study in agricultural subject matter. This, coupled with the greater maturity of Danes--nearing thirty--when they complete their undergraduate studies, means that they are generally better prepared in their subject than American teachers at graduation. However, Danish agriculture teachers are quick to point out that lack of pedagogical preparation in their undergraduate preparation is a serious shortcoming in their training.

Norway

The pattern of preparation of teachers in Norway is similar to that in Denmark, with minor variations. The elementary school system is also similar to that in Denmark. The national requirement is seven years of compulsory schooling, however, more than one half of the local school systems have increased that to nine years. The pattern of the Realskole and gymnasium parallels that in Denmark.

Young men planning to attend the College of Agriculture in Norway must have attended an agricultural school, as in Denmark. However, unlike Denmark where the course lasts less than one year, in Norway the course usually lasts two winters or two winters and one summer, although courses of one year's duration are offered in some of the schools. Not less than one year in an agricultural school is required for admission to the College of Agriculture.

Farm experience, similar to that described for Denmark, is also required of applicants for the Norwegian College of Agriculture. The various curricula offered are similar to those offered in Denmark, with one notable exception: All students, regardless of curricula, are required to complete 90 lessons of 45 minutes each in psychology, pedagogy and methods of teaching. This instruction has been offered in the past by a teacher from the University of Oslo who visited the campus each week to provide the course.

In 1963 the Agricultural College took over a teacher training college near Oslo which had been used to prepare teachers for small-holders' schools, which have now disappeared in Norway. The facilities are used to hold inservice training short courses for teachers of agriculture and extension agents in pedagogy and related social sciences. Initially it was planned to enroll recent graduates and provide them the special training before they accepted positions as teachers or extension agents who attend the two to three month shortcourse while on full salary from their local school district. These experienced teachers and agents apparently left enthusiastic about their training, which led the College of Agriculture to the conclusion that a professor of the pedagogy of agriculture should be appointed to provide additional instruction in pedagogy and related social sciences. The Minister of Agriculture has submitted such a proposal to the Storting (Parliament) and it is anticipated that approval will be forthcoming during 1967-68. If approved, the instruction will be provided at the College of Agriculture during a three to four month period immediately following completion of agricultural studies. This will correspond to the pattern of preparation for prospective teachers for the gymnasium at the University of Oslo.

The Norwegian College of Agriculture is presently considering the possibility of admitting students who have completed the gymnasium, without requiring either attendance at an agricultural school or practical farm experience. This would admit them at age 18 or 19. If this occurs, Norway's agricultural schools, which have always been accustomed to new teachers coming with a thorough background of farming experience and practical agricultural training, in addition to theoretical training, will likely find it difficult to adjust to teachers who lack this background.

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