When I first began to study teacher education programs some ten years ago, it was still more or less possible to memorize the typical programs. For example, in the teachers’ colleges, students took child development, school management, a smattering of art and music, general methods and a fairly heavy dose of remedial work in the 3 R’s. The university graduates in the colleges of education received a complementary offering of adolescent psychology, school law and methods in academic subjects as appropriate. Those destined by their credentials for higher things also got crash courses in such weighty matters as ordering supplies. A few institutions were offering those new-fangled B.Ed.s, which were of course looked upon with that dark suspicion which Canadian educators reserve for most American inventions.

The university B.Ed. programs used different terminology, calling “child development,” “educational psychology,” and “school management,” “educational administration.” Despite such changes, the programs were still quite similar to the normal school programs they had replaced, although they did allow a wider choice of options.

In every program the course work was supplemented at some stage by a carefully worked out combination of practice and observation, usually two to three times as much observation as practice. In some cases, time actually devoted to practice was as little as 20 hours. On the basis of a five-hour day, that works out to just four days of practice. Of course, other institutions of that era were requiring as much as 100 hours, or about 20 days. These figures are quoted from a study of practice teaching made by the Canadian Teachers’ Federation in 1961.
The programs of the time were accompanied by a chorus of complaints that they were dull, repetitive, irrelevant or full of "Mickey Mouse" courses. Teachers in particular criticized the small amount of time spent on practice teaching. The basic similarities of the programs were sometimes pounced upon by critics. One professor, for example, in a controversial book called *So Little for the Mind*, attributed these similarities to the fact that "teachers of teachers... have become a band of brothers. They are even a series of twins; if you meet Tweedledum in Halifax, Tweedledum meets you in Vancouver."

Since that time, a great deal of interest has been shown in the reform of teacher education. Teacher associations, both in Canada and the United States, have shown some leadership in organizing study projects and conferences in this area. The institutions themselves have become engaged in study and revision of their programs.

In view of all this activity in teacher education, it seemed appropriate to the Canadian Teachers' Federation to undertake a study to determine whether the teacher education institutions were in fact changing their programs and, if so, whether they were changing in the directions which had been recommended by various agencies. Most of this article will be devoted to a summary of the results of the CTF study. However, before going into the details of these changes, it might be well to set the stage with a brief description of the development of teacher education in Canada.

The system in Canada, once patterns for training teachers were all established, was to train secondary school teachers at the university, after they had received a degree, and to train elementary teachers in normal schools, after some period of high school education. In the development of normal schools there was originally some similarity between Canada and the United States. However, at this point their paths began to diverge. As I understand it, many of the normal schools in the United States became teachers' colleges and gradually grew into four-year institutions offering liberal arts as well as professional programs and awarding degrees. This did not happen in Canada. The normal schools came to be called teachers colleges, but they remained state-operated single-purpose institutions offering one-, or occasionally two-year professional programs.

Nearly a third of the institutions for training elementary teachers in Canada are still institutions of the teachers' college type. However, change is occurring. Since 1945, one prov-
ince after another has transferred teacher education directly to the multipurpose universities without the intervening step of expanding the teachers' college program. While this process is not yet complete, it is very likely that we have now entered the decade in which all elementary teacher education will be transferred to the universities. The importance of this move in influencing teacher preparation curricula should not be underestimated, since it tends to bring with it longer programs, more highly trained faculty, more emphasis on the scholarly disciplines which contribute to the study of education and readier access to elaborate equipment.

Another difference from teacher education in the United States which has to be mentioned is that the minimum program for teachers is not yet, in any province of Canada, a degree. This is not to say that many teachers don't have degrees. However, they are not required to hold degrees and thus, while one may describe programs to one's heart's content, one cannot assume that all, or even most, teachers have taken the full programs described. On the other hand, minimum standards are constantly being raised. For example, Ontario has announced that the degree will be required for entrants to elementary teaching in 1973 and Alberta grants no permanent certificates to teachers with less than degree standing.

In summary, then, many Canadian institutions are having to adjust their programs both to suit the university milieu and to accommodate students who are, on the whole, older and better educated.

the CTF study

The study from which most of the material for this paper is drawn was conducted by CTF during 1969-70 and was an attempt to determine the trend, or lack of trend, toward certain types of innovation in teacher education institutions. We were at a certain advantage in this study in that the total population of teacher education institutions in Canada is small. There are only about 40 English-speaking teacher education institutions in Canada, compared with over 1,200 in the United States.

The programs offered by the Canadian institutions are of three main types. Outside of the province of Ontario, the university B.Ed. program for both elementary and secondary teachers is the prevailing pattern, although Nova Scotia and New Brunswick still have one teachers' college each. The uni-
versities also usually offer a one-year professional program for graduates of other faculties. In Ontario the pattern differs. Prospective secondary school teachers with degrees take a one-year program at a university college of education and receive a B.Ed. High school graduates may qualify as elementary school teachers after one year in a teachers’ college. However, several of these teachers’ colleges have become the faculties of education of their neighbouring universities since our study was begun and more will follow. Of the 35 institutions for which findings are reported in the study, 24 are classified as universities and 11 as teachers’ colleges.

There is considerable variation in size among the institutions. Enrolments in the teachers’ colleges in 1969-70 ranged from 360 to 1,770. For universities the range in size was much greater. Twelve institutions had enrolments in education of less than 500. In the remaining institutions undergraduate education enrolments ranged from 660 to 4,500.

The French-speaking teacher education institutions in Canada, most of which are in the province of Quebec, were not included in this study. They were left out partly because they were entering a period of rapid transition just at the time of the study, and also because of the difficulty of translating the survey instrument.

The findings cited, then, refer to English Canada institutions. A questionnaire was distributed to these institutions on the last day of December 1969. The response was so excellent that a 92 per cent return was received without any follow-up.

The questionnaire was designed to be as simple as possible to answer and was therefore quite structured. A total of 58 items was used, divided into seven groups dealing with administration and planning, overall design of the program, special courses within the program, practice teaching, school-faculty cooperation, teaching practices of faculty members, and buildings and equipment. For each of the items listed, respondents could indicate whether that particular practice was part of the regular program, in the experimental stages, in the planning stages or not planned at present, simply by placing a check mark in the appropriate column. Several open-ended questions were also included, dealing with admission requirements and faculty retraining. A final question asked respondents to indicate “the most significant change in your program during the past year.”
some highlights of the CTF study

Most of the specific items in the questionnaire were chosen to illustrate one or more general innovation themes. These themes were drawn from a number of sources, including the proposals for model programs of elementary teacher education prepared for the U.S. Office of Education, various publications of AACTE and NCTEPE, and several proposals for reform that have been drawn up in Canada, for example the COFFE Report from the University of British Columbia, and John Macdonald's The Discernible Teacher.

The five themes which I have chosen to attempt to illuminate from the CTF study are:

1. Individualization of instruction in teacher education.
2. Interaction of the school system and the training institution.
3. Disadvantaged children.
4. Orientation to change in education.
5. Educational technology.

Each of the five tables at the end of this article summarizes institutional replies to the items related to one of these themes. For convenience of analysis, each table contains two final columns, one of which is headed “Future Adoption Index” and the other “Innovativeness of Practice Index.” The first of these columns received its heading on the assumption that, by combining the percentage of institutions which indicate a practice is part of the regular program with the percentage of institutions which indicate it is being planned or experimented with, one arrives at an estimate of the maximum percentage of institutions which will adopt the practice into the regular program in the near future. Similarly, the assumption underlying the “Innovativeness of Practice Index” is that, if one combines the percentage of institutions reporting that a practice is in the experimental or planning stages, with the percentage of institutions reporting it as not planned at present, one obtains an estimate of the maximum percentage of institutions for which that practice represents an innovation. This column, then, gives some idea of the newness of the practice for the Canadian institutions. Both indexes will be referred to in the discussion that follows.
individualization of instruction

Table I records items related to individualization of instruction in teacher education. “Individualization” is perhaps one of those fad words which appears from time to time and which subsumes under the one heading both old and new ideas. Consequently, there is a certain vagueness in the term. Nevertheless, it seems to represent a genuine search for programs which can be sufficiently varied in length, content and approach to be of value and interest to all students. The items listed in Table I refer to practices which, if adopted, would indicate a trend toward individualized instruction. They are of two types, those relating to overall program design and those concerned with the teaching practices of faculty members.

The results reported in this table show no items which even half of the institutions report as regular practice. The only item which is reported as regular practice by almost half the institutions is “replacement of formal examinations by other methods of evaluation.” About one-quarter of the institutions reported that they were offering individually prescribed programs and that individual tutoring is regular practice among faculty members. These are the only three of the eight practices which appear at all likely to become regular practice in the near future in the majority of institutions.

Judging from the last column of this table, the remaining items would appear to represent highly innovative practices to most of the institutions. For example, computer-assisted instruction has been talked about a lot, but it is certainly far from being implemented in teacher education institutions in Canada. Similarly, computer-based instructional management systems are still remote from program realities. In fact, two respondents put question marks beside this item. It would appear that very few institutions are prepared to replace their methods courses with on-demand seminars, workshops and lectures, although there is one institution which operates rather consistently on this principle.

In general, then, one might say that the trend toward a thorough-going individualization of program is, in Canadian institutions, still rather minimal, although a few signs of increased flexibility are appearing. That many of the institutions are interested in this area was demonstrated in the responses to the open-ended questions. For a number of institutions, the major recent change in program was increased selection of options.
interaction of the school system and the training institution

Table II records items related to the interaction of the local school system and the teacher education institution. It is often suggested that there is a considerable gap between the thinking in the faculties of education and actual practice in the schools. According to some observers, it is the training schools which are reactionary. Other critics attribute the conservatism to the schools. Both views suggest a certain lack of sympathy between agencies which ought ideally to be in some harmony, or at least to interact in a mutually productive way. This lack of sympathy is often expressed as the gap between theory and practice.

We were therefore concerned in the survey to determine if there were any trend toward systematic interaction between the training institutions and their local school systems. It may be seen from Table II that there were only two items which were reported as regular practice by at least half the institutions. Fifty-two per cent of the institutions reported that school-faculty committees on practice teaching were part of the regular program and 54 per cent that field studies were included. The “Innovativeness of Practice” column suggests that the remaining items are still in the innovation stage for most of the institutions. On the other hand, there does seem to be a clear movement on the part of a third or more of the institutions toward most of these practices. In particular, it would appear that a considerable proportion of institutions will in future be involving the schools in program planning, arranging exchanges of school personnel and faculty, and replacing practice teaching with extended periods of classroom experience.

disadvantaged children

Table III summarizes responses to the items which were related to provisions for teaching teachers about disadvantaged children. We have become increasingly aware over the past decade of the schooling problems encountered by children who come from backgrounds which, for social, economic or ethnic reasons, are regarded as disadvantaged. In Canada we have perhaps been less ready to admit the prevalence of such problems or to acknowledge their severity. But we have known
for some time that the problems are common enough to warrant some attention in the pre-service training of teachers. It therefore seemed of interest to determine whether the training institutions were exhibiting any sensitivity toward these problems.

Four items were therefore included in the section which inquired whether various topics were included in the program as courses, or parts of courses. These items were “Eskimo education,” “Indian and Métis education,” “inner city children,” and “preschool education.” From the replies recorded in Table III it would appear that topics of this type do not form part of the regular program of the majority of the institutions and are not likely to do so in the near future. This lack of interest is not evenly distributed geographically. For example, six of the seven institutions reporting a course on Indian and Métis education are located in the four western provinces of Canada.

orientation to change in education

Table IV gathers together items which illustrate the theme which I have called “Orientation to change in education.” This theme arises from the frequent observation that everyone going into the working world today should be prepared to change, either within an occupation, or from one occupation to another. Teachers are frequently exhorted not only to be prepared for change, but to attempt to bring about changes in education themselves. It seems quite appropriate therefore to inquire whether the training institutions are incorporating within their programs any courses which might lead beginning teachers to adopt or promote innovative practices in education. Six items of this type are recorded in Table IV. For each of these items, the institutions were asked to indicate whether the topic was touched upon in a course, or part of a course, that was included in the regular program.

The results reported in Table IV suggest that there is a stronger trend toward this theme than toward any of the others described previously. For example, 71 per cent of the institutions reported a course on educational technology as part of the regular program. From the Future Adoption Index for this table, it appears that fairly high proportions of institutions will in future be including in their programs such topics as innovation processes, sensitivity training and action research.
There is only one item in this table for which the Future Adoption Index is very low. This is the item described as staff management, or management of the teacher's staff. It seems very likely that future schools will see the employment of large numbers of paraprofessionals of various sorts and that teachers will be called upon to co-ordinate the activities of a variety of helpers. If so, it might be expected that there would be some reflection of this future pattern in the programs of the training institutions. In general, however, this was not found.

**educational technology**

The final theme expressed in the literature of change is the need both to bring technology into the training program and explain its uses in teaching. The items from the questionnaire which relate to this theme are reported in Table V. It would appear from the replies that the institutions are moving fairly briskly in this area and that many of the institutions have adequate equipment for the task. In general, it is the smaller institutions and the teachers' colleges which are less adequately equipped. The exceptions to the general picture of interest in educational technology are information retrieval courses, computer-assisted instruction, and multi-media study carrels.

**summary**

In summary, these would appear to be some of the general trends in teacher preparation curricula in Canada:
1. The total training periods have been lengthened, with the result that professional programs are being attuned to students who are more mature and have more academic training.
2. The programs have become more flexible and offer a wider choice of options. Various experimental programs are in operation, some centering on internships, others on interdisciplinary or thematic approaches, such as communication.
3. There is a trend toward the adoption of an interdisciplinary approach in professional courses in place of the almost exclusive emphasis on educational psychology which once prevailed.
4. Time devoted to practice teaching has been increased and in some cases has been replaced by a preservice internship.
5. Some innovative approaches to the development of teaching skills are being adopted, most notably microteaching, but also simulation games.

6. Students are being involved in a formal way in program development and administration.

7. The system of heavy dependence on formal examinations is breaking down to some degree.

8. The use of closed-circuit television for instructional purposes within the institutions is becoming quite prevalent.

9. Some attention is being given to providing the kinds of courses which might lead to innovative practice on the part of beginning teachers.

These nine points refer to the positive trends in curriculum. There are, however, areas in which trends are not yet very pronounced. For example, individualization of the programs does not seem to be proceeding very rapidly. Computer-assisted instruction is almost non-existent. The institutions have, in general, not yet demonstrated a sensitivity to such needs in the school system as the problems of disadvantaged children, nor to the possibility that the staffing patterns of the schools may be radically different in future. The study also detected inadequacies in the extent to which the training institutions and the local school systems interact.

It would be of interest to repeat this study in a few years’ time to see whether the indicated trends continue and whether the predictions of possible future adoption into the regular program are realized.

references


Table 1. INDIVIDUALIZATION OF INSTRUCTION IN TEACHER EDUCATION

<table>
<thead>
<tr>
<th>OVERALL PROGRAM DESIGN</th>
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<th>Future Adoption Index</th>
<th>Innovativeness of Practice Index</th>
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<tr>
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<td>In Experimental or Planning Stages</td>
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<td>10</td>
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<tr>
<td>Computer-based instructional management system</td>
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<td>—</td>
<td>9</td>
<td>26</td>
<td>23</td>
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<td>Adjustment of program length for individual students on the basis of performance criteria</td>
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<td>11</td>
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<td>11</td>
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<td>Replacement of methods courses by on-demand seminars, workshops and lectures</td>
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<td>Computer-assisted instruction</td>
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<td>Replacement of formal examinations by other methods of evaluation</td>
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<td>Individual tutoring</td>
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<td>Programmed instruction</td>
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Table II. INTERACTION OF THE SCHOOL SYSTEM AND THE TRAINING INSTITUTION

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<td>N %      N %</td>
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<td>Field studies (with youth groups, in nursery schools, etc.)</td>
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<td>Extended period of classroom experience to replace practice teaching</td>
<td>19 54 5 14 8 23</td>
<td>3 9 35 100</td>
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<td>University-administered internship following graduation</td>
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<td>— — 35 100</td>
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<td>Exchange of faculty and school personnel</td>
<td>3 9 9 26 23 65</td>
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<td>Faculty membership for co-operating (practice, supervising) teachers</td>
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<td>— — 35 100</td>
<td>54</td>
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<td>School-faculty committees on practice teaching</td>
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<td>School-faculty committees on program planning</td>
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<td>Joint school-faculty-student innovation projects</td>
<td>9 26 7 20 18 51</td>
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<td>Assumption by faculty of major responsibility for operating a local school system</td>
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### TABLE III. DISADVANTAGED CHILDREN

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<td>5</td>
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<td>Inner city children</td>
<td>5</td>
<td>14</td>
<td>5</td>
<td>14</td>
<td>22</td>
<td>63</td>
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<td>Preschool education</td>
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Table IV. ORIENTATION TO CHANGE IN EDUCATION

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<td>Human relations</td>
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<td>Innovation processes</td>
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<td>Staff management (management of the teacher's staff)</td>
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<td>Sensitivity training</td>
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