

**Educational
Master Plan
Starts With
Survey
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CARIBOO COLLEGE CHRONICLE

Volume 1, Number 6 May 31, 1979

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English
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Leaflets Available

"Nutshell" information about most individual programs and courses of study at Cariboo College has now been made available to prospective students and others in convenient brochure form.

The Student Services office now has a series of 39 leaflets on display in browsing racks, summarizing the highlights of offerings in the three major divisions of the College: University Transfer, Careers and Vocational.

Each three-fold pocket-size leaflet contains a brief description of the program or field of study, the educational

(Application procedures are spelled out in an article on Page 5).

or employment goals (or both) toward which it leads, and a list or capsule description of the courses comprising it. Admission requirements, including applicable course prerequisites, are also given.

REQUEST FORM

Each leaflet also includes a detachable request form, which can be filled in and addressed to the Registrar if the sender would like a College Calendar or an Application Package, or both.

The cover leaf bears the name of the program or discipline, with a distinctive

(Continued on Page 8)

Scientific Outlook on Cariboo Campus



PANORAMIC VIEW of much of the College campus and the landscape to the north will be enjoyed by faculty and students from the second floor of the new Science Building before many more months. Shown during a pause in a brief tour of the structure are Dr. John McIntosh (left), Chemistry instructor,

who coordinated the Science Department planning committee for the project; and Construction Superintendent Russ Grant. The Student Lounge and Cafeteria Building is shown downhill at the right. (Story and another photo on Page 3.)

BCAC Welcome

Approximately 80 Board members plus principals and bursars representing 14 community colleges and provincial institutes will convene in Kamloops beginning Friday June 8 for the 12th annual meeting of the British Columbia Association of Colleges.

A luncheon address by Dr. Patrick L. McGeer, Minister of Education, Science and Technology, and a series of sessions on the conference theme of institutional management will be among the highlights of the weekend conclave.

Opening ceremonies on Friday will include a barbecue supper at Cariboo College and an address by Beryl Bennett, Chairperson of the Malaspina College Board and President of the Association.

The remaining sessions will take place at the Canadian Inn, which is meeting headquarters. A keynote address Saturday morning by Dr. Arthur Kratzmann of the University of Victoria Faculty of Education will be followed by workshop sessions and, in the afternoon, by a panel discussion and debate on the conference theme. In between, the delegates will hear Dr. McGeer's message.

The concluding session on Sunday morning will be devoted to association business, including the election of officers and the budget for the coming year.

Other officers of the association include Board Members Ian G. Edgar of Capilano College, vice-president; Robert H. Buckley of Selkirk College, immediate past president; James Patterson of East Kootenay Community College, Gillian Trumper of North Island Community College and T.J. MacDonald of Capilano, directors. Frank Beinder is executive director.

June 8 Meeting

Discussion of the College Board by-laws prolonged the Board's regular May 29 meeting to the point where Chairman Andrew Smith proposed deferring the rest of the public session.

The Board will reconvene for the rest of its agenda on Friday afternoon, June 8. The public meeting is scheduled for 1 o'clock.

Chiefs Join Ice League

Plans to include the Cariboo College hockey team in the Alberta College Athletic Conference -- giving the Chiefs once again the much-needed competitive challenge of league play -- are in their final stages this week.

College Athletic Director Pat O'Brien has been in frequent telephone contact with the Alberta officials, and reports that problems of scheduling, format and financing have just about been resolved.

It means, he explained, that Cariboo will become the sixth team in the ACAC hockey circuit. Earlier this year the Chiefs met some of the Alberta teams in the Molson Invitational Tournament, but were at a disadvantage because they had only a series of exhibition games.

The proposal for league participation has the approval of the various Cariboo sports coaches, the campus Sports Council, and the College Board, as well as the local Molson tournament committee, O'Brien said

Invitation from Nurses

The first of what are planned as annual open houses for prospective students and others in the community interested in the possibility of a career in nursing will take place at Cariboo College on Monday afternoon and evening, June 4.

Phyllis Johnson, the College's Director of Nursing Education, will be assisted by faculty members, currently enrolled nursing students, College counsellors and other staff members in explaining the nursing program and conducting demonstrations. She said all persons interested are welcome.

Visitors will start their tour in the College Board Room, where they will get an overview of the program and can discuss it with students before inspecting the classroom and lab facilities. They can begin their visit any time between 4 and 8 p.m.

Since the excellently equipped nursing laboratory which will become available by early next year when the College's new Science Building is completed is not

yet ready for showing, the instructors and students will use the present laboratory on the second floor of the main block to demonstrate various nursing skills.

Exhibits and illustrations of various nursing projects will show other aspects of the training provided by the College's two-year program.

NUTRITIOUS SNACKS

Refreshments will be offered, with sound nutrition in mind. In addition to the usual tea and coffee, visitors can reach for celery and carrot sticks.

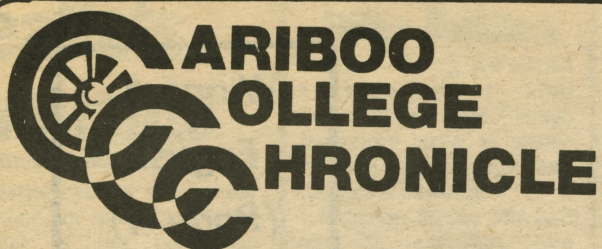
The College's nursing program, now in its seventh year, has prepared more than 150 persons for professional careers as registered nurses. Most of them are working in British Columbia and Alberta, but some are stationed as far east as Ontario and Quebec.

Classes begin in September and continue through July of each year, with practical experience in hospitals and health agencies supplementing a broad program of general, scientific and

(Continued on Page 3)



FIRST STEP in choosing a program or a field of study at Cariboo College is for many people a visit to the Student Services reception desk, where Dian Aylwin is ready with a helpful smile and an array of the new information leaflets. The signs above her indicate the array of services available: Counseling, Financial Aid, Campus Recreation, Study Skills.



An Informational Bulletin for and about the College Community

Published Monthly (except June and July).

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COLLEGE PHILOSOPHY

Cariboo College is a comprehensive community college. As such, it is committed to the philosophy that a community college has the responsibility to offer the broadest range of educational opportunities to the citizens of its region consistent with the available resources. Comprehensiveness does not mean trying to be all things to all citizens regardless of cost, since scarce resources must be wisely used; it does, however, imply a commitment to the concept that individuals have different educational needs and that these are equally worthy of consideration. Thus, Cariboo College does not believe that any one program, or student, has higher status than any other. The worth of a program is measured by the degree to which it meets the needs of the community it serves and the success of a student in that program is measured by the degree to which he or she attains the objectives set for that program.

Regional Community Education Head Sought

A new position of Regional Director of Community Education, responsible for supervising and expanding a wide range of study programs and courses in the College's 65,000-square-mile region, has been established by the Cariboo College Board.

Advertising for qualified candidates for the post, with the commencement date to be "as soon as possible," is already under way.

The new position is the first step in carrying out the Board's commitment to extending a wide variety of educational opportunities throughout the region, now that the College's primary objective of a comprehensive range of programs at the Kamloops campus has been largely attained, according to Board Chairman Andrew M. Smith.

The announcement contains a change in title from "Continuing Education" to "Community Education," reflecting the responsiveness of the College to community needs, Smith said. The Division is responsible for providing both credit and non-credit courses, including career, vocational and general interest offerings as well as university transfer, which fall outside the domain of the College's regular programs. There will be renewed emphasis on credit offerings under the new structure.

AREA SETUP KEPT

Up to now the College has had two Directors of Continuing Education, one for the southern area of the region, including Kamloops, and one for the northern area, with headquarters in Williams Lake. These positions will be retained, but their occupants will become area directors reporting to the new regional director. He, in turn, will report to the Educational Vice-Principal, A.J. Wright.

the new emphasis on community education in a broad sense also reflects the

current educational trend towards "distance learning," College officials point out. One of the major qualifications for the new administrative post call for "considerable background and experience in Distance Learning delivery systems."

In taking the step, the College Board acted on the recommendation of a task force composed of various administrators and department chairpersons as well as Board members.

The task force also recommended the use of a variety of non-traditional modes of credit course delivery, ranging from formal classroom settings to various mixed media and "packaged" courses. It also suggested the long range goal of establishing College Access-Learning Resource Centres in Ashcroft, Lillooet, Merritt, 100 Mile House and Clearwater.

Needs Assessment Study Starts

An intensive survey of the educational services that Cariboo College is performing and can perform in the future throughout the 65,000-square-mile College region will be under way this summer as a major element in preparing a

five-year Educational Master Plan.

The plan must be submitted to the provincial Ministry of Education, Science and Technology in 1980. Based on Ministry-prescribed guidelines, it will spell out both the goals toward which the College should be headed and the strategy which will guide it step by step toward those goals.

Departments Changed

Departmental reorganization affecting several College programs became effective on May 1.

One major change resulted in the splitting of the large Department of Business into two new departments: Business Office Training, which embraces the various skills taught under vocational programs; and Business Administration and Commerce, which includes the career programs and the University transfer courses in Commerce.

Commercial Instructor Judy Waddington has been appointed Acting Chairperson of Business Office Training. For Business Administration, Educational Vice-President A.J. Wright is serving as chairperson pending a permanent appointment, for which advertising has been placed.

The new structure is a result of several internal discussion meetings, including those of a subcommittee of the Committee of Chairpersons.

Another organizational change affects the Electrical Department, chaired by Doug Warrington, expanded to include Carpentry, which was formerly separately administered; and Electronics, which has for some time been a part of the Department of Physical and Life Sciences.

The changes are designed to streamline administration of various programs and courses, according to Acting Principal Leo Perra. Some departments, he explained, had grown to the point of being somewhat unwieldy. The new groupings are seen as more logical and efficient, and should be helpful to the instructors and students concerned.

"Obviously, a preliminary and essential step in carrying out the Ministry's mandate is the collection of data," said Leo Perra, acting College principal. "To that end, we will be fanning out through the region, from Chase to Lillooet and from Lytton and Merritt to Williams Lake and Bella Coola, to find out what people think and expect of the College."

This assessment of regional educational needs will be compiled from answers to questionnaires gleaned from four broad "target" groups, Perra said. These include the general public, Grade 11 and 12 students, college graduates, and specific-interest groups such as employers, native Indians, senior citizens and the rurally isolated.

PLANNER ON JOB

The College has retained a professional regional planner, Lyndagale Thorn of Vancouver, to direct the Needs Assessment Project. Assistance will come from the College's Program Advisory Committee, presided over by Educational Vice-Principal A.J. Wright, which includes representatives from various components of the College community.

To obtain the general public's views of how education affects them personally and how they regard the College's present and future role from the standpoint of their occupational, avocational or broad educational needs and desires, a team of four interviewers will shortly be at work.

These interviewers, will be qualified university and college students working under the Department of Labour summer youth employment program. They will

visit sample households throughout the region during the next three months. The interviews, based on questionnaires, will take about 20 to 30 minutes.

Meanwhile, senior-level students in all or most of the secondary schools in the region will have been filling out questionnaires focussing on their post-graduation intentions and expectations, with specific reference to future education or training. The cooperation of school officials and teachers will be essential for this aspect of the Needs Assessment, Perra said. The results will of course be made available to school authorities, he added.

ALUMNI INCLUDED

Also, as many former students of Cariboo College as possible will be sent separate questionnaires. These will bear principally on how effectively the College has met their individual needs in the light of their present and anticipated employment, career progress or further education.

The "special needs" groups - employers, etc. - will, like the general public, be surveyed via interviews. Questions asked of them will be geared to their particular interests and orientation.

At the same time, the College staff will be participating in discussion of potential and desired goals and of ways of attaining them. Ms. Thorn will also be conducting studies of population and economic data for the region. All these studies, plus the questionnaire results, will then be analyzed and sifted as a basis for the Educational Plan.

"The objective of the survey and the resulting plan," Perra commented, "has been well stated by the Ministry. It is to provide the information and insight to help the College's Board, administration and concerned College constituencies think through the directions in which they will take the College, and thereafter to be accountable to the community for those directions taken."



LYNDA THORN

Planner At Work

Details of the College's current Needs Assessment Survey, from the framing of questionnaires to statistical analyses, have been assigned to Lyndagale M. Thorn, who began intensive work on the project early in May.

Ms. Thorn has had several years of experience in regional planning, and was recently involved in an educational planning study at Vancouver Community College which was somewhat similar to the Cariboo project. She served as adviser to the Market Research Task Force which participated in the planning of educational and training objectives for VCC.

A graduate of the University of British Columbia (1963) with a major in urban geography, she received her Master of Arts degree in 1977 from the same university's School of Community and Regional Planning. She is a member of the Canadian Institute of Planners.

Her other experience includes planning and statistical analysis work with regional districts in British Columbia, and also with the Nottinghamshire County Planning Department in England. Last year she was assistant to the Regional Manager in the Lower Mainland office of the Ministry of Municipal Affairs and Housing.

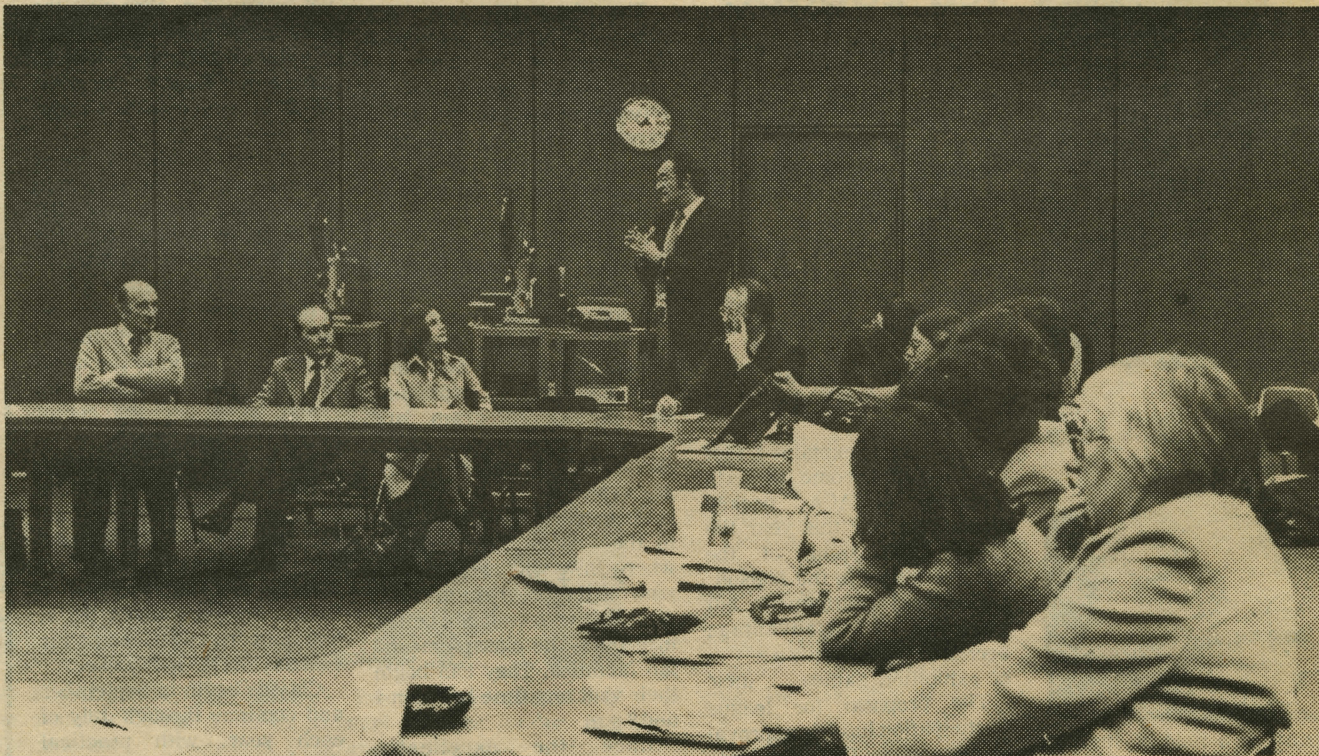
Languages Topic of Meet

Some 30 Modern Languages professors and instructors from universities and colleges throughout British Columbia gathered at Cariboo on Saturday, March 17, for their semi-annual articulation meeting.

They were joined, in their discussion of trends, standards, teaching methods and course development, by representatives of the B.C. Association of Modern Language Teachers, which represents the language instructors at the primary and secondary levels.

After an early morning tour of the campus and a general business meeting, the participants heard Dr. Yves Merzisen, Chairperson of Modern Languages at Cariboo College, present and demonstrate a teaching method in which he has pioneered, using film to enhance the learning of French.

After a luncheon at the College cafeteria, the group went into section meetings concentrating on French, German, Spanish or Russian.



A WORKSHOP DEMONSTRATION by Dr. Yves Merzisen of Cariboo College (standing), illustrating the use of films in language teaching, was a highlight of the recent meeting of the provincial Standing Committee on Language Articulation.

Photo by Tim Pope shows a portion of the group meeting in general session in the Board Room.

Dr. Merzisen has given similar presentations before various language conferences in different areas of North America.

1980 Open House Due

Cariboo College is planning a tenth-anniversary open House in the spring of 1980.

Educational Vice-Principal A.J. Wright, acting on the recommendation of the Committee of Chairpersons, has announced the appointment of a college-wide committee to plan what is expected to be a comprehensive display and demonstration of the wide range of educational opportunities the College now provides.

Tentative plans call for at least a two-day celebration, with one day reserved for the general public of the College region and another for special-invitation groups. A social event for the growing contingent of College alumni is also being considered.

The committee to date includes Counsellor Jim Collingridge, Assistant Registrar Gary McKee, Community Education Coordinator Roy Catherall, Chairpersons Judy Mogan (Nursing), Moe Granger (Physical and Life Sciences), Ron Miles (English) and Derek Chambers (Mathematics), and Charlie Lee of the Stores Department. Student and other representatives are still to be designated. The committee will select its own chairman.

Delayed Credit

Apologies herewith to two guest photographers who should have been credited with pictures that appeared in the April 26 issue of the Chronicle.

The two photographs showing the big outdoor welding job were taken by College Audio-Visual Coordinator Bob Clark, and the photo of Ruth Jones and her award-winning cocoa painting was by Lenore Walker, at the time a Communications Media student.

Invitation to Nursing

(Continued from Page 1)

specialized courses.

To qualify for admission, students must have Grade 12 graduation or equivalent, with an overall average of at least C plus. In addition, Grade 11 level courses in biology, mathematics and either chemistry or physics are required, plus Biology 12 or some other Grade 12 science course.

Information about requirements, courses, financial aid and other subjects of interest to prospective students will be available at the Open House, Ms. Johnson said.

Work on Science Building Advances



LOOKING ACROSS the main hallway of the new Science Building's west wing toward the future physics laboratory on the first floor, Chemistry Instructor Dr. John McIntosh (in white coat) and Construction Superintendent Russ Grant take note of the extensive roughing-in which has been completed this far for the new facility. The chemistry lab will be opposite, on the other side of the hall.

Construction work will be in full swing throughout the summer on the College's new Science Building, so that the return of the full complement of students in September should see the structure well advanced on the inside as well as the outside.

By mid-July the building will begin to assume something of its personality as a science facility. That's the scheduled start for the finish interior carpentry work, beginning with the counters and cabinets in the various laboratories, according to Russ Grant, project job-superintendent for Cana Construction.

The exterior work should be to a large extent completed by midsummer, Grant adds. And on the inside, some of the mechanical equipment will have been installed and considerable other work done.

Completion of the \$3,500,000 project is planned by the end of this year, if all continues to go smoothly.

During May the aluminum mullions which frame the glass curtain wall on the front of the east wing were set in place, as well as the brick

facing over the window spaces. Much of the roofing work was completed.

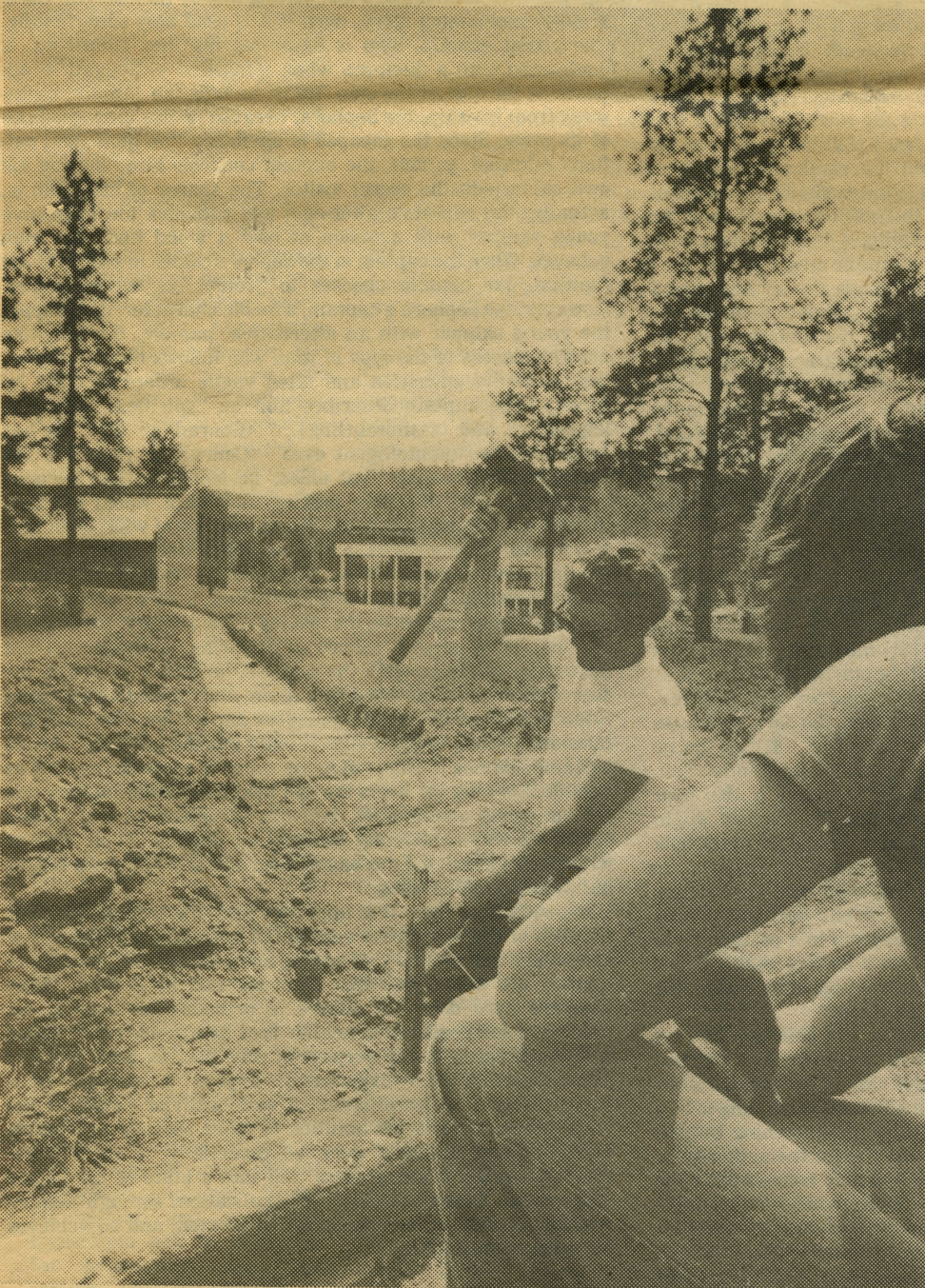
Most of the retaining walls have been finished, but the main entrance stairway and the sidewalks will be poured later. Trenching is to start in June for the placing of utility and drainage pipe.

On the inside, the floor slabs have now been poured for the basement and first floor as well as the second floor. Installation of equipment for the heating and air conditioning systems will be under way shortly in the basement, while roughing-in of plumbing and electrical services continues throughout.

By the end of May, workmen will be placing the insulation and dryboard for the inside face of the exterior walls, this to be followed by the dryboard needed on the interior partitions. On the second floor, corridor walls have already been faced with brick, and similar work is getting under way on the first floor corridors.

The interior stairways at either end of the building have now been poured, and work has begun on the main stairway, Grant reported.

Beautification Goes On



NEW SIDEWALKS (here shown in preparation) are now in place as part of the continuing campus landscaping program. They follow the paths worn by pedestrians across the ground over the

past months while irrigation pipe was being placed. The next step, placing the turf, will be completed shortly, so that the campus will assume a finished green look for the summer.

New Equipment

As if life in the College's Finance Department weren't complicated enough with the budget format changeover, this is the season for preparing to convert the accounting system to new computer equipment.

The Finance Department now uses the computer terminal which serves the Computer Science classes and also other administrative functions.

Within a few months, says Controller Dale Schatz, Finance will have its own data entry equipment installed in a recently-remodeled corner of the Administration offices. This new terminal will use magnetic tape instead of key punch cards for entering the accounting information.

Students Find Egypt Study Tour Memorable

Egypt was a one-time Cariboo College "campus" for three weeks this spring for 19 adult students enrolled in Anthropology 177 under the leadership of Archaeology Instructor Dr. Arnoud Stryd.

The class returned on May 11 from a study tour of the colorful mid-East nation which not only encompassed the key archaeological sites and exhibits but also provided first-hand glimpses of a contemporary Arab nation where ancient ways of life, such as hand labor on farms, are still prevalent.

The impetus for the course came from last fall's short course which Dr. Stryd conducted and which included a visit to the "Treasures of Tutankhamun" exhibit in Seattle. Students whose appetite for a larger helping of Egyptology was whetted by that course, asked for the more extensive study tour, which was promptly arranged by Anthropology Instructor C.G. Mossop, the College's coordinator of travel programs.

Before leaving for Egypt on April 22, the tour participants were briefed by Dr. Stryd in a

series of five lectures. Thus they were prepared for the antiquities and landmarks they saw in Cairo, Luxor, Karnak, the Valley of the Kings and other areas.

Students mentioned among unexpected highlights an interesting tour of contemporary mosques in Cairo; the light and sound display at Karnak; and the rich exhibit of antiquities in the museum at Cairo, which was enhanced by the knowledge and talents of their local guide, a specialist in the history and archaeology of ancient Egypt.

Horticulture Class Proves Popular

The College's initial Practical Horticulture class is just about fully enrolled, with additional applicants being placed on a waiting list, according to Physical and Life Sciences Chairperson Moe Granger.

Dr. Granger also announced

the selection of A.L. "Al" Oliver of Kelowna as instructor for the new program. Oliver, a former Kamloops businessman and later manager of the Kamloops Wildlife Park, will take up his duties in mid-July, to start

preparing the courses. He is a graduate in Agriculture from the University of Saskatchewan.

The eight-month program is designed to train students for a variety of jobs in the horticultural field.

First English Prize Winner Named 40 Awards

June 19

The competition was close, according to English Department Chairperson Ron Miles, but the initial award of the \$200 N. Harrison Prize in English has been made to Kenneth Gillis.

Gillis and the runner-up, David Saito, were enrolled last semester in Dr. G. Alastair Watt's section of English 111. Both had previously completed English 110, the first-year course which emphasizes composition skills.

Other outstanding students

in first-year English who were nominated by their instructors were Gerry Coneybeare and David Rees, English 111, and Lavon Fellenz, English 121.

The English Department committee headed by Miles evaluated four examples of writing done by each nominee.

Gillis is a University Transfer student who is planning to apply for admission to law school at a provincial university.

(An example of his essay writing appears on this page.)

Conrad and Sillitoe: Contrast and Comparison

By KEN GILLIS

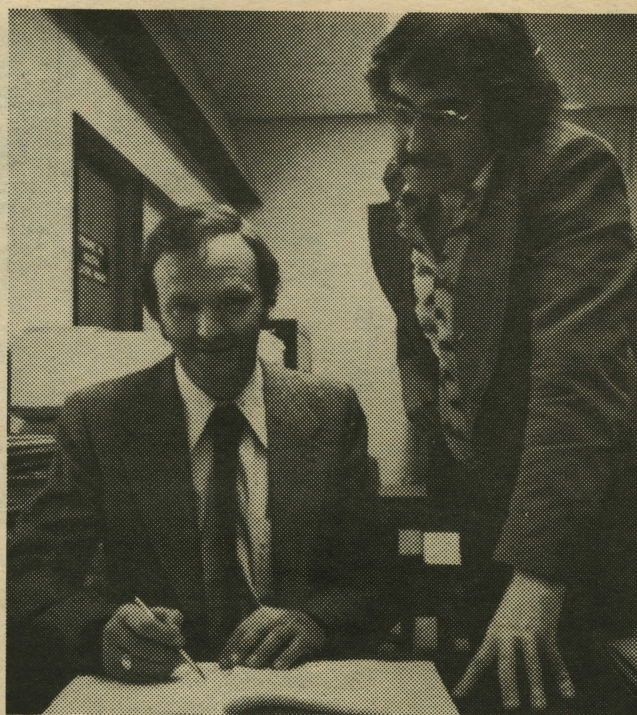
While sharing some similarity of theme, Joseph Conrad's "The Secret Sharer" (1) differs markedly in several ways from "The Loneliness of the Long Distance Runner" (2) by Alan Sillitoe. The authors make very different uses of their tools of setting, characters, and action. While Sillitoe does, certainly, employ symbolism and imagery, he does so to a much lesser extent than does Conrad, whose tale is filled with subtleties, each demanding careful consideration and interpretation. Hence, Conrad's work is the more complex of the two, a fact reinforced by his including a minor theme of brotherhood versus duty, not to throw the reader off the track, but rather to make his work even more intriguing than it would otherwise have been. Finally, and although each is in search of his place in the scheme of things, upon realizing their destinies, the two protagonists follow divergent paths. Thus, each author's treatment of the main theme is quite distinct, even though the result, in some respects, is largely the same.

The theme of self-discovery or self-realization is common to both stories; however, Sillitoe's hero — Smith — comes to terms with himself alone, while he runs. When first we meet Smith, he is running, of a cold morning, across the frozen fields, which are symbolic of the frozen condition of his mind. As the story develops, the runner becomes ever more aware of just what his position in the social world of industrial England really is. As his position crystallizes in Smith's mind, so do the positions of others in society. For instance, he sees the governor of the reformatory as being dead, and, in this connection, states: "By God, to say that last sentence has needed a few hundred miles of long-distance running" (Sillitoe, p. 849). In other words, his running is enabling Smith's mind to gradually shed its state of anesthesia, and a process of enlightenment is taking place. On the other hand, Conrad's protagonist, the unnamed captain, does not come to realize his role in life entirely on his own. Instead, the young skipper is confronted with his choices by the presence of an animus. This animating spirit, emerging from the captain's subconscious, appears in the symbolic form of a fugitive emerging from the sea. In this manner, we see the subconscious area of the captain's mind at work, whereas the long-distance runner's thoughts are related to us purely through his own stream of consciousness.

Each of the stories makes use of various characters, but the secondary characters are of far more significance in Conrad's tale, since the protagonist in Sillitoe's work is the medium through which the entire story is related. Those characters secondary to the long-distance runner himself remain static, and Smith's perception of them is used to illuminate for us his developing perception of himself. His view of "all the pig-faced snotty-nosed dukes and ladies" (Sillitoe, p. 846) is not included so much to denigrate them as to demonstrate to the reader the manner in which Smith sees his position in relation to theirs. Similarly, his naming the police detective "Hitler-face" (Sillitoe, p. 859) shows us not only that he sees law enforcement people as fascists, but also that he sees himself as being completely alien to the world of such people. Thus, Sillitoe makes careful use of static characters to isolate for us the position of his protagonist.

Conrad's story is infinitely more dependent upon characters other than his protagonist. The fugitive, Leggatt, is of signal importance, because he is, in fact, the captain's alter-ego, and represents the subconscious or latent capabilities within the young skipper. Even immediately upon Leggatt's appearance, the captain says: "The self possession of that man had somehow induced a corresponding state in myself" (Conrad, p. 184). This, of course, is the fundamental purpose of the secret sharer's intrusion into the young captain's life. Similarly, as the captain debates with himself as to which direction he should take, the appearance of Captain Archbold epitomizes for him the kind of man whose blind adherence to a perceived duty leads him to deny human brotherhood.

The very name Archbold indicates a deceptive nature concealed by the appearance of decisiveness and resolve. In the same vein, the first mate is demonstrated to be a spineless individual who hides behind his "frightful whiskers" (Conrad, p. 202). The second mate, a surly lad, exemplifies "the sort of ill-conditioned snarling cur—" (Conrad, p. 185) for whose murder Leggatt is responsible. Of course, the prime character in "The Secret Sharer" is the young captain. Suddenly burdened with the awesome responsibility of his first command, the twenty-seven-year-old finds himself embarking on a journey. But this journey turns out to be a psychological trip into his own subconscious, and in a relatively brief time, the young man takes his final steps into manhood. He is, he says, the only stranger aboard, and he admits that he is even a stranger to himself. As the story unfolds, the captain changes from an uncertain, rather



ADJUDGED the highest-ranking student in first-year English, Ken Gillis is shown proofreading a copy of one of his essays whose overall merit won for him the \$200 Jack Harrison English prize recently established by the College Board. Standing beside him is his instructor, Dr. G.A. Watt.

timid lad into a self-reliant, confident commander of men.

Just as is the case with the characters, so it is true that the setting in "The Loneliness of the Long Distance Runner" is less meaningful than that in "The Secret Sharer." Sillitoe sets his story in a reformatory, in the green land surrounding it, and, in a flashback, in industrial Nottingham. There is, nonetheless, some symbolic significance to these locales; for instance, it is in the natural, pastoral surroundings that Smith is able to do his clearest thinking. Furthermore, it is in the foggy darkness of the dirty city that Smith's confusion originates; it is in the brilliant sunlight that he passes through the final phase of development, into a state of full realization of his true self. And his perception of the crass materialism of the television advertisements is sharpened when he considers their real purpose as he runs in the early-morning quiet. It is in these dawning hours that the young man's mind begins to awaken to the real truth; hence the time at which he runs is symbolic of an inner, as well as a meteorological, dawning. In much the same respect, Smith's being cast as a runner is metaphoric. He might have been cast as a machinist, for the "Trot-trot-trot" (Sillitoe, p. 848) of his running could as easily have been the clank-clank-clank of machinery; what it really indicates is the methodical process of his mind grinding out the thoughts, then sifting through them for the truth. Therefore, the setting of Sillitoe's story, while it is, in ways, symbolic, is not crucial to his theme or message.

Joseph Conrad, unlike Sillitoe, has made the setting almost the very essence of his tale. Rife with symbolic meaning, the setting includes images of the conscious, the subconscious, the destination of a mental journey, and the barren desolation of mental inactivity. The very first sentence mentions "half-submerged bamboo fences" (Conrad, p. 181), a reference to the protruding conscious and the submerged recesses of the mind. The sea, too, is representative of the subconscious. Absolutely calm, it is almost indistinguishable from the land, where the two meet. The conscious, therefore, is merging with the dim awareness of the subconscious.

The "westering sun" (Conrad, p. 181) is suggestive of the passing of an era or phase in the captain's life, and the "Paknam pagoda" (Conrad, p. 181) is an image of paramouncy towards which the captain must strive. Similarly, the captain's being "alone with (his) ship" (Conrad, p. 181) means, in reality, alone with life, alone with his inner self "at the starting-point of a long journey" (Conrad, p. 181) — the interior journey into maturity. Again used as an image of the subconscious, the dark sea shows a "flash of phosphorescent light" (Conrad, p. 183) as the no longer completely calm water yields up the captain's other self. Later in the tale, the "reefs and shoals" (Conrad, p. 199) near Koh-ring indicates the rocks upon which the captain might founder, should he fail to realize his alter-ego, and the black hulk of the island is the shadow of darkness or barrier to psychological progress that the young man must overcome. Indeed, the very setting of the ship itself, particularly the confinement of the cabin, places the captain in a position from which there is no escape: he must make a choice. Thus, Conrad uses the instrument of setting to full advantage in his discussion of a young man's ascendancy to full adulthood.

Although they share a commonality in that both use the first person point of view, the two authors demonstrate a marked difference in the use of action and plot. On the one hand, Sillitoe uses a very thin plot: a young man in a Borstal is training to be a long-distance runner, in preparation for an up-coming Borstal cup race. He recognizes that to win the cup for the authority he hates would be to be dishonest with himself; consequently, he throws the race. His mind operates clearly while he runs in the fresh morning air, and he learns to differentiate between his enemies, the "In-law(s)" and the "Out-law(s)" (Sillitoe, p. 847), who are those on his side of the battle. And, indeed, he sees society as a battlefield on which the opposing classes fight their on-going war. He eventually manages to put his father's recent death into its proper perspective, a task he achieves only while running the final big race. These thoughts of his father come to him "as though a bag of rusty screws is loose inside (him) and (he) shake(s) them up every time (he) trot(s) forward"

Funds Boosted

The funds available for scholarships and bursaries were increased by \$5,000 at the May 29 meeting of the Cariboo College Board.

Acting Principal Leo Perra, in forwarding a recommendation by Financial Aid Officer Cathy McNeely, reported that a surplus had accumulated in recent years in the Emergency Student Loan Fund administered by the College, and proposed that a portion of this surplus be used for scholarships and bursaries.

Disposition of the funds will be determined by the College's Financial Aid Committee. Ms. McNeely said that information about bursaries, which require applications, will be posted as soon as possible on the Financial Aid bulletin board.

will be followed by the presentation of the awards and an address by a guest speaker.

Information about the awards program is available from the Student Services office, according to McKee and Financial Aid Officer Cathy McNeely.

More than 40 separate awards of scholarships and prizes, including two silver medals, will be publicly presented on Tuesday evening, June 19, at the College's first-ever Awards Banquet.

An attendance of about 200 is expected, according to Assistant Registrar Gary McKee, who is in charge of arrangements. In addition to the student winners, the invitees include donor representatives, College Board members and senior administrative staff. Relatives and other guests may purchase individual tickets.

One major award will be making its debut: the Lieutenant Governor's Silver Medal, recently inaugurated by Lieutenant-Governor Henry Bell-Irving. It is intended for an outstanding student in a one-year program, as a companion distinction to the Governor-General's Medal awarded to a two-year program student.

The affair is scheduled to begin at 6 p.m. with a smorgasbord dinner, which

(Sillitoe, p. 863). The pain of his father's death, so long repressed, is coming out for the boy to deal with, now that he is able to do so. Finally, as he realizes what the system has done to him and his family, his resolve stiffens, and he throws the race "to get a bit of (his) own back on the In-laws and Potbellies by letting them...watch (him) lose this race" (Sillitoe, p. 862).

On the other hand, Conrad's action and plot are, in their own right, sufficient to make a fascinating tale by themselves. His is a most entertaining story, even if it is read only superficially. The young captain, who is assuming his first command, is confronted with a dilemma when a fugitive — Leggatt — appears at the side of his ship. He is, he tells the captain, swimming from his ship, the Sephora, because he has murdered one of its crew. Since the escapee is obviously "no homicidal ruffian" (Conrad, p. 185), the captain conceals him, sharing his own cabin with the secret visitor. The sharer of his cabin is, actually, the captain's alter-ego, and provides the indecisive young skipper with a vision of how a stolid and real man behaves. When the captain of the Sephora comes in search of the fugitive, our captain chooses to protect his secret sharer. However, the Sephora's captain, a feeble character, does supply the young skipper with an alternative, namely, the jelly-like amorphousness of the type of man who follows blindly any order, even the unwritten and often vague orders dictated by society. The captain describes him as "spiritless...bandy (-legged)..." and "...mumb(ing)..." (Conrad, p. 191). He has "smeary blue, unintelligent eyes" (Conrad, p. 191), and the young captain realizes that unless he learns to take decisive actions himself, then this feckless dolt with whom he finds himself conversing is a living representation of what he stands to become. Having failed in his mission to steal Leggatt away, the Sephora's captain leaves. Immediately upon his dismissal, upon the dismissal of his worthless values, a wind springs up to send the young captain on the last leg of his journey. He elects to put his secret sharer ashore at Koh-ring, a dangerous but necessary manoeuvre. In the process, he firmly overrules the objections of his frightened first mate, and, indeed, at one point is forced to literally shake some sense into the terrified man. His mission fulfilled, Leggatt slips silently into the sea from whence he came, leaving a white hat in the water to serve the captain as a guide. Leaving the hat is the last help the animus can provide for the young commander, but it is sufficient, as the captain steers his way confidently towards his destiny. Thus, with or without its underlying messages, Conrad's tale of the sea makes highly enjoyable reading.

In conclusion, then, it is apparent that Conrad's is the more polished of the two stories considered here. His superior use of symbolism and imagery, of setting and plot, sets his mastery of literary art well above that demonstrated by Sillitoe. While Conrad's hero does not adhere to orthodox methods in his process of self-realization, neither does he turn his newly-found awareness solely to the purpose of rebellion, as does Sillitoe's protagonist. Smith's experiences appear to amount to a rationalization or justification of evil behavior, whereas the young captain turns his abilities to more socially acceptable ends. Finally, Sillitoe's work is, essentially, a social commentary on the working class' fall into a state of narcotized dysfunction. Conrad's is the full explication, through demonstration, of an interior psychological process, and he achieves his purpose masterfully.

(1) Joseph Conrad, "The Secret Sharer," in *Fiction 100: An Anthology of Short Stories*, ed. James H. Pickering (New York: Macmillan, 1978), pp. 181-202.

(2) Alan Sillitoe, "The Loneliness of the Long Distance Runner," in *Fiction 100: An Anthology of Short Stories*, ed. James H. Pickering (New York: Macmillan, 1978), pp. 846-866.

Admission Steps Told

By GARY McKEE
Assistant Registrar

Considering attending Cariboo College next fall? Then you should write or telephone the office of the Registrar as soon as you have finished reading this article.

The address is: Admissions Department, Cariboo College, P.O. Box 3010, Kamloops, B.C., V2C 5N3. If you telephone, the number is 374-0123, Extension 228.

You will be sent an "application package" promptly upon receipt of your written or telephoned request. This package contains all the forms you will have to complete in order to apply for admission. It also contains information on the College counselling service, financial aid, and such other services and facilities as the Study Skills Centre, the Student Health Office and the Bookstore.

The personal documentation you will be asked to supply will be spelled out in the package. It may vary with the type of program you are planning to pursue; you may need to submit transcripts of your secondary and post-secondary education, birth certificate, typing test scores, etc.

Application packages must be completed in their entirety before they can be processed; furthermore, they must be submitted as a unit. Incomplete packages cannot be considered; experience has shown that confusion and frustration for both College staff and applicants result from an attempt to assemble scattered pieces of information.

PROMPTNESS HELPS

There is a definite advantage in early submission. Applications are handled on a first-come, first-served basis. If all the necessary documentation is present, the applicant is mailed an Authorization to Register, which includes the permanent student number assigned to him or her. When registration day arrives (September 5-7 this year, depending on program), students are admitted to the building according to student number, starting with the lowest. This gives the early applicant a wider choice of sections in the multi-section courses; later in the day, most desirable sections are likely to be filled up.

If the completed application package is not received in the Registrar's Office before August 6, there is no certainty that it can be fully processed in time for the September registration. This situation may mean extra hours on registration day.

The transcripts that applicants supply must be official ones. An official transcript usually bears the seal of the issuing institution and is signed by an appropriate authority. However, if there is difficulty in obtaining official transcripts, interim grade statements and unofficial transcripts will be accepted for processing until the required ones are available.

For students about to graduate from secondary schools, for example, Grade 11 marks and the latest available Grade 12 report card will be

Top Prize-Winners in Math Contest



PRACTICAL PRIZE to take with him to his new job in Vancouver is presented to Brian Palmer (right) by his instructor, Art Meger (left), while Mechanics Chairperson Ben Eldridge concurs. Palmer was the top-ranked student in the College's first Advanced Gas and Diesel Technician course, which has just ended. The award was a Vernier caliper donated by Lloyd Creek Ranches. Like most of the initial class, Palmer found work readily, in his case with the engine rebuilding department of a major diesel dealership. The next class begins in October.

temporarily acceptable. In the case of schools on the semester system, such as NorKam, the Easter report card should be submitted; in the case of Kamloops Senior Secondary and other non-semestered schools, December Grade 12 marks will do.

'MATURE' STATUS

If you are applying to the College under "mature student" status, you are still required to submit official transcripts. Mature students are defined in the College Calendar as persons at least 20 years old and a minimum of three years out of school. Mature students may not have to meet the grade level requirements for the program they are applying for, although they still have to meet the pre-requisites for certain courses.

If the program an applicant is considering includes a course in English, he or she should arrange to write the Provincial English Placement Test as soon as possible. Information on the next sitting for this test can be obtained from school authorities or from the College Registrar's Office.

Full details about the College admission policy, requirements and procedure are contained in the 1979-80 College Calendar, beginning on Page 74. Calendars are available on request.

Respiratory Program Set

Applications for the new three-year Respiratory Technology program are still being accepted at Cariboo College, but prospective enrollees are reminded that laboratory and hospital training facilities impose definite limits on class sizes.

The program will start with the Fall semester in early September, according to Chairperson M.R. Granger of the Department of Physical and Life Sciences.

Demand for respiratory technologists as members of a modern hospital medical team is growing, Dr. Granger said. The College program provides for two years of combined classroom, laboratory and hospital study, as the pre-clinical phase, followed by a third year devoted to clinical training in an accredited hospital. The student is then eligible to write the certification examination set by the Canadian Society of Respiratory Technologists.

Most of the first-year courses are in related academic fields such as mathematics and the sciences. In the second year the subjects studied are directly related to the practice of the specialty.

MATH ACHIEVERS - College Chairperson of Mathematics Derek Chambers, far left, shares his pleasure at the results of the College-sponsored sixth annual math competition for secondary school students with the top scorers in the senior and junior divisions. The senior winners, at rear, are Chris Baxter (left) and Greg Keenan, both of NorKam Secondary, first and second place respectively. In front are Terry Klim (left), first place junior contestant from McArthur Park, and Fred Fawcett of Williams Lake.

NorKam Senior Secondary School clearly dominated the sixth annual Cariboo College mathematics contest, its team of students capturing the first three places in the senior division of the event.

In the junior section, McArthur Park of Kamloops did almost as well, taking first and third places in the finals. Second place went to a student from Williams Lake Junior Secondary.

The top-ranking senior contestant, Chris Baxter of NorKam, was awarded a \$200 scholarship to Cariboo College. Book prizes went to his runner-up teammate, Greg Keenan, and to the two highest-scoring junior entries, Terry Klim of McArthur Park and Fred Fawcett of Williams Lake.

The 61 students who survived the preliminary examination, which was written in their home schools early in April, came to the College on April 27 to tackle the 2½-hour final test. Both exams, as usual, were con-

structed by the Mathematics faculty of the College.

In addition to qualifying for the final exam, the two top-ranking preliminary round contestants in each of the 17 participating schools also received book prizes.

The 35 competitors who passed the final test are as follows:

SENIOR DIVISION

1. Chris Baxter, NorKam; 2. Greg Keenan, NorKam; 3. Lee Iverson, NorKam; 4. Sam Anderson, Chase; 5. Gina Roberts, Columneetza; 6. Luis Goddyn, Westsyde; 7. Greg Toth, Kamloops Secondary; 8. Chew Wah Bo, Lillooet; 9. Glen Stirling, Merritt; 10. Ralph English, Merritt; 11. Dave Ablett, NorKam; 12. Douglas Craigen, Columneetza; 13. Debbie Zimmerman, Clearwater; 14. Brian Buchan, Westsyde; and 15. Rick Wagstaff, Barriere.

JUNIOR DIVISION

1. Terry Klim, McArthur Park; 2. Fred Fawcett, Williams Lake; 3. John

Women's Centre

An Access Centre for women at Cariboo College, geared to the needs of current and prospective women students, is in the planning stage.

College Counsellor Mia Gordon has in mind a broad spectrum of general and specialized services which the centre could offer - vocational planning, life planning interviews, testing, and various drop-in information and support services for enrollees. In addition to helping women resume their interrupted schooling.

The centre's coordinator would also be available to help plan seminars, workshops and short non-credit courses in self-development and career planning for women. Special funding from the Ministry of Education, Science and Technology has been made available.

Women, Ms. Gordon points out, make up more than half the enrolments in non-trades courses, and the proportion is growing. Many women, however, have difficulty in adjusting to the change in lifestyle that a return to studies entails.

The trend toward promoting access to all types of education for all women is nationwide conference on the subject, held at the Banff Centre. She was one of six B.C. representatives at the conference.

Eremko, McArthur Park; 4. Ross Boulanger, Merritt; 5. Brad Swallows, John Peterson; 6. Robert Fust, Williams Lake; 7. Alana Krider, Ashcroft; 8. Cam Finnigan, Valleyview; 9. Scott Iverson, Brocklehurst; 10. Kerry Tangerman, Brocklehurst; 11. Walter Mochizuki, Westsyde; 12. Tony Ryan, Sahali; 13. Brian McGhee, Westsyde; 14. Terrence Matuschewski, John Peterson; 15. Edson Ng, Ashcroft; 16. Michael Schwarz, Anne Stevenson; 17. David Thompson, Brocklehurst; 18. Wiebe Dejong, McArthur Park; 19. Tim Cassidy, Williams Lake; and 20. Kyung Kim, Valleyview.

BRITISH COLUMBIA

STUDENT ASSISTANCE PROGRAM

FOR 1979-80

APPLICATION FORMS

for the 1979-80 educational year are now available from the Student Services Department

EARLY APPLICATION DEADLINE

(for students wishing funding in early September)

June 15, 1979

FINAL DEADLINE

8 Weeks Prior to Last Day of Classes

For further information, set up an appointment at Student Services with the FINANCIAL AID OFFICER.

'Bob' Plans CE Loses On Painting Secretary

The only fixed plans on Robert A. Campbell's retirement agenda involve the hills and mountains around Kamloops, which he and his wife Pat plan to explore as painters, and the trout population in the area's lakes, on which he plans to exercise his angling skills.

"Bob" Campbell joined the Cariboo faculty in August, 1971, as the sole instructor in Fine Arts, and has since seen the program and the staff grow to a wide range of courses and four full-time plus three part-time faculty (including Commercial Communications).

In addition to teaching various courses, primarily Art History and Painting, he has conducted workshops in many communities throughout the College region. He has also exhibited his own work in Kamloops, including annual joint husband-and-wife showings at their home, which have become a local tradition.

Born in London during World War I, Campbell spent his boyhood in England and Malta, and attended the local art school in Ipswich at the age of 16. Later, while taking his teacher training at Brighton, he won an open-entry scholarship competition which led to three years at the Edinburgh College of Art. He was there as a graduate student in 1940.

Excluded from military service on medical grounds, he taught high school under blitzkrieg conditions in Essex. Later he taught at Ipswich, and then taught for a long period at Northgate.

He stayed there, except for a year as an exchange teacher in Philadelphia, until he moved to Canada in 1968. In addition to teaching during the Northgate period, he did considerable adult education work as well as painting for exhibition, doing sculpture commissions, writing art reviews and film-making.

His first few years in

Nine years of pleasant, efficient public contact along with intimate knowledge of the machinery in what is now entitled Community Education have earned for Autumn Cripps the informal title of "Mrs. Continuing Education" at Cariboo College. She is retiring shortly from College service.

Mrs. Cripps has been secretary in what was originally the Adult Education office since 1970, and transferred with it from School District 24 jurisdiction to that of Cariboo College in July, 1971. Prior to that she had been a secretary at Kamloops Senior Secondary School for some three years.

Mrs. Cripps was born in Winnipeg, but grew up in Vancouver. She attended Kitsilano High School and then served with various firms, including Shell Canada, as a secretary.

When her family grew up, she re-entered the business world as a bookkeeper, and then brushed up on her secretarial skills at the old Kamloops Business School.

Her plans for retirement include part-time work or volunteer activities of a type that will allow her time for travel and for continuing to help her husband with garden activities.

Canada were spent in the Kootenays as a free-lance artist and teacher, before, as he puts it, he was "called" to Cariboo College.

Campbell may continue to teach an Art History course at the College on a part-time basis, but he and Mrs. Campbell plan to concentrate on capturing in color their impressions of the Kamloops area landscape. He also intends, if time permits, to do some portrait painting and to resume the sculpturing for which he has not recently had the time.

Board Honors Retirees



THREE COLLEGE staff members who are retiring this summer were guests of the College Board at a recent dinner meeting. Board Chairman Andrew M. Smith of Williams Lake is at left, and

Acting Principal Leo Perra at right. The retirees, left to right, are Tom Julseth, driver-storesman; Autumn Cripps, Community Education secretary; and Fine Arts Instructor R.A. Campbell.

Instructors Move On

Four Cariboo faculty members of at least four years' standing will be absent from the College roster next September, having resigned for a variety of personal career reasons.

Psychology Instructor Dave Wood, one of the charter faculty group, is moving to Victoria and a change in career plans.

Paul McKenzie, Leisure and Recreation Instructor, will be working on his master's degree and will also be teaching at the University of Victoria.

Pamela Steuart of the Nursing faculty is moving to Salt Spring Island, where she will do part-time nursing and possibly some instructing.

Drafting Instructor Bob Beale has decided to take time out from a long teaching and drafting career to pursue various personal interests. He will continue to live in the Kamloops area.

Retirement Once Again

Tom Julseth came out of retirement from private business five years ago to work with the Stores Department of Cariboo College, and returns to that status at the end of July. He has been a familiar figure on campus, quietly delivering supplies and furniture to various locations, sometimes pushing a hand-truck and sometimes piloting a forklift.

A native of the United States, Tom moved to British Columbia from Washington State as a youth. He entered World War II service from Terrace, and returned there after wartime service in the Armored Corps.

For 22 years he ran a transfer and moving business, building up to a fleet of 27 trucks, then moved to Keremeos in the late 1960's, operating a service station and restaurant. He moved to Kamloops in 1973.

Rec Schedule Varied Recent Staff Changes

Inside the College gym, outside the Student Lounge and, on occasion, off campus -- campus recreation activities continue to attract students and staff members during noontime and other breaks, after class and work, and even in the evenings.

This year Cariboo has an active and organized summer program for recreation, ranging from tossing frisbees during lunch hour to a tug of war tournament and challenge matches in a variety of indoor sports.

The most ambitious event on the schedule is a planned camping trip to the McQueen Lake Environmental Resource Centre on the June 15-17 weekend.

Working under a Department of Labour Youth Employment Project, three Leisure and Recreation

students are promoting a variety of events to combat the traditional summer slowdown on the campus recreation scene. Anne Marie Salter, Tim Boulbee and Karen Jensen work out of headquarters in the gym.

Noon hour activities include floor hockey and volleyball in the gym in addition to a rain of footballs, softballs and frisbees in front of the Student Lounge. Evenings the gym is open for badminton on Tuesday, floor hockey on Wednesday and volleyball on Thursday.

Most of the evening events are challenge matches. Teams represent the various programs: Drafting, Welding, Electrical, Adult Basic Education, etc. Roller skating in the gym is also on the planning schedule, as well as outside volleyball games.

Four resignations, one new appointment to fill one of them, and an upgrading are the recent staff changes reported to the Personnel and Industrial Relations Department.

The resignations include two faculty members: Claire Chuchla, Nursing, and Pat Burton, Secretarial Arts.

Joe Perfonic, gymnasium attendant, also resigned recently, and Len Hewer has been appointed to the position.

In the support staff category, Ernie Elliott, storesman in Food Processing, has resigned.

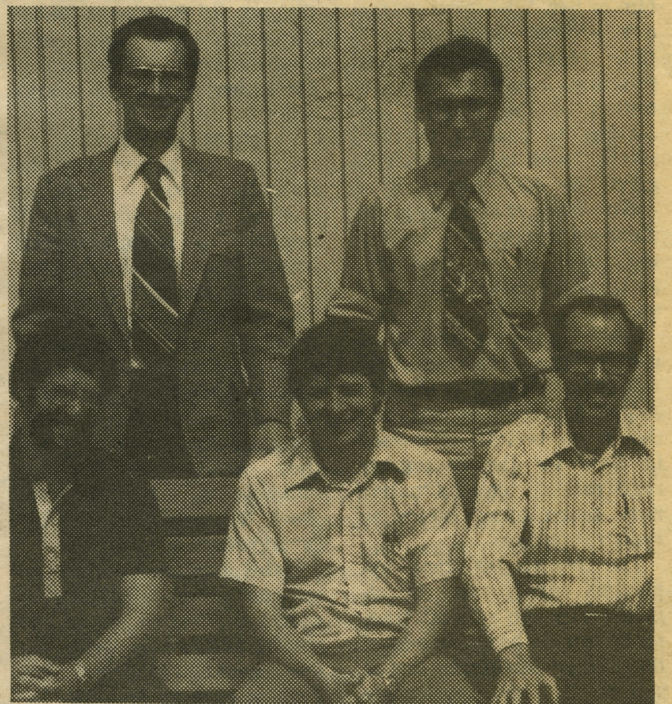
The position upgrading was Administrative Assistant to the Registrar to Assistant Registrar. Gary McKee is the incumbent.

Classroom Looks Good After This



YOU CAN ALMOST HEAR the grunts from the faculty members (in the foreground of this Bob Clark photo) as they strain to win a round in the campus tug-of-war contest on May 24. They did gain the semi-finals, but were out-tugged by a team

from Drafting, who, in turn, lost to the Welders in the final round. Other teams participating represented Adult Basic Education, Heavy Duty Mechanics, Pre-Apprentice Electricians and Administration.



FACULTY ASSOCIATION executive board members take time out from a noonday meeting to smile for the photo record. Seated, left to right, are David Reiter (English), president; Gary Schwartz (Electronics), College Board representative; and David Fox (Librarian), secretary. Standing are Eldon Cameron (Business Office Training), treasurer, at left; and Fred Cunningham (Adult Basic Education), member at large. Absent at the time were Bo Hansen (Political Studies), vice-president; Neil Morrison (Sociology), shop steward; and William Karney (Business Administration), member at large.

— Photo by Bob Clark.

Ministry's Initiatives in Science:

New Stress on Technology

A request by British Columbia to become the site of billion-dollar research into duplicating the sun's energy is just one of several recent provincial government initiatives to attract high technology industry to British Columbia, says Dr. Pat McGeer, Minister of Education, Science and Technology.

"Whether or not we achieve this particular objective of having an international fusion research facility located here, we are beginning to show the world that B.C. has the intellectual and entrepreneurial resources necessary for a high-technology industrial economy that may even eclipse our vast natural resources one day.

Around the world, the nations which are prospering today are mostly those whose industries have been encouraged to step out front in scientific and technological development," McGeer observes.

"Many of them -- look at the Swiss with medical drugs, the Japanese with electronics, the Americans with computers -- have created wholly new economic enterprises to supplement traditional pursuits, and often surpass them.

"Canada has lagged far behind," McGeer says, "and British Columbia too -- until now."

EXPANDED MANDATE

To bring the capabilities of advanced education institutions to the benefit of the British Columbian industrial economy, the B.C. Ministry of Education has now become the Ministry of Education, Science and Technology. Among the many initiatives of this expanded mandate is the proposal that B.C. become the home of an international experiment which could provide a new and primary energy source for mankind.

The United States, Soviet Union, Japan and European Economic Community, through the International Atomic Energy Association, are considering whether to jointly investigate this conversion of hydrogen molecules (or their isotopes) into helium gas, using ordinary sea water as the raw material.

"While the theory is understood," McGeer explains, "what remains to be resolved is the engineering questions of how you can ignite these miniature suns and draw off the resulting millions of degrees of heat for conversion into electrical or other forms of power."

Though no construction would begin until at least 1985, several countries are in the running for this monumental project. British Columbia offers proximity to the United States and Japan, and abundant hydro-electric power required in the experimental stages.

"The host country will receive a capital investment of about \$1 billion, an operating budget of about \$100 million a year and the inside track on what will become the most important technology in the world in the next century," McGeer explains.

FUSION, NOT FISSION

"And this is at little or no cost to itself -- financially or environmentally. Remember that this is nuclear fusion, not fission, and the technology is entirely non-classified. This isn't the exploding of atoms but rather the fusing of various particles. There are nowhere near the environmental hazards associated with coal-fired plants, for example."

Other initiatives of the Ministry of Education, Science and Technology include the new Science Council of B.C., the development of research parks, and industrial

research scholarships and post-doctoral fellowships.

The 15-member council, established under the Science Council of British Columbia Act as approved by the legislature last June, is unique in the country.

The chairman is Dr. Erich W. Vogt, a vice-president and professor of physics at the University of British Columbia. Vogt has been associated with the Chalk River nuclear laboratories and is presently chairman of the TRIUMF meson facility, located at UBC.

"Even more than Canada as a whole," Vogt observes, "British Columbia has exported its resources, including its intellectual resources. With the Science Council we may be able to turn that around."

He cites TRIUMF as an example: "It was built by bright young British Columbians who had gone abroad to work, but came back." And TRIUMF has provided the resources for at least one small company to grow into a \$20 million industry.

RESOURCE EMPHASIS

Vogt says that, initially, the Science Council will place its greatest stress on the development of ideas related to the resource industry "and scientific ideas that happen to be just about ready for commercial development."

Priority areas include forest and ocean resources, coal transportation, communications and the environment. The council expects to make specific recommendations to the minister in the near future on the structure and activities of a coal research institute, and on several aspects of forest research.

Providing staff support to the Science Council and services to the B.C. government's internal research advisory committee is the Secretariat for Science Research and Development. The executive director of this Research Secretariat is Dr. William Armstrong, a metallurgical engineer and former chairman of the Universities Council of B.C.

"I think we are ahead now of all the other provinces in having a science council that has both advisory and granting powers," Armstrong says. "We can accept money from almost any source and give out grants."

For example, the council has thus far awarded 15 industrial post-doctoral fellowships, designed to encourage B.C. industries to employ young Ph.D.s in any sector of their organizations that require an injection of highly-trained manpower.

SCHOLARSHIP AWARDS

The council has also awarded 18 scholarships to candidates for masters and doctoral degrees to tackle applied research problems for business and industry, with the students spending part of

Students Get Air Time



NEWS AND MUSIC from Station CMMD — From the studio in Room 210, Communications Media Student Evan Fitzer takes his turn as disc jockey and newscaster. The station is on the air about 16 hours a week, including noon-hour broadcasts across the

campus to the Student Lounge. Like the course newspaper, the 210 Express, the regular radio and television production time makes up part of the approximately 50 hours a week that students in this program must count on committing themselves to.

their time in the co-operating firm.

The Science Council will also be recommending support for individual projects to the provincial cabinet, to be funded by special warrants: "Things," says Armstrong, "with a fairly rapid payoff."

Possible candidates are a project to harvest commercially valuable kelp off Vancouver Island and another to produce useful products such as insecticides and insect repellants from slash from logging operations.

On a larger scale are a projected coal research institute and the fusion research centre. Funding for such projects is being sought from the federal government as well.

INDUSTRIAL PARKS

The Ministry of Education, Science and Technology is also committed to the establishment of industrial research parks, having founded the crown corporation Discovery Park Industries Ltd. to assist in the provision of research facilities and land for high-technology and research-oriented industries.

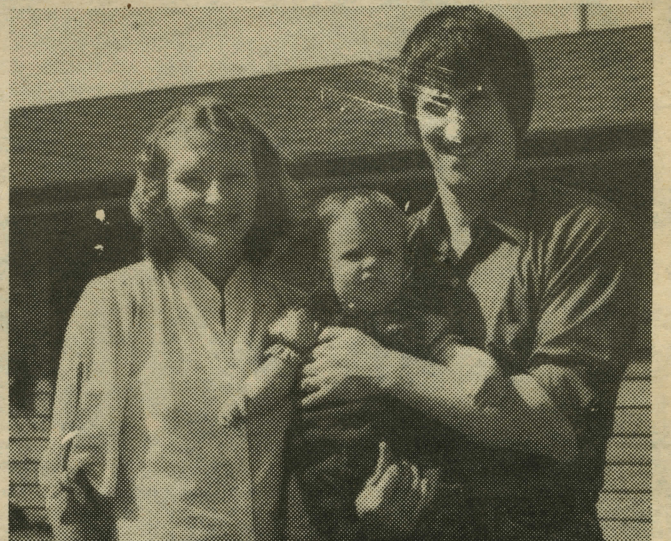
Potential discovery park sites are now being negotiated at all three B.C. universities. These locations, when reserved, will take advantage of existing research and university facilities to allow industry and the universities to match their respective needs and skills and to provide a pool of highly skilled personnel.

McGeer, himself a research scientist, cites the example of the so-called Silicon Valley in California, the area around Stanford University that burgeoned with electronics industries following important discoveries in the use of materials such as silicon to make transistors and other electronic components.

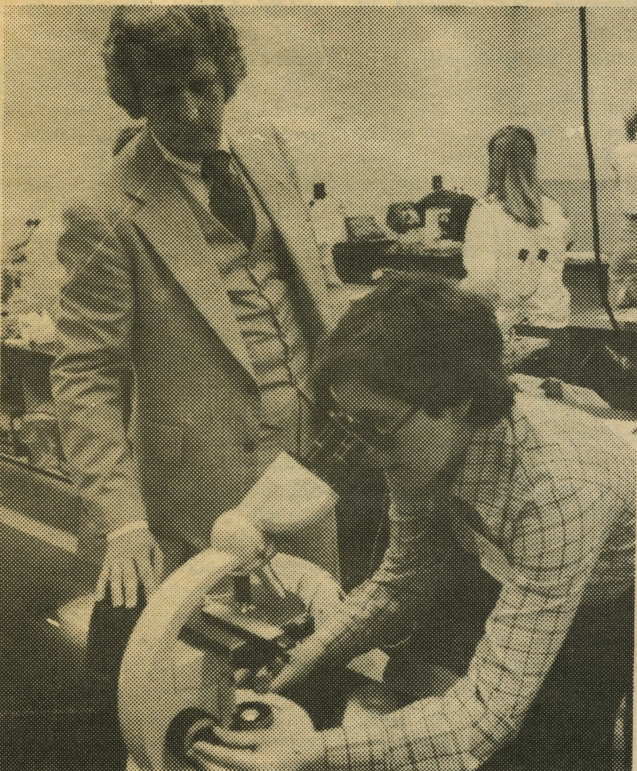
The result, he notes, was 160,000 high-paying jobs and indirect benefits to a million people. "This is the very best in industry, the very highest in job income and security -- and it is an industry that is environmentally impeccable."



DONNING a chef's apron for a lunchtime showing of his parabolic "solar cooker", Physics Lab Demonstrator Hugh McTaggart prepares hot dogs for some colleagues. Using reflected sunlight, the device will cook the wieners in four to seven minutes. Chemistry Lab Demonstrator Ed Baron is one witness, and Faculty Secretaries Connie Der Housoff (left) and Lois Leeds are the others. Normally the device is used in physics demonstrations.



BACK TO COMMUNITY - George Aulin, 26, shown here with wife Diane (nee. Latta) and daughter Nikki Leanne, 11 months, have settled back into Kamloops following George's graduation from the University of British Columbia in June, 1978. After two years at Cariboo College, George transferred to the Commerce Program at U.B.C. George is now a C.A. articled student with Jarrett, Gould and Elliot in Kamloops. During his time with the College, George was one of the strong men of the Chiefs hockey team.



MICROSCOPY WORKSHOP at the College was one of many highlights of the five-day 22nd annual Post-Graduate Course in Medical Technology sponsored by Dr. Glenn Martin and other interested pathologists and technologists from Royal Inland Hospital. In this picture by Bob Clark, a technologist from Edmonton is trying out a new piece of equipment under the interested eye of a sales representative. Registrants numbering about 270 from all over North America took part in the mid-May course, along with local pathologists, technologists and laboratory scientists.

Leaflets Available

(Continued from Page 1)

four-letter code or symbol for each one. In most cases, the symbol is the computer designation; for example, CRIM for Corrections, COMP for Computing and COOK for Food Training. These codes are printed in the colour representing the type of program concerned: red for Careers, green for University Transfer, blue for Vocational.

The leaflets are intended for distribution through secondary school counsellors and the College's Student Services office.

Most of them deal with a single area of study or employment-oriented program. In some cases, however, these have been grouped. For example, one leaflet covers both the Business Administration and the Accounting Diploma programs, while another, entitled "Business Skills," describes four programs: Clerk-Typist, Bookkeeping-Accounting, Word Processing and Banking and Financial Services. Similarly, offerings in French, German and Spanish are grouped under "Languages." And "Mechanics" covers General Mechanics, Small Engine Repair and Advanced Diesel and Gas Technician.

FOUR EXCEPTIONS

In all, there are 18 leaflets covering the academic disciplines, some of which, like Fine Arts, include general interest credit courses; 12 in the Careers area; and nine classed as Vocational, covering 14 programs. Four Vocational programs sponsored by the B.C. Department of Labour are not represented: Automotive Repair, Carpentry, Electrical and Heavy Duty Mechanics.

The leaflets, obtainable on request, are entitled as follows:

Better Bookstore

The long-awaited rearrangement and enlargement of the College Bookstore area is under way in the Lounge and Cafeteria Building.

Manager Brian Mitchell and his assistant, Lyn Plante, are conducting business as nearly as usual as possible amid the plastic and confusion, confident that the additional shelf and storage space will be worth the present inconvenience to customers.

Academic

Anthropology
Archaeology
Astronomy
Biology
Chemistry
Computing
Economics
English
Fine Arts
Geography
Geology (Earth Science)
History
Languages
Mathematics
Physical Education
Political Studies
Psychology
Sociology

Careers

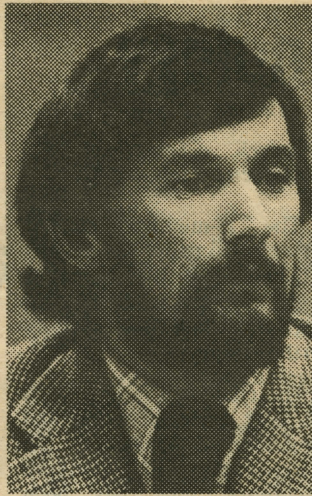
Business Administration-Accounting Diploma
Community Health Service Worker
Corrections
Communications Media
Early Childhood Education
Leisure and Recreation
Marketing Management
Medical Laboratory Technology
Nursing
Respiratory Technology
Secretarial Arts
Social Service Work

Vocational

Business Skills
Commercial Communications
Commercial Arts and Printing
General Drafting
Electronics Technician
Food Training
Mechanics
Partsperson
Practical Horticulture
Welding

Instructors Publish in Varied Fields

Taylor: Ecology



DR. MARK TAYLOR

A call for nationwide cooperative action to gather and process ecological data as the basis for a unified, consistent and effective attack on ecological problems is sounded by Cariboo College Biologist Mark E. Taylor in his contribution to a recently published book.

Dr. Taylor's article, "Ecology and Governments in Canada," is the opening chapter of *Ecology Versus Politics in Canada*, published by the University of Toronto Press. Professor William Leiss of York University edited the volume for the University League for Social Reform.

In his article, Dr. Taylor points to Quebec and British Columbia as the only provinces with legislation providing for ecological reserves. In Ontario, on the other hand, half-hearted gestures, overlapping jurisdictions and the lack of concerted action have left, he says, a clear field for Ontario Hydro projects to supersede environmental concerns.

This "multi-use" approach is in direct conflict with ecological priorities, as illustrated by the logging and recreational pressures on Algonquin National Park.

Overlapping jurisdictions were also a problem, he notes, in the case of the Afton copper mine and smelter project near Kamloops, with the provincial

government initially issuing a construction permit without public hearings. The hearings came later as a result of pressure from local jurisdictions and private environmental groups.

Dr. Taylor has been publishing scientific papers since 1969, mostly in the field of zoology. His interests have broadened in recent years to include a variety of ecological matters, as his recent essay shows. His two current research interests center on the monitoring of vegetation in the vicinity of the Afton copper smelter to measure the effect of its emissions; and on the knapweed infestation which is threatening valuable rangeland in the B.C. Interior. He is more a supervisor than a researcher in the latter undertaking, which is financed by Agriculture Canada.

At the March 27 meeting of the Cariboo College Board, he presented a survey of the knapweed problem and of the attempts being made to control it.

Dr. Taylor came to Canada from his native England by way of East Africa. He received his Bachelor of Science degree in zoology and botany from London University in 1966, and went to Kenya as a research assistant to the late Dr. L. S. B. Leakey, working out of the latter's Centre for Prehistory and Paleontology of the National Museum of Kenya in Nairobi.

He concentrated on the comparative anatomy of various species of viverids, and published several articles on these small carnivorous mammals. These studies developed into his Ph. D. Thesis for the University of Toronto in 1971.

In the same year he took a teaching post in Shiraz, Iran, as assistant professor in biology at Pahlavi University. He also did research into the population dynamics of the larger mammals in the Bamu Game Reserve, a mountainous area north of Shiraz.

From 1972 to 1975 Dr. Taylor taught at York University as visiting assistant professor, first in the Biology Department and then in the Faculty of Environment Studies.

He joined the Cariboo faculty in 1975, and has taught various Biology courses as well as an anatomy-physiology course designed principally for Nursing students. He has also been active in the Faculty Association, particularly in the negotiation of collective agreements, and is currently involved in the development of cross-country ski trails in the Lac Le Jeune area.

Hughes: Biography



DR. RICHARD HUGHES

Geology Instructor Richard D. Hughes has once again combined his wide-ranging professional and personal research interests to produce a brief biography of an important but under-recognized figure in Canadian geological history.

His account of the life and work of Alexander Murray (1810-1884), the first director of the Geological Survey of Newfoundland, is scheduled to appear in Volume XI of the definitive *Dictionary of Canadian Biography*, which is currently being printed by the University of Toronto Press.

In 1976 there appeared Volume IX of the DCB, which contained Dr. Hughes' biographical article on Joseph Beete Jukes (1811-1869), the first scientist to complete an extensive report on Newfoundland geology. Jukes was also, as Dr. Hughes emphasizes, an acute observer of the island colony's society around 1840.

The research and documentation for these biographies was a challenge not only to Dr. Hughes' knowledge of his field, but also to the painstaking persistence that has to characterize all scientific research. The letters and other documents from which he worked were widely scattered.

As well, the huge job of bibliography — there are 110 documentation footnotes on the Murray biography — called into play his knowledge of library resources and procedures. Not many of his colleagues and students at Cariboo know that he is qualified professionally as a librarian.

The biographies of both Jukes and Murray grew out of Dr. Hughes' contact with their work in the course of the ten years (1959-69) he spent as a member of the Geology faculty at Memorial University of Newfoundland in St. John's.

How he got there is an interesting biographical account in itself.

Born in Winnipeg, he was educated in Vancouver. As an 18-year-old, he took a training course in placer mining at Emory Creek, near Yale, which, he says, "initiated my lifelong interest in geology."

DEGREES FROM UBC

After a period as a yard hand for a lumber company in Vancouver and a year and a half in isolated posts working for the Hudson's Bay Company as a clerk in its fur trade department, he was able to enter the University of British Columbia. He won an honors B.A. in Geology in 1947 and a Master's degree the following year.

His summer jobs during this period were on geological work in the field: The Yukon and Northwest Territories and the western Canadian

provinces. Transportation on the job was mostly on horseback.

Moving to the University of Oklahoma for both further study and part-time teaching, he received his Doctor of Philosophy degree in 1953. His doctoral thesis, "Geology of Portions of Sunwapta and Southesk map areas, Jasper National Park, Alberta," was later summarized in a publication of the Alberta Society of Petroleum Geologists.

That was the first of several research studies published in various scientific journals, most of them having to do with geology and related fields, including one on modern petroleum geological reconnaissance using helicopters and aerial photos.

CONSULTING WORK

In 1952 he was granted registration in the British Columbia Association of Professional Engineers. There followed six years of work as a consulting geologist. In association with D. Bruce Bullock, Dr. Hughes pioneered in the use of helicopters for geological mapping. They mapped the Rocky Mountain foothill belt in B.C., and, for an oil company, a vast area of the Northwest Territories. Transportation included not only helicopters, but also saddle horses, Beaver aircraft, canoes and "Nahanni" river-boats.

He turned to full-time teaching in 1959, as assistant professor, then associate professor of Geology at Memorial. He spent one year of this period on sabbatical leave, using it to do research at Queen's University in the history of geological science in Canada and in the philosophy of science.

In 1969 he decided to return to his home province. He enrolled in the School of Librarianship at U.B.C., and graduated in 1970 with a Bachelor's degree in Library Science.

The same year Cariboo College opened its doors, and "Dick" Hughes became one of the charter faculty members.

His colleagues are accustomed to his tremendous range of interests in history and other fields as well as science. One of his latest projects, undertaken last year, is a pioneering course in Forensic Geology, emphasizing the application of geological knowledge to law enforcement and judicial proceedings. And a number of prospectors in the Kamloops-Cariboo region are familiar with his courses in prospecting.

Earth Station Component



SECOND HALF of a 15-foot-diameter parabolic antenna which will be a major component of an earth station for satellite television reception is delivered to the College electronics shop by the donor, B.C. Telephone. The antenna formerly was part of the phone company's microwave network, but will enter a new phase of usefulness soon

in the College's Telecommunications and Home Entertainment options under the Electronics Program. In this photo a phone company employee rides the equipment while Electronics Instructors Don Graham (left) and Gary Schwartz (right) help guide it into place.