Activities of the Hawaii Curriculum Center

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At the start of its second full year of operation the Hawaii Curriculum Center has completed or is engaged in a number of activities. The English language project, because of its size and importance, is given a separate chapter in this issue. Here, a number of activities are sketched in briefly to posit the scope of Center activity and to suggest future possibilities. Activities have been classed into (1) activities relating to the curriculum dialogue in the state, (2) projects relating to curriculum innovations, (3) projects relating to the organization of the school, and (4) support to cooperative and independent projects.

The Curriculum Dialogue in Hawaii

While a minor part of its total activity, the participation in the growing curriculum dialogue in the State is essential. The specialized function of large scale development and product testing of national and international packaged educational curricula must proceed closely with the total developments of education in Hawaii.

The Curriculum Conference. — In June of 1966 the Center, in cooperation with the Office of Instructional Services, D.O.E. and faculty members in the University, organized a Curriculum Conference for the then Assistant Superintendent (and presently Superintendent of Education, State of Hawaii) Ralph Kiyosaki. The Conference brought together 150 teachers, program and curriculum specialists, teacher educators, scholars from the relevant disciplines, representatives of the private and church-related schools, and educational consultants from the Mainland. The Conference considered seven areas of general education curriculum — art, English, foreign language, mathematics, music, social studies, and science — and the organization of schools and clusters of schools for curriculum improvement. The subject field groups worked toward appropriate definitions of the field, instructional perspectives, curriculum designs, teacher performance requirements, and other considerations leading to policy statements for each curriculum area.

The Conference demonstrated several phenomena: first, there is great interest throughout the state in the continued development of school programs; second, Hawaii has interested and competent personnel necessary to lead out in the development of plans and products; third, the opportunities for cooperation among people in public schools, private and church-related schools, and the University and private colleges are great; fourth, inter-agency ventures are appearing to conduct necessary planning and operations — they include the cooperative University/DOE educational television system; cooperation on teacher education plans and policies; the growth of professional organizations in the state; and the Hawaii Curriculum Center, among others.

The Conference had several tangible results: the study team in English made necessary progress toward developing a posture for the curriculum in English language; the music and science groups established blueprints for action in curriculum development and teacher education; other fields of study clarified the curriculum issues in their fields and added essential increments toward progress in the design of curricula; and people in the several agencies became better acquainted and developed productive relationships.

The Curriculum Forums. — The Curriculum Forums, co-sponsored by the Office of Instructional Services, DOE, and the Department of Curriculum and Instruction, University of Hawaii, brought together ap-

proximately 100 curriculum leaders of the state's public and private schools to consider the topics of the Conference and to explore their implications for the schools. Teachers and scholars in the subject areas were invited as their fields were discussed. Eight forums were held in 1966-67.

In-service education. — An essential ingredient in any educational project is the in-service education provided to teachers and school leaders in the theory and practices of the innovation. The Center provides summer and school year educational opportunities for teachers in pilot and field location schools which are linked to the project. English language teachers from the 25 pilot schools will participate in a two-year program of education starting in the summer of 1968. This education will precede the introduction of drafts of materials into those pilot schools during the 1969-71 school years.

The Center established eight 14-month fellowships for the English language specialists from each of the districts of the state plus the island of Molokai. The fellows are being prepared for leadership roles in their home areas during the pilot and field testing period of the Hawaii English Project.

Curriculum Projects

Experimental summer classes. — The Center conducted a set of sixteen experimental classes at its Laboratory School Division during the summer of 1967. Pupils were recommended by 45 Honolulu schools, public and private, for the experience. The classes, in a variety of subjects, were designed to explore some ideas that had been advanced in the curriculum development activities of the preceding year.

Three literature prototype courses for 11- and 12-year-old students were compared for their effectiveness. One attempted to help students achieve an educated response to literature through discussion, analysis, and explanation of professionally-written works having literary merit. The second approached the same objective through students' own literary products. The third experimented with a combination of the two methods.

A group of students of ages 10 to 12 worked with a poet in a studio environment where they learned how experienced poets work with imagery, metaphor, sound, symbol, and meter and experimented in the use of these devices in their own writing.

A group of high school students studied written composition from the basis of evaluation of their own products as well as their analysis of professional works. Specific study was made of credibility, logical organization, purpose, and assertion and proof.

Twenty-five kindergarten and primary pupils working with a linguist and a primary teacher tried out extended sequences of the first-year language materials now being developed by the Center.

An ungraded class in Japanese language and culture drew students from ages 4 to 11. Materials which had been previously tested with two kindergarten classes and a first-grade class provided the language base. Cultural emphasis came through such activities as eating Japanese lunches, making and flying kites, preparing *sushi*, and arranging flowers.

Some senior high school students with training in set theory in mathematics approached English grammar as a logical system, using concepts and techniques developed out of mathematical logic. Beginning with an analysis of the logical properties that all languages possess, they moved to a study of several logically-based grammars of English, finally writing their own grammars of English.

Twenty-three students from grades 6 to 8 were introduced to modern symbolic logic through materials produced by Patrick Suppes at Stanford and the "WFF' N' PROOF" games developed by Layman Allen. Symbolic sentences, logical inferences, diagrams of truth values, and consistency were among the topics covered.

Two groups of high school students worked with "artists-in-residence." A prominent local painter and an outstanding Mainland potter provided studio experiences in painting and ceramics.

Three other classes, a theater workshop for high school students and physical chemistry and ecology for grades 7 to 9, are described elsewhere in this article.

Complete records of each class are now being carefully evaluated to determine their relevance for revision of the existing courses or for their possible replication on a wider basis.

Exemplary Fine Arts Activities.— As a first step in contributing to the program in the fine arts, the Center has conducted a series of activities of an exemplary nature. These were, first, the bringing of community cultural resources to schools; second, the development of a teacher's manual for the educational concert series of the Honolulu Symphony Orchestra; and third, the sponsoring of an experimental theater workshop for high school students.

The community arts activities are being presented in the Laboratory School of the Center, St. John's School, Kalihi-Uka School, and all five schools on the island of Molokai.

For each activity an artist-consultant prepared detailed plans, assembled notes for the use of the classroom teacher, and visited the

classrooms to introduce the children to the coming activity. Careful attention was given to developing the vocabulary and language concepts of the art as well as to developing visual concepts and appreciation.

Activities were conducted in storytelling, children's theater and drama, ethnic ballet and modern dance, choral, symphonic, and operatic music, painting, weaving, ceramics, sculpture, and photography.

Kalihi-Uka and St. John's pupils sat on the floor of an artist's studio as he painted. He talked with them as he worked, building the important concepts of color, shape, perspective, and texture, and he invited their thoughts about how to improve the painting. As he painted in their suggestions he helped them see why the change was or was not appropriate.

Cultural and educational agencies provided outstanding assistance in carrying out these programs. The Honolulu Art Academy loaned and arranged selected works from its collection for the exhibit in Molokai. The University of Hawaii extended its Lyceum series to Molokai and coordinated its activities there with those of the Curriculum Center. Its Departments of Music, Dance, Drama, and Speech provided the services of artists. The State Foundation on Culture and the Arts has been closely related to these activities and has cooperated extensively in planning for the continued development of arts education.

Teacher's Manual, Symphony. — The second contribution to education in the arts has been the preparation of a teacher's manual for the educational concert series of the Honolulu Symphony Orchestra. A comprehensive, illustrated booklet was prepared featuring the background of the orchestra and its conductors, the educational objectives of the concert series, notes on the music to be played, biographies of the composers, the characteristics and capabilities of the instruments, recommended films and references, and the scores of songs the children sang with the orchestra. The manual has attracted wide attention among music educators and symphonic groups across the nation.

Experimental Theater Workshop. — The third fine arts activity was the experimental theater workshop. High school students interested in writing or acting were recruited from four high schools. They met together for about ten hours a week in the early evening. Direction was given by a specialist who had consultant services available as needed. In an open, flexible setting they worked on playwriting, production and direction, acting, music, choreography, and stagecraft. The climax came in public performances in February and April. Each consisted of about eighteen numbers developed around a common theme. The material was witty and sophisticated in its criticism of the current scene.

Japanese Language Project. — One of the Curriculum Center's objectives is to develop foreign language programs utilizing contemporary language theory, audio-lingual methods, and new technological aids. Japanese for primary grade children was selected as the first project. The program and materials have been used since November with excellent results in two kindergarten classes and one first-grade class. This activity is independent of but coordinated with a major University of Hawaii research project for developing instructional materials in Japanese in grades 3 through 10.

Music Project. — A proposal for a music curriculum project was developed by the Music Committee in the June 1966 Curriculum Conference. The project will design

World famous Korean dance specialist Halla Huhm was a performer and demonstrator in ethnic dance for children in Molokai and Kalihi.

and develop a model music curriculum for kindergarten through grade 12 based upon the idea of the discipline and skills of music. The design is being prepared by music theorists and historians, composers, professional musicians, and music educators. A Music Curriculum Advisory Committee has been appointed by the Center to provide policy guidance for the project.

Among the ideas being tried this year at the Laboratory School for possible inclusion in the curriculum are composition and improvisation at the kindergarten to grade 3 level, instruction in a woodwind, brass, or string instrument at some point in grades 4 to 6, music literature in grades 7 to 9, and music theory as an optional study in grades 10 to 12.

Science Project. — Out of the same Curriculum Conference came a recommendation that a permanent Hawaii Science Curriculum Council be established to help bring into being an optimum program of science education from kindergarten through the university level.

The Council includes representatives of various departments of the College of Arts and Sciences and the

College of Education of the University of Hawaii, teachers and science supervisors of the state's public and private schools, and scientists from industry.

After an investigation of existing science curricula the Council identified a special need for an improved program at the seventh-to-ninth grade level. Two disciplinary areas were chosen for concurrent study during these years — physical chemistry and ecology. The former will provide a broad foundation in the methodology and concepts of the physical sciences. Because it has an abstract theoretical structure, it lends itself to the exemplification of a range of intellectual models and systems. The second science, ecology, will provide a similar broad foundation in the methods and concepts of the earth sciences and biology. Since ecology is geographically specific, the program will first develop its study in terms of the local Hawaiian environment. This approach will provide a model for development of parallel studies in other geographical locations.

The comparative studies approach has been adopted to allow the presentation of the authentic world of science as practiced by the disciplinary specialists. It allows the student to experience the diverse methodologies employed to produce scientific knowledge in the different areas of scientific inquiry. It gives the child an insight into the mechanism of idea exchange, a feel for the evolutionary patterns common to all of the disciplines, and a picture of those elements of unity that do exist in science.

The Laboratory School Division of the Curriculum Center has provided staff, space, and equipment to undertake a feasibility study of the project. The first phases of this study are being completed in the experimental summer classes and regular classes at the Center.

Physical Education Program. — The Physical Education Faculty of the Laboratory School has designed and put into practice a new program which schedules two hours of physical education weekly for students from kindergarten to grade 6 and grades 9 to 12, and four hours weekly for students in grades 7 and 8. All classes are taught by physical education specialists.

In the lower grades the program emphasizes fundamental motor pattern development leading into the basic skills of sports, dance, and gymnastics in the upper elementary grades. Emphasis in the intermediate grades is on the refinement of skills in the areas of team sports, dance, and gymnastics, and on the introduction to individual sports. In the secondary grades concentration is on the development of skills for personal recreation. Secondary-level students are thus offered a variety of options: single semester courses in swimming, tennis, golf, gymnastics, track and field, badminton, wrestling, modern dance, and Polynesian and Oriental ethnic dance.

History, Philosophy and Social Sciences Program. — The Faculty in History, Philosophy and Social Sciences is currently initiating a program of substantial curriculum change and development which will shortly affect all levels in the Laboratory School. At present the most salient characteristic of this activity is the utilization of numerous teaching units and materials from several of the national social studies curriculum projects in the vanguard of "the new social studies." In this category are units from the U.C.L.A. Civic Education Project, Educational

George Barati, then conductor of the Honolulu Symphony Orchestra, serves as a resource-narrator for Molokai pupils in connection with the Symphony Concerts there.

A light opera was written and staged for elementary school pupils in eight field-testing schools as part of a demonstration program in the fine arts.

Services Incorporated, the Amherst History Project, the Anthropology Curriculum Study Project, the Asian Studies Curriculum Project, the Carnegie Tech Social Studies Curriculum for Able Students Project, and the Harvard Curriculum Based on the Study of Public Controversy Project. Generally the project units are characterized by greatly reduced coverage, much more concentration in depth on specific topics, good representation of current scholarship in an area, and frequent use of inductive teaching techniques where the student confronts data or data-like materials and is led to reason toward important concepts, interpretations, or theories. Particularly promising units will receive a careful evaluation at the Laboratory School and should result in reports for general dissemination.

Organization Projects

The previous portion described some of the Center's many ongoing curriculum projects. To make some of these projects possible, the Center has undertaken certain organizational projects. Four of these are discussed.

The organization by faculties. — The principle from architecture, "form follows function," is applicable to the organization of the University Laboratory School faculty and staff. Inasmuch as the Center has the singular mission of serving as a primary curriculum development agency, its personnel must be so organized as to make possible a vigorous leading out in curriculum research, design, development, demonstration, and evaluation in various program areas. The model of organization most appropriate to this function seems to be an organization by "faculties." This model provides each faculty with the time to confer and work, and the power to make decisions affecting curriculum content, design of courses, selection of instructional materials, design of time allotment for courses, and design of groupings most appropriate for instruction. The eight faculties of the Laboratory School are: 1) Faculty in English Language and Literature; 2) Faculty in Foreign Languages and Literatures; 3) Faculty in Mathematics; 4) Faculty in Sciences; 5) Faculty in History, Philosophy, and Social Sciences; 6) Faculty in Art; 7) Faculty in Music; and 8) Faculty in Physical Education.

Each faculty is responsible for the total program sequence from kindergarten through grade 12. A distinctive feature of the faculty organization is the possibility of assignment of former "high school," "intermediate," and "elementary" teachers to any appropriate age/grade level. This procedure should enhance the development of new programs, the flexibility of teacher assignments, the continuity of the entire curriculum, and the planned use of scarce facilities and materials.

At present the eight faculties hold weekly meetings for deliberation on general curriculum and instructional issues. They also plan for improvement in course offerings, evaluation designs, and the quality of library holdings. Because the Center regards the library as a central instructional resource center, the faculties are now reviewing library titles, supportive instructional aids, and text collection. Listings of needed titles and basic documents for purchase are also being prepared.

Multi-level team staffing and ungraded grouping. — To give maximum scope to faculty talent

Dr. Delores Curtis has designed a training program in elementary physical education in which activities are carefully chosen to develop certain skills in a logical sequence.

while providing unity and coordination of program for students, the Laboratory School is using multi-level cooperative teaching (team teaching) as the staffing pattern at the elementary level. The design permits non-graded organization. The 236 pupils who range from kindergarten to grade six are separated into three groups, each taught by teams of specialists in English, mathematics, social studies, science, music, art, and physical education. The team-teaching concept is noted for the sharing of responsibility by all team members for programming each child's continuous progress in school. Thus the specialists of the first elementary team are jointly responsible for the progress of 68 children ranging from kindergarten through the third grade; the second team plans the progress of 75 children from grades two to four; and the third team teaches a group of 91 pupils spanning grades four to six.

Through the use of faculty organization, which controls the curriculum and instructional pattern, and the multi-grade teaching team, which programs the school experience of particular youngsters, we hope to account responsibly for both the child and his curriculum.

Modular scheduling. — The High School Unit (grades 7 to 12) operates a school program based on modular scheduling. As an administrative organizational model, modular, (sometimes called "flexible") scheduling makes possible the adaptation of class sizes to fit different modes of instruction: small groups of 8 to 15 students for discussion; large groups of 40 to 90 students for lectures, films, demonstrations, and the like; and individual tutorial sessions or teacher conferences for students needing enrichment or assistance. It also provides different time allotments for classes in the various program areas. For example, discussion groups are scheduled for longer periods, thereby permitting serious consideration of topics under study. Shorter sessions are used for lecture presentations to sustain attention and interest. Because a high value is placed on the development of the students' ability to make choices and to conduct themselves with dignity and purpose, the plan provides independent study time. This mechanism gives students the opportunity to use library and laboratory resources appropriate to their areas of interest and study and to cultivate initiative in the pursuit of learning.

The school is now in its second year of modular scheduling. As a result of observation, deliberation, and planning, course designs have been revised considerably in some program areas; experience is indicating further changes. Space use has also been modified to provide centers of learning and facilities to serve the unique requirements of the various program areas. The art studios have been relocated at a site which enables children from kindergarten through grade 12 to work together with art specialists. Music facilities have been concentrated in a single setting suitable for music education. A new science site is being developed for science instruction for children ranging from the elementary through the intermediate grades.

A notable feature of the current master schedule is the provision of unscheduled times when the faculties may meet to discuss curriculum issues and plan course improvements.

Resource rooms. — The first year of modular scheduling indicated the need for curricular area resource centers for student use. Resource centers are designed to bring the student, the faculty members, and the instructional printed materials relevant to the curriculum into the closest possible contact. Multi-copies of recommended and required readings, as well as assigned reference works for students and faculty, are located within the centers. Scholarly journals and selected monographs are kept in single copy in the centers. The library will contain printed instructional materials for general reading, browsing, and highly specialized research projects, typically in single copy. At present spaces are set apart as resource centers for the programs in English, science, mathematics, social studies, and French. Previously existing centers such as the library, art facilities, science laboratories, industrial arts shop, and homemaking rooms are of course being maintained.

Support to Cooperative and Independent Projects

Continuing the tradition of providing a setting for University faculty research and development activities, the Hawaii Curriculum Center houses and provides support services to several projects which are either cooperative projects between the HCC and another activity, or are under independent control.

Head Start Child Development. — The Center is now in its third year of participation in the Head Start Child Development Program, funded by the Office of Economic Opportunity and administered through the Honolulu Community Action Program Office. At present 35 four-year-old children from the Papakolea Punchbowl community are enrolled in daily sessions from 8:00 A.M. to 2:00 P.M. This program encourages parents to take part in the daily work of the Center as a means of developing their skills in working with and teaching their children.

The children, their parents, and their teachers participate actively in two research and development projects, which are funded by the Office of Economic Opportunity and administered by the University of Hawaii Head Start Evaluation and Research Center under the direction of Professor Dorothy Adkins, Educational Research and Development Center.

1. The University of Hawaii Preschool Language Program, coordinated by Mrs. Doris Crowell with Mrs. Marian Kayan as language consultant, has as its purpose the development of a preschool curriculum designed to overcome the cognitive and linguistic deficiencies of children from low-income homes in Hawaii. Following two years of experimentation and exploration in the Laboratory School classes, the project staff has developed a curriculum, now in experimental manual form, which is being rigorously tested this year by the two Laboratory School Head Start teachers and six field school teachers with eight additional field teachers serving as controls.

2. The Parent Education Project, also coordinated by Doris Crowell, is designed to develop methods of interpreting the Preschool Language Program to the parents and showing the parents ways in which they can support the school's efforts. A Parent Education staff works toward the development of positive parent attitudes toward school and helps parents find ways of supporting their child's school experience. A Coordinator of Health, Social, and Educational Services for the University Head Start Child Development Center works closely with the project's Parent Education staff.

Motivated Learning Project for Preschoolers. — An experimental preschool class and laboratory has been established by Arthur W. Staats, Professor of Psychology and Educational Psychology. Twelve four-year-old children in this class will be provided with traditional nursery school experience as well as with an individually administered program of training in number concept-learning, alphabet-reading, and letter-writing. A "token-reinforcement" system involving rewards for the child, previously shown to be highly effective, is used in this training. The course of the children's learning is being recorded in detail. The purposes of the project are (1) to provide the children with cognitive skills advantageous for later school learning; (2) to study the cognitive learning of children in order to develop a theory of cognitive learning which will have general applicability; and (3) to provide training for graduate students of educational psychology and psychology in the field of child learning.

Hawaii Upward Bound Project. — The Center has hosted the Hawaii Upward Bound Project for the summers of 1966 and 1967. Upward Bound is an Office of Economic Opportunity program which assists non-high school graduates in acquiring the academic background, the personal goals, and the information necessary for success in the University. The Hawaii Curriculum Center provides classrooms, offices, facilities, and equipment for the program. The Director of the Center is a member of the Academic Advisory Committee.

Sato/Young Japanese Language Project. — The Center is providing support to the Japanese Language Project directed by Esther Sato, staff member of the Hawaii Curriculum Center (on leave) and John Young, Chairman of the Department of Pacific and Asian Languages, University of Hawaii. The project, now in its second year, is developing instructional materials in Japanese language for grades 3 through 10. This project is coordinated with the high school textbook writing project directed by Dr. Young and the primary grades Japanese language program directed by Faye Yamaguchi and described above.

This article has given a brief description of a number of Curriculum Center activities. They suggest the scope of Center activity. Reports on each of the activities will be given to all interested schools. In turn the Center would appreciate accounts of similar projects elsewhere, both within and without the state.

Blase Souza, HCC research librarian, demonstrates the use of microfiche in a reader-printer to Jerome Bunnag, a new member of the HCC staff. This new ERIC document retrieval system is a basic tool for curriculum planners.