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ABSTRACT

The followup study on program articulation in Hawaii public secondary and postsecondary educational institutions examines articulation in the subject areas of auto mechanics, business education, drafting, and food service. It contains seven general recommendations regarding articulation for the State Board of Vocational Education, the Board of Regents, community college provosts, and the State Department of Education. In addition, it contains specific recommendations relative to implementation of program articulation in the four subject areas for the community colleges and State Department of Education. It also contains the report of an administrators' meeting on articulation with the various general and specific recommendations and articulation guidelines and responsibilities delineated by provosts. Appendixes comprising one-half of the document list the program offerings in the four subject areas and analyze them with respect to: extent of implementation of articulation, description of implementation, responsible agent, expected outcomes, cost factors, and other implications of both the postsecondary and secondary levels. (JR)

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FINAL REPORT

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ARTICULATION AMONG AND BETWEEN PUBLIC SECONDARY
AND POST-SECONDARY INSTITUTIONS IN HAWAII

A Follow-Up Study of the Implementation of
the FY 1973 Articulation Recommendations

Research Project in Vocational Education
Conducted Under
Part C of Public Law 90-576

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PREFACE

The body of this report was written in January, 1975. Draft copies were reviewed by administrators from the community colleges, and the Department of Education district offices and Vocational-Technical Section.

An administrators' meeting on articulation was held on March 14, 1975, focusing on recommendations from this report. The objective was to ascertain an administrative consensus on recommendations which were agreeable to all and those which were not. The D.O.E. and community college groups, which met in separate working sessions, were asked to specify revisions which were necessary and problems implicit in the recommendations.

They were also asked to focus on the following:

1. specification of where authority and responsibility for review, revision, approval and implementation lie.
2. establishment of procedures or mechanisms for implementation and the resolution of questions or problems arising from implementation efforts.
3. need for a person or body to monitor, coordinate, and evaluate implementation efforts on separate community college campuses and D.O.E. districts.

The results of this meeting are reported in the Addendum to the Report on page 29. In brief, the provosts identified a number of articulation guidelines according to which they would operate as well as specific responsibilities which they would assume. The D.O.E. administrators suggested revisions to the recommendations and specified time frames for them.

The revisions have been incorporated into this report. Addenda have also been noted on the implementation charts updating the extent of implementation.

Minnie Boggs
March 31, 1975

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SUMMARY OF RECOMMENDATIONS

General Recommendations

1. State Board for Vocational Education: Formally re-endorse the concept and intent of articulation and encourage implementation to carry out the goal and objectives of articulation as stated in the 1974 Revised State Master Plan for Vocational Education (p. 7).

Board of Regents: Support and encourage implementation on the community college level (p. 7).
2. Provosts of the Community Colleges and the D.O.E. District Superintendents: Declare a commitment to improving articulation between program areas and exercise administrative leadership in the implementation of the agreements (p. 8).
3. State Board for Vocational Education: Establish a position in the Office of the State Director for Vocational Education for the evaluation of vocational education programs in all aspects, including articulation (p. 9).

Alternative recommendations:

- a. State Board should restore the position of Assistant State Director for Vocational Education, who shall assume responsibilities for evaluation and articulation (p. 9).
- b. State Board should establish position counts for articulation in the Office of the Chancellor for Community Colleges (horizontal articulation on the community college level) and in the Office of the State Director for Vocational Education (vertical articulation) (p. 9).

4. Provosts: Consider as a first step implementing recommendations not involving systemwide changes in course numbers, credit hours, or contact hours. Support course content equivalency throughout the system through performance criteria and tests based on identifiable competencies (p. 10).
5. Chancellor for Community Colleges: Transmit information on implementation of recommendations on community college level to Superintendent of Education for dissemination through established channels (p. 11).
6. Provosts and District Superintendents: Encourage counselors to acquire and apply knowledge of vocational education programs towards an articulated vocational counseling and guidance system (p. 12).

D.O.E.: Incorporate an explicit statement of commitment to an articulated vocational counseling and guidance system in the State Master Plan for Comprehensive Guidance (p. 12).

State Director for Vocational Education: Continue to make concerted efforts to provide information on the availability of vocational guidance resources (p. 12).

7. D.O.E. Vocational-Technical Education Section and Chancellor for Community Colleges: Develop a coordinated, annual, long-range inservice education plan for vocational education instructors (p. 12).

State Director for Vocational Education: Continue to fund inservice education for vocational education instructors (p. 13).

Chancellor for Community Colleges, and D.O.E. District Superintendents in consultation with the D.O.E. State Personnel Office: Coordinate and schedule workshops and courses, such as during summer, to accommodate the needs of neighbor island instructors (p. 13).

Specific Recommendations - Automotive Mechanics

Community college

1. Provosts: Initiate action to cooperatively develop uniform performance objectives based on identifiable behavioral competencies by community college and secondary school vocational automotive instructors. Competencies should be testable through uniform performance tests developed cooperatively by community college faculty with the necessary expertise in evaluation (p. 16).
2. Chancellor for Community Colleges: Coordinate the scheduling of inservice training opportunities in automotive mechanics for continued flexibility to allow participation by neighbor island instructors (p. 17).
3. Provosts of Hawaii, Kauai, and Maui Community Colleges: Initiate action to include secondary school representation on the college automotive advisory committees (p. 17).

NOTE: This recommendation has now been implemented.

4. The Chancellor for Community Colleges upon consultation with the Statewide Curriculum Council, should specify appropriate channels for the consideration of systemwide curriculum proposals. The Chancellor should specify channels for considering changes in definition of vocational education instructor workload. Furthermore, the question of who is responsible for determining and maintaining course equivalency should be answered. All new courses

should be established on the basis of equivalency (p. 19).

D.O.E.

1. Secondary school vocational automotive instructors: Provide input in the development of performance criteria for automotive courses on the community college level (p. 16).
2. District Superintendents for Hawaii, Maui, and Kauai: Submit to the Provost of the community college the name(s) of elected secondary school representative(s) on the college automotive advisory committee. Work with the State Director for Vocational Education to see that inservice training opportunities in automotive mechanics continue to be flexible enough to allow participation by neighbor island instructors (p. 18).

Specific Recommendations - Typing and Shorthand

Community College:

Provosts of Kapiolani, Windward, and Leeward Community Colleges should inform their staffs of placement and credit procedures through certification in the event that certification procedures are implemented in all D.O.E. districts (p. 21).

D.O.E.

1. District Superintendents on Oahu: Implement the recommended certification procedures for typing and shorthand (p. 21).
2. Vocational-Technical Education: Print uniform certificates of proficiency to be used in certification procedures throughout the State (p. 21).

NOTE: This recommendation is now being implemented.

Specific Recommendations - Drafting

Community College

1. Provosts: Support drafting instructors' attempts to improve horizontal articulation through course content equivalency in the form of uniform performance objectives and tests (p. 25).

Hawaii, Honolulu, Kauai, and Maui Community Colleges: Review evaluative instrument developed cooperatively by Leeward Community College and D.O.E. for possible use in their drafting programs (p. 25).

2. Hawaii, Honolulu, Kauai, Leeward, Maui: Invite participation of secondary school vocational drafting instructors on college drafting advisory committees (p. 26).

NOTE: This recommendation has now been implemented at Hawaii, Honolulu, Kauai, and Leeward Community Colleges. Maui will take steps to do so.

D.O.E. and Community College:

Intensive summer workshops and courses on Oahu should be available to accommodate the needs of both Oahu and neighbor island drafting instructors (p. 25).

Specific Recommendations - Food Service

Community College

1. Statewide Curriculum Council: Disseminate to all community colleges information on authorized procedures for making systemwide changes in course numbering and titling. If authorized procedures are followed for renumbering Food Service courses and necessary

approval obtained, implementation should occur at the same time on all campuses with food service programs (p. 27).

2. Hawaii and Leeward Community College Provosts: Consider implementation of the Food Service course credit options (p. 28).

D.O.E.:

Secondary school foods program instructors: Work in closer coordination with community college instructors so that students are prepared to exercise community college course credit options (p. 28).

EXTENT OF IMPLEMENTATION OF FY 73 ARTICULATION RECOMMENDATIONS

	AUTOMOTIVE MECHANICS			BUSINESS EDUCATION (TYPING AND SHORTHAND)			DRAFTING			FOOD SERVICE		
	Full	Partial	None	Full	Partial	None	Full	Partial	None	Full	Partial	None
COMMUNITY COLLEGE												
Hawaii		X		X				X				X
Honolulu		X		No Program				X			No Program	
Kapiolani		No Program			X			No Program			X	
Kauai		X		X				X			No Program	
Leeward		X			X			X			X	
Mau		X			X			X			No Program	
Windward		No Program				X		No Program			No Program	
D.O.E. DISTRICT												
Central		X				X		No Vocational Program				Only O.S. Program
Honolulu		X				X		X				X
Leeward		X			X			X				X
Windward		X				X		X				Only O.S. Program
Hawaii		X			X			No Vocational Program			X	
Kauai		X		X				No Vocational Program			No Program	
Mau		X			X			No Vocational Program			No Program	

*

D.O.E. DISTRICT

Central

Honolulu

Leeward

Windward

Hawaii

Kauai

Mau

ARTICULATION AMONG AND BETWEEN PUBLIC SECONDARY AND
POST-SECONDARY EDUCATIONAL INSTITUTIONS IN HAWAII

A Follow-Up Study of the Implementation of the
FY 1973 Articulation Recommendations

Introduction

Articulation efforts in Hawaii are addressed to the need for cooperative planning and systematic coordination in educational programs. For purposes of clarity, it may be appropriate to define just what is meant by the term articulation. As McKinnerney* defines it:

Articulation refers to the relationships between educational programs which are designed to provide a smooth transition for the student from one educational program to another. This movement . . . can be either horizontal or vertical.

Horizontal articulation includes those relationships between programs, courses, or activities which exist at any one educational competency level and provide a coordinated educational program for the student. Vertical articulation refers to those relationships which exist between institutions, programs, courses or activities and provide a coordinated program for a student moving from one educational competency level to the next.

For the past three years articulation in vocational education program areas has been a subject of prime concern to vocational educators in Hawaii. On a national level, the Vocational Amendments Act of 1968 underscored the importance of a unified program of vocational education. To achieve more integration in the vocational programs offered in the public secondary and

*Beryl R. McKinnerney, Student Articulation Between Secondary and Post-Secondary Education, 1974.

post-secondary programs in Hawaii, the State Director for Vocational Education obtained federal funds for year-long meetings involving personnel from both levels of education.

The year-long meetings during the first Articulation Institute (1972-73) focused on four vocational education areas (automotive mechanics, business education--typing and shorthand, drafting technology, and food services) and resulted in specific recommendations to improve horizontal and vertical articulation. A second Articulation Institute was held during 1973-74 to improve articulation in business education (accounting, data processing, office practice), electricity, electronics technology, and allied health. A Third Articulation Institute is currently (1974-75) being held in the areas of agriculture, auto body repair and painting, carpentry, and distributive education.

The need for integrated vocational education programs on both secondary and post-secondary levels of education becomes increasingly paramount as more students and their parents become aware of the diversity of employment opportunities in vocational areas. Educators should remember that program articulation is designed to enhance the occupational development of students through integrated programs which recognize the validity of occupational competence and knowledge gained through prior job experience as well as formal classroom instruction. If a student can already meet the performance criteria for a given course, repetition of the coursework is not only inefficient in terms of his program but probably also distasteful to him.

Educators have no quarrel with the idea that occupational competence may be acquired in ways other than instruction in their particular institutions. What is needed is their commitment to this concept by facilitating

the awarding of course credits to recognize the validity of competencies acquired previously. The student may then proceed to the next level of coursework in a more integrated manner at no expense of time and potential loss of earnings. Although course challenge examinations have long been available in the community colleges, they have not been a viable credit option because students have feared challenging a course. Furthermore, many instructors and counselors have not actively encouraged students to exercise the option and have not facilitated student demonstration of competencies so as to avoid unnecessary repetition of coursework because faculties are not adequately compensated for developing, administering, and correcting the examinations.

Articulation efforts in vocational education program areas in Hawaii focus on the benefit to students through integrated programs which maximize student learning and occupational enthusiasm. The objectives of articulation between vocational education areas in Hawaii's high schools and community colleges include:

1. the facilitation of program entry on the community college level,
2. recognition through various community college credit options that students may already have acquired competence and knowledge relevant to particular courses through previous coursework or on-the-job training,
3. the minimizing of expensive and time-consuming program duplication, and
4. the use of uniform competency tests for use in student evaluation or placement so as to insure minimal duplication of coursework.

Purpose

This report is an evaluation of articulation efforts stemming from the FY 73 Articulation Institute recommendations for Automotive Mechanics, Business Education (Typing and Shorthand), Drafting, and Food Service. It should be considered as formative evaluation, that is, evaluation which seeks to improve a process before it ends. Evaluative feedback is being channeled to currently ongoing articulation efforts in the Third Institute. The principal objective of this evaluation is to facilitate systematic ways of implementing the recommendations which were developed as a result of state-wide efforts to achieve vertical and horizontal articulation.

Methodology

Data for the main body of the report were obtained mainly through on-site interviews at each of the community colleges and some D.O.E. district offices. Community college personnel interviewed included the Provost, Dean of Instruction, chairpersons of the Business Education and Trades and Industry Divisions, and instructors in each of the four subject areas. D.O.E. personnel interviewed included the Hawaii Deputy District Superintendent, the Maui District Superintendent and the Kauai District Curriculum Specialist.

Input from educators was also obtained through letters of inquiry, a survey instrument, telephone conversations, and meetings. Educators included individual instructors who had participated in the First Articulation Institute, curriculum specialists in the D.O.E. district offices on Oahu, program specialists in the Vocational-Technical Education Section of the D.O.E., the Head Team Leaders for each of the four subject areas, and the Director for Community College Services.

A meeting on articulation for administrators from the Department of Education and the community colleges was held on March 14, 1975. The results of this meeting are reported in the Addendum on pages 29 - 35.

GENERAL RECOMMENDATIONS

Problem 1. Since May, 1973, when the Articulation Report containing the recommendations of each area was published, there has been some administrative action by provosts and district superintendents to implement the recommendations. Many recommendations on some campuses have been implemented mainly through instructor initiative. However, because there was no formal endorsement of the Articulation Report by the State Board for Vocational Education, the implementation which has occurred either through administrative action or instructor initiative has occurred on a seemingly fragmented and piecemeal basis without statewide coordination.

Furthermore, because the Articulation Report has not been formally approved by the State Board, it is not considered by some people to be an official document. Therefore, it does not receive the consideration for implementation appropriate to an official document. The agreements which were made among the instructor-participants have not been formalized as official agreements between the Board of Education and the Board of Regents and therefore must be considered as recommendations or informal agreements.

Original strategy for implementation called for the State Board for Vocational Education to officially approve the recommendations so that they would have the binding force of agreements. The State Board commended the participants on their work but did not formally approve the Report. It directed that a study be conducted to review the implications of the recommendations before taking further action. This study attempts to provide the necessary information. In 1974, however, the State Board

approve the Revised State Master Plan for Vocational Education, which included statements on the goal and objectives of articulation.

The Board of Education (governing board for education on the K-12 level) also approved the Articulation Report. However, the Department of Education has not officially initiated any attempts at implementation of the recommendations on the secondary level because it is awaiting the State Board's official approval of the Report.

Official action at this time is important. A year's worth of educators' efforts has gone into the recommendations. Since then articulation efforts have continued in the FY 1974 and 1975 institutes in an increasingly wider range of vocational education areas. It is imperative that implementation efforts from the first year's recommendations be endorsed as an impetus to the implementation of the second and third year's recommendations, and to clarify the confusion concerning the role of the State Board.

Recommendation:

1. The State Board for Vocational Education in the State of Hawaii should formally re-endorse the concept and intent of articulation between program areas in different levels of education and encourage implementation to carry out the goal and objectives of articulation as stated in the 1974 Revised State Master Plan for Vocational Education.
2. The Board of Regents as the policy-making body for the University of Hawaii Community College System should support and encourage implementation on the community college level, as well as vertical articulation with the Department of Education.

Problem 2. At present, there is some confusion at various levels within educational institutions as to whose responsibility it is to direct the

implementation of the recommendations. There is some feeling among instructors that they themselves cannot implement the recommendations without the specific direction in the D.O.E. of the Superintendent, district superintendents, and principals; and in the community colleges, of the provosts. Faculty are unsure of the extent to which they should exercise initiative in implementing specific recommendations. Although many recommendations have been implemented on some campuses through instructor initiative, instructors still feel the need to have official sanction for their efforts.

Recommendation:

The provosts of the community colleges and the D.O.E. district superintendents should, upon endorsement of the Report by the State Board, formally make known their commitment to improving articulation between program areas and exercise administrative leadership in directing the implementation of the agreements.

Problem 3. Some faculty-initiated attempts to implement the recommendations have raised unanticipated questions or problems. Faculty and administrators have been unsure of whom they should turn to for clarification of ambiguities or resolution of problems. There has been no one person or body responsible for monitoring, evaluating, and coordinating articulation efforts on all islands. The specification of institutional, intra-system, and inter-system procedures for the resolution of questions or problems is crucial to the morale of faculty who have initiated implementation efforts and to expediting the implementation of recommendations from the second and third institutes.

Recommendation:

1. Because many of the problems and questions that have arisen in attempts to implement articulation recommendations involve the very substance of and fundamental concepts underlying vocational education, the State Board for Vocational Education should establish a position in the Office of the State Director for Vocational Education for the evaluation of vocational education programs in all aspects, including articulation.

Articulation responsibilities shall involve coordinating and facilitating the implementation of articulation recommendations on all islands and monitoring and evaluating ongoing articulation plans. These responsibilities shall be carried out in close cooperation with Provosts and District Superintendents, who are responsible for exercising the administrative leadership necessary to effective implementation, as well as the Statewide Curriculum Committee.

2. Provosts of the community colleges and the District Superintendents of the Department of Education, in cooperation with the Evaluation Specialist, should
 - a. specify institutional, intra-system, and inter-system procedures for the resolution of questions, problems, or difficulties which may arise upon efforts to implement the recommendations, and
 - b. establish evaluation and monitoring mechanisms for regular feedback on progress in implementation.

Alternative recommendations:

1. State Board should give priority to the restoration of the positions of Assistant State Director for Vocational Education and fiscal officer, with the Assistant State Director assuming responsibilities for evaluation and articulation.
2. State Board should establish position counts for articulation responsibilities in (a) the Office of the Chancellor for Community Colleges for horizontal articulation on the community

college level, (b) the Office of the State Director for Vocational Education for vertical articulation.

Problem 4. On the community college level there appear to be differences in understanding of what articulation involves. There is some concern that recommendations for program uniformity to facilitate student transfer mean rigidity for the college, imposition of a particular college's program on the other colleges, basic change in mode of instruction entailing costs of additional instructors, or compromise in program quality.

Furthermore, the individual community colleges have varying philosophies governing the operation of programs. They are reflected in different completion requirements for the same vocational program. The differences are evident in the number of courses, the number of credit hours, and the number of contact hours necessary for completion of program requirements. This variation may pose a problem for students entering a community college vocational program from the secondary level as well as from other post-secondary institutions.

Recommendation:

Provosts of the community colleges should as a first step consider the feasibility of implementing recommendations which do not necessitate systemwide changes in course numbers, course credit hours, or course contact hours.

Provosts should support the concept of course content equivalency throughout the system through performance objectives and tests based on task analyses. Criterion measures should be based on identifiable competencies. Performance testing may be used not only for the evaluation of student performance but also for student placement. Uniform performance objectives and tests based on identifiable competencies should be cooperatively developed by faculty possessing the necessary expertise from all community colleges, with input from the secondary level.

Problem 5. Information on specific recommendations and procedures for articulation in each of the four areas has not been widely disseminated among faculties on both secondary and community college levels and between the two levels because of the unofficial nature of the Articulation Report. As a result, only those instructors who participated in the Institute are knowledgeable about the recommendations. Most instructors lack knowledge of the extent to which the recommendations have been implemented in other schools and colleges. For example, the existence of new course credit options at a particular community college and the willingness of all community colleges to accept high school certification of typing and shorthand competencies are not generally known. Consequently, not all efforts to improve vertical articulation have resulted in direct benefits to students.

Recommendation:

Upon implementation in the community colleges of course content equivalency through uniform performance objectives in a given subject area; or systemwide willingness to accept high school certification as a basis for placement in community college typing and shorthand; or systemwide changes in course descriptions, content, titles, numbers or credits; or the availability of new course credit options at any community college, information on such implementation should be transmitted by the Chancellor for Community Colleges to the Superintendent of Education for dissemination, through established channels, to administrators, students, teachers, counselors, and registrars.

Problem 6. Counselors in the secondary schools and community colleges need to be more fully informed about the articulation agreements so that they may advise students of the existence of various course credit options on the community college level; become more knowledgeable about the requirements and needs of vocational education programs; establish open lines of

communication with vocational education instructors; and more effectively guide students in planning integrated programs on the secondary and community college levels.

Recommendations:

1. Counselors on both the secondary and community college levels should be more actively involved in articulation efforts. Provosts and D.O.E. district superintendents should actively encourage counselors to participate in articulation efforts and to acquire and apply knowledge gained about vocational education programs towards improving articulation in vocational counseling and guidance between the secondary and post-secondary levels.
2. The D.O.E. should incorporate an explicit statement of commitment to an articulated vocational counseling and guidance system in the State Master Plan for Comprehensive Guidance.
3. The Office of the State Director for Vocational Education should continue to make concerted efforts to provide information on the availability of vocational guidance resources.

Problem 7. Inservice education opportunities are not as accessible to neighbor island instructors as they are to Oahu instructors. The small number of instructors in a given vocational education subject area on each neighbor island makes offering workshops or University credit courses on those islands a costly process. At present there is no coordinated long-range inservice education plan developed cooperatively by the D.O.E. and community colleges.

Recommendations:

1. The D.O.E. Vocational-Technical Education Section and the Chancellor for Community Colleges should develop a coordinated, annual, and long-range inservice education plan for vocational education instructors.

2. Inservice training opportunities should be flexible enough to accommodate the needs of neighbor island instructors. One means of doing so is to offer intensive workshops or courses on Oahu during the summer, when neighbor islanders may attend them.
3. The State Director for Vocational Education should continue to fund inservice education for vocational education instructors.
4. Coordination of scheduling and procedural matters such as number of credits and cost should be handled (1) in the D.O.E. by the district superintendents in consultation with the D.O.E. State Personnel Office, and (2) in the community colleges by the Office of the Chancellor for Community Colleges.

SPECIFIC RECOMMENDATIONS

Automotive Mechanics Technology

Accomplishments in Implementation:

1. Informal agreements have been made between some high schools and community college instructors to accept students for placement in advanced community college courses on the basis of the high school instructor's recommendations. These agreements are mainly with high school automotive instructors of the Pre-Industrial Program (P.I.P.).
2. Communication between automotive instructors has been greatly facilitated. Instructors feel free to call each other and work cooperatively on various aspects of their programs. High school and community college instructors on Oahu work jointly on displays for the annual Craftsman's Fair. This interchange facilitates knowledge of each other's programs.
3. Inservice workshops have been funded by the Office of the State Director for Vocational Education to upgrade instructor competencies, utilizing community college facilities and instructors. In automotive mechanics, a Honolulu Community College instructor is voluntarily conducting inservice training for Oahu high school instructors. Oahu automotive teachers have developed a five-year plan for inservice training. An intensive ten-day summer workshop will be offered in June, 1975, through General Motors Overseas Distribution Corporation. The fact that the workshop will be offered during the summer will allow neighbor island instructors to avail themselves of this inservice training opportunity.

4. Honolulu, Leeward, and Kauai Community Colleges have sought high school representation on their automotive mechanics advisory committees to promote mutual awareness of programs on both levels and to obtain advisory input from industry more efficiently. Vertical articulation between the Oahu high schools and industry has been improved through high school instructor representation on AUTO, the automotive technicians' professional organization. Knowledge thus gained about professional concerns and new developments and needs of industry is disseminated through the Hawaii Automotive Teachers Association, which was formed by high school and community college instructors on Oahu after the Articulation Institute.
5. Automotive instructors on Maui from the high schools and community college participated in a joint meeting during a Fall, 1974 workshop, sponsored through the Office of the State Director for Vocational Education, to discuss ways of implementing the articulation recommendations for automotive mechanics.

Addendum: Since the body of this report was written, further accomplishments in implementation have occurred.

7. Maui Community College has initiated a pilot program to grant credit for equivalent automotive courses taken in high school. (For details, see page 39.)
8. Hawaii and Maui Community Colleges have high school representation on their automotive mechanics advisory committees.

Problem 1. There is some misunderstanding on the part of community college faculty about automotive mechanics as (1) a vocational program and

(2) an industrial arts program on the secondary level. Because there is insufficient knowledge about the differences in objectives of the two programs, some community college faculty feel that community college standards for instruction and standards for employability in industry should be applicable to both the vocational and industrial arts programs on the secondary level. Since the level of automotive instruction in the industrial arts program is not seen as equivalent to vocational instruction on the community college level, some community college instructors are reluctant to award credit for previous automotive coursework simply on the high school instructor's recommendation, as suggested in the Articulation Report.

Recommendation: Community College

Provosts should initiate action on the cooperative development, by community college and secondary school vocational automotive instructors, of uniform performance objectives based on identifiable behavioral competencies for each automotive area taught. These competencies should be testable through uniform performance tests developed by community college personnel possessing necessary expertise with input from secondary school automotive instructors. Performance testing should be utilized as a means of integrating the student's program on the secondary and community college levels without time-consuming duplication of coursework. Where the student, through performance testing, is able to demonstrate competency required by a given course through prior education or on-the-job training, such competencies should be recognized by awarding the number of credits allowable for that course.

Recommendations: D.O.E.

1. Secondary school automotive instructors should, through cooperative effort with community college automotive instructors, provide input in the development of uniform performance criteria and tests at the community college level.

2. Counselors and automotive instructors should actively encourage students to exercise this credit option as a means of eliminating time-consuming duplication of coursework and achieving a more integrated program. This active encouragement may make the credit-by-examination option a more viable alternative. At present it is underutilized because of student fear of failure, ignorance of the option, and lack of self-confidence.

Problem 2. Inservice training opportunities are not as widely available to automotive instructors on the neighbor islands as they are to instructors on Oahu.

Recommendation: Community College and D.O.E.

Inservice training opportunities in automotive mechanics made available through workshops and University credit courses on Oahu should continue to be made available during the summer or at times which would allow participation by neighbor island instructors. Upgrading of instructor competencies is important as instructional quality is determined by the instructor's competence. The quality of instruction in turn influences the extent of student learning. Upgrading instructor competencies, hence, will result in improved learning opportunities for students.

Problem 3. There is no secondary school instructor representation on the automotive advisory committees of Hawaii, Kauai, and Maui Community Colleges.

Recommendation: Community College

The Provosts of Hawaii, Kauai, and Maui Community Colleges should initiate action to include secondary school representation on the college automotive advisory committees by contacting the D.O.E. District Superintendent on their respective islands. Secondary school representation on the advisory committees will facilitate communication between instructors on both levels, promote increased awareness of programs on both levels, lead to the development of a more articulated automotive mechanics program, utilize industry input more efficiently, reduce the need for separate advisory committees, and thus facilitate student transfer in as integrated a way as possible.

Recommendation: D.O.E.

District Superintendents on Hawaii, Maui, and Kauai should be responsible for submitting to the provost of the community college the name(s) of the elected secondary school representative(s) on the college automotive advisory committee.

NOTE: This recommendation has been implemented since the writing of this report.

Problem 4. A community college systemwide automotive curriculum proposal was developed by seventeen community college automotive instructors as a result of problems identified through the Articulation Institute. The proposal has not been implemented at any college. Administrative review of the proposal on some campuses has identified the following implications:

- a. Implicit in the proposal is a change in definition of vocational instructor workload, from one based on contact hours a week to one based on credit hours. Workload calculated on number of credit hours would use a reduced lab: credit ratio to more nearly approximate that of liberal arts instructors. This change has several implications:
 - 1) Additional instructors must be hired, as present instructors would teach fewer hours.
 - 2) Automotive instructors would be the only vocational education instructors whose workload approximates that of liberal arts instructors.
 - 3) If a reduced lab: credit ratio were implemented, there is a possibility that on some campuses quality of the program would be reduced for students. Furthermore,

instructors may need to be paid overload compensation if the total number of instructional hours is to remain the same.

- b. Justification for program changes was insufficiently established.
- c. The rationale and authorized channels for changing course numbering need to be clarified. The present course numbering indicates the place of a particular course in a curriculum. However, it does not adequately identify vocational/technical areas acceptable for both associate degree programs and some baccalaureate programs.

Recommendations: Community College

1. The Chancellor for Community Colleges upon consultation with the Statewide Curriculum Council, should specify appropriate channels for the consideration of systemwide curriculum proposals. The Chancellor should specify channels for considering changes in definition of vocational education instructor workload.
2. Because recommendations which entail changes in instructor workload are difficult to implement because of fiscal constraints and differences in philosophy governing instructional mode and program operation, instructors should strive for course content equivalency through uniform performance objectives and tests based on identifiable competencies, until such time as workload and philosophical issues can be resolved. The question of who is responsible for determining and maintaining course equivalency should be answered. All new courses should be established on the basis of equivalency.

Business Education (Typing and Shorthand)

Accomplishments in Implementation:

1. All community colleges are willing to accept students for placement in advanced level typing and shorthand on the basis of certification by high school instructors on the basis of specified performance criteria.
2. The certification proposal has been implemented at Hilo High School and Hawaii Community College. Of the seven students certificated thus far, one is currently enrolled in an advanced typing class.
3. The Kauai D.O.E. district office has printed parchment certificates of proficiency calling for the principal's as well as the instructor's signatures. The Kauai Community College Provost has informed the college counselors, registrars, and business instructors of placement procedures upon presentation of the certificate by students. Information on certification procedures has been disseminated to all secondary schools on Kauai by the District Office.
4. The Provost of Maui Community College and the Maui District Superintendent are making cooperative plans to implement the certification proposal for typing and shorthand.
5. Action has been taken at Leeward Community College to make the credit-by-examination option more viable to LCC students. Through cooperative efforts with a Kauai Community College business instructor and a Pearl City High School business instructor, uniform placement examinations for beginning level

typing and shorthand were developed and will be routinely administered to Kauai and Leeward Community College students in beginning level typing and shorthand. The exam will also be administered to selected classes at Pearl City High School. These uniform placement examinations will be especially useful for students who have not had an opportunity to be certificated in high school but who meet performance criteria and would therefore be eligible for placement in advanced level typing and shorthand.

Problem 1. Although Kapiolani, Windward, and Leeward Community Colleges are willing to accept students for placement in advanced typing and shorthand on the basis of certification, no students have presented certificates.

Recommendation: Community College

Provosts of Kapiolani, Windward, and Leeward Community Colleges should inform counselors, registrars, business education instructors and registration advisers of placement and credit procedures through certification, in the event that certification procedures are implemented in all D.O.E. districts.

Recommendation: D.O.E.

1. District Superintendents on Oahu should consider implementing the recommended certification procedures for typing and shorthand. If the procedures are implemented, thus effecting statewide implementation, the Superintendent of Education should send notification to the Office of the Chancellor for Community Colleges for dissemination of the information to all Provosts.
2. The Vocational-Technical Education Section of the D.O.E. should consider printing uniform certificates of proficiency to be used in certification procedures throughout the State. If uniform certificates are not used, samples of the various certificates in use in the districts should be sent to

Hawaii, Maui, Kauai, Kapiolani, Leeward, and Windward Community Colleges. Because students are increasingly mobile from one geographic region to another, it is important that registration advisers, registrars, counselors, and business education faculty at the various community colleges be familiar with the different certificates in use.

Drafting

Accomplishments in Implementation:

1. At Leeward Community College, a high school instructor has been hired to teach the introductory drafting course. Though it was not a specific recommendation in the Articulation Report, this cooperative use of faculty promotes mutual knowledge of the program at both levels and leads to more coordination in programs and in instruction.
2. Inservice training opportunities have been made available to upgrade competencies of drafting instructors. Workshops, funded through the Office of the State Director for Vocational Education, were conducted for Oahu instructors during the summers of 1973 and 1974 at Leeward Community College. A University credit course is being offered through the College of Education during the Spring '75 semester.

Plans are being made for an inservice workshop at Maui Community College to upgrade competencies of secondary school drafting instructors in Maui County. As a result of joint participation by secondary school and community college instructors, it is expected that there will be improved communication on the secondary level and between the secondary level and MCC, resulting in improved vertical articulation.

3. Plans to increase available student options in drafting by developing specialized courses are being made at Leeward and Kauai Community Colleges. A civil engineering drafting option is being considered at Leeward as part of a proposal for a more comprehensive drafting program. Kauai Community College is also

considering making available an engineering drafting course option, utilizing the local Society for Professional Engineers and Architects as possible lecturers on a rotating basis. This vertical articulation with industry will keep the KCC program updated in terms of professional developments, concerns, and employment needs.

4. An "Introduction to Drafting" course has been added to the drafting program at Maui Community College as a result of the drafting curriculum proposal developed in the Articulation Workshop. The course accommodates the needs of students without a drafting background but with avocational or vocational interests in drafting.
5. An evaluative instrument has been developed cooperatively by drafting instructors from Leeward Community College and the D.O.E. The instrument is to be used to evaluate levels of student accomplishment in drafting. Feeder high schools to Leeward Community College have been contacted for field-testing the instrument in Spring 1975. Upon validation of the instrument, it will be used as an aid to instruction. With specific knowledge of student levels of accomplishment, instructors will be able to tailor their instruction to the specific needs of students.

Addendum: Since the body of this report was written, further accomplishments in implementation have occurred.

6. Honolulu Community College has initiated vertical articulation meetings in drafting with Honolulu high schools, and has pre-

pared a folder containing information on the HCC drafting program for dissemination to neighbor island high schools.

Problem 1. The drafting program proposal detailing uniform course titles and numbers for the community colleges cannot be considered for implementation until questions concerning the numbering of vocational courses are resolved. What must be determined are courses which are acceptable for both associate degree programs and some baccalaureate programs, and appropriate changes in course numbering.

Recommendation: Community College

An ad hoc committee of the Statewide Curriculum Council has been established to review and make recommendations on the course numbering system. Until such time as questions are resolved, Provosts should support drafting instructors in attempts to improve the horizontal articulation of drafting programs through course content equivalency in the form of uniform performance objectives and tests. These objectives and tests should be based on identifiable behavioral competencies. Hawaii, Honolulu, Kauai, and Maui Community Colleges may want to review the evaluative instrument developed cooperatively by Leeward Community College and DOE drafting instructors for possible use in their drafting programs.

Problem 2. Workshops and University credit courses have been available for drafting instructors on Oahu. Plans are underway for a workshop on Maui. Hawaii and Kauai instructors have limited opportunities for participation in these workshops and courses.

Recommendation: Community College and D.O.E.

Intensive summer workshops and courses on Oahu should be available as one means of accommodating the needs of both Oahu and neighbor island drafting instructors.

Problem 3. There is a need for a closer communication link between the secondary school and community college drafting programs. Better understanding of the aims and purposes of the program at the two levels would enable students to have a more integrated program on the secondary and community college levels.

Recommendation: Community College

The community colleges with drafting programs should invite the participation of secondary school drafting instructors on the drafting advisory committees of the colleges.

NOTE: Since the writing of this report, steps have been taken, or will be, to implement this recommendation.

Food Service

Accomplishments in Implementation:

1. New Food Service credit options have been made available at Kapiolani Community College. FS 140 credits are available for 1) high school cooperative education experience or 2) a grade of "C" or better in Food Service II on the secondary level. FS 120B and C and FS 123B credits are available with a grade of "C" or better in Food Service I on the secondary level.
2. The systemwide course numbering and description proposal has been implemented at Kapiolani Community College with slight modification. (The letter A originally recommended in the Articulation Report is not being used with course numbers, as its use is reserved for selected studies courses.)

Problem 1. Approval by the curriculum committee of individual colleges is not a sufficient basis for making community college systemwide changes in Food Service course numbering or titling. Efforts to implement the systemwide proposal on the basis of college curriculum committee approval have resulted in uneven implementation. Horizontal articulation is difficult to achieve in this manner.

Recommendation: Community College

The Statewide Curriculum Council should disseminate to all community colleges information on authorized procedures necessary for making systemwide changes in course numbering and titling. If authorized procedures are followed and necessary approval obtained, implementation should occur at the same time on all campuses with food service programs. Information on implementation should be given by the Office of the Chancellor for Community Colleges to the Superintendent of Education for dissemination in secondary schools.

Problem 2. The recommended Food Service credit options are not yet available at Leeward and Hawaii Community Colleges. These options would enable students to progress through the college foods program in a more integrated way without unnecessary duplication of coursework. The credit options recognize the legitimacy of competencies gained through experience on the job and through previous educational experience.

Recommendation: Community College

Hawaii and Leeward Community College Provosts should direct the consideration of the food services course credit options. If the options are to be made available, the Provost should inform the college registrar, registration advisers, counselors, and food service instructors.

Recommendation: D.O.E.

Foods program instructors on the secondary level should work in closer coordination with community college instructors so that students would be prepared on the secondary level to exercise the course credit options at the community college level.

ADDENDUM

An administrators' meeting on articulation was held on March 14, 1975. In attendance were all provosts and deans of instruction from the community colleges, and district superintendents or deputy district superintendents, curriculum specialists, and program specialists from the Department of Education. The community college and D.O.E. administrators met in separate working sessions. Available as resource persons were team leaders or their assistants from automotive mechanics, business education, drafting, and food service.

- The meeting sought an administrative consensus on
1. the recommendations from this report.
 2. the specification of where authority and responsibility for review, revision, approval, and implementation of articulation recommendations lie.
 3. the establishment of procedures or mechanisms for implementation and the resolution of problems or questions arising from implementation efforts.

The following are reports of the discussions. All district superintendents reviewed and accepted the D.O.E. report. The Council of Provosts will take official action to adopt the guidelines and responsibilities delineated at the March 14 meeting.

ADMINISTRATORS' MEETING ON ARTICULATION
REPORT - DEPARTMENT OF EDUCATION SESSION

I. General Recommendations

1. State Board for Vocational Education: Formally endorse the concept and intent of articulation.
 - a. Group recommended approval and implementation by the State Board.
 - b. Time schedule: As soon as possible.
2. State Board for Vocational Education: Establish a position in the State Director's office to evaluate programs including articulation.
 - a. Group recommended approval but that the State Board should give priority to the restoration of positions of Asst. State Director and fiscal officer to the State Director's staff, with consideration being given to the assignment of evaluation and articulation responsibilities to the Asst. State Director rather than establishing a new position.
 - b. Time schedule: July 1, 1975
3. Counselors: Acquire and apply knowledge of vocational education programs towards an articulated vocational counseling and guidance system.

Group recommended approval with the following additional considerations:

- a. That an explicit statement of commitment to an articulated vocational counseling and guidance system including knowledge of vocational education programs be incorporated in the State Master Plan for Comprehensive Guidance.
- b. That the Office of the State Director should continue to make concerted efforts to provide information on the availability of resources (such as through the Career Information Center).
- c. That to the extent that attendance at workshops to enable counselors to acquire such knowledge is voluntary, district superintendents should encourage counselors to participate.

II. Specific Recommendation - Business Education (Typing and Shorthand)

Combine pts. 1 and 2 on agenda to read as follows:

Department of Education: Implement the recommended certification procedures for typing and shorthand Statewide and provide uniform certificates of proficiency to be used in certification procedures throughout the State. (By "Department of Education" is meant the State office through the Voc.-Tech. section.)

Time schedule: September, 1975

III. Recommendations for all Subject Areas

(Note: the group reorganized agenda items because it was felt certain problems were common to all subject areas and should be considered as a whole.)

1. Inservice Education

- a. Funding - Responsible Agent: State Director for Vocational Education

It was recognized that the funding needed to come from the State Director.

- b. Scheduling - Responsible Agents: District Superintendents in consultation with the State Personnel Office.

Scheduling covers both the calendar as well as the location of in-service classes.

- c. Procedures - Responsible Agents: District Superintendents in consultation with the State Personnel Office.

Matters involving credit, cost, etc.

- d. Participation - Responsible Agents: District Superintendents and individual instructors.

Participation is voluntary but District Superintendents will encourage participation.

- e. Plan - Responsible Agents: DOE State Vocational-Technical Education Section, U.H. Chancellor for Community Colleges.

Recommendation is for a coordinated annual and long-range in-service education plan to be worked out with the U.H. Community Colleges.

- f. Priority - Responsible Agents: DOE State Vocational-Technical Education Section with District Superintendents

Time schedule: As soon as possible.

2. Competency Criteria

(Note: The following assumes horizontal articulation which needs to be completed at the community college level.)

- a. Levels of Proficiency - Responsible Agents: Community College provosts and D.O.E. specialists. Provosts should initiate meetings to include community college and secondary school instructors working jointly.
- b. Development of Measurements (same as above)
- c. Setting of Minimum Standards (same as above)
- d. Procedures in consultation with District Superintendents and DOE State office.
- e. Certification - DOE State office
It was recognized that certification may not lend itself to every subject area. A specific recommendation in Auto Mechanics was that Honolulu Community College be designated to take the initiative.

Time schedule: As soon as possible with first priority to Auto Mechanics since groundwork for cooperation is already existing.

IV. Miscellaneous

1. Horizontal articulation has first priority.
2. Group did not establish priority among subject areas indicating that this should be a responsibility of the DOE State Voc.-Tech. section.
3. Review process is already in existence for DOE through District Superintendents.
4. No permanent implementation mechanism was recommended due to lack of time to discuss alternatives.

REPORT: ARTICULATION GUIDELINES AND RESPONSIBILITIES
DELINEATED BY PROVOSTS

March 14, 1975

The discussion of March 14 resulted in

1. a delineation of basic guidelines on articulation according to which the community colleges hope to operate, and
2. an identification of areas of responsibility of the Provosts, the Office of the Chancellor for Community Colleges, the Office of the State Director for Vocational Education, and the State Board for Vocational Education.

For purposes of definition, it was agreed that articulation refers to a uniformity of understanding rather than standardization of all courses or programs.

The context within which the discussion took place was a classification scheme developed by Ralph Miwa, which addressed itself to the need for arriving at guidelines which were conceptually applicable and agreeable to all fields in vocational education.

The following are the basic guidelines on articulation which were agreed upon.

I. ARTICULATION GUIDELINES

1. Support the general concept of course equivalency but refer for further study the review and choice of a model or models for course equivalency in vocational education. All campuses will strive seriously toward uniform course numbering for courses with equivalency in content.
2. Support the concept of a performance objective oriented approach to vocational education. (Agreement on the development of uniform performance objectives, provided that levels of attainment can be an individual campus decision.)
3. Support and review evaluative instruments developed cooperatively by instructors from the community colleges and the D.O.E. (Agreement on need for criterion testing.)
4. Initiate action to include participation of instructors from the secondary level and, where possible, other community colleges on each community college's vocational-technical advisory committee(s).

5. Request that vocational education inservice training opportunities through workshops or courses be held at times, such as summer, which are flexible enough to accommodate the needs of both Oahu and neighbor island instructors.

II. AREAS OF RESPONSIBILITY

The following were agreed to as appropriate areas of responsibility for the Provosts, the Chancellor for Community Colleges, the State Director for Vocational Education, and the State Board for Vocational Education.

- Provosts:
1. Commitment to improving articulation between program areas
 2. Consideration of course numbering matters
 3. Development of performance objectives
 4. Additions to membership on college advisory committees
 5. Strengthening vocational guidance and counseling

Chancellor for

- Community Colleges:
1. Systemwide coordination of inservice training, especially with reference to dates, number of credits, workshops or courses offered.
 2. Systemwide coordination of efforts to improve horizontal articulation.
 3. Transmittal of information on implementation of recommendations on community college level to the Superintendent of Education for dissemination through established channels.

State Director for

Vocational Education: Coordination of community college efforts to articulate vertically with the Department of Education

State Board for

- Vocational Education:
1. Commitment to the concept and intent of articulation
 2. Establishment of position counts in (a) the Office of the Chancellor for Community Colleges for horizontal articulation, (b) the Office of the State Director for Vocational Education for vertical articulation.

III. TIME FRAMES FOR IMPLEMENTATION

No single time frame can be applied to all community colleges, as implementation is dependent on budgetary factors. Provosts will consult with their fiscal officers on the possibility of implementation through (1) state general funds as a campus budget item, and (2) federal vocational education funds, through the Office of the State Director for Vocational Education.

IV. FOLLOW-UP TO THIS MEETING

1. The recommendations from the second and third Articulation Institutes will be examined by Minnie Boggs to see how they fit in with the general guidelines accepted. Those recommendations not covered by these general guidelines will be reviewed at another meeting.
2. The Articulation Guidelines and delineation of areas of responsibility will be forwarded to Walter Chun, Director of Community College Services, for official action by the Council of Provosts. The Council will forward recommendations to the State Board for Vocational Education for further action on items which are beyond the provosts' domain.
3. The Council of Provosts will be responsible for establishing an alternative means of coordinating horizontal and vertical articulation efforts in the event that the recommended positions in the Office of the Chancellor for Community Colleges and the State Director for Vocational Education are not established.
4. As an individual campus responsibility, provosts will initiate action towards the development of a performance objective oriented approach to vocational education.
5. The Office of the Chancellor for Community Colleges will coordinate the beginning of implementation efforts to develop a model or models for performance objectives on individual campuses.

APPENDIX A

AUTOMOTIVE MECHANICS, BUSINESS EDUCATION, DRAFTING, AND FOOD SERVICE

PROGRAMS IN THE COMMUNITY COLLEGES*

December, 1974

	Automotive Mechanics	Business Education	Drafting	Food Service
Hawaii CC	X	X	X	X
Honolulu CC	X		X	X
Kapiolani CC		X		X
Kauai CC	X	X	X	
Leeward CC	X	X	X	X
Maui CC	X	X	X	
Windward CC		X		

*This chart shows which of the four vocational education program areas discussed in the FY 73 Articulation Institute are offered by each community college. It is not a complete listing of all vocational education programs in the community colleges.

APPENDIX B

STATUS REPORT: IMPLEMENTATION OF FY 73 ARTICULATION
RECOMMENDATIONS ON THE POST-SECONDARY LEVEL

AUTOMOTIVE MECHANICS TECHNOLOGY
November 1974

Community College	Extent of Implementation	Description of Implementation	Responsible Agent	Expected Outcomes	Cost Factors	Other Implications
All Community Colleges		A 2-week intensive summer workshop will be held for automotive instructors on both secondary and community college levels in June through General Motors Overseas Distribution Corporation. 3 credits may be earned.	State Director for Vocational Education	Instructional quality is determined by an instructor's competence. The quality of instruction influences the extent of student learning. Upgrading instructor competencies will result in improved learning opportunities for students.	Registration fees to be paid by participants.	
Hawaii	Full Partial <input checked="" type="checkbox"/> None *See Addendum on page 39.	Automotive mechanics curriculum proposal (drafted during 3/73 statewide workshop) has been revised and resubmitted for Curriculum Committee and Dean of Instruction approval.	Automotive instructors	Adoption of proposal is a step toward statewide uniformity in the automotive mechanics curriculum. However, further action may be held in abeyance until the Statewide Curriculum Council issues guidelines on course numbering and titling changes.	The cost implication of the proposal is a need for additional positions, as the contact hour: credit hour ratio would be reduced to bring it more in line with liberal arts lecture/lab courses.	If the proposal is implemented and additional positions are not obtained, the quality of the instructional program may be compromised, as students may not be able to have as much hands-on experience as they need. Adoption of proposal by only HCC does not accomplish horizontal articulation.
Honolulu	Full Partial <input checked="" type="checkbox"/> None *See Addendum on page 39.	The Provost and DOE Deputy District Superintendent both support an official communication channel between the secondary and post-secondary levels. 1. An inservice workshop is being voluntarily taught by an HCC instructor for DOE instructors who want to upgrade their skills in auto mechanics. 2. Implementation of the statewide course proposal will be considered only if no change in faculty workload is involved, and if questions concerning the remodeling of courses can be resolved.	Provost and Deputy District Superintendent HCC automotive instructor and department chairman Automotive department chairman, Dean of Instruction, Provost	The expected outcome is improved vertical articulation between secondary and post-secondary levels in curricula and student programs. Instructional quality is determined by an instructor's competence. The quality of instruction influences the extent of student learning. Upgrading instructor competencies will result in improved learning opportunities for students. Improved horizontal articulation of automotive curricula.	None None	The DOE District Superintendent for Hawaii should contact the Provost of Hawaii Community College to set up an official communication channel to be used on a regular basis.
Leeward	Full Partial <input checked="" type="checkbox"/> None *See Addendum on page 39.	1. Credit options available are a. credit by examination b. credit on the basis of high school instructor's recommendation. 2. Implementation of the system-wide course proposal will be considered only if no change in faculty workload is involved, and if questions concerning the remodeling of courses can be resolved.	Automotive instructors	The expected outcome is improved vertical articulation. Students will be able to complete their education in less time and at less cost, or receive more comprehensive education.	None if proposal is implemented without change in instructor workload.	If credit by examination is administered on a large-group basis, instructor workload will be increased.

Community College	Extent of Implementation	Description of Implementation	Responsible Agent	Expected Outcomes	Cost Factors	Other Implications
Kauai	<p>Full _____ Partial <u> X </u> None _____ *See Addendum below.</p>	<p>2. High school automotive instructors in the Leeward area are invited to attend and provide input at the community college advisory committee meetings.</p>	<p>Community college advisory committee</p>	<p>The expected outcome is improved vertical articulation. Students will be able to complete their education in less time and at less cost, or receive more comprehensive education.</p>	<p>None</p>	<p>Consideration should be given to whether formalizing input from the secondary level via membership on the committee might secure more input on a regular basis. Also, part of the rationale for having a secondary level member on the committee was to keep the secondary level instructors informed of program concerns on the community college level and of industry needs without duplicating industry membership on another advisory committee.</p>
Kauai	<p>Full _____ Partial <u> X </u> None _____ *See Addendum below.</p>	<p>1. Systemwide course proposal is being followed in the instructional content of present courses. 2. Course outlines have been sent to the Kauai District Office for distribution on the secondary level.</p>	<p>Automotive instructors</p>	<p>Improved horizontal articulation is the expected outcome. The expected outcome is better vertical articulation resulting from secondary school instructors' knowledge of the KCC auto mechanics program.</p>	<p>None for what was implemented Minimal duplication costs</p>	<p>Full implementation of the course proposal, if a system for a standardized number of credits is developed, may involve the costs of additional positions. There should be follow-up meetings or visits to each campus with an automotive program to improve communication between instructors and establish a realistic basis of knowledge of programs. A result of this information exchange may be greater utilization of credit options by students.</p>
Maui	<p>Full _____ Partial <u> X </u> None _____ *See Addendum below.</p>	<p>1. Systemwide course proposal is being followed in the instructional content of present courses. 2. Vertical articulation: instructor contact between MCC and Lahainaluna High School.</p>	<p>Automotive instructor Automotive instructors</p>	<p>Improved horizontal articulation of curricula is the expected outcome. Improved vertical articulation of MCC curricula and student programs in the expected outcome.</p>	<p>None for what was implemented None</p>	<p>Full implementation of the course proposal, if a system for a standardized number of credits is developed, may involve the costs of additional positions. More instructor contact is needed between MCC and Baldwin and Maui High Schools to establish a realistic understanding of each other's programs and cooperative attitude towards vertical articulation.</p>
ADDENDUM	<p>1. Since November, 1974, community colleges with automotive committees.</p> <p>2. Maui Community College has initiated a pilot program to grant credit for equivalent automotive courses taken in high school.</p> <p>a. An MCC student who has completed one semester of an automotive course is awarded 4 credits for AMT49 (Automotive Servicing).</p> <p>b. An MCC student who has completed 2 years of automotive courses at Lahainaluna High School with a grade of "B" or better as his second year final grade will be awarded 3 MCC credits for AMT53 (Automotive Brake System) and 4 MCC credits for AMT52 (Engine).</p>	<p>community colleges with automotive programs have initiated steps to include secondary school representation on their advisory</p>	<p>community colleges with automotive programs have initiated steps to include secondary school representation on their advisory</p>	<p>community colleges with automotive programs have initiated steps to include secondary school representation on their advisory</p>	<p>community colleges with automotive programs have initiated steps to include secondary school representation on their advisory</p>	<p>community colleges with automotive programs have initiated steps to include secondary school representation on their advisory</p>

BUSINESS EDUCATION (TYPING AND SHORTHAND)
December, 1974

Community College	Extent of Implementation	Description of Implementation	Responsible Agent	Expected Outcomes	Cost Factors	Other Implications
Hawaii	Full <input checked="" type="checkbox"/> Partial _____ None _____	The certification proposal has been accepted and implemented at Hilo High School using certificates printed by the business department. Of the 7 students certified by Hilo High, 1 student was enrolled in the Hawaii Community College advanced level typing class as of Fall '74.	Hilo High School business instructors and Hawaii Community College Business Division Chairperson.	Students will be able to complete their coursework at HCC more quickly without unnecessary duplication. Freed from the need to repeat coursework, they may take more advanced level or specialized coursework.	Minimal costs of printing certificates	There is a need for information dissemination to HCC registration advisers regarding use of the certificate for placement. The Provost should send to the Hawaii DOE District Superintendent written confirmation of credit and placement procedures implemented at Hawaii CC.
Kapiolani	Full _____ Partial <input checked="" type="checkbox"/> None _____	Kapiolani Community College is willing to accept students for placement in advanced level business courses on the basis of certification. However, no student has presented a certificate for placement. At present students may earn credits as soon as individualized self-paced modules are completed. Business education advisers have been informed of certification procedures.	Provost, Dean of Instruction, Business Division Chairman			The registrar and counselors should also be informed of certification and placement procedures in the event that students do present certificates for placement. The admissions office should be informed of these procedures for purposes of awarding credit.
Kauai	Full <input checked="" type="checkbox"/> Partial _____ None _____	KCC business instructors and secondary level business instructors have participated in joint articulation meetings to consider the implementation of the articulation recommendations. The Kauai DOE District Office has printed certificates of proficiency which call for the principal's as well as the instructor's signature. KCC Provost has sent to the Kauai DOE District Superintendent written confirmation of the credit and certification procedures. The District Superintendent has disseminated the information to the high school instructors and counselors. KCC Provost has informed KCC counselors, registrar and registration advisers of the certification and credit procedures.	KCC Provost, DOE District Superintendent, Deputy District Superintendent, Curriculum Specialist for Secondary Education	Students will be able to complete their coursework at KCC more quickly without unnecessary duplication. Freed from the need to repeat coursework, they may take more advanced level or specialized coursework.	Cost of printing certificates	

Community College	Extent of Implementation	Description of Implementation	Responsible Agent	Expected Outcomes	Cost Factors	Other Implications
Leeward	Full Partial <input checked="" type="checkbox"/> None	<p>1. Action has been taken to make the credit by exam option more viable to students. Uniform placement exams for typing and shorthand were developed in cooperation with a community college representative and a DOE representative. Exams were administered to LCC students in Fall '74. Exams will also be used at Kauai Community College and at Pearl City High School.</p>	Business education division chairperson	The routine administration of exams should bypass the problem of student failure to exercise this option due to lack of initiative, lack of self-confidence, or lack of knowledge that the option exists. Students will be able to complete coursework requirements at LCC (or Kauai Community College) without unnecessary duplication.	<p>1. Cost of printing exams</p> <p>2. Possible costs for overhead to administer and correct exams and place students on the basis of their performance.</p>	<p>1. Other Community Colleges should consider the use of the same placement exam so that the exam is uniform at all colleges.</p> <p>2. The large amount of time involved in administration and correction of the exams has workload implications.</p>
Maui	Full Partial <input checked="" type="checkbox"/> None	<p>2. LCC Curriculum Committee approval is needed before credits for beginning level work can be awarded upon successful completion of the advanced level course.</p>	Business education division chairperson should seek curriculum committee approval.	Students will be able to take advanced courses without repeating the introductory course and receive credit for the introductory course upon satisfactory completion of the advanced course.	None	Registrar, Dean of Student Services, Counselors, and business instructors will need to be informed if approval is obtained.
Maui	Full Partial <input checked="" type="checkbox"/> None	<p>A Fall workshop on Articulation was sponsored by EPDA Part F funds through the Office of the State Director for Vocational Education, in response to a joint request by Maui Community College and the Maui DOE District Office. Among those present were 3 MCC business instructors and 4 secondary level business instructors. All accepted the certification proposal and recommended the following for implementation:</p> <ol style="list-style-type: none"> 1. Maui District Office should print certificates to be used beginning January 1975. 2. Copies of minimum criteria requirements for certification should be made available by the Maui District Office to all secondary schools on Maui offering Typing and Shorthand. 3. MCC Business Education Division Chairman should inform registrar and counselors at MCC as well as on the secondary level about the certification procedure, so that they may encourage students to exercise the option. Each counselor should receive a copy of the criteria and certificate. 4. MCC Provost should send to the Maui DOE District Superintendent written confirmation of the credit and certification procedures. The District Superintendent will disseminate the information to the high schools. 	MCC Provost, Maui DOE District Superintendent, MCC and DOE business instructors	With the implementation of the certification proposal, students will be able to complete their coursework at MCC more quickly without unnecessary duplication. They may thus take more advanced level or specialized coursework.	Costs of printing certificates and copies of minimum criteria for certification	

Community College	Extent of Implementation	Description of Implementation	Responsible Agent	Expected Outcomes	Cost Factors	Other Implications
Windward	Full _____ Partial _____ None _____ X _____	Windward Community College is willing to accept students for placement in advanced level business courses on the basis of certification. However, no student has presented a certificate for placement.	Provost, Dean of Educational Services, Business Education instructors			The DOE Windward District Superintendent should consider the feasibility of initiating action on the certification proposal. The Provost should inform the registrar and counselor or certification and placement procedure in the event that students do present certificates for placement.

Community College	Extent of Implementation	Description of Implementation	Responsible Agent	Expected Outcomes	Cost Factors	Other Implications
		A University credit course EDCI 583 Practicum in Curriculum Development-Industrial Education (Drafting) will be offered for community college and high school instructors during Spring, 1975.	State Director for Vocational Education, University of Hawaii College of Education and Continuing Education	Upgrading instructor competencies will result in better preparation of students.	Instructor costs at \$280/credit hour	Workshops and courses need to be held to accommodate the needs of neighbor island drafting instructors.
Hawaii	Full <input checked="" type="checkbox"/> Partial <input type="checkbox"/> None <input type="checkbox"/> *See Addendum on page 46.	Participation in statewide drafting workshop which produced a recommended drafting program detailing course titles, numbers and credit allocations on the community college level.	Drafting Instructor	A Statewide Curriculum Council ad hoc committee is reviewing University policy on course numbering. Guidelines are expected for the numbering of new courses and the renumbering of present courses.	Air fare and meals	The consideration of the recommended drafting program proposal is being held in abeyance until further notice from the Vice-President for Academic Affairs.
Honolulu	Full <input type="checkbox"/> Partial <input checked="" type="checkbox"/> None <input type="checkbox"/> *See Addendum on page 46.	Recommendations were considered for implementation. Conclusions were: 1. No manpower needs assessment has been made on which to base expansion of the drafting program to include the recommended options. A student receiving narrowly specialized training may find his employment opportunities limited. HCC prefers to offer these courses after work hours as a means of upgrading competencies once the student is employed and finds he needs specialized training.	Provost, Dean of Instruction, Assistant Dean of Instruction	Needs assessment will facilitate program planning and determine which options are feasible for implementation. In-service courses will upgrade worker skills.	1. Costs of conducting a manpower study 2. Costs of Instructor's salary: \$280/credit hour	
		2. More procedures need to be specified in operational terms for improving vertical articulation, both from high school to community college and community college to UH Manoa. At present, no community college drafting coursework is formally applicable to the architectural program at UH Manoa.	Provost, Dean of Instruction, Assistant Dean of Instruction	Vertical articulation between secondary schools and the community colleges and the Manoa campus would make student transfer more economical in time and effort.	None unless meetings are held involving neighbor islanders. Costs then would include airfare and possible per diem.	
		3. Agreement on uniform performance objectives for course content equivalency and student competency evaluation should be no problem as long as performance objectives are to be met after specified intervals such as at the end of the first year or upon completion of the program.	Provost, Dean of Instruction, Assistant Dean of Instruction	Teaching towards uniform performance objectives is a means of attaining course content equivalency which facilitates horizontal articulation among the community colleges. This in turn facilitates vertical articulation with the secondary schools.	Possible increase in instruction workload stemming from performance testing of all students at the same intervals	Performance tests may need to be developed as a measure of the extent to which uniform performance objectives are attained by students.

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College	Extent of Implementation	Description of Implementation	Responsible Agent	Expected Outcomes	Cost Factors	Other Implications
Kauai	Full Partial <input checked="" type="checkbox"/> None	<p>1. Participation in statewide drafting workshop which produced a recommended drafting program detailing course titles, numbers and credit allocations on the community college level.</p> <p>2. The mechanics have been set up for an engineering drafting course option. The Society for Professional Engineers, Architects, and Surveyors will be contacted as a possible source of lecturers on a rotating basis.</p> <p>3. Close communication between KCC and Waimea High School drafting instructors, resulting in agreement on student competency criteria.</p> <p>4. A high school drafting instructor will be added to the community college drafting advisory committee.</p>	Drafting instructor	<p>A Statewide Curriculum Council ad hoc committee is reviewing University policy on course numbering. Guidelines are expected for the numbering of new courses and the renumbering of present courses.</p> <p>An additional option will be available to students with varying interests and degrees of competencies.</p>	Air fare and meals	Course titling is important because of the limited employment situation on Kauai. Because jobs are scarce, it is important that system-wide course labeling not be restricting on a KCC student's employability.
			Drafting instructor	Vertical articulation will be improved.	None	There is a need to improve communication with other high schools offering the drafting program.
			Drafting instructor	There will be increased communication between secondary and post-secondary drafting instructors, resulting in greater knowledge of each other's programs and improved vertical articulation of programs. This facilitates student transfer from the secondary to post-secondary levels. A similar advisory committee for the secondary level will not be necessary.	None	
Leeward	Full Partial <input checked="" type="checkbox"/> None *See Addendum on page 46.	<p>1. Participation in statewide drafting workshop which produced a recommended drafting program, detailing course titles, numbers and credit allocations on the community college level.</p> <p>2. A plan for an expanded drafting program has been devised, consisting of 54 total credit hours. The present program consists of 42 total credit hours. Decision needs to be made on which courses should be required or elective.</p> <p>3. Course outlines have been developed for the civil engineering option and have been submitted for Curriculum Committee approval.</p>	Drafting instructors	<p>A Statewide Curriculum Council ad hoc committee is reviewing University policy on course numbering. Guidelines are expected for the numbering of new courses and the renumbering of present courses.</p> <p>A more comprehensive drafting program will be available for students.</p>	Air fare and meals for neighbor island instructors	The consideration of the recommended drafting program proposal is being held in abeyance until further notice from the Vice-President for Academic Affairs.
			Drafting instructors, Curriculum Committee, Dean of Instruction, Provost	Students will have an additional option in areas of specialization.	Cost of one additional full-time instructor	Classroom space and an office will be necessary.
			Drafting instructors	Students will have an additional option in areas of specialization.	Costs of 12 units of instruction: \$3,360/semester	Classroom space will be necessary.

Community College	Extent of Implementation	Description of Implementation	Responsible Agent	Expected Outcomes	Cost Factors	Other Implications
	4. In-service workshops were conducted for a limited number of Oahu drafting instructors at LCC.	Community College and DOE drafting instructors, State Director for Vocational Education, University of Hawaii College of Education and Continuing Education	Upgrading instructor competencies will result in better preparation of students.	Instructor costs at \$280/credit hour	Workshops need to be held to accommodate the needs of neighbor island drafting instructors.	
	5. As a result of increased communication between counselors and voc.-tech. instructors, course waiver or course substitute agreements with Division Chairman approval are now possible when a required course is not available.	Counselors and Voc.-Tech. Division Chairman and instructors	Students will be able to progress through their program despite the fact that a required course may not be available.	None		
	6. Vertical articulation - a DOE high school instructor has been hired to teach the introductory drafting class in the afternoon.	Provost, Dean of Instruction, Voc.-Tech. Assoc. Dean and Division Chairman	Secondary level instructors will be more knowledgeable about the drafting program at the community college level. This should facilitate vertical articulation.	Instructor costs.	Rotation among high school instructors hired should facilitate vertical articulation even more.	
	7. Attempts have been made to form a drafting club for students.	Drafting instructors	A club would foster enthusiasm for drafting as a career as well as greater awareness of career opportunities in drafting.	None		
	8. An instrument has been developed to evaluate levels of student accomplishment in drafting. Feeder high school drafting instructors have been contacted, and instrument will be tested in Spring 1975.	Drafting instructors from LCC and the DOE.	Instrument will be used as an aid to instruction. Knowing levels of student accomplishment will make it possible for instructors to tailor instruction to the specific needs of the students.	Costs of developing the instrument were funded through the office of the State Director for Vocational Education.	Upon validation of the instrument, its use as an aid to instruction, and possibly placement, should be considered by other community colleges with drafting programs.	
Maui	Full Partial <input checked="" type="checkbox"/> None *See Addendum on page 46.	1. New course, "Introduction to Drafting," has been added to the drafting program as a result of the drafting curriculum proposal developed in the Articulation Workshops.	Drafting instructor with approval from Curriculum Committee, Dean of Instruction, and Provost.	There will be an increase in student course options to better accommodate students with varying interests (vocational vs. vocational) and degrees of competencies.	None	
	2. Communication between MCC and the Maui secondary schools on the course credit transfer option seeks to award credit for high school work in drafting.	Drafting instructor with approval from Curriculum Committee, Dean of Instruction, and Provost.	Upon formalized agreement between the secondary schools and the community college, students will not have to repeat introductory courses at MCC. They will be able to complete their programs sooner and take more advanced courses.	None		

Community College	Extent of Implementation	Description of Implementation	Responsible Agent	Expected Outcomes	Cost Factors	Other Implications
Maui		<p>3. Instructor is working with the DOE Curriculum Specialist for Secondary Education on a proposal for an in-service workshop to upgrade competencies of secondary school drafting instructors from Lanai, Molokai, and Maui.</p>	<p>MCC Drafting Instructor and DOE Curriculum Specialist in Secondary Education.</p>	<p>Instructional quality is determined by the instructor's competence. Quality of instruction influences extent of student learning. Upgrading instructor competencies will result in improved learning opportunities for students.</p> <p>As a result of joint participation in the workshop, there will be improved communication between and among the secondary level and MCC, resulting in improved vertical articulation.</p>	<p>Air fare for instructors from Lanai and Molokai to Maui. Mileage for Maui participant. \$280/credit hour for instructor's salary.</p>	
		<p>4. Participation in statewide drafting workshop which produced a recommended drafting program.</p>	<p>Drafting instructor</p>	<p>Upon further work on standardizing the number of credits as well as course content equivalency, horizontal articulation will be improved, thereby facilitating vertical articulation.</p>	<p>Air fare and meals.</p>	<p>Provosts and Deans of Instruction need to consider the implications of changes in workload and numbering courses above 100.</p>
	<p>Since December, 1974, the following accomplishments in implementation have occurred:</p>					
	<p>1. All community colleges with drafting programs have included or will initiate steps to include secondary school representation on their advisory committees.</p>					
	<p>2. Honolulu Community College has initiated vertical articulation meetings on drafting with Honolulu high schools, and has prepared a folder containing information on the HCC drafting program for dissemination to neighbor island high schools.</p>					

ADDENDUM:

Community College	Extent of Implementation	Description of Implementation	Responsible Agent	Expected Outcomes	Cost Factors	Other Implications
Hawaii	Full Partial <input type="checkbox"/> None <input checked="" type="checkbox"/>	Concern has been expressed as to the need for vertical articulation with Konaewaena High School.	Food Services Coordinator and Instructor	Expected outcome is action initiated by the Provost and Food Services Coordinator to improve vertical articulation.	None	Action is needed by the Provost and Food Services Department Chairman to consider the implementation of the food service recommendations.
Kapiolani	Full Partial <input checked="" type="checkbox"/> None <input type="checkbox"/>	<p>1. System-wide uniform course numbering and description system was implemented.</p> <p>2. Credit option: Community College credits (Food Service 120B & C, 123B) may be awarded on the basis of C or better work in high school Food Service I. Credit option: Students accepted for enrollment in KCC Food Service Program with C or better in high school Food Service II may apply for credit in FS 140 courses. Credit option: Students completing one year of cooperative education experience at the secondary level with a verification letter from their employers may apply for credit in FS 140.</p> <p>3. Instructional resource material is being provided to high schools and industry on an informal basis.</p>	Food Service Education Division Chairman with approval from Curriculum Committee, Dean of Instruction, and the Provost	<p>If the system is adopted by all community colleges,</p> <ol style="list-style-type: none"> student, parent, faculty, and administrative confusion caused by inconsistency in course numbers, titles, and descriptions will be eliminated. inter-college transfer will be facilitated. manhours spent on placement and course credit transfer problems will be decreased. <p>Duplication of introductory course-work will be eliminated. Presently overcrowded KCC introductory courses would be reduced in size if students received credit for high school food service courses. More sections could then be offered in specialized and advanced areas. Students would receive more comprehensive training and be able to progress through the program faster.</p>	None	<p>High school instructors, counselors, and community college registrar need to be informed of available credit options.</p> <p>Students need to be informed and encouraged by the above mentioned people to exercise the credit options.</p>
		<p>3. Instructional resource material is being provided to high schools and industry on an informal basis.</p>	Food Service Education Division Chairman	<ol style="list-style-type: none"> Reduce or eliminate duplication of effort and free man-hours for improving instructional quality in other ways. Increase amount of instructional resources available to each source. Keep food service instructors and those concerned with the food service program informed of the most recently available resources. Help some campuses overcome geographical constraints which may limit knowledge of and accessibility to instructional resources. 	Exchange of materials to be on loan basis or for minimal duplicating costs.	<p>Formal designation of a center is necessary. This may be accomplished by</p> <ol style="list-style-type: none"> election by representatives of food service programs on the community college level, or designation by a statewide articulation committee.

Community College	Extent of Implementation	Description of Implementation	Responsible Agent	Expected Outcomes	Cost Factors	Other Implications
Leeward	Full Partial <input checked="" type="checkbox"/> X None	Curriculum Committee approval was obtained for implementing the proposed uniform course numbering system. However, communication from the Office of Academic Affairs on the Manoa Campus indicated that the proposed use of letters was not acceptable. A decision was made, following two other attempts to change the course numbering system, to desist from further attempts at implementation until authorized systemwide procedures to change course numbering are resolved.	Food Services Coordinator	If uniform course numbering and titling are implemented through authorized systemwide procedures, the expected outcome is improved horizontal articulation.	None	Authorized procedures for making systemwide changes in course numbering and titling should be specified by the Statewide Curriculum Council and information disseminated to all community colleges.

APPENDIX C

AUTOMOTIVE MECHANICS, BUSINESS EDUCATION, DRAFTING AND FOOD SERVICE PROGRAMS ON THE SECONDARY LEVEL*

January, 1974

	AUTOMOTIVE MECHANICS			BUSINESS EDUCATION			DRAFTING			FOOD SERVICE		
	P.I.P.	I.V.	O.S.	P.I.P.	I.V.	O.S.	P.I.P.	I.V.	O.S.	P.I.P.	I.V.	O.S.
HONOLULU DISTRICT												
Farrington	X			X	X	X	X			X		X
Kaimuki		X			X	X					X	X
Kalani	X				X							
McKinley		X			X	X					X	X
Roosevelt		X			X							
Kaiser					X							
CENTRAL DISTRICT												
Aiea				X	X	X						X
Leilehua					X	X						X
Moanalua					X							
Radford		X			X							
Waiialua	X				X	X						X
LEEWARD DISTRICT												
Campbell		X			X							X
Nanakuli	X				X	X						X
Waipahu		X			X	X		X			X	X
Waianae	X	X		X	X					X		X
Pearl City					X							
WINDWARD DISTRICT												
Castle					X	X						X
Kahuku	X				X	X						X
Kailua		X			X	X		X				X

	AUTOMOTIVE MECHANICS			BUSINESS EDUCATION			DRAFTING			FOOD SERVICE		
	P.I.P.	I.V.	O.S.	P.I.P.	I.V.	O.S.	P.I.P.	I.V.	O.S.	P.I.P.	I.V.	O.S.
HAWAII DISTRICT												
Hilo	X				X							
Honokaa					X							
Kau					X							
Kohala	X				X							
Konawaena	X			X	X					X		
Laupahoehoe					X							
Pahoa					X							
MAUI DISTRICT												
Baldwin		X			X							
Hana					X							
Lahainaluna	X				X							
Lanai					X							
Mauí					X							
Molokai					X							
KAUAI DISTRICT												
Kapaa	X				X							
Kauai					X							
Waimea					X							

*This chart shows which of the four vocational education program areas discussed in the FY 73 Articulation Institute are offered in specific secondary schools. It is not a complete listing of all vocational education programs on the secondary level.

The P.I.P. (Pre-Industrial Preparation) Program is an interdisciplinary program which correlates basic mathematical, verbal, and scientific skills with concrete occupational experiences. It serves primarily underachieving disadvantaged students.

The I.V. (Introduction to Vocations) Program is guidance-oriented and serves all students. It includes information on career opportunities and experiences in various clusters of occupations.

The O.S. (Occupational Skills) Program is for limited ability learners and offers specific job skill development.

APPENDIX D

STATUS REPORT: IMPLEMENTATION OF FY 73 ARTICULATION
RECOMMENDATIONS ON THE SECONDARY LEVEL

AUTOMOTIVE MECHANICS TECHNOLOGY
December, 1974

DOE District	Extent of Implementation	Description of Implementation	Responsible Agent	Expected Outcomes	Cost Factors	Other Implications
All Districts	Full Partial <input checked="" type="checkbox"/> None	<p>1. State Guide is in the process of being edited and printed for dissemination.</p> <p>2. Survey of areas of interest for in-service training was conducted. Results were submitted to the State Director for Vocational Education and to the Hawaii Automotive Teachers Association in January 1974. The Association was formed as a result of a felt need resulting from the Articulation Institute. A five-year program was planned for University credit courses and yearly in-service training in workshops to upgrade instructor competencies. The workshops have utilized community college facilities and involved joint participation with community college instructors. An in-depth inservice course for Automotive teachers was offered during February '74. The first summer workshop was held. An in-service course to upgrade subject matter skills and knowledge and to develop new teaching methods and materials will be offered through UH College of Education during Spring '75.</p> <p>A 2-week intensive summer workshop will be held for automotive instructors on both secondary and community college levels in June through General Motors Overseas Distribution Corporation. 3 credits may be earned.</p> <p>3. All principals and automotive teachers received copies of the draft form of the articulation agreements.</p>	DOE Vocational-Technical Division Program Specialist for Trades and Industry	<p>After dissemination of the State Guide and orientation meetings, there will be greater consistency in instruction through use of the Guide. The result will be improved horizontal articulation of secondary level automotive instructional content.</p> <p>Neighbor island instructors will be able to avail themselves of inservice training opportunities during the summer.</p> <p>Teacher competencies will be upgraded, resulting in more comprehensive education for students. Better preparation at the secondary level will allow the student to complete his training at the post-secondary level sooner and at less cost, and to broaden his training by taking more advanced courses.</p>	Printing and mailing costs	<p>Improved horizontal articulation of secondary level automotive instructional content may facilitate vertical articulation with the community colleges. Community college automotive instructors will be able to count on more consistency in secondary level automotive instruction.</p> <p>Inservice workshops should continue to be held at times which would accommodate neighbor island instructors.</p>
			DOE, UH, Community Colleges, Office of the State Director for Vocational Education	<p>Improved horizontal and vertical articulation.</p>	Mailing costs	Draft copies may not have been considered official enough to form a basis for proceeding with the implementation of the recommendations.

Extent of Implementation	Description of Implementation	Responsible Agent	Expected Outcomes	Cost Factors	Other Implications
	<p>4. Names of secondary automotive instructors were submitted to the District Offices for participation on the Advisory committees of the community colleges. There is now high school representation on the Advisory Committees of Honolulu, Hawaii, Kauai, Leeward and Maui Community Colleges, as well as on AUTO, the automotive technicians' professional organization.</p>	<p>Secondary school instructors, DOE district offices, community college advisory committees, and AUTO.</p>	<p>Inclusion of secondary school instructors on community college advisory committee will</p> <ol style="list-style-type: none"> 1. reduce the number of advisory committees needed, 2. improve the vertical articulation of programs. <p>Inclusion of secondary school instructors in the professional organization helps instructors keep current on manpower needs and their implications for competency criteria in the secondary school program.</p>	<p>None</p>	

BUSINESS EDUCATION (TYPING AND SHORTHAND)
December, 1974

DOE District	Extent of Implementation	Description of Implementation	Responsible Agent	Expected Outcomes	Cost Factors	Other Implications
Hawaii	Full Partial <input checked="" type="checkbox"/> None	<p>1. Hilo High has implemented the certification procedures. Students are evaluated according to minimum criteria requirements stipulated by the Articulation Report.</p> <p>2. Deputy District Superintendent has expressed a willingness to open up a communication channel for articulation concerns with Hawaii Community College.</p>	Business instructors, chairman, principal	Students will be able to complete their coursework in business at Hawaii Community College without unnecessary duplication.	Minimal costs of printing certificates	<p>The Hawaii DOE District Office should consider the feasibility of printing certificates for use on Hawaii.</p> <p>The certification proposal should be implemented at other high schools on Hawaii so that all Big Island students have the same option.</p> <p>The District Superintendent should contact the Provost of Hawaii Community College to establish an official communication channel for articulation concerns.</p>
Kauai	Full <input checked="" type="checkbox"/> Partial None	<p>1. Certificates of Proficiency have been printed by the District Office, with provisions for principal's and instructor's signatures. Copies are to be placed in students' permanent files.</p> <p>Kauai DOE District Superintendent has disseminated information on certification procedures and criteria to high school instructors and counselors. KCC Provost has informed the Dean of Student Services, registrar and registration advisers of the certification procedures.</p> <p>2. Articulation meetings have involved business instructors from Kauai Community College and the high schools.</p>	<p>Deputy District Superintendent</p> <p>DOE Curriculum Specialist for Secondary Education, DOE Deputy District Superintendent</p> <p>DOE District Superintendent</p> <p>DOE Provost</p> <p>KCC Provost</p>	<p>Upon establishment of channel, there will be a mechanism by which vertical articulation efforts can be directed, evaluated, and monitored.</p> <p>Students will be able to complete their coursework in business at Kauai Community College without unnecessary duplication.</p>	Costs of printing certificates	<p>Procedures to evaluate certification and placement should be specified by the KCC Provost and DOE District Superintendent through the chairperson of the KCC business division and the DOE Curriculum Specialist.</p>
Maui	Full Partial <input checked="" type="checkbox"/> None	<p>A Fall workshop on Articulation was sponsored by EPDA Part F funds through the Office of the State Director for Vocational Education, in response to a joint request by Maui Community College and the Maui DOE District Office. Among those present were 3 MCC business instructors and 4 secondary level business instructors. All accepted the certification proposal and recommended the following for implementation:</p> <p>1. Maui District Office should print certificates to be used beginning January 1975.</p>	<p>MCC Provost, Maui DOE District Superintendent, MCC Provost and DOE business instructors</p>	<p>With the implementation of the certification proposal, students will be able to complete their coursework at MCC more quickly without unnecessary duplication. They may thus take more advanced level or specialized coursework.</p>	Costs of printing certificates and copies of minimum criteria for certification	<p>An official communication channel or mechanism needs to be established to direct, evaluate and monitor articulation efforts.</p>

Project	Extent of Implementation	Description of Implementation	Responsible Agent	Expected Outcomes	Cost Factors	Other Implications
OAHU Leeward	Full Partial <input checked="" type="checkbox"/> None	<p>2. Copies of minimum criteria requirements for certification should be made available by the Maui District Office to all secondary schools on Maui offering Typing and Shorthand.</p> <p>3. MCC Business Education Division Chairman should inform registrar and counselors at MCC as well as on the secondary level about the certification procedure, so that they may encourage students to exercise the option. Each counselor should receive a copy of the criteria and certificate.</p> <p>4. MCC Provost should send to the Maui DOE District Superintendent written confirmation of the credit and certification procedures. The District Superintendent will disseminate the information to the high schools.</p>	Pearl City High School business instructor	The results of field testing will be forwarded to the coordinator of the placement exam project at Leeward Community College.		Leeward Community College Curriculum Committee approval will be necessary before students can be granted college credit on the basis of satisfactory performance on the exam. A community college systemwide decision would also be necessary to determine whether other community college would accept this credit option.
Central Honolulu Windward	Full Partial None	<p>On the basis of need emerging from the Articulation Institute, an instructor from the business department of Pearl City High School participated in a cooperative effort with the Leeward Community College business division to develop uniform placement exams for typing and shorthand. The exams will be field tested with a selected group of Pearl City High students in Spring '75.</p> <p>These districts should consider the feasibility of implementing the certification proposal as Kapiolani, Leeward and Windward Community Colleges have expressed willingness to accept students for placement on the basis of certification.</p>		Students will be able to progress through typing and shorthand courses at the community colleges without unnecessary duplication and with credit for beginning level courses.	Costs of printing certificates	
ADDENDUM:	As a result of the March use.	14 Administrators' Meeting on Articulation, the Vocational-Technical Education Section			will print certificates for statewide	

DRAFTING TECHNOLOGY
December, 1974

DOE District	Extent of Implementation	Description of Implementation	Responsible Agent	Expected Outcomes	Cost Factors	Other Implications
OAHU Honolulu Leeward Windward	Full Partial <input checked="" type="checkbox"/> None	A University credit course, ED CI 583 Practicum in Curriculum Development: Industrial Education (Drafting) will be offered for community college and high school instructors during Spring, 1975.	University of Hawaii College of Education College of Continuing Education Office of the State Director for Vocational Education	Instructional quality is determined by the instructor's competence. The quality of instruction influences the extent of student learning. Upgrading instructor competence will result in improved learning opportunities for students.	Cost of instructor @ \$280/credit hr. x 3 credits = \$840.	Care should be taken to get information on inservice training through established D.O.E. channels specifically to drafting instructors, rather than general dissemination of information to all faculty.
MauI	Full Partial <input checked="" type="checkbox"/> None	Although Maui District has no vocational drafting program, drafting instructors participated in the Fall 1974 Articulation Workshop on Maui. A proposal for a Maui County drafting workshop to upgrade secondary school instructor competencies is being prepared for submission to the Office of the State Director for Vocational Education. There is communication with the MCC drafting instructor on the possibility of students obtaining college credit for high school work in drafting.	MCC and secondary level drafting instructors	Instructional quality is determined by the instructor's competence. The quality of instruction influences the extent of student learning. Upgrading instructor competence will result in improved learning opportunities for students.	Cost of instructor @ \$280/credit hr. x 3 credits = \$840.	
Hawaii		No Vocational Drafting Program				
Kauai		No Vocational Drafting Program				
APPENDUM:						
		Since December, 1974, steps have been taken to include secondary school drafting instructors on the membership of advisory committees at Leeward, Honolulu, Hawaii, and Kauai Community Colleges and will be taken at Maui Community College.				

FOOD SERVICE
December, 1974

DOE District	Extent of Implementation	Description of Implementation	Responsible Agent	Expected Outcomes	Cost Factors	Other Implications
Hawaii	Full Partial <input checked="" type="checkbox"/> None	Konawaena has initiated vertical articulation efforts with Hawaii Community College. Students would like to visit HCC to familiarize themselves with the food services program.	Konawaena Foods Instructor	Upon operationalizing articulation procedures between Konawaena and HCC, students and faculty will become familiar with the HCC food services program. If course credit options are made available by HCC, students will be able to progress through the foods program without unnecessary duplication of course-work.	Mileage costs	Hawaii Community College Provost should initiate articulation meetings between Konawaena and HCC Food Service departments so that articulation procedures may be operationalized. HCC Provost should consider the feasibility of implementing the course credit recommendations.
OAHU Central Honolulu Leeward Windward	Full Partial None	DOE instructors who did not participate in the Articulation Institute are unfamiliar with the specific recommendations. They are unaware that credit options are available at Kapiolani Community College Food Service program. DOE instructors who did participate in the Articulation Institute have not had students who they felt they could recommend to exercise the credit options offered by Kapiolani Community College As a result, no students have yet benefited in terms of streamlining their community college foods program by exercising the available course credit options.		Information on the availability of course credit options in Food Service at Kapiolani Community College should be disseminated through the Vocational-Technical Education Division and the District Offices to all high school counselors, home economics instructors, and principals, so that students may begin exercising the available course credit options at Kapiolani Community College.		Central and Windward Districts may not be able to implement the food service articulation recommendations because they have only the Occupational Skills Program in Food Service, which serves limited ability learners.

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