The primary purpose of the project was to develop experimental career development curriculum materials for elementary and junior high school students. Supporting aims were to develop a logical-theoretical paradigm and comprehensive, organized curriculum framework. Behavioral descriptions were designed to encompass the "developmental tasks" of career development at various age levels, deducing general and specific performance objectives at each developmental level, and designing learning experiences to enable each individual to successfully cope with the demands of each career developmental task. A teacher's guide containing five instructional units and separate instructional materials and activities were developed for each grade. Technical reports and descriptive materials documenting the project's theoretical orientation were developed. (See ED 060 198 for related document.) Commercial versions of curriculum materials for grades 1-3 are being prepared. (Author/MS)
CAREER DEVELOPMENT FOR CHILDREN
PROJECT: FINAL REPORT

Larry J. Bailey
Project Director

Career Development for Children Project
Department of Occupational Education
Southern Illinois University at Carbondale

in cooperation with

Research Development Unit
Division of Vocational and Technical Education
Board of Vocational Education and Rehabilitation
State of Illinois

August 31, 1973
IF YOU CAN'T BE A PINE ON THE TOP OF A HILL,
BE A SCRUB IN THE VALLEY--BUT BE
THE BEST LITTLE SCRUB BY THE SIDE OF THE RILL;
BE A BUSH IF YOU CAN'T BE A TREE.

DOUGLAS MALLOCH
(1877 - 1938)
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SUMMARY OF THE REPORT

A. Time Period

The duration of the project was from February 15, 1970 to August 31, 1973. During the last 18 months the project was supported by Part C "discretionary" funds awarded to the Illinois Division of Vocational and Technical Education.

B. Goals and Objectives

The primary purpose of the project was to develop experimental career development curriculum materials for elementary and junior high school students. Supporting aims were to develop a logical-theoretical paradigm and comprehensive, organized curriculum framework.

C. Procedures

To achieve program objectives the operational tasks were those of designing behavioral descriptions to encompass the "developmental tasks" of career development at various age levels, deducing general and specific performance objectives at each developmental level, and designing learning experiences to enable each individual to successfully cope with the demands of each career developmental task. Curriculum materials and teachers guides were developed to enable each student to learn about "self" and the "world of work" at greater levels of specificity.
D. Accomplishments

A teacher's guide containing five instructional units and separate instructional materials and activities were developed for each grade one through six. A teacher's guide and student text were developed for both grades seven and eight. Technical reports and descriptive materials documenting the project's theoretical orientation were developed and have been deposited with the ERIC Clearinghouse on Vocational and Technical Education. The experimental curriculum materials have been awarded to McKnight Publishing Company through competitive bidding. Commercial versions of grades one through three materials are expected to be completed for the 1974-75 school year.

E. Evaluation

A third-party evaluation of the project has been conducted under a separate contract with the Illinois Division of Vocational and Technical Education. Findings of that study are contained in a companion volume to this project report.

F. Conclusions and Recommendations

The Career Development for Children Project has demonstrated high standards of performance which are reflected in its conceptual base, materials development, technical memoranda, National visibility, professional acceptance and future potential. Because of proven leadership and expertise the CDCP should be provided with additional support to continue development and implementation of career development curricula.
Since the beginning of the modern era of career guidance in the early fifties, the body of literature and research related to vocational behavior has multiplied exponentially. The search for unifying constructs and principles of vocational behavior has been accompanied by a surge in the area of theory building. The present status of career development theory has received extensive treatment in many recent publications (Osipow, 1968; Kroll, Dinklage, Lee, Morley and Wilson, 1970; Zaccaria, 1970; Roth, Hershenson, and Hillard, 1970; Zytowski, 1968; Herr and Cramer, 1972; and Bailey and Stadt, 1973).

As theoretical orientations and models of career development have come to be better understood, researchers and practitioners have sought to validate theory and implement career education and guidance practices derived from theory. The most comprehensive reviews of research on vocational behavior to date may be found in Crites (1969), Herr and Cramer (1972), and Bailey and Stadt (1973). Additional closely related reviews have been completed by Perrone (1966), Tennyson (1968), and Holland and Whitney (1969).

Clearly, no shortage of concepts and principles for career development exists. However, if a hard criterion is used, that is, replicated studies whose results have been proven in the field over a period
of years, then one would have to conclude that very little about career development that is systematic in nature is really known (Osipow, 1969).

Herr (1970) points out, however, that while no one approach yields the comprehensiveness of explanation one might wish, collectively there exists a conceptual frame of reference which views vocational development and decision-making through the lenses of many disciplines. There is emerging a set of constructs and propositions, some tested and some not, which serve to explain differential decision behavior and trends in the vocational aspects of development. Using a realistic criterion, certain heuristic statements can be made regarding the nature of career development:

1. Career development is considered to be one aspect of the individual's total development. It is most profitably viewed as longitudinal in nature and based on principles of developmental psychology. Vocational behavior develops over time through processes of growth and learning.

2. The theories of career development acknowledge a wide range of factors which determine or at least influence the process of human development (Zaccaria, 1970). Career development is integrated to the total fabric of personality development and is the result of the synthesis of many personal, social, and vocational factors as one matures (Herr, 1970).

3. The unfolding of an individual's career development beginning in early childhood is seen as relatively contin-
uous and long term, but divided into stages or life periods for purposes of description and presentation (Zaccaria, 1970).

4. Each vocational life stage involves meeting and learning to cope with critical developmental tasks. Many of these developmental tasks center on the acquisition of coping mechanisms and mastery behavior which subsume career related choices and adjustments. The choices which an individual makes and the manner in which he enacts the resultant roles form a life sequence known as his career pattern (Ashcraft, 1966).

5. Vocational behavior and career selection develop from less effective behavior and unrealistic or fantasy choice to more complex behavior and more realistic choosing. Career selection becomes increasingly reality-oriented and more realistic as one moves toward the choice itself (Herr, 1970).

6. An individual's striving to arrive at an appropriate vocational goal may be interpreted as a search for a work role that is harmonious with the need structures resulting from the gratification and frustration of early life, as a search for the new ego identity that marks the adolescent stage, or as an attempt to implement an already emerging self-concept (Ashcraft, 1966).

7. Vocational development theories support the existence and causal role of inner, tensional states, which depending on
the focus of the theory, are variously described as interests, needs, values, personality characteristics, or life styles (Zytowski, 1965).

**Rationale**

The research and commentary on career development indicates, beyond any reasonable doubt, that systematic career planning must begin at the elementary school level. Elementary age youth need the opportunity to continuously and systematically explore, from an internal frame of reference, their values, attitudes, and interests in relation to the wide range of educational and career opportunities which may be available to them so that they will avoid premature educational and occupational foreclosure (Gysbers, 1969).

The kindergarten to sixth grade level is the most reasonable place to begin examining the career development process. Children show an interest in the world of work at a remarkably early age. Even before their explicit interest in the world of work, children are exposed to events which shape aspects of their personal development related to work (Osipow, 1969).

Herr (1969, 1970) also concurs that intervention in facilitating career development must begin during the first decade of life. This is the nursery of human nature and the time when the attitudes are formed which later become manifest in vocational commitment or rejection. Youngsters in elementary schools must be exposed to experiences which are meaningful in terms of their individual characteris-
tics and to information which is accurate if they are not to carry residual of exaggeration and overromanticized occupational stereotypes into later decision-processing.

The timing for prevocational orientation may be crucial. According to Sherman (1967) once students get involved in the junior high school milieu their own social and physical maturation and the existing organizational structures and the rewards offered from these environments in which they live all influence them. If students are helped to focus on career development prior to becoming a part of this milieu, it could help them to build a kind of core attitude toward their personal future which might provide a slightly different perspective on the many other concerns of this age.

Bottoms and Matheny (1969) indicate that concern for career development cannot be a one-shot approach that takes place at the junior or senior high level. It is too late when the student reaches the point of making the transition from school to work. Career development should be conceived as a pyramid offering a broad base of exploratory experiences at the elementary and junior high school levels and gradually narrowing to a decision point as the student acquires appropriate preparation for the next step beyond school. Such a vocational development theme could serve as a common thread to unify the educational effort at all levels.

Career development programs initiated at the elementary school level must be systematically organized; the core of which is a sound conceptual model derived from career development theory that provides
for specific vocational developmental tasks. A series of well-planned exposures such as gaming and simulation, role playing, vocational exploratory experiences, etc. can then be implemented to assist students in coping with the demands of each vocational developmental task. Specifically designed and articulated activities can help to provide children and youth with a realistic understanding of self which can be translated into the intermediate goal of educational-vocational choice and the ultimate goal of vocational maturity. Career development programs thus conceived have the potential for providing a core of experiences around which all future educational and occupational goals revolve.

Initiation and Funding

On November 6, 1969 the Graduate School of Southern Illinois University at Carbondale transmitted a proposal on behalf of Larry J. Bailey entitled Facilitating Career Development at the Elementary Level to the Illinois Division of Vocational and Technical Education (DVTE). The grant application was subsequently approved for funding for the period February 15, 1970 to September 1, 1972 with a total budget request of $132,696. (In actual practice, the project was approved for $15,620 of DVTE support for Fiscal Year 1970 with subsequent approval contingent on availability of funds.)

For 24 1/2 months the project was externally supported with funds allocated to the State under Section 131(b) of Part C of the Vocational Education Amendments of 1968 (Public Law 90-576). Then,
in Fiscal Year 1972, Commissioner of Education, Sidney P. Marland decided to award $9 million of Section 131(a) Part C "discretionary" monies to the State Boards for use in establishing career education model programs. As a result of this action, the State of Illinois was eligible for a supplemental allocation of $382,790.

Upon acceptance by the Office of Education of the State's "letter of assurance" which set forth its plan for using the supplemental funds, DVTE terminated the original CDCP grant and awarded a "new" 18-month grant from its share of discretionary monies. Following is a tabular summary of project allocations by source and amount.

### TABLE 1

<table>
<thead>
<tr>
<th>Source</th>
<th>DVTE</th>
<th>SIU*</th>
<th>TOTAL</th>
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<tr>
<td>Regular Part C</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>(February 15, 1970 to February 29, 1972)</td>
<td>88,468</td>
<td>39,960</td>
<td>128,428</td>
</tr>
<tr>
<td>Discretionary Part C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(March 1, 1972 to August 31, 1973)</td>
<td>116,193</td>
<td>28,165</td>
<td>144,358</td>
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*Total faculty released time, fringe benefits, and indirect cost @ 10% of total direct cost.
II. Goals and Objectives

Purpose of the Project

The aim of the project was to schematize a curriculum model and supporting literature to provide guidelines and give impetus to career development programs for elementary and junior high school students (grades 1-8). The operational tasks were those of designing behavioral descriptions to encompass the "developmental tasks" of career development at various age levels, deducing general and specific performance objectives at each developmental level, and designing learning experiences to enable each individual to successfully cope with the demands of each vocational developmental task. Experimental curriculum materials and teachers guides were developed to enable each student to learn about "self" and the "world of work" at greater levels of specificity as he proceeds through school.

Objectives

1. To expand the dialogue among state department personnel, occupational educators, elementary educators, guidance counselors, and classroom teachers for the purpose of identifying and understanding the role of each in the career development process.

2. To review, synthesize, and interpret the body of literature and research related to career development.
3. To conceptualize the structure of vocational development at different age-grade levels.

4. To identify the vocational developmental tasks characteristic of each age-grade level.

5. To illustrate behaviors (performance objectives) characteristic of each vocational developmental task.

6. To develop a variety of curriculum materials and activities which will lead to desired behavioral outcomes.

7. To evaluate the effectiveness of teachers' guides and instructional materials in local school settings.

8. To disseminate the curriculum development model and policy papers.

9. To engage in staff development, pre-service, and in-service teacher education.

10. To stimulate further research to aid in the facilitation of career development for children and youth.
III. Project Design and Procedures

Original Development Plan

The short 20-page proposal submitted to DVTE in November 1969 described seven program goals to be achieved during the 30 months of development:

A. Assessment of problem and objectives, and formulation of theory and research evaluations procedures.

B. Identification of relevant bodies of knowledge and collection of data.

C. Synthesis and interpretation of literature and supporting research, and formulation and validation of a career development model.

D. Designing the instructional system and preparation of guidelines and supporting curriculum materials.

E. Pilot test career development model and evaluate curriculum materials in natural school settings.

F. Dissemination of career development model and preparation of teacher education.

G. Creation of exemplary career development demonstration projects concurrent with evaluation and further research.

As Schon (1967) points out, invention does not usually move in a series of orderly steps directed toward an objective spelled out in advance. Invention takes unexpected twists and turns, building on the
unexpected. In general, the CDCP has addressed each of the goals, but not necessarily in the manner that the original proposal specified. In the following sections, it will be shown how the project evolved and how it modified program goals and reordered priorities commensurate with its expertise and personnel and fiscal resources.

**Decision Points and Rationale**

Following is a good approximation of the crucial decisions that shaped the nature of the Career Development for Children Project. The linear outline gives an impression of more chronological order than was actually the case. Many decisions were made simultaneously, and required a lengthy period of time. Further, several of the critical decisions led to consequences that affected all subsequent decision-making processes.

**Decision 1: To establish a sound conceptual base prior to product development.**

What seemed to the author to be the logical approach to research and development (i.e., defining basic purpose, rationale, assumptions and goals), is not usually the route followed by most curriculum development projects. The CDCP chose to pattern its R & D strategies along the lines of Glaser's (1969, pp. 706-707) description of five "functions" necessary for the successful relationship among research, development and application: (1) exploratory research, (2) fundamental development, (3) specific development, (4) design and proving, and (5) training and
follow-through. Many projects are only concerned with areas four and five. The fact that many projects neglect earlier steps may help to explain why such projects fail to fully achieve their intended aims.

Decision 2: To reject the "capstone" strategy and pursue development of proprietary curriculum materials.

The original intent of the project was to formulate goals and objectives and then select existing commercial materials to achieve those objectives. The project would only develop proprietary products to achieve objectives for which commercial materials were not available. The project quickly discovered that very few products existed having the capability to facilitate career development objectives. Those materials that did have face validity were of such poor technical quality as to be unusable. Because of these conditions and the project's good fortune in having a very talented, creative writer on its staff, Barbara Zimmermann, the decision was made to pursue development of original products. It should be pointed out that the School-Based Career Education model selected a capstone strategy and spent millions of dollars before they realized the folly of it all.

Decision 3: To develop a process oriented curriculum.

One of the most notable outcomes of the 1960 era of curriculum development was the emergence of process curricula. Seferian and Cole (1970, p. 1) define process education "... as the systematic activity of the educational enterprise toward the cultivation of
those generalizable and adaptive behaviors which underlie all creative activity and which the learner engages in to acquire, organize, and utilize information and experience for effective problem solving and productive living." The compatibility between this approach and the CDCP "curricular language" is obvious.

Decision 4: To employ a systems approach to curriculum development.

Banathy (1968, p. 16) describes the systems approach to education as the "... pragmatic application of the scientific method; it is a synthesis of successful methodologies in problem solving, planning, and development, used by many people in many fields over a long period of time. Briefly, the systems approach is common sense by design." Central in the systems view of education are emphasis on the learner rather than the teacher, and an insistence upon clear descriptions of basic purpose and performance expectations. Herr's (1969) paper was very influential in causing the writer to adopt this approach. No one has put more succinctly than Herr the marriage of career development theory, the systems approach to educational programming and the reorientation of vocational education.

Decision 5: To concentrate primarily on student-based rather than teacher-based materials.

Curriculum development projects typically employ one of two basic strategies:

1) To develop educational products that represent cognitive, affective, or psychomotor stimuli to facilitate learner behavior; or
2) To develop materials to modify the teacher's behavior under the assumption that the teacher in turn will influence the desired student behavior.

Obviously, both approaches have merit and a successful program must support both approaches. The difficulty with selecting the latter approach as a primary strategy is the built-in restraints of transportability, variance in teacher behavior, teacher attrition and related problems. The relative validity of these approaches may be compared by examining two large-scale industrial arts curriculum projects: American Industry Project and the Industrial Arts Curriculum Project. The AIP developed a teacher-based program that was highly touted, but has met with relatively little lasting success. IACP on the other hand, developed student-based materials with supporting teacher guides and as a result has made a significant National impact.

Decision 6: To concentrate on curriculum development and to restrict active field-testing.

During the June 1971 field test of Level I materials it became obvious that testing of experimental materials and staff development for cooperating teachers was a very costly undertaking when viewed in relation to finite CDCP personnel and fiscal resources. Such activities were costly in terms of actual time required, in terms of lost development time, and in terms of relevant feedback obtained.

By Spring 1971 the CDCP had matured into a team of qualified problem solvers and developers. Rather than utilize the talents of
this staff for local school implementation, the Director chose to concentrate on what the project did best—solving conceptual problems and developing prototype curriculum materials. This decision then was primarily a question of priority and not a rejection of the need for evaluative data. The CDCP did conduct formative evaluations of its labors, but not in the manner of more conventional externally funded curriculum development projects. Based on CDCP's experiences the following principle is postulated: The extent to which field testing of experimental materials is required, is largely a function of the extent and quality of in-house research and development.

Decision 7: To decentralize materials development.

The decision to employ personnel to develop selected materials on a contractual services basis rather than on a staff basis was prompted by three factors:

A. The sheer magnitude of required development spanning grades 1-8. Practical space and office restrictions and limitations on the Director's span of control suggested the desirability of differentiating work tasks and of conducting a portion of the materials development external to the CDCP central office.

B. The need for artistic expertise. The economic principle of supply and demand comes to bear here. A project subject to civil service employment restrictions and tenuous external funds cannot compete with private enterprise in attracting and holding qualified artists and designers. An additional
rationale is the fact that the rate of completion of written materials (and consequently the need for graphics) tends to be non-linear.

C. **Barbara Zimmermann leaving the project.** Ms. Zimmermann's proven talents and experience and her desire to continue developmental work, even though geographic relocation prohibited her employment on the staff, were paramount in the Director's decision to have her work on a contractual basis rather than employ a replacement for her staff position.

Even though the process of submitting work requisitions and invoice vouchers for contractual services proved at times to be frustrating and cumbersome, the assets have proven to be greater than the liabilities.

**Decision 8: To seek commercial assistance in diffusion**

During mid-1971 the Director undertook a review of curriculum development projects to identify tested strategies for diffusion and implementation of materials following completion of formative development. Because of the greater long range impact of projects which were disseminated through commercial channels (and conversely, the limited impact of projects whose materials were placed in the public domain) the writer in August 1971 initiated a dialogue among CDCP, DVTE and the Southern Illinois University Foundation. As a result of this initiative, DVTE later adopted a copyright policy and ultimately developed administrative guidelines for projects securing assistance in the dis-
semination of materials arising from contractual agreements. These were the guidelines which CDCP followed and which later resulted in a contractual agreement with McKnight Publishing Company.

Actual Procedures for Development

The development of CDCP curriculum materials and related activities can be summarized in relation to four major curriculum phases: (1) model development and evaluation, (2) preparation of experimental materials (staff), (3) preparation of experimental materials (contractual), and (4) diffusion. Field testing and in-service education will not be discussed as separate phases because of decisions described in the previous section. Major events in the evolution of the project have been highlighted in Figure 1.

Model Development and Evaluation

During the first six months of the project primary attention was devoted to a comprehensive review of related career development theory, research, and exemplary career development and occupational information projects. A related research project being conducted at this time documents a portion of this review of literature (Bailey, 1970).

1 This section summarizes activities primarily during the period February 15, 1970 to February 29, 1972. Activities during the last 18 months of funding are described in five interim progress reports contained in Appendix A.
Figure 1. Major Event Flow Chart

1968

Author begins review and synthesis of career development theory and research.

1969

Author joins faculty at SIU/C. Released time provided for proposed preparation.

Proposal transmitted

1970

CDCP funding begins

Curriculum model developed

Conference for evaluation of curriculum model.

Model revised. Development begins on Levels 1, 7 & 8.

1971

First generation Level 1 & 7 completed.

Art completed for Level 1.

Level 1 pilot test.
Development begins on Level 5

Diffusion strategies investigated

CDCP, SIU, DVTE planning conference

Level 8 pilot test

Discretionary funding begins.

Second generation Level 8 begins

Zimmermann leaves. Continues development of Levels 2, 3, 4 & 6, 1972

Level 2 materials complete.

Level 3 materials complete.

DVTE copyright guidelines received
Art begins on Levels 2, 3 & 5

Levels 2 & 3 art completed

Level 5 design completed

Publisher selected

Level 4 complete

Level 6 complete

Levels 5 and second version Level 8 complete

Publisher pre-production conference

CDCP funding ends. Final report submitted.

McKnight production of commercial materials
A dialogue between project staff and consultants was established during this period. Meetings were held April 17-18 with Norman Gysbers and Earl Moore, with Edwin Herr on June 21-22, and with Richard Swanson on June 26-28 to explore various approaches to model development and materials preparation. In August 1971 a preliminary model began to take shape. A working paper describing the model was prepared based primarily upon Super's (1963) career development theory, the constructs of developmental stages and developmental tasks described by Havighurst (1953) and Super (1957); elements of vocational maturity identified by Gibbons and Lohnes (1966), Crites (1965), Super (1960), and Westbrook (1970); and an inventory of objectives identified in a review of 26 selected career development related exemplary projects.

An invitational conference was held on September 3, 1970 in which Larry Bailey presented the model followed by reactions from Herr, Gysbers and Moore. Convinced that the model had face validity, the staff began to move into the next phase of curriculum design and materials development. Minor revisions and additions were made to the model and it was later duplicated and disseminated as A Curriculum Model for Facilitating Career Development (Bailey, 1971).

Preparation of Experimental Materials (staff)

In October 1970 further elaboration of the curriculum model was begun. Basic purpose and functional themes for each of the grade levels one through eight were identified. This outline was later published
as an informational brochure entitled Implementing Career Education (Bailey, 1971). Having identified the emphasis for each grade level, work tasks were then differentiated among project staff by grade level. Barbara Zimmermann undertook development of Level I. Kenne Turner began Level VII. Geoffrey Sainty began Level VIII.

In the first quarter of 1971, teachers' guides and student instructional materials were completed for Levels I and VII. Development continued on Level VIII. The Director continued conceptualization of remaining grade levels.

Design of Level II materials by Barbara Zimmermann and planning for field-testing of Level I materials were initiated during the second quarter. In June, Level I materials were tested with six grade one classes in Alton, Illinois. The principle objective of the field test was to determine the extent to which teachers could implement the program with only the instructional materials and teacher's guide and a minimum of in-service training. No major problems were encountered by any of the six cooperating teachers. Enthusiastic response by students to the activities and materials was observed. Many favorable comments were received related to a brochure directed to parents entitled 21,741 Choices for a Career (Brenton, 1970).

In the third quarter of 1971 several important personnel changes occurred. Barbara Zimmermann moved to Iowa. Geoffrey Sainty resigned from the project to accept a university fellowship and his position was filled by Michael Browns. Kenne Turner and William Van Rooy were promoted to full-time Researcher positions. Winona Burns began work
as a Research Assistant.

Subsequently, William Van Rooy began to develop a rationale and content model for Level V. His accomplishments are described in A Conceptual Model of the World of Work (Van Rooy and Bailey, 1972). Kenne Turner continued development of Level VIII which was earlier begun by Geoffrey Sainty. Michael Browns had the responsibility to develop an evaluation design and data collection instruments to be used for the Level VIII field-test.

No new activities were initiated in the last quarter of 1971. The contractual service portion of the FY 1972 budget was not approved until November 15, 1971--over six months after the scheduled beginning date. Development during the Summer and Fall of 1971 was nearly static because of the budget delay, the time expended by the Director in attempting to resolve the situation, and the residual effects of frustration and general helplessness. Kenne Turner completed an abbreviated version of Level VIII which was used in the Alton field test beginning in January 1972. Michael Browns completed the evaluation instruments for the field-test. A description of procedures for the field test, copies of instruments used, and a summary of results are contained in Browns (1972), The Development of an Instrument for Evaluating Experimental Instructional Materials.

At the end of February 1972, the original project grant was terminated and a new 18-month funding period was begun. One requirement of the new grant was the submission of quarterly progress reports. Since these reports provide a comprehensive account of project activities
and accomplishments during the period March 1, 1972 to May 31, 1973 (see Appendix A), a short summary for the final three months of the project will suffice to conclude this section.

During the last quarter of the project, staff development of materials was restricted to completion of Level V and the second version of Level VIII. Materials for the remaining levels were concluded to the point where they were ready for additional development and diffusion by a commercial publisher.

Preparation of Experimental Materials (Contractual)

Because of conditions discussed earlier in relation to the rationale affecting the decision to decentralize materials development (see pp. 15 & 16), this section will be correspondingly brief. In Fall 1972 Barbara Zimmermann continued writing material for Levels II and III which she had begun earlier on the project. Prior to her completion of these materials, Kenne Turner developed the purpose, rationale, objectives, and review of resource materials for Levels IV and VI. This outline was later used by Ms. Zimmermann to develop product and teacher's guides for Levels IV and VI.

A similar approach was done at Level V. William Van Rooy prepared the text and thumbnail sketches for David Hencke to use in completing final art for three Level V filmstrips. He also prepared working outlines for the Level V student text and reference series which Angela Koenig and Beverly Hendee used to write text materials. After Bill left the project in March 1973, the Director continued to
outline specific task descriptions for materials which Ms. Koenig then completed.

In November 1972, Randall Richmond was contracted to develop a graphics design plan for Levels II and III. This plan was subsequently approved and comprehensive art for these materials was completed. The purpose here was to develop graphic solutions for Level II and III written materials, but not restrict the design to a specific format. Once again, the project limited its role to that of creating prototype materials which a commercial publishing company of other agency would develop and disseminate.

Design solutions were also developed for the Level V student text and related reference series. Levels I, II, III and V were the only ones for which art was prepared. The limiting factors with respect to remaining materials were time and money; not need, interest or ability.

Diffusion

During the second year of operation the Director began to actively explore various avenues for diffusion of CDCP materials. The failure of most externally funded research and development projects to achieve widespread adoption, or have a lasting educational impact was a conscious concern of the Director's. Because the CDCP had chosen to develop student-based materials such as study prints, filmstrips, games, consumable response books, etc. it was apparent that some type of continued support would be required beyond the stage of formative development.
A review was subsequently undertaken of curriculum development projects in an attempt to identify diffusion strategies and to identify those factors which contributed to later adoption. Primary references surveyed were Grobman's (1970) book on Developmental Curriculum Projects, Buffer's (1971) evaluation report of the Industrial Arts Curriculum Project (IACP), and the 21 product development reports completed by the American Institutes for Research (Crawford, 1972). From this review, a number of key factors were identified. Of particular significance was the fact that no projects were identified having lasting educational impact or widespread adoption whose materials were placed in the public domain. On the other hand, it was revealed that projects which made provisions for diffusion during the formative stage of development and which had active commercial involvement during the latter stage of development were much more likely to make a significant impact.

This awareness prompted the Director to convene a planning conference among CDCP, DVTE and the SIU Foundation on August 12, 1971 with the view toward soliciting commercial publisher support for developing and marketing CDCP materials. A genuine interest was expressed by all parties present. The problem, however, was that USOE Copyright Guidelines do not apply to state administered formula grant programs and the State of Illinois had no such policy or guidelines. As a consequence, the CDCP could take no further initiative until after DVTE formulated the requisite policy and procedures.

Finally, on February 15, 1972 the State Board of Vocational Education and Rehabilitation adopted the USOE Copyright Policy as the
general guidelines to be followed for state administered projects. In November 1972 a definitive handbook of administrative guidelines was received which detailed procedures to be followed by projects seeking publisher assistance. A Publishers' Alert Conference was arranged by DVTE for March 29 & 30, 1973 in Chicago for projects deemed by DVTE to have "mass market" potential. Appendix B contains the Request for Proposals (RPA) presented by the CDCP Director to interested publishers at the conference on March 30.

Three publishers (Science Research Associates, Houghton Mifflin, and McKnight) expressed an interest in CDCP materials and requested additional information after the Conference. Of the three, only McKnight responded with a proposal on May 15, 1973. (It should be noted that the RPA was written in such a way as to eliminate all but the most qualified and professionally committed publishers.) Following an evaluation of the McKnight proposal by members of the proposal review committee, a letter dated June 8, 1973 was transmitted to DVTE recommending that McKnight Publishing Company be chosen to develop and market the CDCP materials. At the time of this writing no official response has been received from DVTE.

Organization and Staffing

The Career Development for Children Project is the result of a group effort with many people contributing to its development. Larry J. Bailey conceived the project and initiated the grant proposal. The theory and rationale for the project evolved from three earlier
works (Bailey, 1968a, 1968b, 1969) and his personal reference library, which was later published as an annotated bibliography under a separate grant from DVTE (Bailey, 1970). He also directed the project and was fiscal officer throughout the duration of the funding period.

The bulk of materials development was carried out by five full-time researchers. Barbara Zimmermann wrote materials for Levels I, II, III, IV and VI. Kenne Turner prepared the initial versions of Levels VII and VIII and developed the conceptual structure and compiled resource materials for Levels IV and VI. During his tenure with the project he also functioned ex officio as Assistant Project Director. William Van Rooy developed the conceptual structure, wrote much of the text material, and supervised the contractual writing tasks and graphics for Level V. Mary Antholz joined the staff in August 1972 and developed the second version of Level VIII materials. Terry Mauzy provided photographic expertise for all levels and compiled an inventory of photographs and line art for use in illustrating Level V materials. Following is a summary of primary personnel and their tenure of employment. Table 2 graphically illustrates the overall staffing pattern.

**Administrative Staff**


Researchers

Kenne G. Turner: 100%, July 1, 1971 to December 31, 1972.
Mary Antholz: 100%, August 1, 1972 to August 31, 1973.
Terry Mauzy: 100%, January 1, 1973 to August 31, 1973

Research Assistants

Michael V. Browns: 50%, June 1, 1971 to June 30, 1972.

Secretaries

Mary A. Mis: 100%, February 15, 1970 to September 15, 1970.
Consultants

James J. Buffer, Ohio State University
David H. Burnham, McBer Company
Henry C. Cole, University of Kentucky
Norman C. Gysbers, University of Missouri
A. Dean Hauenstein, Florida International University
Edwin L. Herr, Pennsylvania State University
JoAnne Martin, McBer Company
Earl J. Moore, University of Missouri
Richard A. Swanson, Bowling Green State University
Lois Van Rooy, Southern Illinois University at Carbondale

Writers and Artists (contractual basis)

Marie Delaney
David G. Hencke
Beverly A. Hendee
Angela Koenig
Werner Mertz
Randall Richmond
Elden D. Stromberg
Lois Van Rooy
Barbara Zimmermann
TABLE 2

STAFFING PATTERN FEBRUARY 15, 1970 TO AUGUST 31, 1973

- Bailey, Larry J.
- Stadt, Ronald W.
- Nystrom, Dennis C.
- Sullivan, James A.
- Mis, Mary A.
- Deichmann, Ann
- Turner, Kenne G.
- Sainty, Geoffrey
- Zimmermann, Barbara
- Ferrell, Twyla
- Van Rocy, William
- Browns, Michael V.
- Roush, Mary
- Burns, Winona
- Fischmar, Sharon
- Antholz, Mary
- Mauzy, Terry
- Wood, Tom
IV. Results and Accomplishments

Description of Curriculum Framework

Curriculum materials have been developed for each grade level one through eight. For Levels I to VI a teacher's guide containing five instructional units were completed. Each unit consists of four parts: (1) Purpose and Objectives, (2) Instructional Activities, (3) Instructional Materials, and (4) Related References. A sample instructional unit has been reproduced in Appendix 3 (Level I, Unit 4). Separate instructional activities and materials were then developed for each unit, e.g., storybooks, filmstrips, card games, consumable response books, etc. For Levels VII and VIII a teacher's guide and student text were developed. Following is a brief description of the primary purpose and rationale for each level.

Level I: Becoming Aware of Me and What I Do

Level I helps the child begin to acquire a view of himself in terms of his own activities and those of others. He is introduced first to the idea that he both shares many characteristics with other people, and that he has characteristics which make him unique. The child becomes aware that people have daily activities, some of which almost everyone does and some which are peculiar to each individual. He also becomes aware of the individuality inherent in how one thinks and feels about his daily activities. For example,
John may be different from Joe even though they both set
the table because John hates to do it and Joe doesn't
mind at all.

The categories of work and play activity are presented
as one way that behavior can be differentiated. The
approach is a functional one for this level. It gives the
child an opportunity to explore and understand himself in
terms of his own activities. The child will examine these
simple groups in class and relate his own daily activities
to each category. As a result of these experiences,
children will be helped to develop broad generalizations
about work and play and to understand some of the reasons
why people work.

Level II: Knowing My Interest and Making Choices

The primary purpose of Level II is to make the child
aware that work activities have the potential for providing
ways in which his unique self may be expressed. After a
review of generalizations about work and play, the category
of work activity is examined in more detail. There are
many kinds of work with which the child is familiar--work
at school, work at home, volunteer work done by his parents,
and of course the occupation of his parent(s). The term
occupation is introduced as the "main business" of a person's
life. Since young children often confuse the title of an
occupation and its goal and specific activities, each child is given the opportunity to explore one occupation in some detail. Each child will do research to gather concrete information about his "fantasy choice" occupation. With this information, the child will be exposed to a number of ways that personal interests, goals and lifestyles can be related to occupations. Given some of these possible relationships, the child will look at the occupation he "researched" earlier and consider it in terms of how his own interests might be met in that occupation. He will also have a chance to consider his personal interests in relation to other occupations that may be discussed in class.

An important aspect to emphasize while the child is exploring possibilities for self expression through work, is each person's responsibility for choosing what he is to become. In Level II the child will have an opportunity to discuss why it is important to try out new areas for possible discovery of interests and why he should not dismiss an occupation as being undesirable without real information about it.

Decision-making and discussion stories are also included as part of each Unit in Level II. Making decisions about situations dealing with interests and occupations is meant to further encourage flexible thinking and to give the child practice in assessing the components of a decision-making situation.
Level III: Grouping Interests and Occupations

The "world of work" is a very complex network of industries and occupations. In order for the child to begin to understand this phenomenon and to become aware of the potential for his participation in it, concepts and supporting instructional materials must be presented to him in a systematic way. In Level III a conscious attempt has been made to provide activities and materials that are compatible with what is known about the nature of learning in young children.

A primary assumption of the CDCP is that the more information and understanding one has of self and the world of work, the more accurate and valid will be his career decisions. Level III begins to deal with these two sets of data in a more structured way. The process of grouping is introduced as a technique which will enable children to better understand and make decisions about the thousands of occupations which will someday be available to them. (The term "grouping" is preferable here to the more formal term "classification" which is often used in science curriculums.)

Although this level is devoted in large part to conceptual development, the affective domain has not been overlooked. The basic economic groups of goods and services provide a structure for examining the social and cooperative nature of work roles. The ordering of personal interests
into formal interest areas provides a salient way of relating interests to occupations with a view toward demonstrating to the child the occupational potential for self expression. Because other areas of the elementary school curriculum deal with classification and with roles, the teacher should be alert to ways of using such material to reinforce behaviors developed in Level III.

Level IV: Meeting Individual Needs Through Work

The performance of productive work is one way that people define a role for themselves in the social system. Work is one way that an individual can meet his personal needs and interests and can have social contact with other people and cultivate a measure of security and feelings of self worth. The increasing discontent of many workers makes clear the fact that work roles are not providing the degree of personal involvement and job satisfaction that they might. It is clear too, that career education will have limited influence in helping students to make more personally relevant career decisions if it is limited only to expanding the student's knowledge of occupational information. The social context of work must also be a major concern.
Level IV is designed to present a perspective of the world of work as a place where people work together to meet basic needs for survival, to meet their need for social interaction, and as a way of expressing their individual self-concepts. Dependence of people on each other to achieve material wants, but also for personal interaction, love, and a sense of belonging is as necessary for a healthy life as clean water and food.

Level V: Meeting Cultural Needs Through Work

In Level V the student is introduced to how the world of work has evolved from the perspective of basic anthropological concepts. Awareness is developed of how Man meets basic human needs, how a culture is created in the process of meeting basic needs, how the culture in turn imposes certain imperatives, and finally how these cultural imperatives are met through various types of human work activity. A basic definition for the world of work is then developed based on this concept of cultural imperatives, i.e., "The world of work in the network of occupational establishments concerned with the replenishment, the management and maintenance and the transmission of culture." The significance of this approach is that the student is able to conceptualize the world of work in terms of smaller social-economic units with which he is
already familiar, e.g., a factory, hospital, bank, airport. Functional categories of occupational establishments are provided to enable the student to vicariously explore the many facets of human work activity. These same categories and the construct of an occupational establishment can also be used to organize group classroom simulations of various business, industry, government and service establishments.

Level VI: My Future Career Role

The process of deciding what role students might play in the world of work is explored in Level VI. Career development is presented as a process in which students are already engaged. They begin to see that their attitudes toward occupations; the way they feel about school; their abilities, interests and values; and how they get along with others already influence their behavior and the decisions that they make.

Students go on to further examine four areas of career development: the importance of work in social and personal well being, the role of education, effects of changes in self and society, and the importance of interpersonal relationships in career planning. Career planning then, as presented in Level VI, includes considerations related to the development of the "whole person," not just questions related to occupations and work. Throughout the level
students are asked to consider those aspects of career planning over which they have some control and how they can cope with those factors beyond their control. This perspective toward career planning and decision-making is designed to enhance a sense of personal responsibility and realistic self-evaluation.

Level VII: Relating Economics Principles to Career Planning

At the end of junior high school, students are faced with the necessity of making a curriculum choice prior to entering high school. Level VIII is designed to provide students with the vocabulary and conceptual base for making this important decision. The intimate relationship between education and work, makes the choice of a high school curriculum as much an occupational decision as an educational one.

At this level concepts and principles related to economics and manpower will be introduced. An understanding of the changing nature of manpower supply and demand will provide students with an overall view of employment trends in the 1970's and 1980's. The importance of education and training for effective participation in economic life will be emphasized. Finally, the study of relationships among the economic, social, and psychological aspects of work is designed to help students better understand the reasons why
people work and help them to identify those factors of work which are of primary importance to them.

Level VIII: Career Orientation and Decision-Making

Level VIII is designed to impress upon students the necessity of beginning to plan for a future career. It is important that they recognize the economic and occupational implications of choosing a high school curriculum and the need to consider such variables as abilities, interests, values, needs, knowledge of occupational clusters, and personal goals in the process of making this decision.

The primary behavioral outcome at this level is the clarification of a self-concept. Formulation of a "career hypothesis," is the end result of clarification. The culmination of this level is the planning of a projected high school program that is compatible with self characteristics and occupational goals.

Publications

Following is a compilation of all CDCP publications. Copies are on file in the ERIC Clearinghouse for Vocational and Technical Education and are presently listed (or will be soon) in Research in Education (RIE) or Abstracts of Related Materials (ARM).


In addition to the above, the project has given rise to the following related publications.


2. Bailey, L.J. Facilitating career development at the elementary school level. Elementary School Guidance and Counseling, 1971, 6(2), 139-140.


Presentations and Workshops

The following presentations and workshops having CDCP as the primary focus were conducted by Larry J. Bailey.


12. "Organizing the curriculum around a career development theme." Manchester, Kentucky: Clay County Public Schools Exemplary Programs Workshop, August 5-6, 1971.


20. "Career development for children project." Columbus, Ohio: Graduate lecture, The Ohio State University, August 7, 1972.


V. Evaluation

**Logical Validity of the CDCP Paradigm**

The formative evaluation of the CDCP is being carried out by a third-party evaluator under a separate contract with DVTE. This evaluation summary will be included along with the CDCP final report in DVTE's composite report of discretionary grant activities submitted to the Office of Education.

In addition to the third party evaluation, the CDCP has manifested an active concern for evaluation in the day-to-day *modus operandi* of the project. Grobman (1970, p. 171) points out that "... projects and project personnel are constantly evaluating, in each decision they make, as well as when there is simply a tacit judgment that things are all right--where no overt decision is made . . . ." As the CDCP Director appointed, assigned, and reassigned personnel, as specific developmental strategies and processes were selected, as materials were revised, as research problems were investigated, and as policy papers were written and disseminated, he was making evaluative decisions. The relative validity of these decisions is the essence of formative evaluation, and it is assumed, those areas toward which the third-party evaluation will be addressed.

To supplement the third-party evaluation, the Director contracted with Henry Cole in January 1973 to develop an approach for conducting an evaluation of the CDCP intellectual framework. In his paper entitled
Approaches to the Logical Validation of Career Development Curricula

Paradigms, Cole outlined a framework of issues, qualities and principles of curriculum design against which the logical validity of the CDCP paradigm (or any other career education program) could be evaluated. While his purpose was not to evaluate the project per se, he did provide a short summary of his perceptions of the project which are presented below (Cole, 1973, pp. 59-62):

It is apparent that the CDCP paradigm does meet most of the suggested criteria quite well in its present stage of formulation. It builds upon and extends the fundamental conceptions of career development and career maturity which have been in development through the work of Parsons, Ginzberg, Super, and Crites. The program perhaps goes beyond these earlier works in proposing that career education has a dual role of helping individuals toward a Maslovian achievement of "being needs," within the context of doing work which is socially meaningful and productive. CDCP has a definite "growth and development of self-thrust" theme which is often lacking in programs more impersonally concerned with producing workers for a strong economy. Because of this rooting in historically evolving concepts and ideals, the long range outcomes which its programs and materials produce should be quite easily and appropriately evaluated in a summative way through presently available instruments and procedures as suggested by Crites (1973).
The program in both its supporting rationale documents, and its prototype learning activities, does convey quite clearly its assumptions and values about most of the major issues which have been discussed. In large measure those assumptions are similar to the ones which have been presented in this paper and logically defended. The rationale and the paradigm for the program appear to be directed toward and capable of meeting the qualities suggested as basic for a sound career development curriculum.

The CDCP paradigm meets well the design principle of logical-theoretic framework to justify its effort. It meets even better the second principle which calls for a structure and organization of the curriculum within some empirical-logical-theoretical framework of developmental psychology and learning theory. The program also has broad objectives with stated rationales and appears to have sampled appropriate numbers of specific objectives for use in generating and designing instructional activities and materials and sampling topics for study. The program could be stronger in generating and perhaps better relating some specific objectives to major goals at some points but it generally approximates this ideal much better than most curricula.

The program could better meet the design principle of having a wider array of topics, materials and activities within given levels designed to achieve stated competencies.
The prototype curriculum materials are fairly broad and varied and begin to meet this criterion. The curriculum generation paradigm seems capable of fostering such diversity in instructional materials designs. It can be presumed that as more developmental work is completed the program will be strengthened in this respect. One procedure which might help achieve more diversity in instructional materials and activities while also building a better logical relationship between broad, intermediate and specific objectives is the translation and reorganization of the six domains of behavior (Bailey, 1973, p. 7) into process skill categories. These are essentially process skills now but could perhaps be better expressed as clusters of skills. For example "concepts of self" might be translated into "knowing self," "liking self," "feeling esteemed," "being loved," "inferring self" or whatever other skills are generally thought to be involved in nurturing strong self concepts. "Information Processing Skills" might be translated into "gathering or seeking information," "organizing information," "using information to make decisions," "observing and inferring information," etc.

The program cannot, of course, fully meet design principles 5, 6 and 7 at this time since it is still in the planning and prototype development stage. It appears, however, that in future program development attention should
be given to each of these dimensions. Evidence of planning toward meeting adequately the criteria of each of these dimensions is found in the "Request for Publisher Assistance" produced and distributed by project personnel in attempting to collaborate with commercial publishers and distributors of curriculum materials in the next stages of curriculum development, teacher education, program evaluation, and dissemination. This document is an excellent indication that the program developers are aware of these needs and are attempting to meet them. One note of caution needs to be raised. Many commercial producers are not interested in or willing to invest much time or money in developing teacher education programs or conducting proper field studies and evaluation prior to wide scale dissemination and implementation. Rather they wish to develop the materials quickly and disseminate them rapidly to return money on production and development costs. Consequently it may be wise to write into the contracts with commercial producers, agreements for teacher education and evaluation functions to be carried out by some other groups. Local universities and colleges offer one source of some able graduate students and professors with the necessary skills to carry out these functions at minimal cost. Doctoral students often have difficult times identifying significant research topics for their dissertations. Designing compon-
ents of a teacher education program and evaluating them or
designing and carrying out evaluation plans to determine
the effectiveness of certain curricular components would
be most worthy topics for doctoral students in educational
psychology and curriculum and instruction departments.

Of course in using these college and university resources,
the program developers should prescribe very carefully
the type of program or evaluation to be designed and carried
out as most graduate students and professors will not have
the necessary broad conceptualization of the program which
may be necessary to proceed with a proper and effective
training and evaluation design. In such situations it is
wise to establish a series of tasks and milestones which
are designed to insure keeping the work on target. Such
activities cannot simply be globally subcontracted.
They must be carefully planned and supervised by the
project staff if the results are to be logically integrated
and meaningful.

Cole's paper not only provides issues, qualities and principles
of curriculum design against which to logically evaluate the paradigm,
but also offers many valuable suggestions for augmenting the conceptual
base and instructional development system. A research prospectus
patterned along these lines has already been drafted for submission to
an appropriate funding agency.
VI. Conclusions and Recommendations

Based on the writer's first hand knowledge of curriculum development projects supported by State and Federal funds, the writer has long since concluded that the CDCP in its conceptual base, materials development, technical memoranda, national visibility, professional acceptance and future potential, ranks somewhere in the top quartile when compared with programs of a similar nature. Because of the writer's obvious bias, however, he would endorse and encourage more objective and rigorous appraisal of the project's activities and accomplishments by external parties. Careful reading of the third-party evaluation which accompanies this report will provide additional perspective. The acid test of accountability, however, will be the impact of the program at the local level and the degree to which its curriculum materials facilitate vocational maturity.

The major implications and recommendations for further research are that continued financial support be provided for the project to:

1. Implement commercial versions of the curriculum materials in selected demonstration sites;
2. Conduct summative evaluations of program effects;
3. Augment and validate the logical-theoretical model;
4. Strengthen the relationship between broad, intermediate and specific objectives;
5. Translate and reorganize the six domains of behavior (see Bailey and Stadt, 1973, p. 350) into process skill categories; and
6. Continue development of more comprehensive and diversified curriculum materials.
VII. References


____________. Factors related to success in practical nursing programs. Nursing Outlook, 1968, 16, 59. (b)


Bottoms, G. and Matheny, K.B. A guide for the development, implementation, and administration of exemplary programs and projects in vocational education. September, 1969, Atlanta, Georgia, Contract No. OEG-0-9-207008-2779 (085), Office of Education.


Buffer, J.J. A junior high school industrial technology project; a final evaluation of the industrial arts curriculum project (IACP), 1965-1971. Final Report, Project No. 70003, Grant No. OEG-3-7-070003-1608. The Ohio State University Research Foundation, August 31, 1971.


Havighurst, R.J. Human development and education. New York: David McKay, 1953.


What do we really know about career development.


APPENDIX A

*Interim Progress Reports 1-5
(March 1, 1972 to May 31, 1973)
INTERIM PROGRESS REPORT

1. Project Title
   Career Development for Children Project

2. Project Director and Location
   Larry J. Bailey, Project Director
   Department of Occupational Education
   Southern Illinois University
   Carbondale, Illinois 62901


4. Major activities and accomplishments during this period
   Following is a listing of major activities and accomplishments for this period. Selected activities may also be discussed in following sections.
   A. All narrative for Level II teachers guide and student instructional materials were completed.
   B. World of Work model was completed and documented (see also 5.)
   C. Conceptualization of Level IV purpose, rationale, and objectives was completed.
   D. Revision of Level VII student text was initiated.
   E. Material development continued for Levels III and V.
   F. Pilot testing of Level I and portions of Level III continued.
   G. Analysis of evaluation data collected for Level VIII field testing completed (see also 9.).
   H. Dissemination of materials continued. During the period 3-1-72 to 5-15-72, 64 individual requests were received and descriptive materials provided (see also 7).

5. Significant findings and events
   A major project goal was achieved with the completion of "A Conceptual Model of the World of Work". The significance of this model is that it provides the project with a valid approach for structuring world of work concepts and related
information. This model appears to be the first major attempt to define the world of work as a construct for curriculum development.

6. Problems

Three problems have seriously jeopardized CDCP's ability to meet project objectives.

A. Project was funded subject to the condition that requisitions for contractual services be submitted to the State Director for prior approval.

B. All expenditures subject to above conditions were delayed from March 1, 1971 to April 15, 1972 without justification or cause. As a result, six weeks of valuable developmental work were lost.

C. The Project has, since August of 1971, been promoting cooperative relationships among CDCP, SIU Foundation, and DVTE for the purpose of involving a commercial publisher in product development and dissemination. A letter of March 31, 1972 (attached) was sent to the State Director asking for a meeting to discuss same. A return letter from the Director (not included to avoid embarrassment to all parties concerned) flatly rejected the proposal.

7. Dissemination activities

Attached is a recently completed brochure to educate elementary teachers to the Project's orientation and major goals. The brochure has been mailed to all individuals who have written to the project during the last two years. It may be of interest to note that 640 such request have been received during the 24 month period.

8. Data collection

Not applicable

9. Progress on evaluation plans and procedures.

Development of two data collection instruments were completed and their psychometric characteristics established. Analysis of data support the instruments face and content validity and reliability. An extensive treatment of the development of the instruments is provided in Brown, Michael V. The Development of an Instrument for Evaluating Experimental Instructional Materials. MS Thesis, Southern Illinois University, May 1972, 91 pp.
10. Other activities

Not Applicable

11. Staff employment and utilization.

None

12. Staff development

A. Inservice teacher education and professional development workshops and presentations:

Division of Vocational and Technical Education, State of Illinois, April 3, Attendance 55 (Dr. Bailey)

Undergraduate seminar, Department of Home Economics Education, SIU, May 8, Attendance 40. (Mr. Turner)

13. Future activities planned for next reporting period

Not applicable

[Signature of Project Director]

[May 8, 1972]

[Date]
1. Project Title

Career Development for Children Project

2. Project Director and Location

Larry J. Bailey, Project Director
Department of Occupational Education
Southern Illinois University
Carbondale, Illinois 62901

3. Period Covered: From June 1, 1972 to August 31, 1972

4. Major activities and accomplishments during this period

Following is a listing of major activities and accomplishments for this period. Selected activities may also be discussed in following sections.

A. Narrative for Level III student instructional materials was completed. A planning conference was held July 17 and August 12 with graphic consultants to design graphical presentation for same.

B. Revision of "Related Materials" section of Level I teachers guide completed.

C. Restructuring of Level VII student text completed.

D. Preliminary form of Filmstrip No. 1 for Level V completed. Script revised with assistance from SIU Instructional Materials Center. Preparation of final art begun.

E. Preparation of Level V student text and supplementary reading series continued.

F. Writing conference held August 31 with Barbara Zimmermann to plan for Level IV product development.

G. Conceptual model for Self construct completed by Ken Turner.

H. Writing conference conducted for CDCP staff by Dr. Dean Hauenstein to acquaint them with product development techniques for Level VIII.

5. Significant findings and events.

None

6. Problems

A. Conditions of prior approval for contractual services expenditures continues to plague the project in several ways: (1) The "turn-around" time for approval, while generally accomplished in four
days, has on numerous occasions extended to a week or ten days. (2) Because of the subject condition, each requisition must be personally reviewed by the SIU Purchasing Officer. This additional requirement often slows down the issuance of a work order by several additional days. It is estimated that at least one working day each month is lost as a result of the subject condition.

B. A letter dated May 11, 1972 was sent to Dr. McCage requesting permission to employ a new Researcher subject to conditions elaborated on in the letter. Permission for the request was subsequently granted.

7. Dissemination activities

A. Dissemination of descriptive materials continued. During this quarter 60 individual requests were received and descriptive materials provided.

B. Quantity descriptive materials were provided for Dr. Worley's career development workshop held in Peoria.

C. Tadlock Associates visited the project on June 27 to discuss CDCP and RDU relationship

D. Mr. Mike Brown, office of Naval Research, Washington D.C. visited the project on August 14 to discuss development of career guidance materials for the military.

E. Mr. Carl Larson, Assistant Superintendent of Iowa Central Community College visited the project on August 31 to discuss a potential role for the project re in-service education for Northwest Iowa elementary teachers.

8. Data collection

None

9. Progress on evaluation plans and procedures

None

10. Other activities

None

11. Staff employment and utilization

Beginning August 1, Mary Bee Antholz joined the project as a full-time Researcher. Ms. Antholz's major responsibility will be the development of a student text for level VIII. (see also 6B for related information)
12. Staff development

A. Graduate Lecture, Dept. of Occupational Education (541), July 25-26, attendance 20 (Ken Turner)

B. Graduate Lecture, The Ohio State University, August 7, attendance 75 (Dr. Bailey)

C. Graduate seminar, Secondary Education Department, August 10, attendance 15 (Dr. Bailey).

13. Future activities planned for next reporting period.

None

Signature of Project Director

Date

(August 11, 1972)
1. Project Title
Career Development for Children Project

2. Project Director and Location
Larry J. Bailey, Project Director
Department of Occupational Education
Southern Illinois University
Carbondale, Illinois 62901

3. Period Covered: From September 1, 1972 to December 1, 1972

4. Major activities and accomplishments during this period

Following is a listing of major activities and accomplishments for this period. Selected activities may also be discussed in following sections:

A. Prototype for Level V Filmstrip No. 1 completed. Script for filmstrip No. 2 completed and illustrations begun.
B. Writing continued on Level V "People Working Together" series.
C. Writing continued on Level VIII
D. "Curriculum Refocusing" activities for Levels I to III initiated.
E. Introduction to Accommodation Stage completed. Purpose, rationale and objectives for Levels IV to VI completed.
F. Preparation of graphics design scheme for Awareness Stage completed. Graphics for Level II initiated.

5. Significant findings and events.
None

6. Problems

A. Condition of prior approval for contractual services expenditure continues to plague the project. (Refer to previous quarterly reports.)
B. Illness of writer working on Level VII has resulted in temporary suspension of activity at that level.

7. Dissemination activities

A. Dissemination of descriptive materials continued. During this quarter 45 individual requests were received and descriptive materials provided.
B. Quantity descriptive materials were provided for Dorothy Lawson's elementary education workshops.

C. Description of the project contained in American Hospital Association publication. (See pp. 10 and 11 of attached).

D. Dorothy Lawson, Eastern Illinois University, visited the project on September 20 to discuss cooperation re in-service elementary workshops.

E. Gary Hoffman, Career Education Director OSPI visited project on October 13 to discuss OSPI's role in career education.

F. Alton curriculum implementation team (Dean Browning, Dean Taylor and Jim Adams) visited project on October 16 to discuss pilot-testing schedule for remainder of the funding period.

G. Fred Clark, "third-party evaluation" for the project visited the project on November 28 and 29.

8. Data collection

None

9. Progress on evaluation plans and procedures

Refer to 7G

10. Other activities

None

11. Staff employment and utilization

Refer to 6B

12. Staff development

A. Product development presentation to DVTE and OSPI representatives on September 29, attendance 9 (total staff).

B. Elementary in-service workshop, Educational Research Council of America, Cleveland, Ohio, October 12, 1972, attendance 18 (Dr. Bailey).

C. Elementary in-service workshop, Perrysburg, Ohio, October 11, 1972, attendance 75 (Dr. Bailey) and Springfield, Illinois, November 1, 1972, attendance 8 (Dr. Bailey).
D. Presentation to OSPI administrative officers re Illinois' "Action Goals for the Seventies."

13. Future activities planned for next reporting period.

None.

Signature of Project Director

[Signature]

Date

[Date]
1. Project Title
   Career Development for Children Project

2. Project Director and Location
   Larry J. Bailey, Project Director
   Department of Occupational Education
   Southern Illinois University
   Carbondale, Illinois 62901

3. Period Covered: December 1, 1972 to February 28, 1973

4. Major activities and accomplishments during this period
   A. Illustrations and photography completed for Level V Filmstrips No. 2 and 3
   B. Rough manuscript finished for Level V student text.
   C. Writing continued on Level V, "People Working Together" series.
   D. Writing continued on Level VIII
   E. Major evaluation and revision of Level II and III teachers guides completed. Teachers Guides I, II and III reprinted.
   F. Design graphics and rough art completed for Level II.
   G. Photography for Level V continued.
   H. Preparation of two policy papers re "Measuring Readability" and "Guidelines for Writers of Instructional Materials" initiated (Lois Van Rooy).
   I. Preparation of policy paper re validation of CDCP conceptual model initiated (Dr. Henry Cole).

5. Significant findings and events.
   A comprehensive review of existing methods for measuring readability suggests that most techniques have questionable validity (see 4H).

6. Problems
   Condition of prior approval for contractual services expenditures continues to cause undue delays and excess record keeping. (Refer to previous quarterly reports.)

7. Dissemination activities
   A. Dissemination of descriptive materials continued. During this quarter 50 individual requests were received and descriptive materials provided.
B. Description of project appeared in January issue (Vol. 20(43)) of Illinois ASCD Newsletter (see attached).

C. Barbara Zimmermann assisted in an evaluation of Level II and III instructional materials December 18 and 19 (See 4E).

D. David Hampson, Project Director for NIE's School-Based Career Education Model visited the project on January 8-10.

E. Dr. Elaine Katz conducted an on-site evaluation for Fred Clarke on January 31.

F. The Superintendent of Gorham schools and a junior high school teacher visited the project on February 8.

G. Fred Clarke conducted an on-site evaluation February 22.

8. Data collection
None

9. Progress on evaluation plans and procedures
Refer to 4E, 4H and 4I

10. Other activities
None

11. Staff employment and utilization
   2. Terry Mauzy, Research Assistant, accepted a 100 percent appointment January 1 as Researcher.
   3. Tom Wood has assumed a 75% appointment as a Research Assistant for Winter and Spring Quarters.

12. Staff development
   A. Dr. Bailey presented CDCP theory and rationale to OE 302 class (January 25) and OE 541 (February 15) class.
   B. Mary Antholz represented the project February 13-15 at the Peoria Career Education Action Conference.
   C. Dr. Bailey made a presentation to the Fifth Annual NABTE Research Foundation Conference in Chicago on February 2.
13. Future activities planned for next reporting period.

None.

[Signature]

Signature of Project Director

3-26-73

Date
INTERIM PROGRESS REPORT

1. Project Title
   Career Development for Children Project

2. Project Director and Location
   Larry J. Bailey, Project Director
   Department of Occupational Education
   Southern Illinois University
   Carbondale, Illinois 62901


4. Major activities and accomplishments during this period

   Following is a listing of major activities and accomplishments for this period. Selected activities may also be discussed in following sections.

   A. Design graphics and rough art completed for Level III.

   B. Writing continued on Level IV.

   C. Writing continued on Level VIII.

   D. Graphic design and prototype format completed for Level V, "People Working Together" series.

   E. Final outline including occupational establishment-occupational title matrix completed for Level V, "People Working Together" series.

   F. Photography continued for Level V.

   G. Review of related resource material for Levels I-VIII completed.

   H. Policy paper re "Measuring Readability" and "Guidelines for Writers of Instructional Materials" completed (Lois Van Rooy).

   I. Policy paper re validation of CDCP conceptual model completed (Dr. Henry Cole).

5. Significant findings and events.

   A Publisher's Alert Conference was held March 29-30 in Chicago to apprise potential publishers of the availability of CDCP instructional material. Attached is a copy of the RPA. A proposal received from McKnight Publishing Company has now been transmitted to the review team for evaluation.
6. Problems

Same comment as previous report.

7. Dissemination activities

A. Dissemination of descriptive materials continued. During this quarter 45 individual requests were received and descriptive materials provided. One copy of all CDCP materials were sent to ERIC at The Ohio State University.

B. Six member career education task force from Rantoul visited the project on April 11.

C. Anita Klausa, Giant City Guidance Counselor spent May 4 reviewing project materials and resources.

D. William McKnight III met with project staff on May 3 to discuss RPA specifications.

8. Data collection

None

9. Progress on evaluation plans and procedures

Refer to 4A and 4I.

10. Other activities

Request for budget amendment was submitted and approved. See attached related correspondence.

11. Staff employment and utilization

No changes

12. Staff development

A. Dr. Bailey conducted an in-service workshop for Carbondale elementary teachers on April 26.

B. Drs. Bailey and Stadt conducted an in-service workshop for Carbondale High School teachers on May 1.

C. Dr. Bailey presented CDCP theory and rationale to the following classes:

2. OE 541, May 10
3. HE 414, May 14

D. Dr. Bailey conducted an in-service workshop for Giant City teachers and administrators on May 25.
E. Mary Antholz represented the project at AOGA convention in St. Louis on April 15-18.

13. Future activities planned for next reporting period.

None.

Signature of Project Director

[Signature]

Date

[Date: May 25, 1973]
APPENDIX B

Request for Publisher Assistance
REQUEST FOR PUBLISHER ASSISTANCE

March 29-30, 1973


I. Introduction

The Southern Illinois University at Carbondale, on behalf of the Career Development for Children Project (CDCP), solicits proposals from publishers for proprietary rights to the CDCP curriculum materials. In exchange for the rights to publish and vend such materials, the commercial publisher will agree to join with the Project in a partnership to:

1. establish short range, intermediate range, and long range goals for the National implementation of the CDCP;
2. conduct a rigorous evaluation of completed curriculum materials to determine necessary revisions and/or additions;
3. conduct pilot and/or demonstration testing to the extent necessary to demonstrate the validity, utility and transportability of Project materials;
4. perform necessary product revisions, develop related materials, and produce final materials in a manner which is in keeping with the best examples of currently available materials at the elementary school level;
5. provide in-service education and related services for those schools wishing to implement the program; and
6. provide direct financial support and/or work closely with the Project to obtain additional monies for research and development.

The CDCP is making available Levels I, II and III (primary elementary) for publisher's consideration. Rights to the remaining Levels IV to VIII will be a part of the specific contractual conditions. These materials were developed under a special contractual agreement with the Illinois Division of Vocational and Technical Education (DVTE). The DVTE has agreed in principle to a limited copyright and details between DVTE and Southern Illinois University at Carbondale are currently in progress. It is anticipated that the five-year limited copyright will be adjusted to provide for five "selling" years for the commercial editions of the materials to be published.
Because the Project recognizes its obligation to provide quality educational materials to the educational community, it is reluctant to establish an arbitrary date for release of completed products. It would seem, however, that Levels I, II and III should be available no later than the 1975 school year.

It should be reemphasized that the CDCP is not interested in only a publisher-disseminator for its materials. The Project is engaged in a long-term developmental effort. It is believed that the ultimate success of the program will be dependent upon the expertise and the degree of commitment that a commercial publisher is willing to invest, and the quality of its cooperative relationship with the CDCP.

II. Description of Items to be Produced

To assist prospective bidders in preparing proposals, Teachers Guides outlining the program at each level, together with descriptions, sample formats and actual instructional materials are provided as attachments to this RPA. Camera-ready art and other exhibits will be available for viewing March 29 and 30. The Project Director will be available for both of these days to respond to specific questions. A listing of appended items follows:

I. Descriptive and Informational Materials

A. A Curriculum Model for Facilitating Career Development
B. A Conceptual Model of the World of Work
C. A Theory of the Functional Self
D. Implementing Career Education
E. Some Questions and Answers on Career Development: An Interview with CDCP

II. Teachers Guides

A. Level I: Becoming Aware of Me and What I Do
B. Level II: Knowing My Interests and Making Choices
C. Level III: Grouping Interests and Occupations

Following the March 29-30 conference, prospective bidders may obtain additional information concerning the CDCP by phoning or writing Dr. Bailey (618-536-2381). In addition the dates of April 11, 12 and 13 will be set aside for those publishers who may wish to arrange a personal appointment with the Project Director in Carbondale, Illinois. All proposals should be received no later than May 15, 1973.
Proposals should include responses to each of the items listed below. Please respond to each in turn to facilitate the comparison of proposals. When it is appropriate, itemize the responses in terms of the materials to be produced.

1. What are the company's operational definitions for career education and career development respectively. How does career education relate to elementary and secondary school curriculums now and in the future (say by 1980)?

2. State the company qualifications to produce the CDCP materials. Do these materials fit into the portfolio of the company? List the current related elementary and junior high titles which you now publish. What are your plans for expansion in this field?

3. Assessment of the market potential. This should include first year and subsequent years.

4. Marketing, promotion, and sales plans. These should include long-range plans for providing national exposure as well as plans for advertising before the materials will be available to the schools.
   a. How many sales representatives do you currently employ to handle this kind of program as their primary sales responsibility?
   b. What has been your history and what are your future plans for exhibiting instructional materials at local, state, regional, and national professional meetings, e.g., AIAA, AVA, APGA, and ASCD, and their state-affiliated conventions?
   c. What methods will you utilize to introduce your published instructional materials to teacher educators and teachers in training?
   d. What advertising media and promotional methods will you use for providing exposure to these materials?

5. Proposed plans for making CDCP instructional materials available by a specified target date (it is the publisher's responsibility to recommend the target date).

6. What personnel and monies are you willing to commit to product revision, pilot and/or demonstration testing, and development of additional products?
   a. What role will the CDCP Project Director play in the above decisions?
   b. Itemize briefly those product lines which represent the best product formats that your company is capable of producing.
   c. What commitment are you willing to make to assure that final products
are among the finest in the industry.

d. Commitment of the company to and plans for the development of supplementary materials and refinement of existing materials. This would involve such items as filmstrips, films, alternate laboratory activities, and redesign of existing materials.

e. Feedback and revision procedures during the period of limited copyright. What techniques will be used to obtain meaningful feedback from the schools and consultants for use in revision of the materials? Will any revision be made during the limited copyright period?

f. Plans for the revision of the materials and continuation of marketing them after the expiration of the limited copyright period, when the materials are placed in the public domain.

g. What role will the CDCP Project Director play during the period of limited copyright and after?

7. Commitment of the company to short-term teacher preparation program(s) and other installation services and plans for accomplishing them.

a. Do you plan to provide financial assistance to promote teacher training workshops? Will you promote and support drive-in training sessions?

b. To what extent do you plan to provide instructional materials (at reduced cost) to participants in teacher training workshops?

c. What professional assistance do you plan to provide to new schools installing the instructional systems?

d. What role will the CDCP Project Director and Staff play in teacher training and installation?

7. Royalty provision. Please specify royalties in terms of percentages; avoid complicated royalty schedules.

9. Charges against future royalties. Itemize all charges which may be assessed against future royalties resulting from the publication and distribution of the CDCP materials.

10. Provide draft of publication agreement to be used. What items should be included in the agreement and how should they be expressed?
III. Specific Contractual Conditions

1. Publication agreement must be approved by the DVTE and Project representative.

2. Neither Southern Illinois University at Carbondale nor its employees will produce or arrange for the production of any revision or adaptation of the copyrighted work during the first two (2) years of the authorized copyright period, other than pursuant to the approved publication agreement, without the written authorization of the DVTE.

3. The copyright period of any revision or adaptation published by the selected publisher during the authorized copyright period will be coterminous with the authorized copyright period and such a revision or adaptation will be subject to these same terms and conditions.

4. In the event that the DVTE finds that the Southern Illinois University at Carbondale, prior to execution of the publication agreement, has failed to comply with the terms and conditions set forth herein, or that the publisher, subsequent to execution of the publication agreement, has failed to comply with the terms of the publication agreement, the DVTE shall have the right to license others to publish, translate, reproduce, deliver, perform, use and dispose of copyright materials subject to this agreement; to require that all copyrights secured on such materials be assigned to the DVTE; and to require that the DVTE take such other steps as the Contracting Officer may reasonably require to transfer, terminate, withdraw or abandon all such copyrights and copyright registrations on any materials, copyrighted by this authority; provided that SIU/C and the publisher shall be given written notice of any proposed action to be taken and shall be afforded an opportunity to be heard, if request is made in writing within thirty (30) days after such notice is received. The decision of the DVTE in this matter will be final.

5. The agreement will also include
   a. Upon written request the DVTE may examine or cause to be examined through certified public accountants the books of account of the distributor insofar as they relate to the sale, rental, or licensing of the CDCP materials.
   b. Methods of dealing with any infringements of copyright.
   c. A suitable method of dealing with bankruptcy and/or termination.
   d. Interpretation according to the laws of the State of Illinois.
   e. That the DVTE may use, reproduce, publish, or have reproduced, used and published, without charge for purposes, all or any part of any CDCP materials, however, it is not the intent of this clause to allow the DVTE to service or provide materials for markets normally serviced by commercial publishers.
6. Contractual conditions should relate both to currently available materials, Levels I, II and III, and proprietary rights to materials for Levels IV through VIII. Prior to execution of a publication agreement for Levels IV through VIII the DVTE and SIU/C shall conduct a thorough appraisal of the degree to which contractual conditions have been met for Levels I, II and III. If, in the opinion of DVTE and SIU/C the publisher has failed to fulfill previously agreed to conditions, DVTE will have the authority to take such action as may be required to withdraw proprietary rights for Levels IV through VIII.

IV. Evaluation Criteria

The proposals will be evaluated on the basis of the considerations listed below (no ranking of criteria is implied):

1. Qualifications of the company to produce the materials.

2. Initial production and distribution plans (quality, quantity, school procurement procedures, school delivery, etc.).

3. Marketing, promotion, and sales plans (advertising sales force in the field, sales prices, etc.).

4. Editorial assistance during the final revision of the materials.

5. Commitment of the company to teacher preparation and installation of new programs.

6. Commitment of the company to sponsor or encourage additional research and development.

7. Provisions for involvement of original developers.

8. Revision and feedback procedures.


V. Evaluation Procedures

The proposals will be presented to a review subcommittee of the CDCP Advisory Committee. This subcommittee will rank the proposals and make its recommendations to the Project Director. In turn, the Project Director will make his recommendation to the grantee (SIU/C) for submission to the DVTE.

The publishers will be notified by the grantee of the action taken by the DVTE on or about June 1, 1973.
VI. Proposal Submission

Proposal Deadline: Due in Project Director's office on or before May 15, 1973.

Number of Copies: Submit ten (10) copies of proposal (may be accompanied by additional exhibit materials which need not be supplied in duplicate).

Submit Proposals To: Dr. Larry J. Bailey
Department of Occupational Education
Southern Illinois University
Carbondale, Illinois 62901
618-536-2381
APPENDIX C

Representative Instructional Unit
(Level I, Unit 4)
UNIT IV
The Meaning of Work and Play

A. Purpose and Objectives

Unit IV presents a further way of developing beginning awareness of self and the world of work. Exploration of work and play categories in this unit should give the child an idea of the functional and personal nature of work. Although work and play will not be new concepts, the Unit is designed (1) to expand the child's perception of them, (2) to present work and play activities in the broader context of all human activity, and (3) to introduce that activities and feelings about work and play are part of what makes us each unique. Although an understanding of general characteristics of work and play is a goal for the unit, the teacher will want to point out that the distinctions between the two are not always clear, that work for one person may be play for another. As a result, differences between work and play should not be emphasized at the expense of commonalities.

The teacher will find that work already has a number of connotations for the child. One might be the negative aspects picked up from hearing adults complain about work. Another is the job of its being a "Grown up" thing and hence of great importance. The teacher will want to add her own ideas to the definitions of work and play, as well as to encourage the children to focus on their ideas and feelings about these categories. In arriving at generalizations about work and play, activity 2 outlines a few characteristics which should be brought out for the purposes of this curriculum. There is also a short discussion of work
and play in the Related References section for this unit which may be helpful.

Unit V will have the child examine his own activities in terms of work and play categories. The discussions in Units IV and V should emphasize that many people work for some of the same reasons and sometimes at the same job, but that each individual has his own style of doing the work, and his own feelings about it. The emphasis on the shared and unique characteristics of work, as in daily activities in general, will provide the necessary framework for more detailed exploration of occupations in Level II.

4. Differentiates human activity in terms of work and play
   4.1 identifies general characteristics of work and play
   4.2 identifies some reasons why people work and play
   4.3 assesses commonalities and differences between work and play

B. Instructional Activities

1) Wango from Dango serves as an introduction to the questions, "What is work, and what is play?" After Wango from Dango is presented, teacher can call for solutions to Wango's problems, and may list possibilities on board. She may point out where children agree and disagree.

2) To extend the discussion of work and play characteristics, the teacher may use the statements made by children about the differences between work and play. Some are listed at the end of this activity. Students can be called on to say whether they agree or disagree with a statement, and
support their statements. While the goal for the unit is discussion and exploration of work and play characteristics, for the purposes of this curriculum the teacher will want to include these general characteristics:

1. work involves a goal—there is a task to be finished
2. most grown ups work for a living
3. most grown ups, but not all, get paid for their work
4. the work a person does is one of the activities that identifies him, that makes him unique

Following are some answers given by elementary school children to answer the question, "What is the difference between work and play?" which may be helpful in starting class discussion:

1. "Play you get to go out and do whatever you want to do and work you have to sit at a desk and write things."
2. "Work is hard and play is easy."
3. "Work is more important than play."
4. "I sit down when you work and you don't have to sit down when you play."
5. "Work takes you longer."
6. "When you play, you have fun and when you work you don't like it."
7. "Play is more fun than work."

3) To further explore the commonalities and differences between work and play, the teacher may use the sketches of Eddie and Betty. The brief description of work and play in the related references section will give
the teacher an idea of the approach that the CDC is using to examine activity and work and play. Basically, "ideal" play is when the activity itself is the goal, whereas in work, while the activity may be enjoyable, there is a goal, a "product" of some kind which is the main goal. Eddie and Betty can be used to help children see the differences between stopping a purely "play" activity in the middle, and stopping a work activity where there is an outside goal to be achieved. After the teacher reads the sketches she may use the following as a guide for discussion. (Refer to p. 4-14.)

EDDIE

The teacher should point out that the main reason why Eddie went out to play ball, his main goal, was to have a little fun and exercise before dinner. Even though he was interrupted, he still got a chance to play and achieve his main goal. The teacher may help children identify some of their own play activities that they do for the activity itself.

BETTY

Here the teacher should point out that the main goal of Betty's activity was to finish setting the table. She may enjoy the activity but the main goal is still the finished product. When she doesn't finish setting the table she doesn't achieve her goal. The teacher may help children identify their activities that belong to this "work" classification--things like brushing their teeth, chores in the house, etc.
4) To apply their understanding of work and play, the children can be called on to act out a particular activity. The rest of the class must try to guess whether the activity would be classified as work or play. For each guess the child must supply some reason, such as "She looks happy," "It looks hard," which the teacher will write down. Then the class can look for patterns, characteristics of work and play that may appear. These should be kept for review in later activities.

5) To reinforce the concept that work is goal-oriented activity and to develop positive attitudes toward work, The Fish in the Tank Activity, described in detail in the instructional materials section, provides an enjoyable, active experience. It has been used in a number of first grade classes with great success.
C. Instructional Materials
A brother and sister
Named Jimmy and Sue
Were walking along
On their way home from school

When all of a sudden
In a great cloud of smoke
(So much smoke in fact
that you'd probably choke)

A flying saucer appeared
Right before their eyes,
With a bright golden door.
And to their surprise

A very strange creature
Came out of the door.

He had seven arms
and seven legs too.
Would you be as frightened
As Jimmy and Sue?

"Please don't be afraid,"
The strange creature said
"I'm Wango from Dango
And I'm not really bad.
I hope you can help me.
If you can't I'll be sad.
If I don't get this job done
My king will be mad."
If you don't want to help me
Don't bother to run
'Cause I'll simply kidnap you
With my lollipop gun."

"We're really too little
To help much" said Sue.
"But we'll happily do
Anything we can do."

"In Dango" said Wango
"We don't live like you.
You may find it strange
The things that we do.
We just sit in trees
And talk with the birds,
And for our hobby
We study your words."

"Now I've come from the king
Who seems to be stuck.
On two of your words
(He's just run amuck)
He's studied and worried
And right to this day.
He can't see the difference
Between work and play."

"I hope you can help me
In some little way
He'll turn me into a bird
If he can't have his way.
Please come," said Wango.
"We'll make a deal
I'll give you a ride
In my Dangomobile
And we'll scoot 'round this town
In a wonderful way
While you show me the difference
Between Work and Play."
"That's easy" said Jimmy
"That's a pretty good deal."
And they all jumped inside of
The Dangomobile
They zipped around town
In the broad light of day
To show Wango the difference
Between work and play.

The first person they saw
Was Mr. J. Bogger
(That's Mr. J. Bogger,
The everyday Jogger)
He was puffing and panting
His way down the street
His face was all red
And he really looked beat

"Well now" said Wango
What do you say?"

That's easy" said Suzie
That man is at play.

"You're crazy!" cried Jimmy
As crazy can be.
That kind of thing
Looks like work to me"

"Now children" yelled Wango.
Please let's not fight
You're awfully nice
And I don't think it's right
We'll travel some more. Maybe
Then you can say
Just what is the difference
Between work and play."

So they winged in the window
Of Mrs. McFake,
Who was bustling around,
And making a cake.
Jimmy said "Well now
I know that that's play
Cause I'd make a cake
For fun anyday."
"Oh, Jimmy" said Suzie
You're really a jerk!
She's baking a cake
'Cause it's part of her work."

Poor Wango just groaned.
"You two are just great
I'm sure to end up
As a bird at this rate."

"Come on" he said
We'll have one more try.
If you can't agree this time
You can kiss me good by."

"They whizzed through the park
Humming a tune
'Til they found an old man
Who was selling balloons.
"OK" said Wango
"It's up to you two.
Now tell me please
What does he do?"

"Look, look," said Suzie
How pretty and bright
He must be playing
I'm sure that I'm right"

Jimmy said "That's just
One more mistake that you've made
Can't you see that's his work?
Don't you know he gets paid?"

"I know what I see"
Said our Sweet Sister Sue
I'm not going to listen
To a dummy like you!"

"You're stupid" yelled Jimmy
"That's all I can say.
You can't tell the difference
Between work and play."
By this time poor Wango
Was ready to bust.
"I must find the answer
Oh really. I must!
You two can bicker and argue all day
But if I don't find out
All about work and play
I shudder to think
(my goodness—my word)
The king's going to change me
Into a bird!"

Wango needs help.
You know that is true.
I bet he needs help
From some people like you.

If you all think together
You might find a way
To show him the difference
Between work and play.

Being a bird
Wouldn't be all that great
Could you possibly help him
Before it's too late??
FISH-IN-THE-TANK ACTIVITY

GENERAL DESCRIPTION

The "Fish-in-the-Tank" is a fascinating game resulting from an optical illusion. The fish on one side of the card appears to be in the tank on the opposite side of the card when it is spun on a dowel.

CONDUCTING THE ACTIVITY

1. Classroom Set-up
   A. Clamp the two sets of jigs to rigid desks or benches color code one set of jigs red and the other set blue.
   B. Have a hacksaw placed next to each jig (Although hacksaws are generally for cutting metal, it has been found that inexperienced first grade children can more successfully cut wood with a hacksaw than other wood cutting saws).
   C. Have dowels placed next to the two cut-off jigs.

2. Initiating the Activity
   A. With the attention of the students, bring out a "Fish-in-the-Tank" game
   B. Walk around the room spinning the "Fish-in-the-Tank" Give the children an opportunity to see the optical illusion.
   C. Tell students that you only have one game and ask if they would like to make one for themselves.
   D. Demonstrate the cut-off and slotting operations to the students.
   E. Have students get out their pencils and crayons.
   F. Distribute two cards to each student.
   G. Draw and color the "Fish-in-the-Tank" card in unison to insure success.
      (The second card is for students to experiment with after they complete the basic game).
   H. Divide class into two groups, "Blues and Reds", and allow them to go to the jigs of the same color after they complete their cards.
   I. When the game is completed, students may play with it and/or experiment with their second card (e.g. "Car-in-the-Garage," "Bird-in-the-Cage") until all students are through.
   J. Conduct a follow-up discussion on the commonalities of work and play. Also, implement additional optional instructional activities.
JIGS, TOOLS, AND MATERIALS

1. Jigs (assemble with glue and wood screws)
   A. Cut-off jig (2 needed for average class)
      1. Base; 1 each 3/4" x 6" x 12" plywood
      2. Guides; 2 each 2" x 2" x 2" Hardwood
   B. Slot jig (2 needed for average class)
      1. Base; 1 each 3/4" x 6" x 12" plywood
      2. Guides; 2 each 2" x 2" x 2" Hardwood
      3. Ridge; 1 each 1 1/4" x 2" x 10" Hardwood

2. Tools (for average class)
   A. 4 each 6" 'C' Clamps
   B. 4 each hacksaws
   C. 2 each extra hacksaw blades

3. Materials per student
   A. 2 each 2 1/2" x 2 1/2" white cards (thickness of the card should equal the slot in the dowel).
   B. 1 each 3/8" Diameter x 8" wood dowel (36" dowels may be purchased from any hardware store or lumber yard).

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**Eddie**

Eddie wanted to have some fun before he went in to dinner. He looked across the street, and there were some of his friends playing softball.

"Hey fella's" he called. "Can I play for awhile??"

"Sure, come on over" they called back.

Eddie loved to play baseball, especially on nice days like this one. He pitched for his team for the first inning. Then he was up and ran two bases, when his friend Joe hit a home run and Eddie ran in.

He had just gotten out in the field again and had pitched to the first hitter when he heard his mother calling.

"Eddie, its time to eat dinner!! Come right away."

"I'm sorry guys, I gotta' go." Eddie said. "I'll try to come back after I eat if you're still here.

**Betty**

Betty's mother called to her from upstairs.

"Betty, I've got some work for you to do. Do you have a few minutes."

"Sure mom," Betty said. She liked to help her mother when she could.

"Could you set the table for me please? Your father is bringing a friend home for dinner and I have to get dinner started now."
"Sure."

"OK. Put the good glasses on and set the table for four, OK? First Betty picked up all the things off the table. Then she put down the special blue placemats for company. Then she took four forks, four knives and four spoons out of the drawer. She started to put them carefully around the table. Just then she remembered that she promised her friend Laura she would call her before dinner. She dropped what she was doing and ran into the living room to use the telephone.
D. References

The following references may expand your view of the concepts dealt with in this lesson and provide you with ideas for further activities. Some of the books may be in use in your school, or at least available for your examination.


In addition to supplying stories to discuss values, this volume also provides stories dealing with possible work activities of young children. Specifically the stories "Delicious Chocolate Pudding" "Just Imagine" "Mr. Garcia's Newspaper" may provide discussion material for this unit.


Teachers may find ideas for discussion of work and play activities in the family in Unit 2 on Families and Unit 3C on Homes. In addition Unit 7A on change in families may provide ideas for activities which will further the classes understanding of individual differences.

A nice rhyming catalogue of work activities that father's do when they are away from home during the day. May be a nice book for "storytime" reading out loud.


This is a fun story about a little boy who comes up with a unique summer job for himself. After reading the story out loud the teacher may have children discuss what aspects of Tommy's work are difficult, which were easy, fun etc.


The program contains pupil's independent activity books which reinforce the concepts presented in the teacher's "Big Books." This program is designed to develop an awareness of self by identifying the individual's role with the family, the school, and the neighborhood. It is a program that initiates and expands the social "readiness" a child needs to begin formal learning.

Family at Work and Play (Study prints) Chicago: Society for Visual Education.

A set of eight study prints which picture a family at the zoo, at home,
leaving for school, shopping, at work, at the playground and responsibilities at home.


This program is designed to help children look at the world around him through a wide variety of activities. "The program develops important concepts in sociology, anthropology, history, economics, geography, and political science." Grade one of this program looks at the family in the working world.


This film examines the economic functions of the family as a community unit. Centering around the working father, the viewers see him at work as a structural ironworker. They also see how his work helps his family with the money he earns.


Filmstrips which show six working mothers at home with their families. Activities are shown throughout their working day.