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ABSTRACT

This report, prepared by the staff of the ERIC Clearinghouse on Teacher Education, analyzes the health education, physical education, and recreation education (HPR) work of the Clearinghouse, and recommends ways of improving the usefulness and comprehensiveness of that aspect of the ERIC system. The document (1) describes the ERIC system over-all; (2) provides a brief history of the American Alliance for Health, Physical Education and Recreation and ERIC's collaboration in the field of HPR; (3) explains what the Clearinghouse has done in the field of HPR in terms of its three major functions--data base building, user services, and information analysis; and (4) presents recommendations. The major recommendation is to establish a separate ERIC Clearinghouse on HPR. In the interim, it is recommended that the Clearinghouse on Teacher Education limit its resources for HPR to 20 percent; that the Thesaurus of ERIC Descriptors be improved to add more HPR descriptor terms; that there be an emphasis on acquiring documents not adequately covered in the data base; and that the Clearinghouse be more widely publicized to people in the health, physical education, and recreation community. Appendixes list the 16 ERIC Clearinghouses, members of the Administrative Committee and Advisory and Policy Council for the Clearinghouse on Teacher Education, and input forms for new HPR descriptor terms. An order form for computer searches is also included. (CD)

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ANALYSIS AND RECOMMENDATIONS
FOR THE
HEALTH EDUCATION,
PHYSICAL EDUCATION, AND
RECREATION EDUCATION
ACTIVITIES OF THE
ERIC CLEARINGHOUSE ON TEACHER EDUCATION:
A PLANNING DOCUMENT

December 1975

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INTRODUCTION

From time to time, the Clearinghouse staff conducts substantial Requirements Analysis and Evaluation studies of its major functions. This report is a product of one such study. It is intended primarily as an internal planning document, but it is also expected that it will be of value to others who are interested in improving information services for the health, physical education, and recreation communities.

The focus of this report on health education, physical education, and recreation education (HPR)* results from the fact that the ERIC Clearinghouse on Teacher Education assumed the responsibility for monitoring educational literature in these fields in March of 1973. Substantial Clearinghouse resources were not devoted to these fields until two years later, when the American Alliance for Health, Physical Education, and Recreation officially became a sponsor, joining the American Association of Colleges for Teacher Education, the National Education Association, and the Association of Teacher Educators.

This report does three things: a) it recounts briefly the history of HPR with relation to the ERIC system; b) it documents the Clearinghouse's efforts in the areas of HPR and c) it gathers and analyzes important data useful in planning future Clearinghouse efforts -- particularly those during the next contract year, March, 1976 through February 1977. In essence then, the effort

*The Clearinghouse uses the acronym HPR (health education, physical education, and recreation education) when referring to these subject fields. In this document, however, the Clearinghouse has used the term and its acronym, "health, physical education, and recreation (HPER)," when referring to the communities involved in these subject fields because that is how they refer to themselves.

involved in the preparation of this report is intended primarily to permit the Clearinghouse staff, its advisors, and major information users to take a comprehensive look at where the Clearinghouse has been and where it presently is with regard to its efforts in the fields of HPR. With this knowledge, and reactions stimulated by the report, we will be better able to plan for the future information needs of the health, physical education, and recreation communities.

In order to provide the necessary context for analysis, Section I of this report describes briefly the ERIC system -- its several components and operation. In addition, it provides a description of the activities of the Clearinghouse on Teacher Education and the functional organization of those activities. Section II recounts the relationship of the fields of health education, physical education, and recreation education to the ERIC system. In large part, this growing relationship was due to the efforts of the American Alliance for Health, Physical Education, and Recreation. This second section includes the recommendations of the HPR consultant group which was convened to assist the Clearinghouse in planning for its work in these areas. Sections III, IV and V report Clearinghouse activities in HPR. These activities are classified as Data Base Building, User Services, and Information Analysis Products. The final section of the report attempts to compare the recommendations of the consultant group (in Section II) with the outputs of the Clearinghouse (Sections III, IV, V). The final section of the report presents recommendations for further action. Draft recommendations were developed by the Clearinghouse staff for consideration by the Clearinghouse Advisory and Policy Council on December 2, 1975. Based on these deliberations, Section VI of the draft report was adjusted to represent the positions of the Council relative to HPR activities. The recommendations are incorporated in the Clearinghouse plan for 1976-77.

In addition to recognizing the key role played by members of the Advisory and Policy Council, it is appropriate to identify several other persons who have helped the Clearinghouse in its efforts to serve the HPER community. In July of 1974, the Clearinghouse convened a team of consultants to help plan for the 1975-76 effort in HPR-related fields. Their contribution was invaluable, and their continued support and encouragement is much appreciated. The team members were Dr. John J. Burt, College of Education, University of Maryland; Dr. James R. Champlin, Department of Recreation and Park Administration, University of Georgia; Dr. John H. Cooper, Associate Executive Secretary for Administration, American Alliance for Health, Physical Education, and Recreation; Marvin H. Eyler, Dean of the College of Physical Education, Recreation, and Health, University of Maryland; and Dr. H. Douglas Sessoms, Curriculum in Recreation Administration, University of North Carolina.

We would also like to express our appreciation to Dr. Gordon D. Jeppson, Associate for Health, Physical Education, and Recreation with the Clearinghouse on Teacher Education, for his involvement in improving the Clearinghouse's efforts.

SECTION I
THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

A Nation-wide System

The Educational Resources Information Center (ERIC) is a nationwide information processing and retrieval system funded by the federal government through the National Institute of Education, with substantial support provided also by professional associations.

Central ERIC is the system component housed within the National Institute of Education which monitors the activities of the entire system -- 16 Clearinghouses, a central processing facility, a document reproduction service, and the publisher of Current Index to Journals in Education (one of ERIC's two monthly print indexes). Central ERIC sets policy and monitors production and quality levels for the entire system.

The 16 ERIC Clearinghouses are operated by universities or professional associations under contract to the National Institute of Education. Each Clearinghouse has expertise in its particular scope area (see Appendix A for a list of ERIC Clearinghouses) and has responsibility for acquiring, selecting, and processing materials for ERIC's two literature files: Resources in Education (RIE) for document literature and Current Index to Journals in Education (CIJE) for journal literature. Clearinghouses have two other major responsibilities -- the preparation of information analysis products which analyze and synthesize selected aspects of the ERIC literature, and the training of people to use ERIC resources.

The ERIC Processing and Reference Facility is primarily a central facility which integrates the work of the 16 Clearinghouses and merges document resumes for publication in RIE. In addition, the facility develops the computer tapes of

document resumes included in RIE, provides lexicographical support, and assists Central ERIC in the maintenance and improvement of the system.

MacMillan Information, a division of MacMillan Publishing Company, edits the journal indexing and annotating of the Clearinghouses and publishes CIJE.

The ERIC Document Reproduction Services has responsibility for distributing the documents (in microfiche and in xerox copy) which are abstracted in RIE to libraries and individual users.

The ERIC Clearinghouse on Teacher Education

The ERIC Clearinghouse on Teacher Education has as its scope, school personnel at all levels from preschool through university education, encompassing all issues from selection through preservice and inservice preparation and training to retirement; curriculum-oriented research reports; educational theory and philosophy; general reports on education; and health education, physical education, and recreation education (HPR).

The Clearinghouse accomplishes its mission of collecting, selecting, analyzing, and disseminating information on education personnel preparation and HPR through four functions (major activity categories): Data Base Building, Information Analysis Publications, User Services, and System Maintenance and Improvement Activities.

The objectives of the Data Base Building function are to acquire, select, catalog, index, and abstract documents and journal articles for the ERIC literature files -- Resources in Education (RIE) and Current Index to Journals in Education (CIJE). During the present contract year (March 1, 1975 - February 28, 1976) the Clearinghouse is obligated to add a minimum of 1,000 document resumes to the RIE file and 900 journal article resumes to the CIJE file.

The aim of Information Analysis Publications is to provide concise analyses

and syntheses of the ERIC literature on various sub-topics within the Clearinghouse's scope. This is done by commissioning experts in the field to generate manuscripts. These manuscripts are edited and camera-ready copy is prepared by the Clearinghouse. The majority of this year's ten Information Analysis Publications will be printed by other organizations, including the United States Office of Education, the Teacher Corps, the American Association of Colleges for Teacher Education, the Association of Teacher Educators, and the National Education Association. The present report is considered to be an information analysis product, primarily intended for Clearinghouse planning purposes.

The User Services function is designed to accomplish several objectives: a) developing greater awareness among members of the educational community of ERIC, the system components, and the resources of the system; b) training people to use ERIC, both manually and by computer; and c) providing substantive information to users upon request.

The first objective is met through articles in bulletins and journals, presentations at meetings, and exhibits at conferences. The second objective is met by conducting workshops for librarians, by teaching classes at local universities, and by providing instruction to Clearinghouse visitors on a one-to-one basis. Answering requests for information on specific topics is accomplished in a number of ways -- with computer or manual searches, with one or more information analysis publications, and by referral to other sources.

The Clearinghouse's computer search service is run on a not-for-profit basis. Another user service of the Clearinghouse which is operated on a not-for-profit basis is its Special Current Issues Publications (SCIP) program. SCIPs are brief publications intended to clarify issues surrounding current topics in the fields of teacher education, health education, physical education, and recreation education. SCIP titles printed or in progress so far this year are:

Accreditation Issues in Teacher Education
Death Education

Governance of Teacher Centers Mainstreaming

The fourth function of the Clearinghouse, System Maintenance and Improvement, is generally related to internal processes and procedures. However, one task within this function which is critical to ERIC users is maintenance, updating, and improvement of the ERIC Thesaurus, which is the vocabulary of index terms (subject descriptors) by which literature is retrieved from the ERIC file. (A discussion of the ERIC Thesaurus as it relates to health education, physical education, and recreation education appears in Section III -- Data Base Building.)

The Clearinghouse is sponsored by four professional associations: the American Alliance for Health, Physical Education, and Recreation, the American Association of Colleges for Teacher Education, the Association of Teacher Educators, and the National Education Association. All sponsors share responsibility for sponsorship policy, and the American Association of Colleges for Teacher Education acts as fiscal agent. The Administrative Committee, which consists of the chief elected officer and the executive officer of each sponsoring association, is the forum in which administrative policy is discussed. (A list of the members of the Administrative Committee appears in Appendix B.)

Clearinghouse policy on substantive matters is guided by its Advisory and Policy Council, which consists of two representatives from the membership of each sponsoring organization, and one representative each from the Research and Development Center for Teacher Education and the Stanford Center for Research and Development in Teaching. (A list of Advisory and Policy Council members appears in Appendix C.)

SECTION II

ERIC--AAHPER: A BRIEF HISTORY

To fill what Dr. Lee G. Burchinal, Assistant Commissioner of Education (HEW), was to call in July 1972 "one of the long-standing glaring-gaps in the Educational Resources Information Center (ERIC) program," the ERIC Clearinghouse on Teacher Education assumed responsibility for covering health education, physical education, and recreation education (HPR) on March 1, 1973.

The need for an HPR-oriented research center was voiced as early as June, 1965, when Reuben Frost, President of the American Association for Health, Physical Education, and Recreation (AAHPER),* and a small ad hoc planning committee selected a Task Force on Research to explore professional research needs in the light of new federal legislation. At a conference on July 8-10, 1965, chaired by Dr. Clayton Shay of Springfield College and Dr. Benjamin H. Massey of Pennsylvania State University, the 28-member Task Force and several AAHPER staff members developed 11 recommendations, later approved by the AAHPER Board of Directors and referred to the President for implementation at the November 1965 meeting.

Specifically, the Task Force requested that efforts be made to expand the collection and dissemination of research in the fields of health education, physical education, and recreation education. The Bureau of Research, U.S. Office of Education, encouraged AAHPER to eventually establish a national center or laboratory to perform these research operations and to house, if possible, the AAHPER archives. The purpose and basic activities of such a center were more closely defined in the following paragraphs of Title IV of the Elementary and Secondary School Act of 1965 (ESEA).

*In 1974, the name of the association was changed to the American Alliance for Health, Physical Education, and Recreation:

A research and development center concentrates on a single area of research interest and may conduct activities ranging from basic research through dissemination of findings and products. Thus interrelated activities can reinforce each other; promising leads from one activity can be immediately followed up in another; and research findings can quickly be put to practice.

Each center is interdisciplinary and ordinarily maintains cooperative relationships with state departments of education, local school systems, universities and teacher training colleges, and relevant professional and nonprofit organizations. Within its stated area of interest, each center can direct its own program without obtaining Office approval before it initiates a project.

Hoping that such a center could serve as a focal point for putting the Task Force recommendations into effect, AAHPER -- with the cooperation of the President's Council on Physical Fitness and the Lifetime Sports Foundation -- engaged Fore, Inc., a communications management firm, to do a study to determine the feasibility of a research center for HPR. Basing their work on interviews with individuals from groups most likely to use such a research center, the Fore, Inc. staff concluded in April 1966 that the project was "feasible" and recommended steps for its implementation. Fore, Inc. was retained by AAHPER for five months to assist with the development of proposals for funding. During this period, Fore, Inc. also prepared a preliminary proposal for an ERIC Clearinghouse which would also serve as the data collection, processing, and dissemination center for the research institute.

In 1966, AAHPER submitted a proposal to the U.S. Office of Education (USOE) requesting funds for the establishment of an ERIC Clearinghouse on HPR. This proposal was not funded, probably because, as the Fore report suggests: a) there existed a lack of understanding on the part of proposal reviewers of the relationship between HPR and other disciplines in education, b) HPR lacked a long history of substantial participation in research projects, and c) HPR was receiving services from various clearinghouses within the Clearinghouse network. With the failure

of this proposal, HPR materials were listed occasionally in RIE and CIJE (ERIC's monthly abstract journals), but none of the clearinghouses had HPR-oriented personnel to oversee the regular input of such materials.

In the next five years, AAHPER officers and members continued to reiterate their concern about the lack of an HPR clearinghouse in letters to USOE staff. During this period various universities became interested in establishing information clearinghouses in HPR on their campus. AAHPER was alerted to their interest and became the vital link in coordinating their efforts. Through the efforts of the AAHPER, the universities agreed to function as a joint committee to establish a "Physical Activity Information Retrieval System (PHACT)." A preliminary funding proposal was returned with the suggestion that the committee continue its efforts, attempting to refine their proposal to give more evidence of need, innovativeness, and expertise. Since no federal funds were apparently available for an information clearinghouse in HPR, AAHPER contacted a number of commercial firms to explore their interest in such a venture. Xerox University Microfilms expressed some interest and a meeting was held in the summer of 1970 with Xerox officials.

Undaunted by USOE's inability to respond to the need for an ERIC Clearinghouse on HPR, Ms. Betty McCue, University of Oregon, chairperson of the AAHPER Professional Preparation Panel, convinced Dr. Philip Piele, director of the ERIC Clearinghouse on Educational Management (at the University of Oregon), of the importance of an ERIC center in HPR. Dr. Piele won majority support for this contention among ERIC clearinghouse directors at a meeting on June 2, 1972 in Chicago. At Ms. McCue's suggestion, AAHPER members were urged to direct letters supporting an ERIC center in HPR to Dr. Lee G. Burchinal, Assistant Commissioner, National Center for Educational Communication, U. S. Office of Education.

In a letter to Past AAHPER President, Dr. Louis E. Alley, in July 1972, Dr. Burchinal voiced support for a restructuring of ERIC to increase efficiency

and to close "glaring gaps" in research coverage such as existed in the fields of health education, physical education, and recreation education. The Executive Committee of AAHPER, Carl Troester (AAHPER Executive Secretary) and Dr. Barbara Forker (AAHPER President), met with Dr. Burchinal on July 20, 1972 to discuss possible locations for the HPR-oriented ERIC center. Among the locations considered were the ERIC Clearinghouse on Science and Mathematics Education at Ohio State University, the ERIC Clearinghouse on Educational Management, the ERIC Clearinghouse on Rural Education, and the ERIC Clearinghouse on Teacher Education. AAHPER decided on the latter because its location at 1 Dupont Circle, Washington, D. C. would make it accessible to persons visiting the capitol and would allow AAHPER to work closely with the ERIC staff in the initial planning phase. The ERIC Clearinghouse on Rural Education continued to be responsible for documentation of outdoor education.

Efforts were made immediately by the Clearinghouse on Teacher Education to determine how the Clearinghouse could best serve the needs of HPR and how to publicize Clearinghouse activities to the HPER community. In late August of 1972, Dr. George Anderson from AAHPER and Dr. Joel Burdin, Director of the ERIC Clearinghouse on Teacher Education, met and discussed what the Clearinghouse could begin to do immediately in the HPR scope. In 1973 and 1974 an HPR representative was appointed by AAHPER to be in attendance at the Advisory and Policy Council meetings of the Clearinghouse. In the fall of 1974, a consulting group of six persons -- two each from the fields of health education, physical education, and recreation education -- was convened to assist the Clearinghouse staff in determining priorities in HPR. (Appendix D is a list of HPR consultants to the Clearinghouse.)

It was the recommendation of these consultants that the major priority in HPR was the development of the data files -- Resources in Education (RIE) and Current Index to Journals in Education (CIJE). It was their belief that Information Analysis activities would be more valuable when the ERIC files contained more HPR-related material. Consequently, with the exception of the present report, no Information Analysis Products in the fields of HPR were planned or undertaken during this contract year (March 1, 1975 through February 29, 1976). The consultant group identified areas within the fields of HPR which they felt should receive priority attention by the Clearinghouse's acquisitions and document processing personnel.

In the field of health education, it was recommended that the Clearinghouse attempt to locate and process materials on professional preparation in health education, school health, community health, and patient health education. Information on the content areas (sex education, drugs, alcohol, nutrition, etc.) is available from other sources, such as the National Library of Medicine, and, consequently, it was felt that the Clearinghouse need not place too much emphasis on health content areas.

The consultant team suggested that, with regard to recreation education, emphasis be placed on community education, community recreation, and those aspects of the recreation profession that are commonly listed as specializations in college curricula: public recreation, outdoor recreation, park management, therapeutic recreation, youth-serving agencies recreation planning, industrial recreation, tourism, forest recreation, resort management, recreation research, and community school recreation.

With regard to physical education, the consultants identified these priority areas: professional preparation, content, and public school physical education.

Among content areas, eight topics were prioritized: sport history, sport sociology, sport psychology, sport philosophy; adaptive physical education, sport skills, pedagogy, and athletics. In addition, motor learning, bio-mechanics, and exercise physiology were identified but de-emphasized due to the fact that these areas are reasonably well covered in professional journals. The consultant team recommended that the Clearinghouse concentrate on four of the above content areas per year, entailing a three year plan for development of the ERIC data base in physical education.

On March 1, 1975, AAHPER became a sponsor of the ERIC Clearinghouse on Teacher Education. As a sponsor, AAHPER has direct representation on the ERIC Advisory and Policy Council. Representatives for the 1975-76 contract year are John Burt, Head, Department of Health Education, University of Maryland, College Park; and Wayne Van Huss, Director of the Human Energy Research Laboratory and professor of physical education, Michigan State University, East Lansing.

In order to more adequately fulfill the Clearinghouse's responsibility within the HPR scope, the position of Associate for Health, Physical Education, and Recreation was created on March 1, 1975. The position was and continues to be filled by Dr. Gordon Jeppson, Program Administrator for the National Association for Sport and Physical Education, American Alliance for Health, Physical Education, and Recreation. Dr. Jeppson's responsibilities include the provision of guidance to Clearinghouse staff on all HPR-related matters, selection of HPR documents for input into the ERIC system, and liaison and public relations activities with the HPER communities.

SECTION III

DATA BASE BUILDING FOR HEALTH EDUCATION, PHYSICAL EDUCATION, AND RECREATION EDUCATION

Data Base Building is one of three primary functions of the Clearinghouse. Its objective is the acquisition, selection, and processing of educational materials for the two ERIC files -- Resources in Education and Current Index to Journals in Education. The consultant team which was convened in July of 1974 to assist the Clearinghouse with its initial planning efforts for activities in the fields of health education, physical education, and recreation education (HPR) recommended that the Clearinghouse devote its resources in HPR to the development of the data base, and that it refrain from the development of information analysis publications until the data base was improved.*

The purposes of this section of the report are: a) to describe briefly the Clearinghouse's activity in building the HPR literature file, and b) to characterize or describe the HPR information base as it exists within the ERIC files. The following discussion is organized in terms of three major ERIC products: the ERIC Thesaurus, Resources in Education (RIE), and Current Index to Journals in Education (CIJE). The ERIC Thesaurus is the vocabulary of educational terms used to index documents and journals for the ERIC files. As such, it is critical to the development and subsequent use of the ERIC files. RIE is the document file, and CIJE is the journal literature file of ERIC.

The Thesaurus of ERIC Descriptors

The ERIC Thesaurus is the authority list of educational terms which is used by indexers to describe the subject content of a document or journal article. It is also used by information seekers to prepare searches of the ERIC file.

*For an expanded discussion of the recommendations of the consultants see Section II, pp. 12-13.

The ERIC Thesaurus is continually refined and expanded to accommodate the knowledge growth in the field of education. New descriptors are added at the suggestion of subject experts in the Clearinghouses, and obsolete descriptors are removed as necessary. Prior to implementation, contemplated changes in the Thesaurus are subjected to rigorous review at the Clearinghouse level, by the lexicographer at the ERIC Facility, and by two advisory panels established by Central ERIC for the purpose of assisting in the development of the ERIC Thesaurus.

The following discussion will attempt to characterize the Thesaurus in relation to HPR terminology. A complete lexicographic analysis of the Thesaurus is not intended here. Rather, the purpose of the discussion is to give an idea of the strengths and weaknesses of the Thesaurus relative to HPR and the limitations which those strengths and weaknesses impose upon the Clearinghouse staff as they process documents and journal articles into the ERIC files.

The ERIC Thesaurus is weak in HPR terminology because HPR information needs were not represented by any one Clearinghouse prior to 1973 and because until March of 1975 there were no HPR professionals directly connected with the ERIC system. In effect, then, there was no advocacy from within the ERIC system for the development of such terminology in the Thesaurus or for the processing of HPR-related educational materials. The lack of sufficient HPR-related descriptors results in two types of indexing problems. The first is the inability to index a document or journal article to a depth sufficient to make it retrievable. The second problem is the potential for misuse of descriptors that are in the Thesaurus.

As an example of the first problem, in a comparison of the ERIC Thesaurus with HPR terminology in "The Standard Terminology for Curriculum and Instruction in Local and State School Systems" and in the index of Completed Research in HPR, the Clearinghouse Associate for HPER found that the following physical activities terms are lacking in the ERIC Thesaurus: Badminton, Bowling, Diving, Fencing,

Field Hockey, Football (American), Handball, Ice Hockey, Lacrosse, Skiing, Soccer, Softball, Track and Field, Volleyball, and Wrestling. At present, because these terms are not descriptors in the ERIC Thesaurus, an indexer must use an identifier* to adequately describe a document about any of these sports. If a document is primarily about football, it is very likely that the indexer will use "Football" as an identifier to describe the contents of the document. If, however, football is one of a number of sports treated in a document, it is unlikely that the indexer will index the document in more detail than to apply to it the descriptor "Athletics." The consequences of this kind of indexing "lack of depth" are obvious. Several relevant documents will be lost to searchers who attempt to retrieve information.

In a computer search of the ERIC file conducted by the Clearinghouse's user services specialist, justification was found for adding to the Thesaurus the following terms: Football, Softball, Soccer, Track and Field, Field Hockey, and Volleyball. The necessary procedures for entering these terms as descriptors in the Thesaurus have been completed by the Clearinghouse staff. (The Descriptor Justification Forms for these terms can be found in Appendix E). In addition, sufficient justification was found to warrant submission of the term "Lifetime Sports" as a descriptor. (A copy of the Descriptor Justification Form for this term is also included in Appendix E.)

*"Identifiers" are terms supplied by abstractor/indexers in order to index a document as completely as possible; they are not formally entered in the ERIC Thesaurus. An identifier is typically the name of a specific entity (e.g., a program, a person, a country). However, a term may be used as an identifier in order to provide justification for its eventually becoming a descriptor.

Another example of a concept which is not indexable at the present time is "gymnastics." When an indexer or user looks up the term "gymnastics" he/she is referred by the Thesaurus to the descriptor "Exercise (Physiology)." To find documents on gymnastics, an information seeker must first retrieve all documents indexed under "Exercise (Physiology)" and then manually cull from these those that deal with gymnastics.

The second consequence of an inadequate Thesaurus is inappropriate indexing. The Thesaurus currently lacks the terms "Sports", "Muscular Activity", and "Movement Education." Documents about sports are indexed with the descriptor "Athletics." Materials which deal with muscular activity are indexed with "Motor Reactions." In these two instances, the indexer or searcher is referred by the Thesaurus to descriptors that provide inappropriate identification of the concept in which he/she is interested. In the case of movement education, the user is not even referred to a descriptor. "Movement Education" simply does not appear in the Thesaurus. When an indexer or user looks up the concept of movement, he/she is referred to the descriptor "Motion." Documents about movement education have variously been indexed with the descriptors Psychomotor Skills, Physical Fitness, Motor Development, and Perceptual Motor Coordination. Such inconsistency hampers the searcher's ability to complete a successful search.

In summary, the weaknesses of the Thesaurus in HPR terminology result in inadequate and inappropriate indexing, which, in turn, limits the capacity of the system to respond to HPR-related questions with relevant material.

The Clearinghouse has made some efforts in the direction of remedying this situation, but it seems that only a comprehensive, detailed lexicographic analysis will provide solutions to the cited problems.

Resources in Education (RIE)

RIE is the document file of ERIC. It includes such educational materials as research reports, conference papers, speeches, program descriptions, project reports, and other resource materials not generally available through commercial channels. In some instances, relevant materials are solicited by the ERIC Clearinghouse for evaluation, and in other cases materials are received unsolicited. All materials are evaluated by subject experts and, if deemed appropriate, selected and processed for RIE.

Acquisition of HPR Documents

The Clearinghouse's first active solicitation of documents in the field of HPR was to the presenters at the Research Section of the 1973 AAHPER Convention. The encouraging response to this request warranted repetition of the procedure for the 1974 AAHPER Convention.

In 1974, the Clearinghouse solicited papers from the meeting, conventions, or conferences of the following associations:

- American School Health Association (ASHA)
- National Association of Physical Education for College Women (NAPECW)
- National Parks and Recreation Association (NPRA)
- National College Physical Education Association for Men (NCPEAM)
- Conventions of the 50 State Associations for Health, Physical Education, and Recreation

ASHA and NPRA provided the Clearinghouse with complimentary copies of selected publication. ASHA also provided convention programs from 1972-74 and, by using the program information, the Clearinghouse solicited papers from the presenters.

Five of the state HPER associations responded to the request and submitted convention presentations to the Clearinghouse.

In another effort to acquire documents during the 1974 contract year, the Clearinghouse wrote to 475 AAHPER members who designated "research" as a special interest area, asking them to submit papers and research findings.

Acquisition efforts in the fields of HPR have increased since AAHPER became a sponsor of the Clearinghouse in March 1975. Individual presenters at the conferences of the following associations have been asked to submit their papers:

- AAHPER
- Midwest District AHPER
- Northwest District AHPER
- Southern District AHPER
- National Intramural Association
- North American Society for Sport History
- American College of Sports Medicine

Initial response has been good and papers continue to be submitted as a result of these requests. Presently, individuals presenting papers at the October 1975 ASHA Convention and at State AHPER Conventions are being asked to submit their presentations. In August, a meeting was arranged with representatives of NCEAM and NAPECW and out of that meeting came an agreement that material from both organizations would be shared with ERIC on a regular basis. To date, the same success cannot be reported in relation to NPRA.

In an attempt to stimulate interest in sending documents to ERIC, an article about the submission of education-related HPR material has appeared in the October issues of both the Journal of Physical Education and Recreation and Health Education. This article has reached approximately 50,000 readers.

Table 1 compares the percentage of individual solicitations for materials in HPR to the percentage of individual teacher education solicitations for similar six month periods in 1974 and 1975.

Table 1

Clearinghouse Acquisitions Effort

<u>Scope Area</u>	<u>1974</u>	<u>1975</u>
HPR	45%	35%
Teacher Ed.	55%	65%

It is surprising to note the decline in the number of individual solicitations for HPR materials. This is explained by increased effort in acquiring conference papers and reports. When conference presentations are solicited, solicitations are often made through the conference coordinator and accurate data about the number of papers received as a result of each such solicitation are impossible to gather.

Selection of HPR Documents for RIE

Documents submitted to ERIC are evaluated to determine if they add to the knowledge base, are current and relevant, and whether or not they meet technical standards for reproduction. Documents which are not timely or do not add to the knowledge base are rejected. In an instance where a document does not meet reproduction criteria, a better copy is requested.

The most important criteria applied to HPR-related materials is the scholarliness of the work. Regardless of the area within HPR with which a document deals, if, in the estimate of the Associate for HPER, the document is of a high standard of quality, it is selected for inclusion in ERIC. The reason for the lack of topic area selectivity is that the data base in HPR is relatively small, and the entire subject area requires expansion.

Less stringent criteria of scholarliness are applied to those documents

in special interest areas poorly represented in the ERIC data base (e.g. Sport History, Sport Psychology, Sport Sociology.)

Document Processing -- Adding HPR Material to the RIE File

Once a document is selected for inclusion in RIE, a document resume is developed. This resume consists of bibliographic information about the document (title, author, source, availability), an abstract of 200 words or less, and index terms which are subsequently used to retrieve documents. Document resumes are transmitted to the ERIC Facility where they are edited for inclusion in a monthly issue of RIE and added to the ERIC computer file. (Figure 1 is a flowchart of document processing.)

In order to measure the volume of HPR-related material in the ERIC file and to measure the level of activity of the Clearinghouse on Teacher Education, the ERIC files were searched by computer using the following descriptors: Athletics, Physical Activities, Physical Education, Womens Athletics, Exercise (Physiology), Physical Development, Psychomotor Skills, Athletic Programs, Recreation, Recreational Activities, Recreational Programs, Recreational Facilities, Health, Health Education, Health Activities, Health Programs, and Health Occupations Education. These terms are considered by the Clearinghouse staff to be the major HPR-related terms in the Thesaurus. It is certain that not all HPR-related materials were retrieved because of the nature of coordinate indexing and the constraints imposed on machine searching by the limitations of the ERIC Thesaurus. However, it is felt that the statistics arrived at in this manner are accurate and will serve to define the ERIC data base in HPR.

In the entire ERIC file, there are 7,111 documents indexed with one of the above HPR-related terms. This represents approximately 3.1 per cent of the entire file.

Table 2 presents statistics concerning the Clearinghouse's level of effort in processing HPR-related materials.

Table 2
Document Processing: Teacher Education vs. HPR

Scope Area	1974		1975*	
	Number of Documents	Percent of all Documents	Number of Documents	Percent of all Documents
Teacher Ed.	1007	84	383	71
HPR	190	16	157	29

*These figures are for the first seven months of CY 75.

It can be seen from Table 2 that the proportion of all documents processed which were HPR-related documents has increased from 1974 to 1975.

Table 3 lists the HPR-related descriptors which were used to determine activity levels in HPR. Included in the table is the number of documents (ED) and journal articles (EJ) indexed with that term.

Table 3

TOTAL HPR DESCRIPTOR POSTINGS

DESCRIPTOR	Number of ED	Number of EJ	Total
Athletics	285	406	691
Physical Education	604	597	1201
Physical Activities	176	161	337
Women's Athletics	31	19	50
Exercise (Physiology)	93	114	207
Physical Development	181	156	337
Psychomotor Skills	294	273	567
Athletic Programs	85	98	183
Recreation	295	206	501
Recreational Activities	247	317	564
Recreational Programs	124	144	268
Recreational Facilities	163	221	384
Health	468	329	797
Health Education	758	749	1507
Health Activities	28	30	58
Health Programs	247	291	538
Health Occupations Education	675	313	988

Table 3 is presented primarily to give an idea of what, generally, is in the ERIC file. If one were to total the right hand column, the sum would be 9,178, when in actuality, there are 7,111 HPR-related documents in the file. The difference is accounted for by the fact that documents were indexed under two or more of the terms listed above.

Of the 7,111 HPR-related documents, 2,547 were indexed with one of the terms related to physical education, 1,285 deal with recreation, and 3,279 are about health.

In order to determine the state of the data base with respect to the priority areas suggested by the HPR consultants, several searches of the ERIC files were conducted. At the time these searches were run, the computer tapes were complete through October 1975. In the area of health education, there was a paucity of literature on the professional preparation of health educators and on patient health education. The search indicated a high frequency of literature on school health.

In the field of physical education, the areas of professional preparation for physical educators and sports studies (history, philosophy, sociology, and psychology) seemed weak.

Literature on the various aspects of recreation was not abundant. The areas of community education, recreation education, and school/community recreation were treated in a very small number of documents.

Current Index to Journals in Education (CIJE)

CIJE is ERIC's journal article index which covers over 700 education journals. Journal coverage in CIJE is of three types: cover-to-cover, selective

and one-shot. Those journals which are totally educational in nature are indexed cover-to-cover. Those journals which are not primarily educational in nature but which often include articles with a direct bearing on the education community are indexed on a selective basis; education articles in such journals are processed for CIJE. One-shot coverage is designed to permit inclusion in CIJE of educational articles from journals not generally considered to be educational in nature.

Since the fields of health education, physical education, and recreation education (HPR) were specifically added to the scope of the Clearinghouse on Teacher Education, efforts have been made to expand the coverage of HPR-related journal articles.

CIJE activity in HPR during 1973 and 1974 was expanded to include the Journal of the American College Health Association. In addition, articles from the American Journal of Occupational Therapy, Journal of Alcohol and Drug Education, Journal of Leisure Research and Parks and Recreation were included on a selective basis.

Since March of 1975, complimentary subscriptions to the following journals have been obtained and articles are being processed on a one-shot basis with the potential for selective coverage: Physical Fitness Newsletter; Athletic Administration; Athletic Journal; Physician and Sportsmedicine; CAHPER Journal; Physical Educator; Gymnasium; Athletic Training; TAHPER Journal; KAHPER Journal; South Carolina JOHPER and Athletic Director.

A list of HPR-related journals which are presently indexed either selectively or cover-to-cover in CIJE appears below. Those which are marked with an asterisk (*) are indexed by the Clearinghouse on Teacher Education.

(S) indicates selective coverage in CIJE, (C) cover-to-cover.

American Journal of Occupational Therapy* (S)
Journal of Alcohol and Drug Education* (S) ({
Journal of Drug Education (S)
Journal of Leisure Research*
Journal of Nutrition Education (S)
Journal of Outdoor Education (C)
Journal of Physical Education and Recreation* (C)
Journal of School Health* (C)
Journal of the American College Health Association* (C)
Parks and Recreation* (S)
Research Quarterly of the AAHPER* (C)
Health Education *

Articles are selected for CIJE indexing in accordance with different criteria than those used for RIE. CIJE is intended to give comprehensive coverage to the journal literature and, therefore, the criteria are whether or not the article is educational in nature, and if so, whether it falls within the scope of the Clearinghouse.

During the first seven months of the 1975-76 (March-September) contract year, 305 HPR-related articles were processed for CIJE by the Clearinghouse. Of these, 197 were from cover-to-cover journals, 44 were selective articles, and 64 were processed on a one-shot basis.

System-wide, 3,053 HPR-related articles were processed for CIJE since its inception.

Summary

The bulk of Clearinghouse effort in HPR is devoted to the Data Base Building function. A great deal of the time of the Associate for HPR is spent on the tasks of acquiring and selecting documents and journal articles for the RIE and CIJE files. Although the data on individual solicitations of documents indicate that they are fewer this year than last year, more conference solicitations, as well as several acquisitions arrangements, have been made.

Activity levels in document and journal article processing have increased since March of 1975.

The final section of this report will compare recommendations of the Clearinghouse's HPR consultants and other expected outcomes with the actual outcomes reported in this section.

SECTION IV
USER SERVICES IN HPR

The objectives of User Services are: a) to make the educational community more aware of the existence of ERIC; b) to train persons to use ERIC; and c) to provide information to persons who request it. These objectives are met in several ways -- through information services, outreach activities, and the Clearinghouse's Special User Services program.

Information Services

The Clearinghouse responds to all information requests received by letter, phone, or in person. Because of limited resources, it is preferred that ERIC users undertake their own information searches. To facilitate this, questions are answered as often as possible with instructions for searching ERIC and suggestions of specific Thesaurus terms which improve the chances of a successful search. In instances where information seekers are unable to undertake their own searches, they can order a computer search (see Special User Services) or they will be provided with copies of appropriate Clearinghouse information analysis products. From March 1st, the beginning of AAHPER's sponsorship, through September 30th, 1975, approximately 7 percent of all information requests processed by the Clearinghouse were HPR-related.

Outreach Activities

Outreach activities are those activities of the Clearinghouse which have the primary objective of informing people about what ERIC is and how to use it. Such activities include presentations and displays at meetings of professional associations, workshops in the use of ERIC, and specially prepared articles for journals and newsletters.

As was mentioned previously, the HPR consultants recommended that the Clearinghouse focus its efforts on the development of the RIE and CIJE files. Clearinghouse staff have consequently refrained from extensive promotion of Clearinghouse services to the HPER communities because it seemed that the weakness of the data base in HPR would disappoint users and discourage them from using ERIC in the future when the data base is stronger. Hopefully, this report will give professionals in the fields of HPR enough of an idea of what materials are in the data base to determine for themselves whether ERIC would be useful for them and how they could participate in improving it.

To date there have been no training workshops specifically for HPER personnel, although the Clearinghouse is preparing to present an ERIC workshop for the College of Health at Howard University, Washington, D.C.

The Clearinghouse has participated in AAHPER's 1975 Annual Convention and the 1975 District Conventions. At the Annual Convention in Atlantic City, Clearinghouse personnel manned a display booth in the exhibit area and responded to questions from convention participants. Because of limited resources, Clearinghouse staff were unable to attend the District Conventions in Ypsilanti, Michigan; Albuquerque, New Mexico; and Shawnee Mission, Kansas. But approximately 1500 Clearinghouse brochures were made available for distribution to meeting participants at these conventions.

One of the most effective ways of reaching professional personnel is through journal articles and newsletter bulletins. This contract year, the Clearinghouse prepared five such articles for HPR-related periodicals.

The articles and the periodicals in which they appeared are:

"ERIC Clearinghouse on Teacher Education," Journal of Physical Education and Recreation, October 1975.

"Building a Data Base for HPR," JOPER, News Section, October 1975.

"ERIC Clearinghouse on Teacher Education," Health Education, September/October 1975.

"Recreation: "A Historical Look," JOPER, December 1975.

"Think ERIC," Update, November 1975.

Special User Services

Special User Services includes two programs: the Clearinghouse's Computer Mediated Bibliographic (COMB) Search Service, and its Special Current Issues Publication (SCIP) Program. These services are discussed individually below.

Computer Mediated Bibliographic Search Service (COMB)

The COMB search service is designed to provide the information seeker with rapid, comprehensive, and efficient access to ERIC literature. (See Appendix F for a descriptive brochure.) For a fee of \$24.00, a user will receive up to 100 citations on his/her topic.

Last year, the Clearinghouse operated the search service from August 5, 1974 until the end of the contract (February 28, 1975). During that period, six computer searches were conducted for HPR-related materials. In contrast, 23 searches for HPR material have been conducted during the 1975-76 contract year. The topics of all HPR searches are listed in Figure 2 below.

Successful computer searching for HPR related material is hampered by the lack of adequate index terms (see discussion in Section III), and by the relatively small number of ERIC citations in the fields of HPR. The problem

of inadequate indexing terminology might be partially solved by the recently acquired capability to compliment descriptor search by searching all resume fields (e.g., title, abstract) for any combination of words and/or characters. However, it is too early to tell whether in fact this new capability will facilitate more successful searching.

Figure 2

TOPICS OF HPR SEARCHES SINCE
August 5, 1974

- | | |
|------|---|
| 1974 | <ul style="list-style-type: none"> Alcoholism (2) Leisure Time and the Handicapped Recreation Models School Health Continuing Education for Health Occupations |
| 1975 | <ul style="list-style-type: none"> Swimming Pools Movement Education (2) Individualized Physical Education Female Motor Reactions Physical Education and Self Concept Biomedical Research and Federal Aid Running and Pulse Rate Federally Supported Medical Research Sex Discrimination Preschool Family Education Recreational Programs Bilateral Transfer Drug Education Scholarships and Women's Athletics Marital Success Changing Role of Father (Male) Athletic Injuries Peer Acceptance of Athletic Ability History of Public Health Movement Exploration Aerobics |

Special Current Issues Publications (SCIPs)

The SCIP Program is designed to disseminate information on "hot topics" in a rapid fashion. Currently, there are two publications in progress which

are related to HPR. The topics of these SCIPs are Death Education and Movement Education. The Death Education SCIP is an expansion of a paper presented by Dr. Loren Bensley at the Midwest District Convention of AAHPER in April 1974. The Movement Education SCIP will consist of a discussion of issues in movement education by an as yet unidentified expert and a bibliography of resources for movement education in the ERIC files.

SECTION V

INFORMATION ANALYSIS IN HPR

Information analysis publications (IAP) are intended to render the data base more manageable to users by analyzing and synthesizing the literature contained in the ERIC files. Experts are commissioned to author information analysis products on aspects of education deemed by the Clearinghouse's Advisory and Policy Council to be current and relevant. While these products may go beyond the ERIC literature, they are intended primarily to synthesize it.

Since health education, physical education, and recreation education (HPR) were added to the scope of the Clearinghouse in March 1973, four information analysis products in that file have been completed. Bibliographic information and abstracts for each of these products appears below.

Title: Preparing Teachers, Students, and Citizens to Deal Constructively with the Problems and Potentialities of Aging.

Author: Sally A. Althoff

ED Number: ED 099310

Date: January 1975

Abstract

This monograph offers information, suggestions, and proposals to teachers, students, and citizens to increase their understanding of the aging process in both its physical and psychosociological aspects. Part I, What is Aging? examines various aspects of aging, some of its major characteristics, and what it is like to grow old in the U. S. today. Part II is concerned with the physical aspects of aging: how the body changes; the aging processes of human cells, human tissue, and organ systems; aging and disease; some theories on why aging takes place; and suggestions on how to deal constructively with aging. Part III examines some psychosociological aspects of aging, with emphasis on ways to encourage continued psychological and social involvement with the rest of the world. Appendixes provide details of resources for additional information. Appendix A describes programs for senior citizens, specifically those provided by ACTION and the Department of Labor. Appendix B lists materials available free from the Administration on Aging. Appendix C gives the locations of all regional and state agencies on aging.

Title: A Selected Annotated Bibliography on Recreation. Part 1
of a Series on Health, Physical Education, and Recreation.

Author: Sally A. Althoff

ED Number: ED 090 142

Date: April 1974

Abstract

This is a selected bibliography of materials on recreation that were announced in the ERIC system. It is divided into two sections: document abstracts and journal citations. All citations are listed alphabetically. The abstract section contains abstracts of documents announced in Research in Education.^{*} The citations in this section include listing of author, title, institution or publisher, publication date, number of pages, ED number, and availability through ERIC Document Reproduction Service. The journal section cites articles announced in Current Index to Journals in Education. The information in these citations includes author, title, periodical, number of pages, publication date, ERIC descriptors, and annotations when appropriate.

Title: A Selected Annotated Bibliography on Physical Education.
Part 2 of a Series on Health, Physical Education, and
Recreation.

Author: Marvin A. Eyler

ED Number: ED 090 143

Date: May 1974

Abstract

This is a selected bibliography of materials on physical education that were announced in the ERIC system. The citations are listed alphabetically by author. It is divided into two sections: ERIC abstracts and journal citations. The first contains abstracts of documents announced in Research in Education since its beginning in 1966; the publication dates of documents go back as far as 1954. Citations include author, title, institution or publisher, publication date, number of pages, ED number, and availability through the ERIC Document Reproduction Service. The second section cites articles announced in Current Index to Journals in Education. The information in these citations includes author, title, periodical, number of pages, publication date, ERIC descriptors, and annotations when appropriate.

*Title changed to Resources in Education in January 1975.

Title: Health Education: Drugs and Alcohol, An Annotated Bibliography*

Author: John Aquino; Lorraine Poliakoff

ED Number: ED 104 841

Date: March 1975

Abstract

This document begins with an article on what drug abuse is and how educators can deal with it. The annotated listing which follows is divided into sections on drug abuse, drug education, alcohol abuse, alcohol education, and venereal disease. Journal articles constitute the majority of the generally post-1971 entries; research studies, books, curriculum manuals, and bibliographies are also included. The reference section of this document was developed by the ERIC Clearinghouse on Teacher Education from a computer search of the ERIC data base. The references are composed of abstracts of ERIC documents as they appear in Research in Education (RIE). Annotations of journal articles have been taken from Current Index to Journals in Education (CIJE).

*This title is a publication of the National Education Association.

The quality and usefulness of the IAP's in the HPR scope has improved from publication to publication. Selected Annotated Bibliography on Recreation and Selected Annotated Bibliography on Physical Education illustrate the inadequacy of the data base in HPR and the lack of direction in the processing of HPR documents. Neither monograph is arranged topically, meaning that someone wishing to use the publication must search through the entire collection to find a citation or citations that might satisfy a particular topic. Another criticism is that a number of the citations are relatively old, five years or more, and may no longer be useful. The most recent IAP, Health Education: Drugs and Alcohol, illustrates some of the progress that has been made since HPR was assigned to the Clearinghouse and HPR professionals started to give guidance to the Clearinghouse's activities. In this product, most of the cita-

tions are very recent (1973 and 1974) and they are broken down by topical headings (e.g., Drug Abuse, Drug Education, Alcoholism, Alcohol Education, Venereal Disease).

When the HPR consultants who convened in July 1974 submitted their recommendations, they suggested that the Clearinghouse refrain from developing any HPR-related information analysis products during 1975-76 contract year, and that the resources of the Clearinghouse devoted to the HPR scope be focused on the acquisition and processing of documents in that field. In keeping with that recommendation, the Clearinghouse has not developed any HPR-related information analysis product this contract year except for the present document. Hopefully, reactions to this document will include suggestions for needed information analysis products in the fields of HPR, if indeed the HPR data base is developed to the point where analysis and synthesis is warranted.

SECTION VI
RECOMMENDATIONS

Recommendation 1: *We recommend that Central ERIC/NIE consider again the establishment of an additional clearinghouse devoted to the information needs of health education, physical education, and recreation education fields.*

The Clearinghouse staff and the Advisory and Policy Council interpret the data reported in the preceding pages as supporting the contention that information services for the fields of health education, physical education, and recreation education can ultimately satisfy the needs for those services only through the establishment of an additional ERIC Clearinghouse devoted to that scope area. Recognizing that the resources required to support such an effort may not be available to ERIC/NIE in the upcoming term, the Clearinghouse presents the following recommendations as measures to be taken to sustain the provision of information services to the HPER community during the near future. Should the resources be available to implement Recommendation 1, the recommendations in this report (with the exception of Recommendation 2) should be taken into consideration as responsibilities for the new clearinghouse.

Recommendation 2: *We recommend that the constructive beginning by the Clearinghouse be maintained. But, in order to prevent erosion of an adequate effort in teacher education, the size of the effort in HPR should be limited to not more than one-fifth of the total resources of the Clearinghouse.*

Recommendation 2 is offered to guide resource allocation in the ERIC Clearinghouse on Teacher Education during the remainder of its contract term. Additional recommendations are presented separately for each of the three primary functions of the Clearinghouse.

Function I: Data Base Building

It was in this area that the consultant team recommended that the Clearinghouse concentrate its efforts; the Clearinghouse Advisory and Policy Council was in agreement with this recommendation. The fact that this report focuses primarily on the Data Base Building function reflects the seriousness with which the Clearinghouse treated the recommendation and the emphasis that was placed on document processing in HPR.

With regard to the acquisition of documents, steady progress has been made. Individual solicitations are fewer, but requests for conference papers are steadily increasing. Through the efforts of the Associate for HPR, several standing acquisitions agreements have been established, and several new journals have been considered for Current Index to Journals in Education.

In the area of document selection, major improvement has been made as a result of the employment of an Associate for HPR. The appointment of the Associate brings much greater administrative control and quality control to the task of document selection in HPR.

The data presented in Table 2, page 23 show that the percentage of all documents processed by the Clearinghouse that are HPR-related rose 134 percent during 1975. Presently, approximately 30 percent of all documents processed by the Clearinghouse deal with health education, or physical education, or recreation education. While more HPR-related documents are being processed now than in previous years, it is not clear whether there are enough being processed in relation to needs in these fields.

Areas within the fields of HPR which seem to be inadequately covered by the literature in the ERIC files are discussed in Section III. They include community education, recreation, and school community recreation. In the area of health education, the professional preparation of health educators and patient health education are weakly documented. Also, the professional preparation of

physical educators and sports studies (sport history, sport psychology, sport philosophy, and sport sociology) are inadequately treated in terms of number of documents in the data base.

The ERIC Thesaurus was discussed in Section III. The major point of that discussion was that the inadequacies of Thesaurus terminology in HPR have a direct effect on the document processing and information services of the Clearinghouse. Ten new terms have been submitted as descriptor candidates. While these are more than were submitted the previous year, the Thesaurus will require additional attention to update and improve HPR terminology.

Given their conclusions, the Clearinghouse believes that two important efforts must be undertaken to improve the data base in HPR. The first effort has to do with the ERIC Thesaurus and the second deals with areas in HPR which are inadequately covered.

Recommendation 3: *A project to improve the ERIC Thesaurus in the fields of health education, physical education, and recreation education should be undertaken jointly with Central ERIC.*

The Clearinghouse on Teacher Education would study the use of HPR terminology and "jargon" especially as it concerns the processes of entering documents into the file and retrieving information from it. Central ERIC would commission a lexicographic analysis of HPR terminology in the Thesaurus and in these fields. Recommendations for the improvement of HPR-related terminology in the Thesaurus would be made jointly by the lexicographer at the ERIC Facility and by the Clearinghouse.

Recommendation 4: *We recommend that emphasis should be placed on acquisition of documents in those priority areas within the fields of health education, physical education, and recreation education which are most inadequately covered by the literature in the data base.*

Function II: User Services

The planning inputs received by the Clearinghouse for its activities in 1975-76 contract year recommended that, in the area of User Services, the Clearinghouse simply do its best to respond to HPR-related questions. Advisors to the Clearinghouse felt that extensive promotion of ERIC services to the HPER community was unwarranted because the data base in HPR was not extensive. Nevertheless, the Clearinghouse has engaged in some promotional activities, in which the ERIC data base in HPR has been characterized as growing but in need of input from HPR professionals.

Seven percent of all questions processed by the Clearinghouse this year have been HPR-related. This will amount to approximately 300 information requests for the 1975-76 contract year.

Five journal articles have been designed to inform members of the HPER community of the existence of ERIC, the services it can provide them, and contributions that they can make to its growth and useability.

Clearinghouse staff members attended the 1975 AAHPER convention. Brochures were distributed at the District AAHPER conventions. In addition, the Associate for HPR has met with key leaders in the AAHPER and its affiliated organizations to inform them about ERIC and its progress with regard to HPR.

As part of its Special User Services program, the Clearinghouse is developing information products in the areas of death education and movement education. These products will reach at least 2000 members of the HPER community.

Potential users of ERIC in the HPER community need to be made aware of ERIC and its resources. The best way to do this is by personal contact during the professional meetings of HPR-related organizations. The Clearinghouse should

do this to the very limited degree that resources will allow.

Recommendation 5: *We recommend that, if resources can be found, a tape/slide or video tape display should be developed especially for the HPER community. AAHPER district leaders could help in presenting such a display at their respective district conventions.*

Function III: Information Analysis Publications

The present report is an example of an information analysis publication in HPR. It is the only one produced by the Clearinghouse this year, and is intended primarily as a planning document. It will also be useful to key persons in the fields of HPR who depend on timely, relevant information.

Two additional types of information analysis products in the HPR scope are recommended as next steps:

Recommendation 6: *The Clearinghouse staff should develop a directory of sources of information in the HPR fields.*

This directory would be a detailed listing of the organizations which disseminate HPR-related information, their location, extent and cost of services, and contact person.

Recommendation 7: *The Clearinghouse should develop a series of bibliographies in the priority areas determined by the consultant team.*

The Clearinghouse staff would develop and disseminate a series of eight to ten bibliographies which would cover all the areas within the HPR fields designated by the HPR consultants as priority areas.

In summary, seven recommendations have been made regarding Clearinghouse activities for the 1976-77 contract year. Implementation of some of these recommendations will require careful use of resources, if not additional resources.

In the opinion of the Council, the Data Base Building function of the Clearinghouse should continue to be the focus of activity in HPR, but Thesaurus improvement, the directory of information sources, and the bibliography series should be effected to the degree that resources allow.

APPENDIX A

ERIC CLEARINGHOUSES LISTED ALPHABETICALLY BY CODE LETTER

CE ERIC Clearinghouse in CAREER EDUCATION

Northern Illinois University
204 Gabel Hall
DeKalb, Illinois 60115

Telephone Number: (815) 753-1251
FTS Number: None

CG ERIC Clearinghouse on COUNSELING AND PERSONNEL SERVICES

University of Michigan
2108 School of Education Building
Ann Arbor, Michigan, 48104

Telephone Number: (313) 764-9492
FTS Number: (313) 769-7100 (Ext. 645)

CS ERIC Clearinghouse on READING AND COMMUNICATION SKILLS

URBANA, ILLINOIS LOCATION

National Council of Teachers of English
1111 Kenyon Road
Urbana, Illinois 61801

Telephone Number: (217) 328-3870
FTS Number: (217) 356-1113

NEW YORK, NEW YORK LOCATION

Speech Communication Association
Statler Hilton Hotel
New York, New York 10011

Telephone Number: (212) 736-6625
FTS Number: (212) 971-5362

EA ERIC Clearinghouse on EDUCATIONAL MANAGEMENT

University of Oregon
Eugene, Oregon 97403

Telephone Number: (503) 686-5043
FTS Number: (503) 687-6456

EC ERIC Clearinghouse on HANDICAPPED AND GIFTED CHILDREN
Council for Exceptional Children
1920 Association Drive
Reston, Virginia 22091

Telephone Number: (703) 620-3660
FTS Number: None

FL ERIC Clearinghouse on LANGUAGES AND LINGUISTICS
Center for Applied Linguistics
1611 North Kent Street
Arlington, Virginia 22209

Telephone Number: (703) 528-4312
FTS Number: None

HE ERIC Clearinghouse on HIGHER EDUCATION
George Washington University
One Dupont Circle, Suite 630
Washington, D. C. 20036

Telephone Number: (202) 296-2597
FTS Number: (202) 632-2612

IR ERIC Clearinghouse on INFORMATION RESOURCES
Stanford University
School of Education
Center for Research and Development in Teaching
Stanford, California 94305

Telephone Number: (415) 497-3345
FTS Number: (408) 275-7481

JC ERIC Clearinghouse for JUNIOR COLLEGES
University of California
96 Powell Library Building
Los Angeles, California 90024

Telephone Number: (213) 825-3931
FTS Number: (213) 824-7660

PS ERIC Clearinghouse on EARLY CHILDHOOD EDUCATION
University of Illinois
College of Education
805 West Pennsylvania Avenue
Urbana, Illinois 61801

Telephone Number: (217) 333-1386
FTS Number: (217) 356-1112

RC ERIC Clearinghouse on RURAL EDUCATION AND SMALL SCHOOLS
New Mexico State University
Box 3 AP
Las Cruces, New Mexico 88003

Telephone Number: (505) 646-2623
FTS Number: (505) 572-0252

SE ERIC Clearinghouse for SCIENCE, MATHEMATICS, AND ENVIRONMENTAL EDUCATION

Ohio State University
1800 Cannon Drive
400 Lincoln Tower
Columbus, Ohio 43210

Telephone Number: (614) 422-6717
FTS Number: (614) 486-8040

SO ERIC Clearinghouse for SOCIAL STUDIES/SOCIAL SCIENCE EDUCATION
855 Broadway
Boulder, Colorado 80302

Telephone Number: (303) 492-8434
FTS Number: (303) 499-3308

SP ERIC Clearinghouse on TEACHER EDUCATION
American Association of Colleges for Teacher Education
One Dupont Circle, N. W., Suite 616
Washington, D. C. 20036

Telephone Number: (202) 293-7280
FTS Number: (202) 632-2785

TM ERIC Clearinghouse on TESTS, MEASUREMENT, AND EVALUATION
Educational Testing Service
Princeton, New Jersey 08540

Telephone Number: (609) 921-9000, Ext. 2182
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November 14, 1975

*This supercedes all previous lists

Appendix C

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Chairman, Social Studies Department
Lathrop High School
Coordinator, Secondary Social Studies
Program
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Physical Education Department
Director, Human Energy Research Labora
Michigan State University
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APPENDIX D

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Dr. John C. Burt
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Dr. H. Douglas Sessoms
Curriculum in Recreation Administration
University of North Carolina
Chapel Hill, North Carolina

ERIC DESCRIPTOR JUSTIFICATION AND DATA INPUT FORM

D. Authorities Used

ED 095103 Fundamental Field Hockey, Physical Education: 5551.21.

ED 093813 Field Hockey-Lacrosse Guide. June 1974-June 1976.

E. Definition of Term

Field hockey is played by two teams of eleven players each. Only the goalkeeper is permitted certain kicking privileges. All other players may use only the stick to play the ball. The hockey field is about the size of a football field (100 yards by 60 yards) with a goal at opposite ends. Goalposts are 4 yards apart and 7 feet high joined by a crossbar. The goal is enclosed by a net or wire screen, supported by two additional posts 4 to 6 feet behind the goal. The object of the game is for the attacking players to hit the ball past the opposing defending players and into the goal for one point.

ERIC DESCRIPTOR JUSTIFICATION AND DATA INPUT FORM

D. Authorities Used

ED 098150 An Epidemiologic Study of High School Football Injuries in North Carolina - 1968-1972. Final Report

ED 093828 What Research Tells the Coach About Football.

E. Definition of Term

American football is played by two teams of eleven players each. The football field is 360 feet by 160 feet with goal posts at opposite ends. The goal posts are 18 feet 6 inches apart and 20 feet high joined by a cross bar 10 feet above the ground. The team with the ball attempts to advance the ball by running or passing. The object is to cross the opponents goal line for a touchdown. A team in possession of the ball is allowed four downs to advance the ball 10 yards. When a team achieves this distance, it receives four additional downs. If the team in possession fails to make the distance in four downs, it loses possession of the ball to its opponents.

ERIC DESCRIPTOR JUSTIFICATION AND DATA INPUT FORM

D. Authorities Used

EJ 079311 Volleyball Guide With Official Rules. July 1971-July 1973.

EJ 002990 Teaching Volleyball Fundamentals.

E. Definition of Term

Volleyball is played on a rectangular court 60 feet long by 30 feet wide, divided by a tightly stretched net 3 feet wide, the top of which is 8 feet above the floor for men and 7 feet $4\frac{1}{4}$ inches above the floor for women. An inflated ball is used, which is approximately 26 inches in circumference and weighs approximately 9 ounces. The object of the game is to hit the ball back and forth across the net, preventing it from touching the ground within the team's own court. Two teams of six players each are involved.

ERIC DESCRIPTOR JUSTIFICATION AND DATA INPUT FORM

D. Authorities Used

ED 099339 Track and Field Fundamentals for Girls and Women.

ED 099337 Track and Field for Young Champions.

E. Definition of Term

Track and field consists of four different types of events: running, jumping, vaulting, and weight throwing. Track events in a modern track and field meet now include sprinting, middle-distance running, distance running, hurdling, and relays. Field events include the running long jump, high jump, pole vault, triple jump, shot put, discus throw, javelin throw and hammer throw.

ERIC DESCRIPTOR JUSTIFICATION AND DATA INPUT FORM

D. Authorities Used

EJ 081786 The Sprint to Lifetime Sports.

EJ 081210 The Anatomy of the Body Shop.

E. Definition of Term

Lifetime sports are those sports where participation can be carried over into adult life after the boy or girl leaves the educational institution. Since most adults do not have opportunities to participate in team sports because there are neither facilities available to them nor enough other adults who would like and are able or free to play at the same time, individual and dual sports such as golf, tennis, bowling, badminton, swimming, squash, handball, etc. are referred to as lifetime sports.

ERIC DESCRIPTOR JUSTIFICATION AND DATA INPUT FORM

D. Authorities Used

EJ 010867 Effects of Soccer Training and Detraining Upon Selected Cardiac and Metabolic Measures.

ED 079291 Selected Soccer and Speedball Articles.

E. Definition of Term

In soccer a team of 11 players seeks to advance a round, inflated ball (with a circumference of not more than 28 inches) toward and between an opponent's goalposts and under its crossbar by dribbling, kicking, striking, or pushing the ball with any part of the body except the arms and hands. Each team has a goalkeeper who can use his or her hands to attempt to stop the ball. The game is played on a rectangular field (for men, not more than 360 feet nor less than 300 feet in length and not more than 225 feet nor less than 165 feet in width; for women, the field length ranges from 240 to 300 feet and the width from 120 to 180 feet.) The goalposts at each end of the field are 8 feet high and 8 yards apart for men and 6 yards apart for women, with goal nets attached to the rear.

ERIC DESCRIPTOR JUSTIFICATION AND DATA INPUT FORM

D. Authorities Used

ED 095112 Fast Pitch Softball, Physical Education: 5551.10.

ED 093815 Softball Guide with Official Rules. January 1972-January 1974.

E. Definition of Term

Softball is a game between two teams of nine players each. The field of play is a large area with a diamond near one end. The diamond, which is actually a square, is formed by four bases 60 feet apart. The object of each team is to score more runs than the opponents. A game is divided into seven innings, and in each inning both teams are alternately on defense (in the field) and offense (at bat) until each team has made three outs at bat. The ball used in softball is a leather-covered sphere, measuring no less than $11\frac{7}{8}$ inches and no more than $12\frac{1}{8}$ inches in circumference and weighing from $6\frac{1}{4}$ to 7 ounces.



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APPENDIX F

CLEARINGHOUSE ON TEACHER EDUCATION

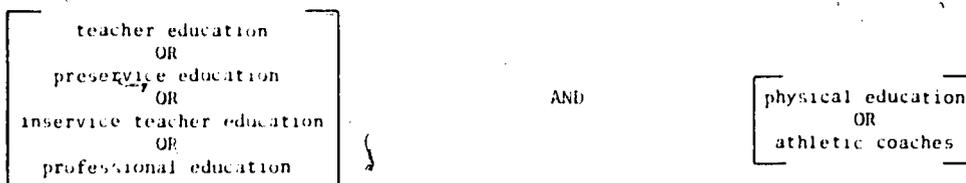
ONE DUPONT CIRCLE SUITE 616 WASHINGTON, D.C. NORTHWEST 20036 202/293-7280

COMPUTER MEDIATED BIBLIOGRAPHIC SEARCH (COMBS)

Whether you are a teacher, administrator, researcher, or student, you can get helpful information about current educational research and practice through a computer search of RESOURCES IN EDUCATION and CURRENT INDEX TO JOURNALS IN EDUCATION. The computer is capable of retrieving, in a highly efficient manner, information about documents and journal articles which meet your requirements as specified through combinations of ERIC descriptors. A user services specialist at the Clearinghouse will translate your question into ERIC descriptors, and run your search. The search results, consisting of document and journal citations which include bibliographic information and abstracts or annotations, will be in your hands within ten days of your order.

HOW DOES COMPUTER SEARCHING WORK?

Computer searching utilizes computer technology to search through the ERIC data base with subject terms from the THESAURUS OF ERIC DESCRIPTORS. For example, if you request a computer search on "the preparation of physical education teachers," the following combination of ERIC descriptors might be used.



The user services specialist first commands the computer to retrieve any document indexed with any of the four terms from the left hand column. S/he then commands all documents indexed with either of the terms from the right hand column to be retrieved. Subsequently, the computer is instructed to compare the two sets of documents, and to identify those documents which fall in both sets, i.e., the computer identifies those documents which are indexed with at least one term from each of the columns. The use of OR expands the search, while the use of AND focuses the search. Searches may also be focused by the use of AND NOT and by the use of major descriptors (indicated with an *), which indicate that the document has that subject as a primary topic. Unless the asterisk is specifically placed in the search command, the results will include documents and journal articles indexed with both major and minor descriptors.

An example of one document resume and one journal citation resulting from the above search are:

ED098214 SP008574
 CASE STUDY: FOCUS ON PERSONAL/PROFESSIONAL PREPARATION IN PHYSICAL EDUCATION.
 University of South Florida, Tampa. Coll. of Education.
 Pub Date 74 Note-33p.; A description of the undergraduate Professional Physical Education Program, College of Education, University of South Florida, Tampa, Florida
 EDRS Price MF-\$0.75 HC-\$1.05 PLUS POSTAGE
 Descriptors-Elementary Grades/ Field Experience Programs/ Kinetics/ *Physical Education/ Program Evaluation/ Secondary Grades/ *Student Evaluation/ *Teacher Education/ *Teaching Experience
 Identifiers-*Distinguished Achievement Awards Entry
 This paper describes a program featuring integrated course sequences and continuous teaching experience that prepares teachers who can create a variety of learning environments that provide meaningful movement experiences for grades K-12. The 2-year program sequence includes the following elements: (a) selective admissions and retention procedure, (b) individual assessment, (c) seminar and field experience/internship, and (d) human kinetics theory and application. Close communication of program elements is assured by team teaching and open communication between faculty and students. Immediate application of theory is possible in the concurrent field experience, and frequent evaluation by all involved provides feedback for continuing refinement of the program. (Author)

EJ058773 RC500930
 WHAT SHOULD HIGHER EDUCATION BE LIKE FOR THE PHYSICAL EDUCATOR?
 Gutin, Bernard, and Others Journal of Health, Physical Education and Recreation; 43; 5; 66-72 May 72
 Descriptors-*Curriculum Development/ *Graduate Study/ *Physical Education/ *Teacher Education/ *Teaching Experience
 Five different answers from 5 viewpoints on possible future directions for college and university personnel in terms of such topics as training quality researchers, graduate education, needed revisions in professional-preparation curriculums, and teaching experience. (NQ)

WHAT WILL A COMPUTER SEARCH COST?

The fee for a computer search from the ERIC Clearinghouse on Teacher Education is \$24.00 for up to the first 100 resumes, and \$0.15 for each additional resume. It is necessary to charge this fee in order to maintain this valuable service to our clients on a continuing basis. If you know in advance that you want no more than 100 resumes, payment in advance will facilitate processing.

HOW CAN A SEARCH BE ORDERED?

Just fill out the form on the reverse side of this page and return it to the Clearinghouse. If you have any questions about manual or computer searching, call the user services specialist, ERIC Clearinghouse on Teacher Education, (202) 293-7280.





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20036
202/293-7280

REQUEST FOR A COMPUTER SEARCH

The cost for a computer search from the ERIC Clearinghouse on Teacher Education is \$24.00 for searches drawing up to 100 abstract citations of documents as they appeared in *Resources in Education (RIE)* and *Current Index to Journals in Education (CIJE)* and \$0.15 for each additional citation. A copy of a print-out will be mailed to you, and you will be billed.

TOPIC: (Please describe your topic in some detail. ERIC descriptors will be developed by a Clearinghouse staff member for your computer search. If you have access to the *ERIC Thesaurus*, which lists acceptable ERIC descriptors, this may assist you in describing your search; but only a narrative is necessary.)

(Attach additional sheet if more space is required.)

CHECK ONE:

- Send me up to 100 abstracts on this topic for \$24.00.
- In addition to the above, send me ___ additional citations at \$0.15 each.
- Send me as many abstracts as the search draws (hang the cost).

CHECK ONE:

- Search both RIE and CIJE
- Search only RIE
- Search only CIJE

CHECK ONE:

- Search with major and minor descriptors
- Search with major descriptors only

FOR ADDITIONAL INFORMATION, call User Services, ERIC Clearinghouse on Teacher Education, (202) 293-7280.

Date _____ Signature _____

Your name and title _____

Your phone _____

Address where search is to be sent _____

Billing address (if different from above) _____