Chapter II

REVIEW OF RELATED LITERATURE

Downing\(^1\) conducted a study on parents' and teachers' opinions of the critical factors essential for Mainstreamed physical education programme for physically exceptional students at the elementary level to investigate and to develop an appropriate physical education programme for such students in the Monmouth Country, New Jersey Elementary Schools. Seventy five parents and 101 teachers responded to the opinionnaires. Analysis of variance was performed on each opinion in the opinionnaire, and means and ranking for each individual item were determined. The results of the analysis showed that all of the opinions of parents and teachers were significantly different except for the opinion concerning the students size.

Cramer\(^2\) studied the status of scuba diving as a physical education activity to determine the structure and status of scuba diving as physical education offering in higher education. In the many universities returned questionnaire indicated that a specific

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course outline was used by four universities, no outline was shown by two, and one respondent failed to answer the questionnaire and the survey indicates that scuba diving is not only being taught with considerable success on the college level but that is an extremely popular course.

Hodges\(^3\) showed in his survey the study status and structure in physical education in public two year colleges of the Midwest to investigate the current status and organisational structure of physical education in public two year colleges of the Mid West United States. The physical education in the public two year college in the Mid West - United State is obviously considered a integral part of the total college curriculum. Not merely is the present situation encouraging but future expectation appears equally encouraging.

Reed\(^4\) conducted a study of corporate fitness programmes fortunes 500 companies; a description of programme goals and measures used to evaluate programme effectiveness to identify the types of measures used to evaluate fitness programmes offered


\(^4\)David Jeffry Reed, "A Study of Corporate Fitness Programme, for Tunes 500 Companies : A Description of Programme Goals and Measures used to Evaluate Programme Effectiveness," *Dissertation Abstracts International* 47 (December 1986): 7079-A.
by the fortune 500 companies and to determine the effectiveness of these measures as perceived by fitness Directors of this programme besides the secondary purpose to describe characteristics of the fitness programmes directors. Data analysis revealed that no significant relationship was found to exist between programme type and selective evaluation programmes.

Dailey\(^5\) studied a legal analysis of appellate tort negligence cases in public school physical education K-2 from 1963-1983 to describe the importance of court level and certain key factors on the judgements and settlements of negligence cases in physical education. This case low study of fort liability pertains to only those negligence cases involving public school education kindergarten through 12th grade in the United States from January 1, 1963 to December 31, 1983. The analysis showed the adequate safety instructions must be given. The correct performance of a skill must be demonstrated or made clear, and the progression children use in learning a skill or activity must be prodent. Improper inadequate or lack of supervision are not defined well by the courts.

Marry\textsuperscript{6} conducted a study promoting physical activity in the United States: challenges to physical education to find out the status of involvement and to suggest strategies for encouraging adults to increase their physical activity. National and Regional data were studied from several perspectives i.e. geographically, demographically with respect to life style and from a leisure point of view. The findings showed: a) although 33.5 per cent of the adult population undertook a physical fitness programme in 1982, less than 5 per cent swam, weight lifting, jogged in each activity at least once in a week, b) less than 35 per cent of individuals owning jogging shoes, lifting equipment or bicycles used their equipment regularly, c) between 1982–1983 the 35 to 40 years age category increase ownership of jogging shoes and jogging participation, d) life style influences both the types and the amount of physical activity undertaken, e) inactive individuals are undirected in their leisure and show little interest in physical activity, f) psychological factors are ultimately related to type of physical activity undertaken, g) calls attention to "individual faults" to the exclusion of "system fault" as the blame for an inactive society.

Fredl and Bevan\textsuperscript{7}\textsuperscript{8} conducted a survey of daily physical education in Canada and the data analysis led to this conclusion that daily programmes are received with enthusiastically favourable comments from the majority of children, teachers, administrators and parents involved.

Schmetty and Sandra\textsuperscript{8} conducted the study of the physical fitness programme development project to enhance the awareness, a competence of teachers in the area of physical fitness, facilitate the development of effective programme components in the existing physical education curriculum, increase the students knowledge of fitness concepts, fitness levels, and attitudes and motivation towards physical fitness. The respondents participated in fine workshops over a 15 months period. Each teacher initiated a series of programme development segments through the study. These segments were developed in part at periodic workshops and outlined the methods by which the teacher expected to successfully complete the project goals. In addition to the segment


\textsuperscript{8}Hill Schmetty and Rose Sandra, "The Study of the Physical Fitness Programme Development Project," Dissertation Abstracts International 47 (December 1986): 2079-A.
implementations, each teacher administered a cardio-respiratory test prior to the first segment and again following the last segment.

Klostreich\(^9\) surveyed on predicting future trends in physical education curriculum at the under gradauate level: Delphi study to predict future trends in physical education curriculum at the under graduate level using the Delphi study (seen). The techniques employ a pannel of experts individuals recognised as leaders in the field under study with opinion anonymity and control feedback. A panel of 50 experts was asked to participate in competing series of these questionnaires with a return rate of 74 per cent. The result was a list of 34 trends with a high probability of occurrence with trend, durability and estimated time period for occurrence. This prediction can be used by college physical education administrators and curriculum specialist to plan future curriculum at the under-graduate level.

Douglas\(^10\) surveyed physical education in two year colleges to ascertain the development of physical education to date in


two year colleges. The author feels that percentage of colleges with service programmes and the high percentage giving academic credit and counting the quality points in the G.P.A. warrant the conclusion that the majority of two year colleges replying to this survey to consider physical education an integral part of the college curriculum.

Daune\(^{11}\) studied the organisational structure of college programme in HPER to identify current practice and to search for supportive information to use in their proposal for school status. The survey indicated that HPER programmes should be grouped as a school or unit separate from other disciplines and operated as an autonomous academic body under a Dean of Institution or Dean of the College. In only 24 per cent of the Institutions surveyed was this case. Many of the positive replies to this question are incorporated in a preliminary proposal for school status submitted to the administration by the department of HPER at webber state college.

Thompson\(^{12}\) conducted a survey of the personal technical


and educational physical fitness values of selected North Carolina Physical Education to provide information concerning some physical Fitness/exercise habits current technical knowledge and extent of teaching physical fitness principles of secondary school physical education in the North Carolina Public School system and the possible effects of their trials on the students they teach. The overall findings indicated that the majority of physical educators exercised regularly even though some did not do so long enough or intensely enough to receive physiological benefits, weight training for personal fitness or for the students edification appeared to have low priority as a phase of total body fitness. Physical educators had a higher preponderance of body fats and lower muenlarity based on their own evaluations, students' evaluations and published body fat referenced life nature. More male than female physical educators received better retaings from students as physical fitness practitioners, educators and indoctrinators. The quality and quantity of physical fitness testing were suspected. The principles of warming up, stretching and cooldown were well established and well executed by the educators. The physical educators were lacking in personal and students education exercise monitoring. The current technical knowledge of physical educators concerning physical fitness terminology, weight control, diet and body measurements was inadequate. Overall, the total physical fitness education of students in North Carolina Public Secondary
school as reported by the students seemed to be suspect.

Butts\textsuperscript{13} surveyed physical education in the public elementary school in Texas. The purpose of this study was to determine the status of physical education in public elementary school in Texas during the 1983-84 school year. Two hundred and two representatives of sampled schools (76.8 per cent of 263 schools) responded to a written survey. The data indicated that the majority of the surveyed school were in compliance with state mandated daily physical education at every grade level (k-6). The percentage of complying schools increased progressively from 73.07 for kindergarten to 83.2 per cent at the 6th grade level. The median number of days physical education was offered increased from 4 at the kindergarten level to 4-3 for the first grade and to 5 for the remaining grades. The median number of minutes physical education was offered at grades K-6 steadily increased from 25 to 45 minutes. The information indicated that certified physical education teachers taught 50 per cent of the class room at the kindergarten level, at all other levels they taught the majority of class room reaching 887, at the 6th grade level. The respondent indicated

that 50 per cent of the schools utilized a non-specified combination of guides to develop physical education programme content. The set of state guides was the single most frequently listed guide in programme development. The respondents listed building and ground limitations and financial restrictions, 27.2 per cent and 24.8 per cent respectively as primary deterrents to the improvement of physical education programmes.

Lynn\textsuperscript{14} surveyed physical education in Asia and Pacific Island to determine what types of physical education programmes exist in selected Asian and Pacific Island countries. One hundred and ninety students were interviewed representing the following 18 countries; Australia, Burma, Cambodia, Ceylon, Fiji, Iland, Hon-kong, India, Indomesia, Japan, Korea, Malaya, New Zeland, Okinava, Pakistan, Philippine Island, Republic of China, Thailand, Tonga.

The survey led to the conclusion that the physical education is a social matter and that (a) Adults needed more opportunity for exercise and learning sports skills.

b) additional attention should be given to the less skilled groups.

c) the programme should reach the poor areas as well as the more privileged, and

d) better nutrition is needed to give strength for participation in physical exercise. There are some major problems mentioned by the majority of the students indicated a need for additional and better informed teachers - teachers who are able to teach for leisure life time sports. Every country reported a need for more equipments and facilities. Many more financial support for physical education, more comprehensive policies and plans for school programmes, park and play areas for free participation, educating parents to allow children to participate without fear of injuries and improving living conditions so that children and adults have sufficient strength, endurance and desire for sports.

Joseph\textsuperscript{15} evaluated under-graduat professional preparation in physical education in Canada to probe the adequacy of various

phases of Canadian under-graduate professional preparation programmes in physical education. Other purposes were to compare the judgement of local physical education faculty members with those made by the investigator on size visits to four prairie provinces universities and to compare the judgements of selected group of physical education faculty. Means and percentage were used and analyses were made on the basis of percent attainment of the possible score.

Conclusions of the study were:

1. The programme is reasonably adequate according to the criteria of this study.

2. The area of the students, personal programme library reference materials, organisation and administration were yet to be developed.

3. The areas of faculty philosophy, objectives and curriculum in the programme are satisfactory.

4. Physical education faculty members were judged to have quite outstanding qualifications and were recognized as an integral part of the universal community.

5. The general faculty members holding advance degrees senior ranks and administrative positions and those with the greatest amount of teaching experience expressed more satisfaction
with their programmes than did other faculty groups.

6. The under-graduate professional preparation programmes in the prairie provinces university were a good quality.

Edward\textsuperscript{16} conducted a survey on physical education (Elementary Section) in greater Victoria schools to investigate the physical education curriculum facilities and the personnel in the Districts' schools. At the elementary school level (1-7) 326 primary and inter-mediate teachers of physical education and 29 administrators completed the survey questionnaires. The analysis led to this conclusion that Victoria is community oriented to an athletic, competitive concept of physical education. This attitude is best reflected in the elected school boards failure over the years of demand a quality physical education programme. Victoria's teachers and administrators are highly qualified professional educators. However, the superficial physical education teacher training preparation of the "Generalist" coupled with the competitive games background common to many teachers, influence both the content and the quality of the elementary physical education programme. Facilities are poor but the programme can be improved

\textsuperscript{16}Fougner Edward, "A Summary of a Physical Education Survey (Elementary Section) Conducted in Greater Victoria Schools," Canadian Association for Health Physical Education and Recreation 39 (November - December 1972) : 45.
using existing school and community facilities.

Joseph and Oxendine\(^{17}\) studied the status of general instruction in four year colleges and universities to investigate the status of physical education programme. Of the responding institutions, 74 per cent require physical education for all students. An additional 8 per cent have a requirement for students in certain schools or departments. During the past four years there has been a \(10 - 15\) per cent decrease in the number of institutions requiring physical education. Curricular changes have occurred within the past two years. Majority of the institutions have got physical education for a period of two years. However, a slight shift toward one year physical education is noticed. It is also noticed that one fourth of the students elect to take the physical education, on the other hand it is also seen that this number increases after the first year. Greater flexibility in physical education programmes today allows more faculty and student option regarding independent study, competency examinations the grading system and general class routine. There is an increasing tendency for physical education course to receive academic credit and to count in the grade point average. Recreational type of activities are more prevalent while team activities show a decrease.

Co-educational courses continue to grow to the extent that the majority of the physical education courses are now co-educational.

William\textsuperscript{18} surveyed physical education in the junior school: A study of the teachers' involvement to find out biographical details, preparation for current involvement in the teaching of physical education, and the value of the subject in the junior school. A questionnaire was administered to 300 junior school teachers from one authority, followed by interview with a subsample which focuses on those teaching older juniors. Results indicate that significant members of staff involved in the teaching of physical education have reservations about their adequacy in this area and that many of these are experiencing satisfaction with their training do so because of either a low priority given to the subject or because of ignorance of the possibilities offered by physical education while many would be irrespective to further guidance. Results suggest that this is if not given during initial training, it is unlikely to be sought of a later date. While it is not possible to measure the bias present in the sample, respondents almost certainly have an interest in the subject which an

average of it. The problems which they raised are thus likely to increase rather than diminish among the profession as a whole.

Beran\textsuperscript{19} conducted a study to determine the carry over the value of the physical education programme for women at Silimen University.

The results led to the conclusion that:

1. The number of the students in the class be limited.

2. The students should be given choice for selection of curriculum and also adequate time be given to learn each specific activity.

3. The students enrolled in the teacher education courses be grouped separately so that they can be taught a special course prepared for respective teachers.

4. Enough time should be allotted for swimming in the curriculum and that is given in one block of time rather than scattered through out three semesters.

5. The use of syllabus for text book would result in more effective teaching.

\textsuperscript{19} Janne Beran, "Study to Determine the Carry Over Value of the Physical Education Programme for Women at Siliman University," \textit{Dissertation Abstracts International} 33 (January 1972): 3479-A.
6. The physical education faculty should re-examine its objectives and attempt to ascertain to what extent the present objectives are being attained.

Ruth20 surveyed a revised physical education curriculum for the public schools to revise the physical education curriculum for the Talso Public Schools in providing a progressive, sequential physical education programme for Grades K-12. The questionnaire was mailed to all 156 Physical Education Instructors in the Talsa Public Schools to see if a revision of the existing curriculum was needed. The researcher tabulated the results of the survey and converted the results to percentages. In determining the need for the revision of the physical education curriculum, the researcher used the review of the literature and the results of the physical education teachers' responses to the survey. The researchers was concerned with questions that scored 70 per cent or less and concerned those areas that needed to be strengthen and if possible reviews 72 per cent of the survey which was completed and the returned result of the survey indicated that revisions needed to be made in one category including in the

survey. Utilizing a thorough investigation of Books, Articles, Curriculum Guides and responses from the teachers' surveyed, the researcher led a committee in the revision of the physical education curriculum to provide a progressive, sequential program grades K - 12 the physical education for the Tulsa Public Schools.

Brosnow 21 conducted survey study of 48 Secondary Boarding schools considering their physical education programme. These are represented in the questionnaire where that of professional preparation of personnel, administration facilities and activities within the programme. After summing up the replies to the questionnaire a number of valuable recommendations were made.

Neson 22 made a survey study using a stratified random sample of 100 senior white public high schools of Louisiana. The survey covered personnel, required classes, intramural sports, inter-scholastic athletics, health education, facilities and equipments financial support and community resources. The study revealed


the actual pattern in which physical education programme was carried on.

Surveys are also done to compare existing programme with acceptable criteria or tentative standards as a basis for revision and also to find out the extent of implementation of the state requirement in the given area of study.

Verkey\textsuperscript{23} made study of physical education curriculum for higher secondary schools in Mysore. As a result of the study arrangements were presented for the compulsory inclusion of physical education in the school curricula, standard for play area, equipment, leadership, fitness tests as an end to planning and evaluatory were developed. A curriculum for students X, XI, XII, was planned as a guide for the physical education teacher.

Elizabeth\textsuperscript{24} in her study, through a random sampling questionnaire were mailed to 231 dept of physical education chairpersons in Florida Public Schools, 98 of which wereremailed (42.2%)

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x 51%, frequencies and distribution were calculated and the following conclusions were drawn: a greater per cent of urban community schools (57%), course offering seemed comparable for male and female students: female chair-persons outnumbered male chairpersons and employment tends for men and women vary according to the type of community (urban rural) and showed no discrepancy in hiring.

Misra\textsuperscript{25} in his study revealed, sending questionnaire to 100 schools and 50 colleges of Orissa state, that the lack of qualified physical education personnel in proportion to institutions strength, the effectiveness of the programmes, facilities, equipment etc. play a significant role in the success of the programmes. Mass participation was ignored by most of the institutions have a stringent attitude in respect of financial aids to the educational institutions programme.

D'Souza\textsuperscript{26} surveyed the physical education programme


for girls secondary schools of Tamil Nadu in order to provide basis for drawing up guide-lines for imaginative curriculum in physical education to realise the objectives of physical education more effectively.

Tuciker\textsuperscript{27} in his study revealed that 57\% (N = 188) of the schools mainstream their handicapped into regular physical education programme with only 38 per cent of these altering the activities to meet the students' needs. 28 per cent (N = 103) offer an adopted physical education programme with 40\% of these writing IEP (s) for the handicapped students. 88\% of the institution teaching adopted physical education have a physical degree. The most frequent reasons for not offering an adopted physical education programme were lack of facilities, lack of enough handicapped subjects, lack of trained instructor. Only 14 \% of 52 schools, districts responding have offered workshops to trained faculty in adopted physical education.

Torres\textsuperscript{28} conducted a study to evaluate and compare


the quality of the physical education programme and create an awareness and understanding of what is essential in the organisation and administration of a quality of physical education programme for universities and to make available this importance for people who are responsible for providing and maintaining such programmes. Elements of the programme evaluated were instructional staff, facilities, programme, organising the programme of activities, administration professional association and the professional educational programmes. From an analysis of data it was observed that universities wide programme received a rating of average. Statistical evaluation was analysised and comparative methods of study were used. A recommendation was made that the programme be re-evaluated in five years.

Suryasasin\textsuperscript{29} evaluated the under-graduate professional health physical education and recreation programme is situated in co-educational institutions in Tennesse. The instrument used as a score card for educating under-graduate professional programme in physical education. The raw total score and raw area scores of each institution were changed to material percentile equivalups

and placed in rank order to reveal their relationship to the national mean. Recommendations for programme improvement for each institution was made on the basis of the score card sub-areas which had a percent of attainment below 50 and recommendations were also made by the researcher regarding the evaluating instrument used in the institution surveyed and suggestions for future study in this area.

Newton\textsuperscript{30} evaluated under-graduated professional preparation for men in physical education in Banoda degree grading institutions.

A questionnaire reflecting the recommended standards on under-graduate professional preparation was considered and used the evaluating instrument in the study.

The completed questionnaires were analysed to provide summary data.

Nardison\textsuperscript{31} indicated the types of programmes time alloted


for physical education, facilities activities testing and evaluating curriculum guides, professional and inservice preparation of teachers of physical education programmes for the handicapped. The Principals from a stratified random sample of elementary (n = 291) Junior high school (n = 210), were sent questionnaires. A 21% or better respon was received from each of the three principal groups.

Watts\textsuperscript{32} conducted a study on Junior High School Physical Education Programmes for girls in the state of Illinois. Questionnaire returns from 420 junior high schools in Illinois showed that 27 per cent had below average programmes, more information was desired about fitness and grading, and the primary problems were lack of time, lack of facilities, and large classes. A 70 page general curriculum guide covering planning a balanced programme, administration and teaching, and programme evaluation as a means of improvement was prepared for the educational bulletin service at Northern Illinois University.

Fields surveyed physical education services, provided educable mentally retarded children in public schools in selected communities. A 3 part questionnaire was sent to 49 persons responsible for physical education, special education, and/or administration. Part I covered current provisions for exceptional students and particularly educable mentally retarded children with special reference to whether they had special classes and, if so, how they had been developed, taught, and evaluated. Part II covered opinions concerning advantages and dis-advantages in adopting the physical education programme for educable mentally retarded children. Part III concerned opinions regarding possible problems resulting from either special classes or having educable mentally retarded children participating in the regular programme with "normals."

Palmer studied a cost analysis of physical education and a comparison of the per pupil cost of physical education and English in the grant joint union high school district for the


school year 1963-64. Data concerning the physical education plant, facilities and inventory were obtained from the district administrative office, sacraments county finance report (1962-63), local spalding sporting goods company, and unpublished tennis. The construction cost of physical education facilities rose steadily since the first gymnasium was built in 1934. The cost per pupil enrolled in physical education was less than that in English and the cost of construction in body was below the average per period cost in the district so other subject apparently had instructional costs that were above the district average.

Onyiliogwu studied physical education programme for boys' secondary school in eastern Nigeria. Data from eastern Nigeria, climatic conditions, cultural patterns, personal experience, and philogohies and programmes of other countries were used as background material. The proposed programme included: recognition by the Ministry of Physical Education as a part of Education, an annual allocation, encouraging young men to study physical education with employment guaranteed, employment of overseas teachers until the need could be met locally, programme

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activities including intramural and inter-scholastic athletics, area inspectors for evaluation and supplementary recreation centres.

Allsen\textsuperscript{36} evaluated the programmes at 9 junior colleges in Idaho, Utah, and Wyoming after Neilson-cum-allsen Score-cards were competed by the staff during a visitation, the 15 male instructors had good professional preparation and experience, but, except at two junior colleges, membership in professional organizations and attendance at meetings was substandard. The indoor facilities were superior to the outdoor facilities and the schools had difficulty obtaining gymnastic, corrective, and testing equipment. Record keeping was good, but the time allotment and enrolment were unsatisfactory. The variety of activities was too limited, intramural programmes were especially weak.

Jones\textsuperscript{37} did a fiscal study of physical education at the school district level in Wisconsin. The purpose of the study was to investigate the relation of time allotment with a specialist


and class size to school district budgetary factors sources, amounts, and allocations of funds and indicators of community wealth. Information on time allotment and class size was collected by questionnaires from school district and administrators, enrolment tax, and general budget data were available from the Wisconsin Departments of Public Instruction and Taxation. None of the variables investigated was related significantly to time allotment and class size in the Wisconsin School Districts.

Messersmith38 conducted a survey of American Colleges and Universities which had ROTC units in an effort to find-out how many institutions permitted the substitutions of ROTC for physical education.

The survey led this conclusion that:

1. 231 institutions surveyed in this study, 215, or 73 per cent, answered the questionnaire.

2. Two hundred twelve institutions reported having ROTC units while three schools indicated that no unit existed on their campus.

3. Participation in military programme is compulsory in 120 institutions.

4. One hundred eighty schools, or 85 per cent of the schools having ROTC units, having a required physical education programme.

5. Of the 180 schools having a required physical education programme, 104 or 58 per cent, permit no substitution of ROTC for physical education; eight schools or 4 per cent permit partial substitution while 68 schools or 38 per cent permit full substitution of ROTC for physical education.

Mumford studied the present status of health and physical education programmes in Negro senior colleges. The purposes were 1) to evaluate the physical education programmes and the general health, recreation and safety provisions of Negro colleges in terms of accepted standards. 2) to compare private and public Negro institutions, 3) to determine the relationships between expenditure, personnel, facilities, and programme efficiency and 4) offer upon the basis of these facts constructive professional

for changes and improvement as a guide in post war planning should the need for it become evident.

The modified Laporte score cards were used to cover the various phases of the physical education programme. Again modified form of the Laporte score card was supplemented by a check list designed to obtain additional information considered necessary to this study. For the data collection, materials were mailed to the Deans of the colleges being studied by the Dean of Southern university, Baton Rouge, Louisiana.

The comparing the two groups with reference to expenditures, enrollment, and resident tuition, the ratio was used because of the small samples involved and then chhi-square technique was used in the comparison of the two groups in terms of classification (public or private).

The study led this conclusion that Negro colleges have a highly mixed, heterogeneous situation in respect of physical education programmes a situation running from little or nothing to some good programmes. Furthermore these colleges in practically every criterion differ a great deal among themselves possibly one factor contributing to this great variablity is concerned with the local aims of each physical education department. Same schools have comparatively good gymnasiums and fairly adequate staff
and are concentrating more or less on professional courses in physical education. Some have poor facilities, and probably place emphasis upon certain instruments. In keeping with the limited facilities, too, in many instances, it is obvious that regardless of staff or facilities, the major interest is being placed upon inter-collegiate athletes. Furthermore there are institutions in which all phases of physical education receive meagre or no attention. It is obvious that great variability in what exists tends to make for great variability in what the present programmes are trying to do.

Analysis of the data in all aspects of the programme point to four basic problems influencing the present low standards of physical education in Negro colleges.

1. Limited funds, both budget and capital outlay.
2. Inadequate facilities.
3. Inadequate number and training of most of the instructors.
4. Attitude of the college administration toward the programme of health and physical education.
Curtis conducted a study on a critical evaluation of the physical education programme of the rural schools of Michigan.

There were two purposes in making this study:

1. The development of principles that might be used as a basis for the building of adequate programme of organised play activities for rural schools.

2. The formulation of recommendations consistent with those principles for guidance in the establishing of adequate programmes of organised play activities for the rural schools of Michigan. Two significant general conclusions are brought out in the study. First, the degree to which the practices in the Michigan schools confirm to the basic criteria is exceedingly low. Of a total of seventy eight single items included in the Criteria, there is conformity above 90 per cent in only one, that being the inclusion of group games in the programme. Even then, although they were checked as included, no teacher reported the inclusion of a great enough number or variety of these games to give all the children an opportunity to participate in the play.

The second significant conclusion that may be warranted is that a great majority of the county commissioners and teachers would like to have assistance in adequate programme. According to the items check and the comments made, the believe there are decided values in play activities for rural children, particularly for social development. It seems reasonable to conclude that if the teachers could be given some assistance, either in their training or in service, or both, some very fine programmes would be developed throughout the state.

Spragens 41 studied the physical education needs and interests of a selected group of orthopedically handicapped children with recommendations for planning and conducting physical education activities. Case studies ( e .20) were made of orthopedically handicapped children of elementary school, Austin. The orthopedically handicapped had common needs with other children but greater difficulty in mastering one or more skills, additional frustrations, and some deficit in social experience with their peer groups. Their physical education interests were necessarily limited to some extent but the limitations were often magnified by lack of proper instructions were often magnified by lack of proper

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instruction, insufficient opportunity to play with their fellows, or lack of a recreation programme in which they were welcome and had some appropriate function. A group programme was advocated alongside workshops for teachers, parents, and recreation leaders.

Koldus⁴² made a study on appraisal of the secondary school physical education programme in Arkansas, in which the sample consisted of all 459 white secondary schools and 30 per cent of the 140 Negro secondary schools. A detailed questionnaire was devised and distributed to the schools. Questionnaire was returned by 304 schools (61 per cent). The results evaluated against the consensus of experts as taken from the literature. Conclusions were presented under five headings: administration, programme, facilities, equipment and supplies, and generalizations.

Branham⁴³ evaluated the physical education programmes in the elementary schools of the Provo city school system, where


the school programmes were compared with each other and with the average for the school system. Specific strengths and weaknesses in each school were determined and recommendations which might be helpful were presented.

Chambers\textsuperscript{44} studied the appraisal of the attitudes of the principal, teachers and students towards physical education as a secondary school subject. Teachers and students, unlike the principal held a favourable attitude towards physical education as a secondary school subject. Teacher and student were aware of the importance of physical education in developing fitness. Activities which were liked by pupils and teachers were also the activities in which they desired instruction and in which they estimated their skills to be high.

Thesis\textsuperscript{45} conducted a study on analysis, with recommendations, of the boys' physical education programme at the secondary level of the Olmsted Falls school district.

\textsuperscript{44}S.H. Chambers, "The Appraisal of the Attitudes of the Principal, Teachers and Students towards Physical Education as a Secondary School Subjects," Completed Research in Health, Physical Education and Recreation 7 (1964-65): 75.

The instructional and intramural programmes were rated inadequate in many areas, while the inter-scholastic programme received a satisfactory rating.

Cullum⁴⁶ evaluated the required programme in physical education for women of a State University in which data were obtained by administering the Cordts and Shaw (1960) questionnaire to 144 Sophomore women who had completed three semesters of required physical education and to the physical education for women faculty. The returns were analysed in terms of philosophy and objectives, administration, programme and evaluation. The general programme compared favourably with programmes in state co-educational institutions which was surveyed by Cordts and Shaw. The students' programme was valuable. Criteria from the 1954 Washington conference on physical education for college men and women, supported by student and staff opinion indicated that the primary weaknesses were inadequate facilities, insufficient variety in course offerings, and the limited number of instructors.

Butters\textsuperscript{47} studied the physical education curriculum for the Ripon Elementary school to develop a democratically approved curriculum guide to establish a trial programme and had it evaluated by the community, and to secure the cooperation of the self contained classroom teacher to prepare and teach physical education during the regular scheduled class periods. The related literature was surveyed as a preliminary to the preparation of a tentative physical education guide. Visits were made to school systems of similar size and specialists in these systems were consulted. Opinions were obtained from university and college physical education, in developing preliminary draft, information was gathered through personal observations, parent questionnaires and interviews, a functional physical education curriculum guide was developed.

Mc Sween\textsuperscript{48} investigated staff utilization in physical education in which survey of pertinent literature was made regarding


the use of staff with respect to teacher teams and the employment of teacher aides. Organizational patterns, curriculum design, and conclusions as to team teaching in San Diego were described. Apparent advantages of team teaching in physical education warranted further investigation of this approach.

Vanderstoep\textsuperscript{49} surveyed the college and university intramural programmes for women. Four year colleges and university in Massachusetts with intramural programmes for women were surveyed. A structured interview form was developed from the literature and the interviews were recorded in tape. Information obtained related to purpose of the programme, facilities, supervision, financing, physical examinations, eligibility, activities, officials, awards and publicity. Institutions were classed as resident or non-resident, private or public, professional preparatory in physical education or no professional programme, co-educational or girls school, and size (1 to 999, or 1,000 and up). Programmes were compared in terms of these classifications.

\textsuperscript{49}S.F. Vanderstoep, "A Survey of College and University Intramural Programmes for Women," Completed Research in Health Physical Education and Recreation \textbf{7} (1964-65) : 97.
Harold\textsuperscript{50} analysed the physical education programme of the Monuesofa secondary schools in order to discover the relationship that exists between those factors and school enrollment, and further to discover the range of programme and type of activities contained within the physical education programmes. Data for the study were obtained from records in the state department of education and from two special report forms which were sent to public secondary schools in the state records in the state department of education which were utilized included the individual schools' annual reports, in health and physical education, the teachers' daily programme cards in physical education and the annual county superintendents' report to the state department of education. The result led to the conclusion that physical education is required in grades eleven and twelve more often in schools of the smallest enrollment group than in schools with the larger enrollments. The percentage of schools using a marking scale in physical education that is comparable to the scale used in academic subjects, varies little between the four groups of schools. As the size of the school increases, the percentage of

the schools giving no mark in a physical education decreases. As the size of the school increases, the percentage of schools offering a towel service to pupils increases. There is no relation between the size of the play ground and size of the schools. The majority of schools have play-grounds available for physical education which are adjacent to the building. Only 4 per cent of the schools have play-grounds that were more than two tenths of a mile distance. The median programme in physical education contain 16 activities. On the boys' programme, the same activities are found as a first 10 ranking activities in all four groups of schools. On the girls' programme, the first ranking activities in all four groups of schools are spread over 14 different activities. The median expenditure is 8.25 per pupil. The size of the classes in physical education ranges from 4-87 pupils. The median class size increases as the size of the school increases. The range of the medians for the four groups of schools is from 27-34 pupils.

Wise\textsuperscript{51} conducted an evaluative study of the physical education programme in the secondary schools in alliance. Evaluative criteria developed by the Ohio Association of Health Physical

Education and Recreation and published by the State department of education were applied to the physical education programme for boys in the three secondary schools in alliance, Ohio. Evaluation was based on interviews with physical educators and administrators and on observation of the programme in operation. The teachers complained favourably with the suggested standards for qualification but the programme was limited primarily by inadequate facilities and equipment.

Manguso\textsuperscript{52} surveyed the physical education and athletic programmes of the Ranch-camp schools of California to contribute to the development of physical education and athletics programmes in the Ranch-camp schools of delinquents in California and to propose guide-lines for establishing and maintaining programmes for delinquent boys committed to Ranch-camps. Nineteen of 27 Ranch-camp schools in California returned questionnaires, which covered the general areas of administration, curriculum, methods teaching personnel, facilities, and equipment, pertinent literature related to Ranch-camp schools, Juvenile delinquency, and physical education and athletics were reviewed to determine approved

principles and practices which might serve as criteria for the development of recommended programme of physical education and athletics at these schools. Recommendations were made relative to the implementation of a physical education and athletics programme.

Kingsbury studied of budget and financial practices utilized by physical education departments in the first class school districts of Washington State for 1963. In almost all school districts a physical education on budget was prepared cooperatively by all staff members. The major budgetary items were (a) equipment and supplies and (b) Laundry and cleaning. Financial support came from general school district funds. Procedures for approving the budget differed considerably. Departments usually kept inventories and found them useful in budget planning. Most school districts had specific policies concerning the procurement of bids, priority scheduling, and disbursement of funds. Final approval of purchase requests was usually vested in the principal of superintendent. A minority of schools provided a petty cash fund. Physical education budget operations were evaluated by almost all

school districts.

Lucas evaluated the physical education professional preparation programme at Tory State College 1950-1959. Physical education teacher preparation at Tory State College was evaluated on the basis of a critical incidence questionnaire and interview returns from 30 male graduates (12 per cent) between 1950 and 1959. The programme as a whole seemed adequate but strengthening was recommended in guidance, coaching public relations, solving practical problems in less than ideal situation communication between department and graduates, and provision for development of personal skill.

Cullum studied an evaluation of the required programme in physical education for women at the University of South Carolina. The questionnaire devised by Cardts and Shaw was completed by 144 Sophomore women who had been in required physical education at least three semesters at the university and the womens' physical education faculty.

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In general the programme compared favourably with those in other state co-educational institutions and the students considered the programme valuable. The primary criticisms by students were inadequate facilities, variety in course offering, and number of instructors.

Phillips\textsuperscript{56} evaluated Men's physical education service programmes in higher education in New York State. The purpose of the study was to evaluate the service programmes of physical education for men in the colleges of New York State. Dul standards (optimal and essential) were developed to serve as bases for evaluating the component parts of the overall programme. A representative sampling of fourteen institutions was obtained and these institutions were studied extensively. It was found that the percentage of institutions of higher education in New York State requiring physical education for graduation and giving credit for such courses, was much lower than was been found to exist in similar institutions throughout the United States.

Jack\textsuperscript{57} analysed the physical education programme of the Minnesota Secondary schools to determine the relationship between certain factors of the physical education programme and conditions such as, 1) size of enrollment, 2) wealth of school districts, 3) percentage of pupils transported, 4) training of teachers.

The data for the study were obtained from two sources: first, two special reports which were sent to all public secondary schools in the State of Minnesota and, second, from the various reports of the local school districts on file in the state department of education.

The following conclusions were drawn from the study:

1. School enrollment does have a relationship to the physical education programme in regard to same factors such as number of required years of physical education, length of physical education, class period, size of the physical education class, range of physical activities in physical education programme, international programme.

2. The wealth of a school districts has for the most part, little relationship to the physical education programme.

3. No relationship were obtained that were significant between percentage of pupils transported and number of required years of physical education, number of required periods of physical education per week, number of intramural activities, and range of the physical education class room.

4. The small school is faced with the problem of an adequately trained teacher.

5. The type of institutions at which the teacher received his or her training seemed to make little difference. The amount of training received appeared to be more important.

Jackson\textsuperscript{58} studied physical education in the junior high schools of Illinois. The purpose of the study was to secure information relative to the present practices in the conduct of the curriculum of physical education in the junior high school of the state. Inquiry blanks were sent to the Principals of the six junior high schools listed as such in the Illinois School Director, 1937-38,

\textsuperscript{58}C.O. Jackson, "Physical Education in the Junior High Schools of Illinois," \textit{Research Quarterly} 10 (March 1939): 124-133.
and limiting its scope specifically to the curriculum in the physical education. A stamped and self addressed envelope was enclosed. Follow-up cards were later sent to a few schools which had not responded by a certain date. The typical junior high school in the state of Illinois, as pictured in the present study has an enrollment somewhere between two hundred fifty and five hundred pupils, requires physical education participation of all students for six semesters, and requires attendance two periods of forty to forty-five minutes (exclusive of dressing and showers) each week. The periods of physical education carried on for the most part in regulation gymnasium are devoted largely to play as opposed to specific instruction in a variety of activities, and the chances are fifty-fifty that the instructors in this school follows curriculum outlines which have probably been developed for the local situation. The principal may possibly have copies of these in his office. The Board of Education furnishes from 50 to 200 annually for the conduct of the curriculum but the instructors must depend on the athletic association for the loan or use of additional sports equipment.

The opportunities in intramurals for boys are very meager, with most emphasis on the few highly organised team sports such as basketball and softball (which may comprise the major part of the curriculum offerings). Basketball is by far the most impor-
tant inter-scholastic sport. The programme intramurals for girls is probably broader and better balanced than for the boys. Practically no emphasis is placed on inter-scholastic athletes for girls. The principal of this school does not consider the present curriculum in physical education as complete and worth while as the other curricula in the school, largely because lack of adequate time, facilities, organization and administration.

Buell conducted a study for identifying a core of elements essential to a successful physical education Basic Instruction Programme (PEBIP) and to design a prototype that could serve as a model to assist administrators in developing or enhancing their particular Physical Education Basic Instruction Programme. A total of 299 professionals directly responsible for the administration of the Physical Education Basic Instruction Programme at their institution responded to a questionnaire designed to identify: a) the integral elements of an "ideal Physical Education Basic Instruction Programme," b) the preferred goals of the Physical Education Basic Instruction Programme and c) demographic information. SPSSX was used to determine one way frequencies and

percentage for responses to survey statements and demographic information. A sum of weighted ranks was used to order programme goals. Cross tabulations were performed for selected variables and to the square test for independence was performed to determine if a relationship existed between a subjects' current position and his/her survey responses.

A majority of the respondents (77 per cent) designated a preference for a required Physical Education Basic Instruction Programme. Subjects indicated that institution recognition, both financial and attitudinal, was essential to the success of a basic instruction programme. Also considered very important was preparing a diverse campus population, including faculty and staff to incorporate physical activity into their daily living patterns, subjects supported the idea that basic instruction faculty should be full time and assigned and paid on the same basis as other faculty members, though part time instructors could be used to offer unique activities. While respondents generally did not indicate a different of opinion as to the essential elements for a required or an elective programme, there were some differences of opinion based on demographic variables.
Piccolin conducted a study on history and status of physical education in state controlled first level schools in the state of South Iuro Grande, Brazil, to determine the status of physical education in this level of education, the school physical education requirements, objectives, activities, grading and evaluation system, intramural and extramural activities, facilities and equipment, supervision and sport coordination, teaching faculty and professional teaching preparation were investigated. A mail survey sent to all 38 State Regional Offices of education and personal interviews held at all state physical education professional preparation institutions and at the state subsecretariate of sport were the mean used in this study.

The general finding of the study was that physical education in state controlled first level schools has been implemented, particularly, in grades 1-4, when the class room teachers are being replaced by physical education specialists. The need for more physical education teachers, appropriate facilities and equipment to have the classes taught and the objectives achieved was quite evident in the survey. There was a strong feeling by all physical

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60 Jacetted Javo-Carlos Piccolin, "History and Status of Physical Education in State Controlled First Level School in the State of South Rliuro Grande, Brazil," Dissertation Abstracts International 46 (October 1985) : 924-A.
education supervisors to emphasize the teaching of movement education in grades 1-4 and sport instruction in the following four years of instruction.

Sanders\textsuperscript{61} studied to investigate the number, types and status of adopted physical education programmes in the schools under study. The study was a descriptive survey, and an instrument was developed, which was primarily a closed form questionnaire.

The questionnaire was mailed to the Principals of every Public Secondary School included in the 1982-83 Illinois Public School Districts and Schools Directory. Of the 735 possible refers, 532, or 72.4 per cent, were returned.

The following conclusions were drawn:

1. The larger the population of the geographic area or the larger the total student population, the higher the incident of adapted physical education programmes.

2. Handicapped students are mainstreamed into regular physical education in 47.6 per cent of the schools.

3. Thirty-one per cent of the schools offer adapted physical education programmes.

4. In the majority of schools:
   a) The adapted physical education class meets five times a week (85.4 per cent).

   b) Students are grouped to fit their schedules (33.3 per cent) or by handicapped (20.3 per cent).

   c) Letter grades are used to grade the handicapped students in physical education.

   d) Districts do not offer workshops or inservice training for faculty in adapted physical education.

   e) Excellent, good or adequate facilities and equipment were reported.

5. Many schools (49.1 per cent) have teachers teaching adapted physical education who have no adapted background.

Borell62 surveyed and evaluated the physical education curriculum, facilities and administration organisation in the public

secondary schools of Tacoma, Washington, 1963-64. Collectively, the mean score of the 15 schools for the 10 areas of the Laporte score card No. II was 16-4 as compared with the suggested average of 15. The schools were strong in activity programme, locker and shower facilities, supplied and equipment, and organization and administration of class programmes. Eleven schools were below average in outdoor areas, 11 locked swimming pools, and all were substandard in modified or adapted programmes.

Barratt\textsuperscript{63} surveyed Dance curriculum selected colleges and universities with recommended guides for dance curricular designs. The survey was based on questionnaire returns covering administrative procedures, course offerings and sequences, percentage of methods and content courses, and desirable electives. Dance curriculums in education lacked definition as to administration and requirements.

Shaw\textsuperscript{64} surveyed the status of required physical education in colleges and universities of the United States. The purposes


of the enquiry were:

1. To determine the physical education requirement in the colleges and universities of the country.

2. To discover to what extent grades in physical education were counted in figuring honours by semesters and at graduation.

3. To discover present practices in excusing students from physical education requirements.

The questionnaires were sent to 352 Directors of Physical Education in Colleges and Universities in the United States. A double post card was used to encourage response. 70 per cent questionnaires were returned and the results led to the conclusion that:

1. Sixty per cent of the schools had either a four or eight term requirement.

2. Sixty nine per cent of the schools grant full academic credit for each semester of required physical education, five per cent give some credit, 25 per cent give no credit.

3. 50 per cent of the schools count physical education grades when computing honours by semesters.

4. Fortynine per cent of the schools count physical education grades when figuring honours at graduation.
5. Private schools are much more conservative in granting credit and count physical education grades towards honour both by semesters and at graduate that are state controlled schools. This is due to (probably) state schools being more directly responsible to their constitution.

6. Certain schools are inconsistent in their policies in regard to giving credit and honours for physical education.

7. There are no major differences between the groups of schools studied in regard to their practice of granting excuse from physical education.

Georgiady\textsuperscript{65} surveyed the physical education in elementary schools. The general purpose of this study was to gain a composite picture of physical education in the elementary schools. The immediate purpose to compare the status of physical education in a city of 25,000 with the nation at large. Since physical education is recognized as an integral part of the progressive elementary schools programme, we should be aware of the trends in the administration and organization of the activities which comprise the programme.

If this study better acquaint those within the profession with the status of physical education in elementary schools, its purpose will have been justified. The result of this study led to the conclusions that: 1) separate activities for boys and girls are more common than activities with mixed groups, 2) intramural and inter-class activities are more widely in use than inter-scholastic activities, 3) over half of the school studied allow two and one half hours or more per week for the programme. 4) Most schools feel that the cost of equipment is a barrier to the improvement and extension of their programme. 5) Most schools give points or letters for awards on the basis of participation and excellence of performance as determined by the faculty member in charge of the physical education programme. 6) Slightly more than half of the schools correlate their programmes with school subjects, among which health and social studies are most frequently used. Few schools correlate their programme with civic observances or organizations.