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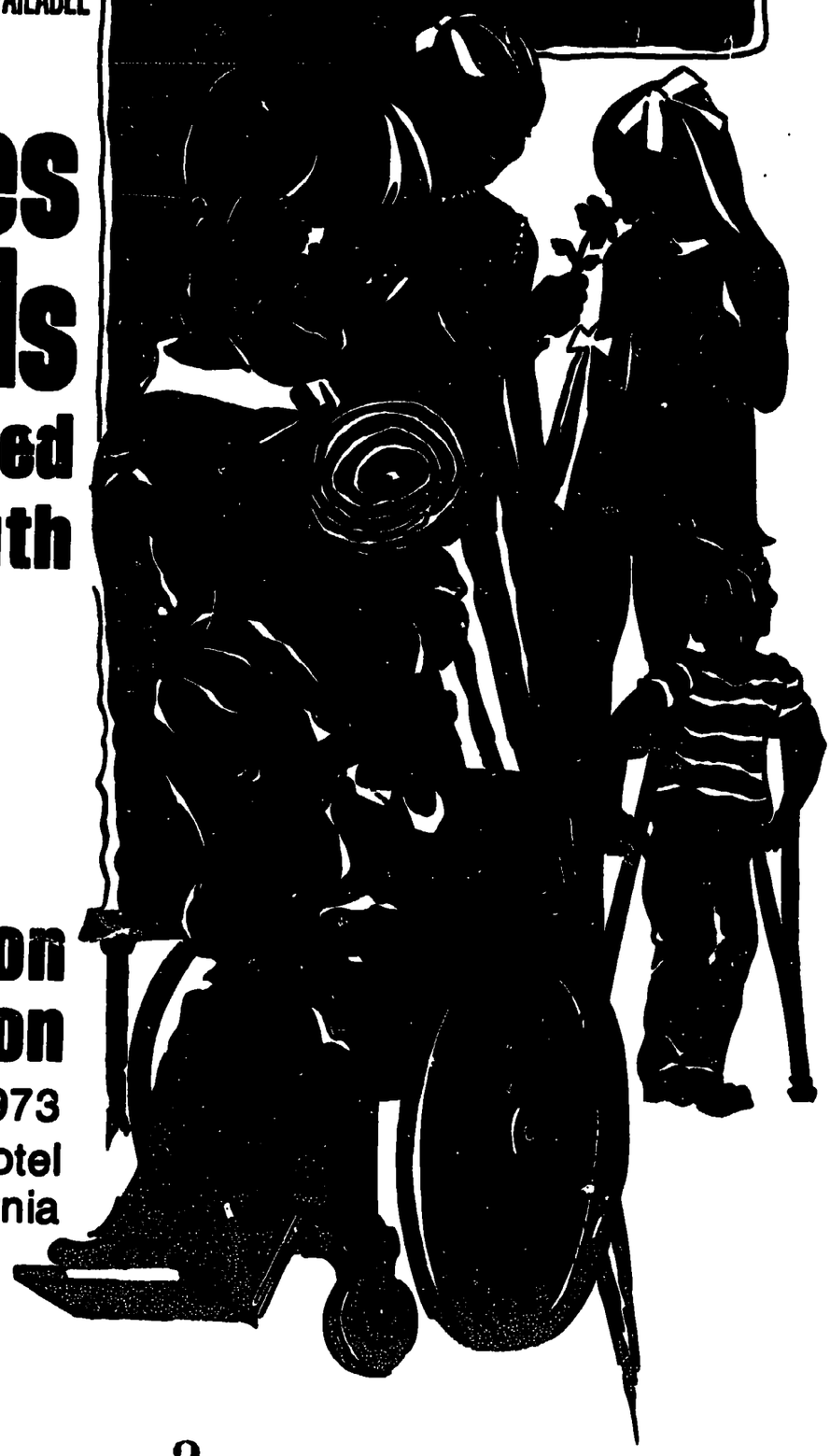
ABSTRACT

Presented are 36 papers given at a 1973 conference on physical education techniques and methods for handicapped children. The following are sample titles and authors: "Movement--The Instructional Imperative" by Roy Barsch, "Movement in Programs for Handicapped Children--Hysteria and Reality" by Bryant Cratty, "Moving and Learning" by Marianne Frostig, "Activities for Handicapped Infants and Children--A Physician's Viewpoint" by Margaret Jones, "Behavior Modification--Its Role in the Instruction of Physical Education for the Educationally Handicapped" by Ronald French, "The Relationship of Motor Development to Learning" by Caro Hatcher, and "A Sequential Guide for Developing Movement Skills and Concepts Through Creative Dance" by Dorothy Singleton. Also included is the conference agenda. (DB)

putting it all together

techniques & methods for handicapped children and youth



conference on physical education

may 24-26, 1973
airport marina hotel
los angeles, california

Heaven's Very Special Child

A meeting was held quite far from Earth.
It's time again for another birth,

Said the Angels to the Lord above,
"This Special Child will need much love."

His progress may seem very slow,
Accomplishments he may not know,

And he'll require extra care
From the folks he meets down there.

He may be slow to run or play,
His thoughts may seem quite far away.

In many ways he won't adapt,
And he'll be known as handicapped.

So let's be careful where he's sent.
We want his life to be content.

Please, Lord, find the Parents who
Will do a special job for You.

They will not realize right away
The leading role they're asked to play.

But with this child sent from above
Comes stronger faith and richer love.

And soon they'll know the privilege given
In caring for the gift from Heaven.

Their precious charge, so meek and mild,
Is Heaven's very Special Child.

Special Acknowledgement

A special thanks to Mr. Leslie Brinegar, Mr. John Klumb, Dr. Genevie Dexter, Dr. Richard Clowes, Dr. Jean "Terry" Wood, and Mr. Tom Edson for their help and encouragement in making this first Conference on Physical Education Techniques and Methods for Handicapped Children and Youth possible.

A Dream,
A Challenge,
A Reality!

"Putting It All Together", the first national conference on physical education techniques and methods for handicapped children and youth was in the beginning a dream and challenge that the office of Los Angeles County Schools, Division of Special Education finally brought together to become a reality.

Many professionals in special education and physical education have dreamt of bringing together their disciplines with those of medicine, therapy, nursing and recreation to share common interests in working with handicapped children and youth in a physical education setting. Attendance and keen interest in past regional workshops on physical education for the handicapped had shown that such a conference could well develop into national scope. The Division of Special Education of Los Angeles County Schools under the guidance of G. Robert Roice as the National Conference Management Director and Dennis Roberson the program coordinator accepted the challenge to give the direction and leadership needed for such a vast undertaking.

Many others also provided input and direction in the preliminary stages. Each feeling a great need to bring together professionals who could share their expertise and knowledge in this area. Because of this, "Putting It All Together" was able to feature such outstanding individuals as Dr. Bryant Cratty, Ed.D., Dr. Ray Barsch, Ph.D., Dr. Marianne Frostig, Ph.D., Dr. Jack Keogh, Ed.D., Dr. Margaret Jones, M.D., Dr. Lawrence Rarrick, Ph.D., as well as many others selected specifically for the techniques and methods they have developed in their physical education programs for the handicapped. And so came about our reality, the first National Conference on Physical Education Techniques and Methods for Handicapped Children and Youth.

Conference Committees

Conference Coordinator

DR. LORINE PROCHASKA
Consultant, Research and Development
Office of the Los Angeles County Superintendent of Schools

Conference Manager

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Developmental Physical Education
Office of the Los Angeles County
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JOAN SIMONS
Project Assistant for Project Move for Fun, Title VI

DON WELCH
Special Education Principal,
Los Angeles County Schools

Conference Secretary

PAM AL-ANI
Office of the Los Angeles County
Superintendent of Schools

Conference Program

THURSDAY, MAY 24, 1973

11:30 - 1:00 Registration

Afternoon Workshops (Repeated)

Development of School-District-County Remedial Physical Education Programs

RICK SCHLICHTING, B.A., Remedial Physical Education Teacher, Savannah High School, Anaheim, California

LLOYD JONES, M.A., District Administrator, Garden Grove Unified School District, Garden Grove, California

G. ROBERT ROICE, M.A., Program Specialist, Division of Special Education, Office of the Los Angeles County Superintendent of Schools

Developing Goals and Objectives in a Remedial Physical Education Program

DR. LORINE PROCHASKA, Ed.D., Consultant, Research and Development, Division of Special Education, Los Angeles County Superintendent of Schools

Remedial Physical Education and
How it Relates to the State Physical Education Framework

TOM EDSON, M.S., Chairman State Council of Physical Education for the Handicapped

The Purpose of Remedial Physical Education in Special Education Programs

DR. DANIEL ARNHEIM, P.E.D., Professor of Physical Education, California State University, Long Beach

Opening General Session

Welcome and Introductions

Update on the Master Plan in Special Education in California
MR. LESLIE BRINEGAR,
Associate Superintendent; and Chief,
Division of Special Education,
California State Department of Education

Thursday Conference Banquets

Theme: Bridging the Gap Between Theory and Practice

Movement in Programs for Handicapped Children – Hysteria and Reality
DR. BRYANT CRATTY, Ed.D.,
Professor of Kinesiology,
University of California at Los Angeles

Movement - The Instructional Impairative
DR. RAY BARSCH, Ph.D.,
Professor, School of Education,
California State University, Northridge

FRIDAY, MAY 25, 1973

8:30 - 9:30 Registration

Morning Workshops (Repeated)

Creating a Language Rich Environment through Physical Education

G. ROBERT ROICE, M.A., Office of the Los Angeles County Superintendent of Schools

A Sequential Guide for Developing Movement Skills and Concepts Through Creative Dance

DOROTHY SINGLETON, B.A., Remedial Physical Education Teacher, Cleveland School, Office of the Los Angeles County Superintendent of Schools

Ball, Rope, Hoop and Parachute Activities

BOB STUCKEY, M.A., Remedial Physical Education Teacher, El Cajon Elementary School District, El Cajon, California

A Study of Professional Preparation in the Area of Adapted Physical Education

Report of Federal Grant, California State University, Long Beach

Physical Education for the Deaf

ROBIN WOOD, B.S., Remedial Physical Education Teacher, Southwest School for the Deaf, Los Angeles County Superintendent of Schools

Move for Fun – Report of Title VI Project, Pasadena

JOAN SIMONS, M.A., Project Assistant for EHA Title VI Project

Relaxation Techniques Used in Physical Education

CAROL CLARK, M.S., Consultant for Physical Education and Early Childhood, Division of Curriculum and Instructional Services, Office of the Los Angeles County Superintendent of Schools

Considerations in Physical Fitness for the Handicapped

DR. G. LAWRENCE RARRICK, Ph.D., Professor of Physical Education, University of California, Berkeley

Luncheon Session

Moving and Learning

DR. MARIANNE FROSTIG, Ph.D.,
Director Emeritus,
Marianne Frostig Center for Education Therapy

Afternoon Workshops (Repeated)

Learning Through Movement and Music

HAP PALMER, B.A., Creator and Producer, Educational Activities Records

New Uses of Equipment

AL ZASUETA, M.A., Instructor of Physical Education, California State University, San Diego

Physical Education for Elementary EMR Children

AL PROUD, M.A., Remedial Physical Education Teacher, Marin County Schools Office, Marin, California

Active Learning for Handicapped Children

JIM STIEHL, B.S., Graduate Student, University of California, Los Angeles

Writing Federal Projects in Physical Education

California State Department of Education, Bureau of Educational Improvement for the Handicapped, EHA, Title VI-B

Leisure Time Activities for the Handicapped Youngster

CEETTA CRAYTON, B.S., Instructor, Department of Recreation, California State University, Long Beach

Trampoline: For the Physically Handicapped, Asset or Liability?

BILL STONER, M.A., Coordinator, Physical Education, Lowell Joint School District, Whittier, California

Instructional Programs in Physical Education for the Handicapped

LYONEL D. AVANCE, M.S., Project Coordinator, Los Angeles Unified School District

Panel Discussion

Multi-Disciplinarian Approach to Working with Handicapped Children

Shoemaker School, Los Angeles Unified School District: PAT HASSAKIS, M.D., M.P.H., KAREN DEPAUW, B.A., Remedial Physical Education Teacher, LYNNE JONES, B.S., MARSHA WOLFSON, B.S., Registered Physical Therapists, CLAIRE HILL, M.S., Registered Occupational Therapist, ANDREA MATHEWS, B.A., Special Education Teacher

Fridays Conference Banquet

The Five I's of Learning

TOM EDSON, M.S., Chairman,
State Council of Physical Education for the Handicapped

THE AMAZING FALKENSTEIN,
Academy Award Winner, Best Stage Performer, 1972,
Member, Academy of Magical Arts, Television Personality
and World Renowned Mentalist

SATURDAY, MAY 26, 1973

Morning Workshops (Repeated)

The Right Style for the Right Child

CRAIG CUNNINGHAM, M.S., Physical Education Specialist, University Elementary School, University of California, Los Angeles

Team Sports for the Mentally Retarded and Physically Handicapped

JAMES ROGERS, M.S., Physical Education Teacher, Endeavor High School, Fullerton Union High School District

Tumbling Activities

HAROLD WRIGHT, B.A., Remedial Physical Education Teacher, Sunset Elementary School, Los Angeles County Superintendent of Schools

Orff-Schulwerk: Design for Creativity

DR. JOHN ANDERSON, Ph.D., Curriculum Consultant, Riverside County Schools

Physical Education for Minimumly and Maximumly Physically Handicapped

MILT PETTIT, M.S., Remedial Physical Education Teacher, Chula Vista School District, Chula Vista, California

Behavior Modification: Its Role in the Instruction of Physical Education for the Educationally Handicapped

DR. RON FRENCH, Ed.D., Motor Performance Specialist, Manhattan Beach City School District, Manhattan Beach, California

Relationship of Motor Development to Learning

DR. CARO HATCHER, Ed.D., Director, Spastic Children's Foundation

Program Considerations for Children with Movement Problems

Students, University of California, Los Angeles
Chairman: DR. JACK KEOGH, Ed.D., Project Director

Afternoon Workshops (Repeated)

The Physician and The Remedial Physical Education Program

MARY LEYDORF, M.D., F.A.A.P., Medical Consultant, Office of the Los Angeles County Superintendent of Schools

What the Physical Educator Should Know About Blindness

DR. CHARLES BUELL, Ed.D., Teacher for the Visually Impaired, Long Beach Unified School District, Long Beach, California

Physical Education for Secondary TMR's

LARRY KEMP, M.S., Physical Education Teacher, Hope School, Anaheim Union School District, Anaheim, California

"Water Learning" A New Way of Reinforcing Basic Perceptual Skills

CONNIE LAWRENCE, M.A., Consultant, "Splash", Principal, Joseph McKinnon School, San Jose, California

Physical Education for Pregnant Minors

Representatives, Los Angeles Unified School District

An Experimental Approach to Motor Movement in Development Centers for the Handicapped

JOHN WAKEHAM, B.A., Teacher Coordinator, Whittier Development Center for Handicapped Minors

Activities for Handicapped Infants and Early Childhood

MARGARET JONES, M.D., University of California, Los Angeles, School of Medicine

Idea Mart

JIM COWART, B.A., Remedial Physical Education Specialist, Alameda County Schools, and Chairman Elect, State Council on Physical Education for the Handicapped

Panel Discussion

Assessment of Motor Skills

Moderator: DR. JACK KEOGH, Ed.D., Professor Kinesiology, UCLA, Panel Members: RAY MORRIS, M.A., Assistant Professor Physical Th :rapy, California State University, Long Beach, DR. JANET SEAMAN, P.E.D., Assistant Professor Physical Education, California State University, Los Angeles

PLUS:

Syllabus Job Placement, Exhibitors, Film Previewing and College Credit

Contents

Orff Schulwerk
Design For Creativity

DR. JOHN M. ANDERSON,
Curriculum Coordinator
Riverside County Superintendent
of Schools

Narrative[1]

Orff-Schulwerk is a creative process which involves every child through participation in the process. The process is more than a musical method, it concerns itself with the complexities of the body, the spirit, and deepest feelings common to man. It is concerned with calling out all possible forms of fruitful communication.

Orff-Schulwerk is improvisation. Individual awareness to active procedure becomes a self motivating power in performance. Orff-Schulwerk is a step-wise success in self-expression. Orff-Schulwerk is a rhythmic education. Rhythm's first an activity of the mind with subsequent manifestation in sound and movement. Orff-Schulwerk, in dealing always with total expression, is natural and alert in taking speech patterns and gesture for basic material. Ideas are not necessarily words of meaning, but can be nonsense sounds or sounds of gesture like clapping, finger snapping, stamping and patschen (clapping of hands on thighs). Instruments serve as an extension of sound made by the body and continue first as rhythmic patterns more than melodic. Melody grows out of natural sounds commonly heard in children's play and children's calls.

A principle of Orff-Schulwerk is to start education by utilizing and stimulating the child's total pre-disposition to express himself so that any other specialization can be built upon this broad and solid basis.

1 This material describing Orff-Schulwerk is taken from "Orff-Schulwerk Design for Creativity," a report to the U.S. Office of Education of ESEA Title III Project, Bellflower Unified School District, Bellflower, California, 1968.

Feedback is immediate through acceptance or modification of each person's contribution and participation in Orff-Schulwerk group design. The individual's level of inner job will vary according to his inner feelings of success in participation with the group including self-expression. The reinforcement of the child's belief in himself and his expression cannot be done in terms of telling him he was "right" or "wrong." His unique contribution should receive consideration each time, and the criteria, by which it is accepted, or modified, be within terms he can perceive, such as through listening, looking, and empathy for a particular feeling.

I. Ice Breaker (Rondo)
Hello to you
How do you do

Round in a circle
round in a game
round and round and
tell us your name

II. Imitation
Rhythmic
Movement
Golden Lock Game
Laugh before it's light
you'll cry before it's night (Canon)

III. Question and Answer
Rhythmic

Speech
Two, four, six, eight
meet me at the Golden Gate
if I'm late, don't wait
Two, four, six, eight . . . .

IV. Rondo
Rhythmic
Movement (the thing)
Speech A Parade

V. Germ Ideas
Tick tock, tick tock
a stitch in time saves nine
Tick tock, tick tock

Let's take a trip,
Go to the moon, etc.

VI. Ostinati (Rhythmic Movement Accompaniment)
When the peacock loudly calls
then look out for fain and squalls
and
The sharper the blast
the sooner it's past (Tough Blue)

Ostinati (Melodic Accompaniment)
Rain on the green grass
rain on the tree
rain on the house top
but, not on me.

Sequenced Instructional Programs in Physical Education For The Handicapped

LYONEL D. AVANCE
Coordinator, Remedial P.E.
Special Education Division
Los Angeles City Schools

JAMES BREEN
Teacher Coordination,
Remedial P.E. Special Education Division
Los Angeles City Schools

WALDON WILLIAMS
Teacher, Remedial P.E.
McBride School
Los Angeles City Schools

The purpose of the project, *Sequenced Instructional Programs in Physical Education for the Handicapped*, was to write a set of guidelines which could be used to implement specific programs of remedial physical education activities for handicapped children. To accomplish this:

- Existing information relative to skills, activities, games and sports, in physical education for the handicapped was sequenced in order of difficulty for developmental levels pre-school through high school.

- Reference and resource materials — books, equipment, pictures and records, Super 8mm loop films, 16mm films — were organized and correlated with the sequenced guidelines.
- Guidelines were written including related references and resources for teachers.
- Sample media — audio-tape cassettes and Super 8mm loop films were developed for experimental use in the individualization of the physical education instruction program.

- The Guidelines were field-tested by different categories and categorical combinations of handicapped children in the Los Angeles City Schools Special Education Branch programs in order to determine their appropriateness.

Emphasis in the Project has been on individualization of instruction. Abilities of the children were stressed rather than their disabilities. It is believed that one set of sequenced instructional programs in various physical education activities could serve all categories of handicapping conditions if the coding for handicapping limitations was provided rather than developing different sequenced programs for each type of handicap. Therefore, the categorized label approach (deaf, blind, trainable mentally retarded, orthopedically handicapped, etc.) was not used in the development of these curricular materials. Because of the varying developmental levels and abilities of handicapped pupils in the School District and the wide range of ages, the prepared material covers the complete scope of physical education.

The system of coding used indicated which activities pupils with certain handicaps should *not* perform. The codings identified were visual, auditory, lower extremity involvement, upper extremity involvement, and total involvement handicap. As with all physical education instruction, it is expected that teachers will know the capabilities and limitations of the pupil as well as the nature of the specific handicapping disabilities.

In addition to the written material, sample Super 8mm loop films and audio-tape cassettes were developed for experimental use with the sequenced instructional materials in physical education for handicapped pupils. Through the experimental use of these loop films and tape recordings, the pupil was provided an opportunity to reinforce learning. The films and tapes were made separately, but were coordinated, to allow for better control of sensory input. By introducing the media separately and later using it in combination, confusion which might have resulted from a multisensory input approach was avoided.

Written materials and sample audio-visual materials were extensively field-tested with 2000 pupils in 12 elementary and secondary schools for the handicapped in Los Angeles by teachers with expertise in remedial physical education. In addition, trial assessment devices were developed from the sequenced materials for each section of the curriculum to identify pupil progress. At the conclusion of the field testing period, materials were revised where necessary.

This 20 month project initiated in April 1969 under Public Law 88-164 Title III was funded and supervised by the U.S. Department of Health, Education, and Welfare, Bureau of Education for the Handicapped.

Upon completion of the 20 month Phase I project, an 18 month Phase II continuation was granted:

1. To produce and field test a library of developmentally sequenced instructional single-concept loop films.
2. To produce and field test a library of developmentally sequenced instructional single-concept tape cassette cartridges.

These libraries are to be used to individualize instruction in conjunction with the Guidelines produced in Phase I "Sequenced Instructional Programs in Physical Education for the Handicapped." The series includes the following titles, listed by chapter areas:

Motor and Movement Skills

Bouncing A Ball
Catching And Throwing A Ball
Challenge Course
Jumping A Long Rope
Rope Routine
Parachute Play

Guided Running
Hoops: Around The Body
Hoops: Catch - Spin - Jump
Hopping
Jumping
Jumping A Short Rope #1
Jumping A Short Rope #2
Rolling A Ball
Skipping
Striking A Ball
Tires
Trampoline
Walking The Balance Beam

Recreation and Playground Skills

Basketball Chest Shot
Basketball Dribble
Basketball Push Shot
Batting With A Tee
Climbing Tree
Crab Walk
Forward Roll
Head Balance
Horizontal Ladder – Hanging
Horizontal Ladder – Traveling
Low Bar Knee Circles
Low Bar Skin The Cat
Playscape Climbing
Riding Wheel Toys
Sand Play
Soft Tumbling – Log Roll
Soft Tumbling – Forward Roll
Soft Tumbling – Backward Roll
Volleyball Pass
Volleyball Serve

Rhythmic Skills

Clap Your Hands
German Clap Dance
Gustaf Skoal
Rhythm Circle
Schottische
Square Dance 1
Square Dance 2
Walk

Swimming Skills

Breath Control
Jellyfish Float
Front Float
Prone Glide
Kicking
Beginning Stroke
Back Float

Physical Fitness Skills

Balance
Coordination
Endurance – Grasshopper
Endurance – Jumping Jack
Endurance – Running
Flexibility
Strength

Expected Contribution to Education

- A single-concept loop film library and a single-concept tape cassette cartridge library will be available to pupils, and to teachers responsible for physical education of the mentally retarded and physically handicapped.
- The audio-visual media will provide the key link in individualization of physical education instruction for the handicapped.

- The audio-visual media provide planned approach for staff development of teachers responsible for physical education instruction for the handicapped.
- To stimulate motivation in pupils who are handicapped, only pupils enrolled in programs for the handicapped will be filmed for the sequences.
- For ideal continuity in the project the same authors of the guidelines produced the film and cassette cartridge sequences and screening and assessment device.

Dr. Dorothy B. Carr, Assistant Director, Special Education Branch, Los Angeles City Schools, served as Principal Project Investigator. A team of physical education specialists with wide background and experience in planning and writing physical education curriculums was assembled by the project investigator. Lyonel Avance was Project Coordinator, Carole Brown, Anita Delfs, and Gwen Waters were Curriculum Specialists. Miss Waters and Miss Brown left the project in 1970 and 1971 respectively for promotional opportunities.

For additional information and the ordering of publications, contact Mr. Lyonel D. Avance, Project Coordinator, Special Education Branch, Room H-100, Los Angeles City Schools, Box 3307, Los Angeles, Calif. 90051.

Movement —
The Instructional Imperative

DR. ROY H. BARSCH
Lecturer, Department of Rehabilitation
and Special Education,
California State University, Northridge.
Consultant in Special Education

In considering a child as a whole being we must forsake all of our older thinking about categorization of the child. In the past we have fragmented the child at the outset with one set of theories about emotional development and another set about how he acquires an identity of self and yet another about the development of language and others about his normative development and so on, but the only unifying thing about all of these theories is that you quickly run out of child in applying them. If you try to evaluate children on what should be happening at given stages of development according to the norms, you are continually faced with behavior for which you have no established norms. You are frequently frustrated because what is happening hasn't been normalized and as a result you can't do anything with it.

All of these theories unto themselves are very adequate but they are incompatible when you try to run a line on a particular behavior across a three-year-span, for example, and you discover no one has paid any attention to three-year-olds in four of your theories and when you get up to the eight-year level you can't rough in the missing information.

What all this has produced are teachers and other practioners who work with children who theory hop from one theory to another as the need arises, a sort of professional electicism. This is practiced on many levels all the way to the person who has run out of theory in so many instances he has now begun to put things together himself and who, at this point, is no longer an electicist but has now joined the ranks of the theorists.

Dr. Barsch had reached this point and felt there must be some single frame of reference that would apply to all levels of behavior at any age, that could be relied upon whether you were talking about

reading, spelling, arithmetic, behavior, sibling rivalry, or whatever. He now believes that all dynamic action of the individual is spatial and that every relationship that he has with his world, both objects and persons, can be identified in spatial terms and that it is possible to describe a child as having spatial finesse or spatial organization.

In developing this theory spatial areas were defined at progressive distance from the individual and termed "fields of space." The near field, relates to a distance the extension of your arms away from you, that territory pertaining to the sharpness of detail, reading distance, a two-foot span all the way around you. The next field is the mid-space, that area extending about 6 to 8 feet in front of you. This leads us into far space which is roughly the area from mid-space to about 20-30 feet away, which gives a broader picture but with some reduction in the sharpness of detail. Anything beyond that in relation to physical metries is referred to as remote space.

If we look at people in relation to their development we discover that the course of progress toward independence begins with your being within arm's reach of your mother and progresses further and further away until you find yourself sending flowers on Mother's Day from Alaska. Friendship would fit into these terms by classifying strangers as being in the remote space, acquaintances in the far area, friends you rarely see in the mid-space and your closest associates in the near.

It is possible to identify persons, either adult or child, as being predominately zoned in any one of those spaces. The near-space person is exceedingly concerned with detail. All the i's must be dotted and the t's crossed. His desk is never disarranged and all the drawers are just so. He must have detail as a way of life and it all has to come out with sharp, fine detail or he is not comfortable.

If you are a mid-space person we identify you as being in the Valley of Decision – or indecision. You are not quite sure of what you are going to do at any point along the line, you are always in the state of making up your mind. This person decides to take a vacation but after looking at a collection of travel folders he says there are so many choices he cannot make up his mind so he stays home. She cannot decide between the yellow dress and the blue one and takes an inordinate amount of time making up her mind. This is life as it goes on continually for the mid-space person.

For the far-spaced person there is no today, there is always tomorrow. They cannot stand the sharpness of details and are uncomfortable if they are consistently placed in a position where they must be concerned with detail. To make out a grocery list is far less important than solving the war in Vietnam. In the extreme, we move into remote space and these people are sort of not with it. They are so far off in the clouds you have a difficult time touching them with any kind of conversation.

The total school organization is predominately a near space situation. Everything you do from the earliest grades is for the purpose of sharpening detail. You are trying to get the children to respond to very minor differences in sound and words, to get them to form their letters precisely and do their arithmetic correctly right down to the fine point and all of this is centered right in front of them in the near space area of the desk top.

But you are still faced with children who live by their own processes. If you give an assignment to write a composition about something that has happened to them, you will get a variety of reactions based upon these processes. The near-space child will ask, "Should we write on both sides of the paper?" "Where should I put my name?" "Should the title be in capital letters?" "How many sentences should I have?" The mid-space child sits there looking at his paper and he has four or five things he could write about but he can't quite figure out which of them he should start on, so he sits and ponders until the teacher comes over and helps him by making the decision for him. If you will closely observe some of the children you are working with you will discover that with amazing regularity you are making their decisions for them. The far-spaced child with the same assignment says he would rather write about what he is going to do next week. For him what happened last week is already gone so let's look at what is going to happen in the future. He lives for tomorrow and rarely for today.

One of the things you are going to discover about the mid-space child is that he has difficulty with left and right. He has all kinds of difficulty with alterations. Whenever he has to operate on an either-or basis you will find that he not only has a mid-space problem but he has a laterality problem as well because he hasn't organized his left and right in the same way he has not organized black-white, yes-no, either-or.

Each of your children can be identified on this frame of reference in terms of their mobility and the kinds of locomotive patterns they are willing to undertake. Children confined to wheelchairs are, by force, near-space people because that is where their whole life is, right within arm's reach of them. You would expect that a child who attained mobility after being confined to a wheelchair would want to go here and there, to all the places he has not been able to explore in the past, but a child who has had only near-space orientation simply doesn't know where he wants to go when mobility is suddenly available to him.

We can carry this into a child's emotional development by identifying the child with poor emotional processes as the one who is in continuous immediate need for affection in the near zone. He wants to be touched, held, have you close to him in some way to show him that you love him. The mid-space child is in a continual state of conflict and cannot make up his mind. His mother will tell you that one day he will want affection and the next he won't want anyone to touch him and he vascillates between.

You will have children in your classroom who will want you to be close to them, to touch them. There are others who will allow you to touch them but there is no reaction to your touch, it does nothing for them in terms of comfort or communication. Others will be tactually defensive and actually withdraw from your touch, the far-spaced children. And then you will have the remote children who are not defensive about being touched, they are totally unaware. Their state of sensitivity to tactual awareness is so low they don't even know they are being touched.

We can measure the perceptual senses or the emotional processes or the academic processes in these four spatial zones. If you were teaching history, having your students memorize all of the dates and details would be working within the near-space zone. You could go to the conflicts between nations and what each one is trying to accomplish and how they are pulling in different directions and it would be the mid-space of teaching history. The visions of man and what mankind has sought to achieve fit into the far space area, while talking about philosophy and what it might have to bear on the future is the remote area. Similarly, there is no process of education which we cannot in some way structure to fit this particular classification.

We can fit the perceptual senses, the gustatory, olfactory, tactile, kinesthetic, auditory and visual senses, into these four spatial zones. There is no process of the emotional organization or the mobility organization or the academic which cannot fit into this frame of reference and that is why Dr. Barsch feels quite confident it can be used to apply a consistent set of constructions to everything that happens to a child, that will put it all together for you instead of forcing you to hop from one theory to another. In his research, then, the fundamental issue they have been concerned with in the initial assessment of anyone is his spatial orientation.

The next step was to try to assess what each individual had going for him at a particular time and in doing this they included three basic ideas that are quite revolutionary. One is that they consider that all assessment is intended to describe the *functioning ability* of the individual. At the same time this premise is saying it is *not* seeking out a state of pathology. Most of our present assessment procedures are based upon trying to find out what is wrong with an individual. If it can be said at the end of the assessment procedure that he is brain injured or socially deprived or non-English speaking or whatever, the evaluator feels he has found out what is wrong with the individual. Now Dr. Barsch is saying that this new assessment philosophy is interested in describing the dynamic state of affairs for this individual leading only to a statement of differences. Rather than attempting to determine what is wrong, the assessment is aimed at trying to find out how the individual has become organized in the way that he is.

This is a whole new statement in the world of assessment because it starts with the premise that the individual is entitled to be himself and before the evaluator starts classifying him on the basis of all the norms he has available, he tries to establish just what kind of an individual he is. If you send in a child for assessment and tell the evaluator this child has receptive aphasia, he has lost his right to self. Someone has already decided his classification. If you send in a child who has been labeled an immature kindergartener, the evaluator will expect to find him on all the normative tables at the four-year level and will start clicking off norms that he should not be clicking off until the child proves them to him. A child is sent in to the examiner as an autistic child and right away he starts looking for autistic characteristics. If the child has three of these characteristics and there are supposed to be five, the examiner is in a dilemna. Does he call the child autistic if he only has three out of five characteristics or must he have all five? This is where the classification system begins to dominate the assessment process and the child loses his right to be himself.

Next in Dr. Barsch's system of assessment is the premise that all evaluation is a state of your current function and, therefore, the question to be answered is how did this individual get as far as he has? If a child is seven years old and by all the evidence in his cumulative record he should have been dead by two, how did he get to be seven? If a child is in the fifth grade and is reading at the second grade level, how did he get to second grade? If a child has an I.Q. of 75, what has he been doing with it while he was growing up? What did he pick up, what did he miss, what is going for him right now? What are the ways in which he gathers information? In scholastic terms it means identifying at the outset just what kind of a learner this child is.

This is the only question that education should be concerned about. All you are ever going to be related to in the school situation is the individual's learning ability. You are not going to change his family environment. The only way you can change his self concept is by what he finds himself able to do. You can arrange conditions that will cause him to take certain actions, but it is only as he performs that he will change his own self-concept. All you have to work with are some arithmetic books, spelling words, reading materials and all you can do is work on the things involved in the school situation. Your concentration is upon the child's learning and, therefore, to identify what kind of learner he is becomes most crucial.

If you have a near-space learner you know you can approach him far more effectively with precise detail. If you have a mid-spaced learner you know he will have difficulty making decisions and you will arrange conditions so he is continually forced to make decisions until it becomes comfortable for him to do so. You will offer him either-or choices because a multiple choice would be too much for him. If you have a far-spaced child you will be able to appeal to him much more effectively with ideas and possibilities for discovery than with details. He will be more interested in the total process of mathematics than with the precise characters of adding or subtracting. You must get to him with those details eventually, but you can't successfully approach him with them.

When this zonal process has been identified you then go on to establishing the child's processing heirarchy. Is he primarily oriented to visual stimulation, kinesthetic or tactile? The olfactory and gustatory senses were disregarded for practical purposes at this time as they would not be primary methods of gathering information except in very extreme cases. Every individual has some combination of these mobile structures in relation to the world around him. If a child is primarily visually oriented, you will find him far more sensitive to anything presented on a visual level than on one of the others. Another child might be far more sensitive to an auditory approach. The auditory child would respond to a phonics approach in teaching him to read where the visual child would not. If you can determine just how the child has been "reading" his world up to the time you got him, you can eliminate a great deal of

trial and error in how best to present information to him. In this way you can utilize the child's strengths in teaching him.

As teachers you are often advised to build your program on the child's strengths but if you consistently shape a child's world to fit his strengths you are not doing anything to help him overcome his weaknesses. As teachers you must help the children overcome their weaknesses to the point where they are not so disparate from their strengths.

Some years ago Dr. Barsch was involved in a massive school testing program, administering batteries of tests and charting profiles on about 4500 children a year. In some cases the differences in performance were so great he did not feel that averaging out an I.Q. was a valid measurement of a child. His cum record might say he had an I.Q. of 65 but he would occasionally give you a 125 answer. This, however, was the distribution they were getting on the children and what was disturbing was that, by implication at least, people were saying that the high points in a child's profile represented his potential and that if you only got him really organized he would be able to function on this level in all areas.

They took 125 of these children, did detailed profiles on them and arranged for them to be retested at six-month intervals over a period of two years. They were put into special tutorial programs where the emphasis was on their low processes. The first result was that those occasional high points were scaled down to a much lower level but they were so much more stable, so much more solid and predictable that they had lost that oddity of being away up there and away down here. They were now structured and organized in what they brought to bear on their life situations and they were now able to give not just the occasional bright answer but background and understanding of the whole package.

Everyone needs a kind of balance in their abilities. You can't get through life with only one specialization. Being the best in arithmetic won't take you very far if you can't read. A teacher, therefore, cannot so emphasize a child's assets throughout his school career that when he gets out into the world and someone asks for something in his area of weakness he falls apart. As a teacher you must bring the child's state of organization to the point where he is ready for whatever the world out there has in store for him.

At the beginning of this tutorial program and accompanying research simple, straight-forward academic techniques were used without anything that you would classify as motor oriented components. Dr. Barsch then began investigating the relevance of motor training and made two very important discoveries. One is that the whole relevance of movement for human function is cognition, not how muscles move, but the relevance of the state of cognition. How do you think according to your state of movement? What kind of a thinking person are you in relation to your mobility processes? They began using a trampoline and other motor development equipment in their remedial program but only for the purpose of cognitive results, not for the purpose of building muscles or developing strength. The movement activities were always related to thinking.

The second major conclusion that came from all this was that we are not going to put people together with any degree of understanding until we learn more about human vision. If we can put movement and vision together and really understand the intimate relationship between the two, that will be the real starting point.

Dr. Barsch emphasized that the only way you can put it all together for your children is to think of the whole process of learning. You will be teaching your children to read, do arithmetic, spell and so on but if you will simultaneously work more on teaching them how much of their world is available in touch, smell, taste and learning how to listen more effectively, you will find your children coming together far more effectively than they ever did before. Listening becomes a curriculum item that you concentrate on with special exercises in thinking. It may be history that you do but it is thinking that you are after and that becomes the goal.

You can relate cognitive movement throughout your whole curriculum rather than it being something you do between 9:00 and 9:30 every morning. You can utilize movement experiences for the sake of what you would call reading, arithmetic or spelling, but you do it with your total body. You are doing it on the trampoline, you are doing it while you are rolling, you are doing it while you are crawling.

The Title VI project here is a step in this direction. What looks like physical education is actually aimed at increasing the children's whole range of activities, at broadening their world, so that the end result is enriching their entire lives and giving them a wider scope of opportunity than they would have thought possible before. But, at the same time, they are systematically trying to integrate what is going on in the project with what is happening in the classroom. If it could be carried on for another three years, Dr. Barsch feels it would lose its identity as an adaptive physical education program and would be just another part of the total school process.

The dedicated adaptive physical education specialist sees himself as simply a part of the whole team working for the child except that he has a somewhat different bag of tricks available t › him. His goals are identical, he is still dealing in the field of learning, and in so far as he can get the children to learn something they didn't learn in any other way, he is going to be effective.

The more we look at the adaptive physical education teacher, the various therapists and the classroom teacher, the less difference we see in what all these people are doing. Every one of them is involved in an interplay of three things without any exception: they are always helping the individual to perceive more effectively, they are helping him to move in a particular way, and they are always related to the language pattern of the child. You are dealing with perception and movement and language and that is the only thing you can ever deal with. No program designed to help children become more effective than they were when you started can avoid being always perceptual, movement oriented and linguistic.

It would be ideal if everyone could be a multi-disciplinary individual and it is not necessary to obtain a number of different credentials to become one. Because you are a classroom teacher does not prevent you from learning something about the way children's muscles work. An adaptive physical education teacher can inform himself about the mechanics of teaching reading or arithmetic. Each individual profession is free to investigate the thinking of any of the other professions any time they choose and in so doing become more of a whole person.

Putting it all together means that all of the boundaries that we have so artificially constructed all these years should melt away so that what you really have is the integrated comradeship of a group of people who are trying to help children. It is the knowledge that you have, not what we call you that is important. So long as we keep separating these relationships into distinctive provinces that imply that you stop one place and somebody else takes over, we will never be able to put it together for the children. We have to start thinking together in order to bring it together.

Movement — The Instructional Imperative

I. The Indivisible Triad of Instruction
   1. Perception
   2. Language
   3. Movement

II. The Movement Synchrony
   1. Mechanics
   2. Sequence
   3. Rate
   4. Timing

III. The Unity of Adaptive Education
    1. Classroom
    2. Playground
    3. Recreation Area

IV. The Daily Activity Check List

INDEX OF NOTATED FUNCTIONAL ORGANIZATION

Administrative Components

Form No. 6.1

_____
Teacher & School

DAILY ACTIVITY PLAN

_____
Date

☐ All groups w/adaptations
☐ Group
☐ Individual

Description of Activity (Primary Plan only) _____

_____

_____

_____

FITNESS OBJECTIVE	ACTIVITY OBJECTIVE	RECREATIONAL OBJECTIVE
Cardiovascular rate _____	Skill instruction _____	Eventual solo play _____
Vital capacity _____	Skill use in different context ___	Eventual partner play _____
Muscular strength_____	Experience expansion _____	Eventual group play _____
Tension release _____	Modality awareness _____	Immediate enjoyment_____
PRIMARY MOBILITY PURPOSE	**ACADEMIC RELEVANCE**	**PRIMARY PERCEPTUAL EMPHASIS**
Reach, grasp, release _____	Reading directions _____	Visual _____
Manual transport _____	Serial Counting, scoring _____	Auditory _____
Top-bottom reciprocation _____	Listening _____	Kinesthetic _____
Left-right interweaving _____	Visual targeting _____	Tactual _____
Alternation patterns _____	Computing processes _____	Olfactory _____
Locomotive flexibility _____	Color discrimination_____	Gustatory _____
Handling of equipment _____	Rules & regulations _____	
Postural alignment _____	Sequence of actions _____	

Adaptive recreation technique (if applicable)_____

_____

_____

_____

What The Physical Educator Should Know About Blindness

DR. CHARLES BUELL
Teacher Visually Handicapped
Long Beach Unified School District

At least two out of every three blind children in the public schools of our country are not participating in physical education activities which result in good physical fitness. Thousands of students in residential schools for the blind have been exercising vigorously for over 100 years. Each year about 25 blind wrestlers from these residential schools place 1, 2, 3, 4, or 5 in various State Meets. Why do we find thousands of blind children exercising vigorously while other thousands are excused from physical education or assigned sedentary activities? The chief reason for this condition is the difference in attitudes commonly found in residential schools for the blind and the public schools. Fortunately, some public schools have become enlightened.

The problems of blindness can be divided into three groups. First, and by far the most important, there are the problems related to the attitudes toward blindness commonly found in the general public. The attitudes of parents and teachers are particularly crucial. The second aspect of blindness has to do with the attitudes of visually impaired individuals. The third group of problems centers around the physical loss of vision.

When the general public, educators and physical educators gain more insight into these problems and adopt positive attitudes toward blindness, most of the serious difficulties will disappear.

Attitudes Toward Blindness

The prevailing attitude toward blindness is that blind persons are inferior, incapable, and should be protected. Those who hold these false notions and misconceptions do blind individuals a great deal of harm. Those who wish to help in this manner are really hindering blind individuals. For example, when a blind person is overprotected and not given the opportunity to develop good physical fitness, he finds it

extremely difficult to become a useful citizen. One who is blind has to work harder to attain the same rung of success as his seeing peers. Thus, blind children and adults need more physical fitness to be able to expend additional energy to keep up and achieve as much success and happiness as others.

The blind person's right to try has now become law in certain schools and colleges. The Education Act Amendments of 1972 state in Section 904, "No person in the United States shall on the ground of blindness or severely impaired vision be denied admission in any course of study by a recipient of Federal financial assistance for any education program or activity, but nothing herein shall be construed to require any such institution to provide any special services to any such person because of his blindness or visual impairment." Thus, any school district or college which receives Federal funds must permit a blind student to enter any course, including physical education. It is hoped that such laws will soon apply to all schools and colleges. Far more desirable than laws would be the existence of prevailing attitudes favorable to blind people.

A physical educator can best help a blind child by keeping an open mind. Give him the opportunity to try almost anything. There are a few exceptions. For example, most blind people realize it is unsafe for them to drive on highways and city streets. They also know that playing center field on a professional baseball team is an impossibility. Most people are unaware of the multitude of activities in which some blind people take part. In public school physical education and community recreation some of these are wrestling, track and field, football, gymnastics, rebound tumbling, judo, weightlifting, swimming, scuba diving, water skiing, winter sports, camping, bowling, roller skating, ice skating. Reading the references listed at the end of the article will reveal more details on these activities and many others not listed here.

Most blind people have successfully adjusted to their loss of vision. When the general public becomes generally aware of this fact, prevailing attitudes will markedly change. Most physical educators, and others, should think in terms of ability rather than disability. Emphasize the positive rather than the negative aspects of the loss of vision. After all, blind individuals are much more like seeing people than they are different from them. In other words, blindness isn't as "big a deal" as most people think it is. The general public is far under-estimating the capabilities of blind individuals. For this reason thousands of blind individuals remain unemployed. Fortunately, a segment of the public is enlightened and other thousands of blind people are employed and work in all kinds of jobs.

Attitudes of Blind Persons Toward Blindness

A child's attitudes are largely determined by the attitudes of adults close to him. It is highly desirable that these attitudes be positive in nature. This is particularly true in the case of blind children. It has been said, "What you think of me, I'll think of me, and what I think of me, I will be." Parents and teachers of blind children should have confidence in and respect for them. Under such conditions a blind child is likely to build a good self-image. He will view blindness as a disability which need not prevent him from leading a happy, independent and useful life. Blind children who are so unfortunate as to have parents and teachers whose attitudes toward blindness are similar to those prevailing in the general public usually achieve very little in life. The attitudes of parents and teachers are crucial in determining success and failure for most blind children.

Some Facts About Blindness

There are about 450,000 blind people in the United States. Nearly 15,000 blind children now attend public schools, and there are about 8,000 pupils in residential schools for the blind. The common definition of blindness is "central visual acuity no greater than 20/200 in the better eye with correction." In a general way it can be said that these people have lost 9/10ths or more of their vision. It should be

pointed out that three-fourths of the so-called blind have some useful vision. Even light perception is helpful under certain conditions. Some of them can read by using magnifying glasses or large print. Ophthalmologists encourage the use of remaining vision, except in a few cases. Bumps and falls do not injure the eyes, except in a few delicate conditions which ophthalmologists can easily identify. Blind children and adults do not have any more serious accidents than do their seeing peers. The idea that visually impaired people suffer more accidents is based upon opinion, not evidence. Informed ophthalmologist and physical educators know that thousands of blind children are exercising vigorously without undue risk of accident or injury to the eyes. An accident or a failure for a blind person should be no more serious than it is for one who has normal vision.

Blind persons are not amazing as a segment of the general public believes. People who lose part or all of their vision are not compensated by an improved nerve path to the ears. They make better use of their hearing and other remaining senses than do most people. For example, one who has to pay attention to sound cues to get information becomes more attentive to them. Simple common sense procedures enable blind people to travel most anywhere and perform most kinds of work. If the reader were to lose his vision, he could adjust to the condition just as hundreds of thousands have successfully done.

Bibliography

American Association of Health, Physical Education and Recreation, *Physical Education and Recreation for the Visually Handicapped*, 1973. The Association, 1201 Sixteenth St., N.W., Washington, D.C. 20036.

Buell, Charles, *Physical Education for Blind Children*, Springfield, Illinois, Charles C. Thomas, 1966. 224 pp.

A film entitled *Physical Education for Blind Children*, produced by Charles Buell is available for purchase or rental from Campbell Films, Saxtons River, Vermont 05154.

Relation Techniques Used In Physical Education

CAROL E. CLARK
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Los Angeles County Superintendent of Schools Office,
Los Angeles, California

Written material from *Rhythmic Activities for the Classroom*
The Instructor Publications, Inc., Dansville, New York, 14437

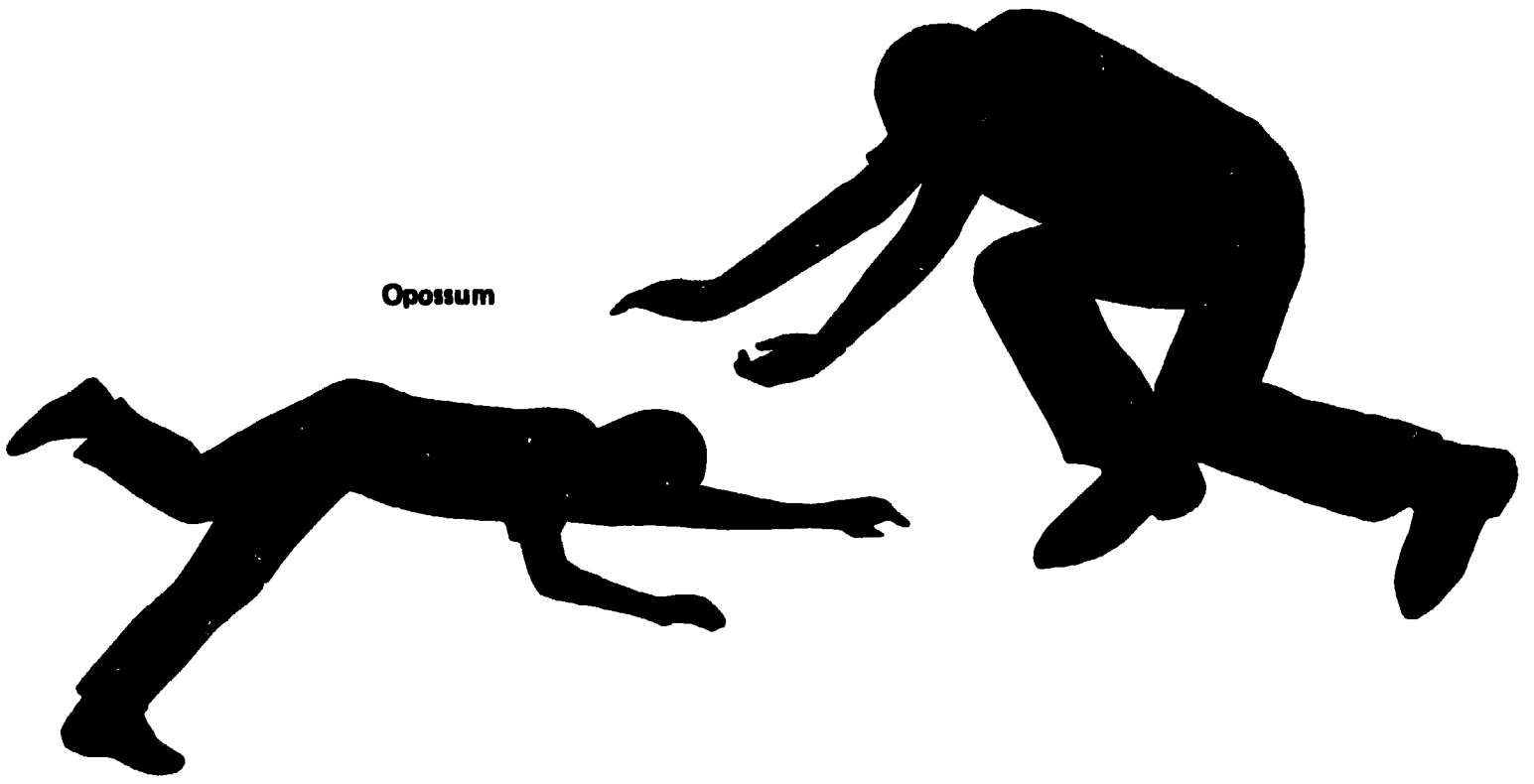
Muscle tension is necessary for any form of movement, but excess muscle tension causes fatigue and strain. The tense child may appear uncoordinated, with jerky and excessive movements. In well coordinated rhythmical movement there is a control of energy which allows for "letting go" when it is appropriate. Teachers recognize the tense child by his constant motion, clenched fists, frowns, and inablility to sit quietly.

Many rhythms periods conclude with a time to relax. This is best done with the children stretched out on the floor. Soft music may be played in the background. A teacher can manually assist the child to relax by lifting and moving different parts of the body allowing them to gently drop. Tense children may resist the teacher's help by controlling their own movements or becoming rigid.

An awareness of body parts and being able to feel tension may help the child to relax. Wiggling and shaking hands, shoulders, legs, heads; "tightening up" parts of the body and "letting go"; and playing "Opossum" are some ways to do this. Practice in falling softly to the floor and acting out "Raggedy Ann" poems may also be of help.

Opossum

The opossum is a very funny-looking little animal. He looks a little like a rat with his long, strong tail, but he has a funny, white face and a furry body. He can go to sleep upside down, hanging by his tail. When he's frightened he lies very, very still so nobody knows he's around. Pretend you're an opossum and lie very, very still so nobody will know you're around. If I come and move your arms or legs, remember you don't want me to know that you're really alive.



Opossum

Skywriter

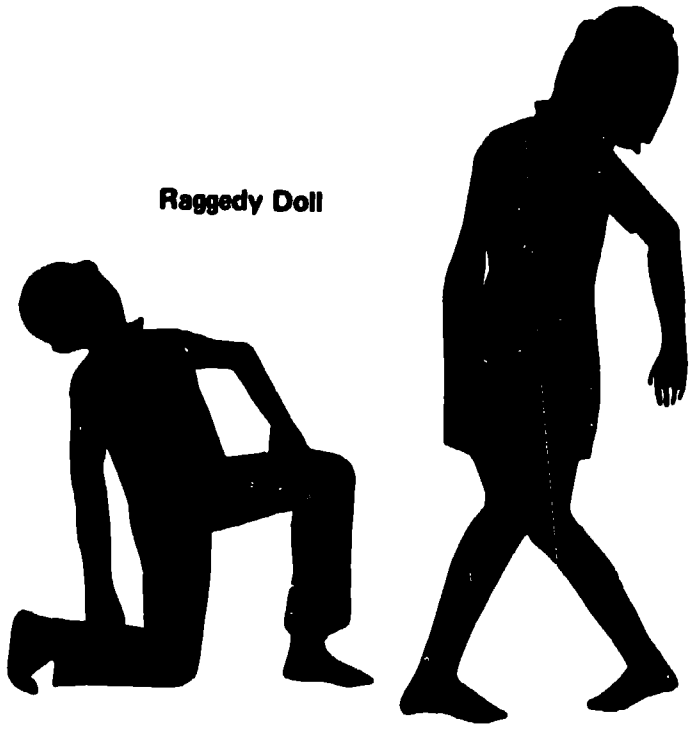
(Children are stretched out on the floor, eyes closed. Speak slowly.) Pretend that there is a big skywriter above you. It is going to draw a line around your entire body. It is starting at the bottom of your foot, slowly going up the outside of your leg, by your knee, now your thigh, your hip. Now it is by your chest, down the inside of your upper arm, lower arm, around your hand, up the outside of your arm, around your shoulder, by your neck, around your ear, the top of your head, down around your other ear, your neck, etc., until the line meets. Now pretend you are like watercolor paint, or jelly, and spread out to fill up the line. Feel where your body touches the floor. Rest a minute – without moving – and think of something very nice; a birthday, wading in the water. Now wake up slowly and stretch like a cat.

No Bones

(Children may start in standing or sitting position.)

I have no bones in my fingers. *(wiggle fingers)*
I have no bones in my hands. *(wiggle hands)*
I have no bones in my shoulders or arms;
(drop arms and shoulders down)
I don't know where they'll land.
I have no bones in my back. *(curl back down)*
I have no bones in my knees. *(bend knees)*
So I'll fall to the floor in a lump, lump, lump
(crumple to the floor)
And stay as still as I please.

No Bones



Raggedy Doll

Raggedy Doll

The raggedy doll said, "I don't mind
If my pants are held with a pin behind,
Or that the sawdust is out of my toe –
'Cause I'm just a raggedy doll, you know.

My arms are so floppy, they fling and flap
And my head rests all the way down in my lap.
The rest of me goes to and fro –
'Cause I'm just a raggedy doll, you know."

If somebody pulled me up by a string,
I'd stand so straight I'd certainly sing.
But my legs are so wobbly they just let go –
'Cause I'm just a raggedy doll, you know.

I can't move a muscle – I can just smile,
But I ca tay here for a long, long while.
I feel so soft from my head to my toe –
'Cause I'm just a raggedy doll, you know."

Author unknown

RCA VICTOR

SQUARE DANCE SERIES

Album No. 1
(Ages 8 to 10 – Grades 3 and 4)
78 rpm E-3000 45 rpm EEB-3000
33 1/3 rpm LE-3000

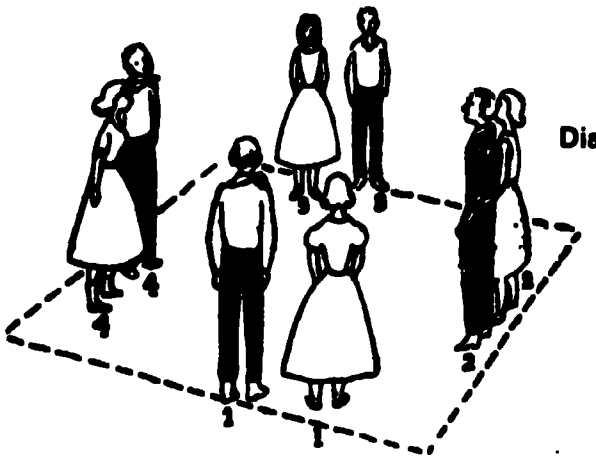


Diagram 1

Diagram 2

Let's Square Dance!

This album presents eight dances, carefully selected for and adapted to the social needs and physical capacities of third and fourth grade children. It includes calls and music for six square dances, one circle dance, one longways dance, and one record containing music without calls.

Teaching Suggestions

Begin by familiarizing the group with the square dance formation, the basic steps and skills. Then the specific dances may be taught and enjoyed by the group. *(Each dance is described in approximate order of difficulty.)* Have the dancers walk through the pattern, or figure, of the dance before actually playing the record. If they show confusion when the dance is begun, re-teach it, paying special attention to the part that seems to be causing difficulty. Instruction should be slow, distinct, and spirited. When a dance has been done successfully, it may be repeated at a later time with a brief review, after which you may expect it to be remembered without review or instruction.

The Square Dance Formation

(Diagram 1) Each set consists of four couples standing on the sides of a square, backs parallel to one of the walls of the room, facing in. The distance across the set is about eight feet. In each couple, the boy is on the left and the girl on the right. The *first* couple stands with its back to the music; the other couples are numbered off counter-clockwise from the first. Thus, the *second* couple is on the right of the first; the *third* is across the set, and the *fourth* is on the left. The *first* and *third* are *head couples*. The *second* and *fourth* are *side couples*.

Study Of Professional Preparation In The Area Of Adapted Physical Education

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I. Grant Information

Department of Health, Education and Welfare
Under direction of Dr. Robert A. Pestolesi and Dr. Daniel D. Arnheim

II. Responsibilities Under Grant

A. Graduate Assistants work 20 hours per week with handicapped
   1. Institute for Sensory Motor Development
   2. Long Beach Veterans Administration Hospital

B. Formulation of Action Committee to engage in field research for purposes of accomplishing the following objectives:

1. Observe a variety of adapted physical education programs both in a regular public school setting and in the special education setting making a general assessment as to their effectiveness to the consumer.
2. Compare, through the interview technique, the current California State University, Long Beach professional preparation for adapted physical educators with other comparable institutions.
3. Interviews with supervision personnel through the State in the field of adapted physical education.
4. Through interviews and a written questionnaire, evaluate professional preparation of current graduates now working in adapted physical education.
5. Determine most expeditious way to interest and recruit minority students in adapted physical education.

III. Progress To Date

From this endeavor, ten major competency categories have tentatively been selected in which will later be subdivided into specific competencies under each category. They are as follows:

1. Knowledge of factual material about exceptional children
2. Counseling students
3. Management of adapted physical education class and program administration
4. Communication with parents
5. Communication with other professionals
6. Developing and planning instructional programs
7. Evaluating the instructional process
8. Assessing consumer behavior
9. Implcmenting the instructional program
10. Defining instructional goals and objectives

IV. Professional Preparation at California State University, Long Beach (see attached sheets):

1. Physical Education Major
2. Corrective Therapy Certification
3. Certificate in Adapted Physical Education

NAME _____

STUDENT NO. _____

MEN'S PHYSICAL EDUCATION ADVISING FORM

(TENTATIVE PROGRAM FOR RYAN ACT)

PHYSICAL EDUCATION MAJOR REQUIREMENTS — **MINOR REQUIREMENTS**

	COURSES			PR	MUST TAKE	DATE TAKEN	GRADE		PR	MUST TAKE	DATE TAKEN	GRADE
	LOWER DIVISION											
*	BIO 101	Human Anatomy	3									
*	BIO 102	Human Physiology	4									
	MPE 111	Intro to Men's PI	2									
	MPE 144	Team Sports I (BB, SB, Bsktbll, VBl	2									
	MPE 146	Indiv & Dual Sports I	3									
	MPE 160	Fundamental Rhythms	2									
	MPE 241	Aquatics	2									
	MPE 242	Gymnastics	2									
	MPE 243	Wrestling	2									
	MPE 244	Team Sports II (FB & Soccer)	2									
	MPE 246	Indiv & Dual Sports II (Cond, CC & Track)	2									
	UPPER DIVISION											
	MPE 301	Prof Prep & Appraisal	2									
	MPE 310	Org & Conduct of PE	3	111 301								
	MPE 315	Hist & Princ of MPE	3									
	MPE 321	Motor Learning	2	101 102								
	MPE 333	App Princ of Kines	3	101 102								
	MPE 335	Physiology of Exercise	3	101 102								
	MPE 390	Test & Meas in PE	2									
	MPE 433	Behav Prob in PE & Ath	2									
	MPE 437	Adapted PE	2	333								
	MPE 470	Elem School PE	2									
+	MPE 480	Pre & Care of Ath Inj	2	437								
	TAKE ONE											
	MPE 311	Anal of Aquatics	2	241								
	MPE 312	Anal of Gymnastics	2	242								
	MPE 313	Anal of Wrestling	2	243								
	TAKE ONE											
	MPE 486	Coaching Track	3	246								
	MPE 487	Coaching Baseball	3	144								
	MPE 484	Coaching Football	3	244								
	MPE 485	Coaching Basketball	3	144								

CREDENTIAL REQUIREMENTS

Courses offered in Professional Ed.	24 units
Student Teaching	15 units
Professional Education	6 units
EDSE 455P Curr & Methods in Tchng PE	3 units

ACT Test Scored: Eng. _____

Comp. _____

English Clearance _____

Speech Clearance _____

GPA Clearance _____

Student's Signature _____

Advisor's Signature _____

Date _____

ELECTIVES

MPE 130, 160, 248, 270, 271, 317, 346, 436
438, 439, 481, 482, 488, 489, 497, 499

\+ Co-Requisite

* Pre-requisite to Science Core

** For Transfer Students having completed an introduction course

APPROVED PROGRAM FOR CORRECTIVE THERAPY CERTIFICATION

The Physical Education Department in cooperation with the Veterans Administration Hospital offers interested students an opportunity to qualify for certification in Corrective Therapy through the American Corrective Therapy Association.

Certification is designed to recognize advanced knowledge and the ability to provide therapeutic physical education commonly applied in public and private rehabilitation clinics and hospitals; public and private schools, colleges and universities; special schools and camps for the handicapped; nursing and recreational programs for the handicapped.

Requirements for Certification Eligibility

1. Bachelor's Degree with a major in physical education.
2. 400 clinical hours in therapeutic physical education approved by the Men's Physical Education Department.
3. *Required Courses:*

	Units
MPE 437 – Adapted Physical Education (2) Prerequisite: Physical Education 333 or equivalent. Organization, administration and techniques utilized in the conduct of adapted physical education classes and corrective therapy clinical programs. (Lecture, Laboratory)	2
MPE 438 – Physical Maintenance and Restoration (3) Prerequisite: Physical Education 437 or consent of instructor. Principles and practical application of exercise for development, maintenance and restoration of school age children and adults.	3
MPE 439 – Fieldwork in Adapted Physical Education (3) Prerequisite: Physical Education 437 or consent of instructor. Supervised clinical training experience in didactics and practical aspects of physical and mental rehabilitation of handicapped patients at the hospital level, under supervision of the Corrective Therapy Training Program in affiliation with the Long Beach Veterans Administration Hospital. May be repeated once for credit.	6
MPE 497 – Independent Study (3) Prerequisite: Major or minor in physical education, junior or senior standing and consent of instructor. Additional clinical training and special study in the area of Corrective Therapy.	3
TOTAL UNITS	14

CERTIFICATE IN ADAPTED PHYSICAL EDUCATION

The Men's Physical Education Department offers a certificate of specialization in the area of adapted physical education. This certificate is designed for students who are interested in the field of physical education for the atypical individual.

Requirements for Adapted Physical Education Certificate

1. Bachelor's Degree with a major in physical education.
2. Approval of adapted physical education counselor.

3. *Required Courses:*

	Units
Select (6) units from the following courses:	
MPE 438 Physical Maintenance & Restoration	3
MPE 439 Fieldwork in Adapted P.E.	3 - 6
SUB TOTAL	6
Ed. Psych. 350 Education of Exceptional Children	3
SUB TOTAL	3
Select (3) units from the following courses:	
Ed. Psych. 451 Learning Disabilities in Exceptional Children	3
Ed. Psych. 461 Mental Deficiency	3
SUB TOTAL	3
Select (3) units from the following courses:	
Psych. 370 Abnormal Psychology	3
Psych. 374 Psychology of Disability	3
SUB TOTAL	3
TOTAL UNITS	15

Idea Mart

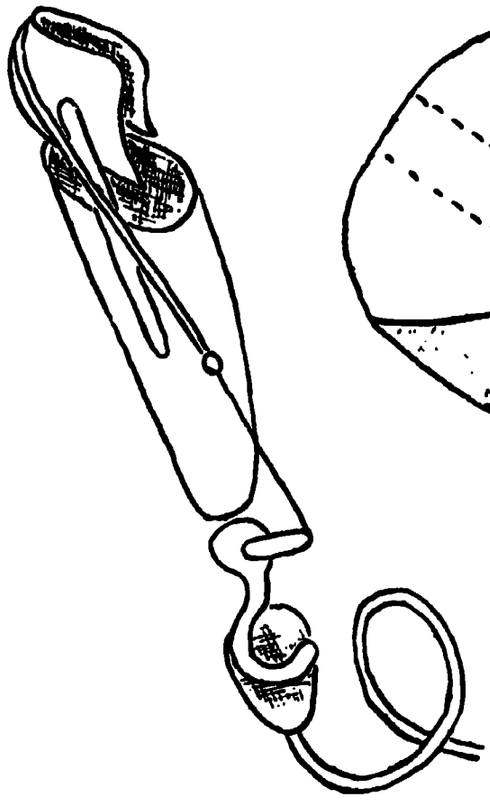
JIM COWART
Remedial Physical Education Specialist
Alameda County Schools

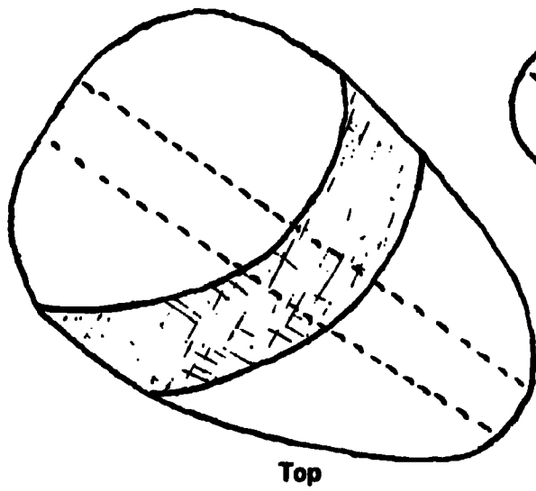
Working in remedial physical education one is confronted with a wide variety of physical problems in students. At times, equipment or supplies are not available in the schools to specifically meet the needs of some students. With a little time, initiative, and creativity many items can be made inexpensively which will well-serve in the program.

To make our program more meaningful to students, factual information related to the student's physical disability should be presented. In addition, knowledge of one's own body musculature and how it can be developed and maintained through exercise is important. When attractive and interesting visual aids are provided this information is well-received by students. Since pupils like not only to see but to touch and manipulate as well, this sense should also be considered in developing teaching aids.

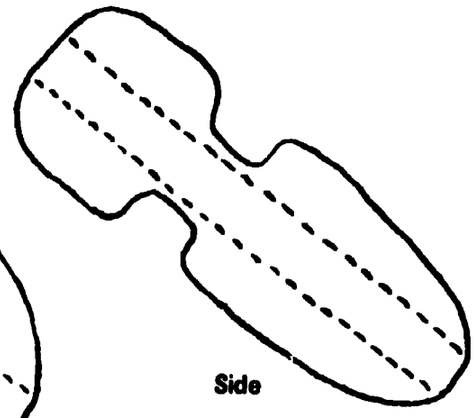
Variety in teaching method and program content is essential to an exciting program, exciting as seen by students as well as professional peers. As you, the teacher, see a need, attempt to meet it by developing/creating a piece of equipment or other supply. Keep in mind getting your industrial arts department to assist, if needed. When student needs are met, the students are contented and your job as teacher becomes more enjoyable and meaningful as well.

Included below are some drawings of equipment and motivational items developed to meet the specific needs of students as seen by the presenter. A more detailed description of each will be made at the session meeting.



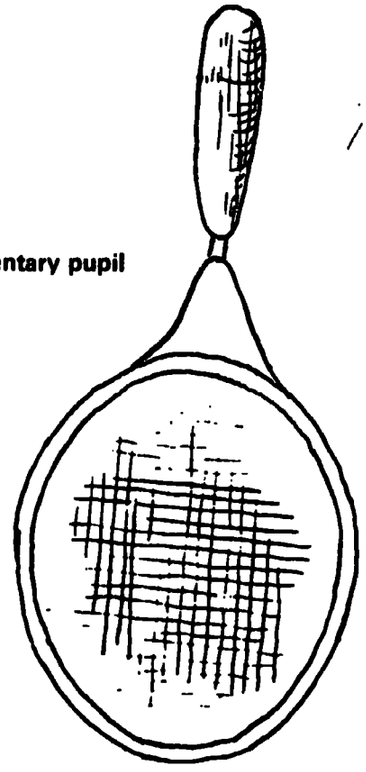


Top

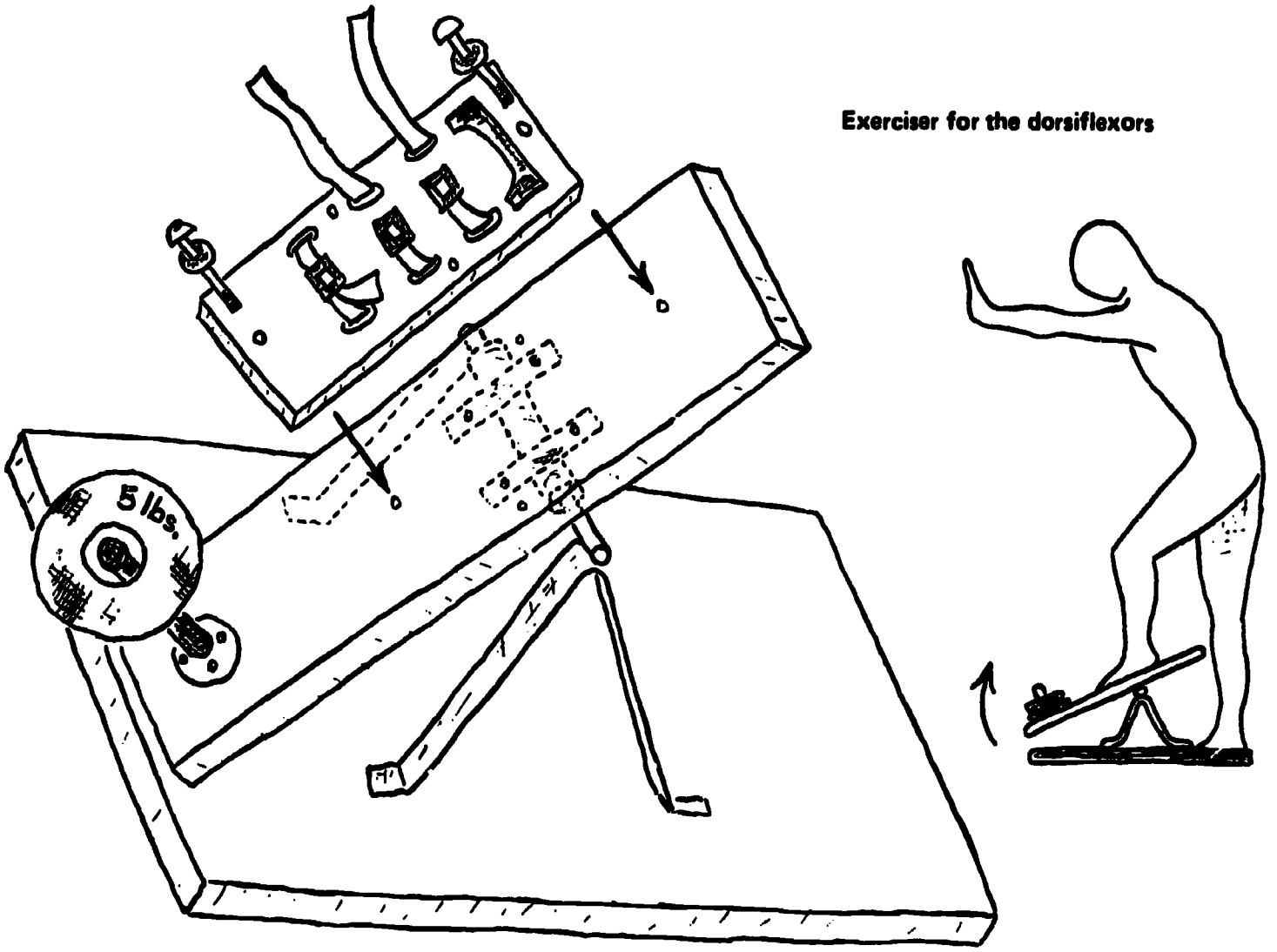


Side

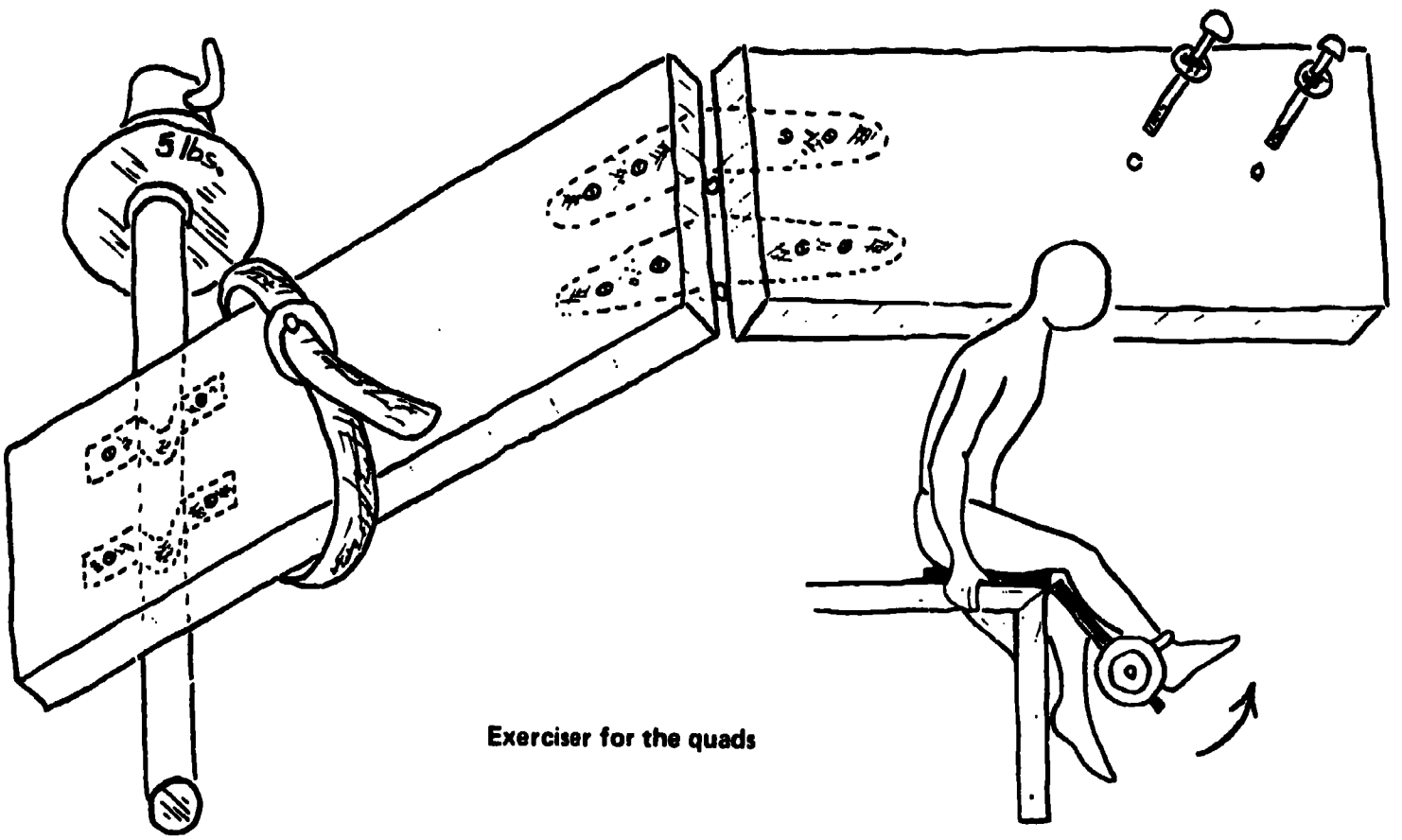
Jump rope handle to fit a prosthetic hook



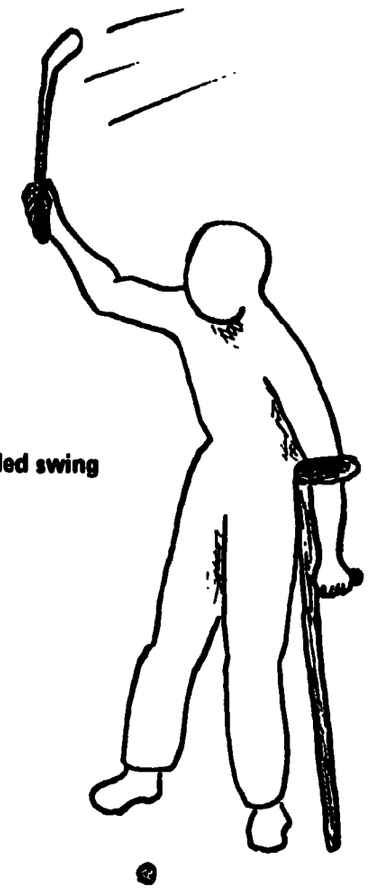
Short handled badminton racket for sedentary pupil



Exerciser for the dorsiflexors



Exerciser for the quads



A shortened golf club to allow a full controlled swing while bracing with the other hand.

In addition to the previous items, others will be shown that were made and used for the following purposes:

- Sports equipment adapted to specific physical needs
- Visual aids to communicate factual information about musculo-skeletal body system
- Motivational items to encourage students to work harder in their physical conditioning program
- Items to provide students with constructive lessons when they are totally excused from any physical activity for a few days
- Resistive exercise equipment built from aircraft pulley, cables, galvanized pipe, etc., to supplement school supply of barbells and dumbbells – to help in the development of muscular strength and endurance.

Movement In Programs For Handicapped Children: Hysteria And Reality[1]

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Since the publication of the texts by Strauss and Lehtinen, Getman and Kephart, in the late 1940's and early 1950's there has been an onrushing interest in the use of movement activities for the handicapped, unparalleled in the history of special education. Professionals, semi-professionals and downright unprofessionals of a wide variety began to prescribe movement education programs containing a wide diversity of tasks, and these programs in turn were proposed for the remediation of many kinds of abilities in children and youth evidencing a wide range of problems.

The onrush of movement prescriptions for the correction of perceptual, visual, intellectual and academic problems was widely appealing for many reasons. Parents, sometimes for the first time, could become involved in helping their unfortunate children. Teachers whose minds were beginning to become rather boggled with the pleatheoria of often subtle educational cureall, were handed rather obvious and easily understandable action cures, consisting of balance beam walking and the like. Children seemed to "take to" the sometimes funfilled activity programs, sessions of movement experiences which often provided a needed break from often oppressive and physically confining sessions of traditionally applied academia.

Those who were convinced reached hard and long for various perceptual-motor programs, either accepting intact the writings and content proposed by one of the "ordained", or else attempting to combine the "best components" contained in various authors' writings, in order to compile an "ideal" program for youngsters evidencing various types of problems.

1. Outline of Dinner Speech, Conference on Physical Education Techniques and Methods for Handicapped Children and Youth. May 24, 1973.

But, amidst the hysteria of the 1950's, 1960's and early 1970's, some discordinate notes occasionally issued forth. For example, the admonition that "movement was the basis of the intellect" fell on puzzled ears of the parents of intelligent children afflicted with cerebral palsy. Couldn't their children be academically capable because they lacked movement capacities they asked? Writers and theoreticians who proclaimed that sound intellectual and academic functioning was only possible if a child evidenced adequate movement abilities[2], were somewhat puzzled at times to find clumsy children within schools for the gifted, or to observe physically superior retardates in the Special Olympics Programs sponsored by the Joseph P. Kennedy Jr. Foundation.

Most disturbing to the more sophisticated examiners of the passing "movement scene", were the rather consistent research findings which indicated that the application *of a few simple movement* cures were not only highly unlikely to modify any academic or perceptual abilities, but also would not modify movement abilities. Following the negative research findings which poured forth, came official statements further reflecting skepticism, from such organizations as the American Academy of Pediatrics, the American Medical Association, the National Association for Retarded Children and similar groups interested in the welfare of the more unfortunate members of our youthful society.

Examination of the various movement theories and practices expounded during the 1950's and 1960's, also brought forth some guidelines and findings which if adhered to when further program development is engaged in, should help to replace movement hysteria with achievable realities. Some of the realities which I believe have been documented in the literature are as follows:

1. Movement is one of several important components of the child's emerging personality, not a central core from which all social, intellectual, perceptual and academic skills must invariably spring.
2. Clumsiness in children, whether academically gifted or those with learning difficulties, poses social obstacles which must be overcome. With exposure to a broadly based program of movement experiences, it is likely to elicit some improvements in movement abilities.
3. A comprehensive program containing a wide variety of sensory-motor experiences has been shown to exert positive changes in some severely and profoundly retarded children. Due to individual differences in neuromotor make-up among these children, as well as among all children, the changes are likely to vary from child to child, exposed to the same program experiences.
4. Adequate hand-eye coordination is a necessary component of classroom functioning, enabling a child, whether gifted, average or below average academically, to answer questions and problems in written form and to express himself intellectually. Hand-eye coordinations involved in printing and writing tasks can often be improved by exposure to properly sequenced exercises.
5. Such academic operations as reading, consists of numerous sub-processes, any one or combination of which if not in tact will likely impede progress. While most reading processes *may* be translated to movement experiences, they need not necessarily be so translated.
6. A wide variety and combination of peripheral processes may be intact and/or deficit in various ways, while basic intellectual functioning may be relatively unimpaired. The way to change central intellectual processes is not by mindlessly applied peripheral movement and sensory experiences, but by involving the central processes directly . . . by encouraging the child to engage in all dimensions of intellectual behavior within a motivating program of movement experiences.
7. To an increased degree it has been found that when a program of movement experiences is filled with academic content and/or *requires a child to think*, to make decisions about the learning

2. A Movement "expert" in the San Fernando Valley last year proclaimed that no child should be admitted to elementary school unless he could skip! A perhaps useful criteria, as its application would eliminate the kindergarten and most of the first grade youngsters.

process, and to engage in various intellectual operations, it is likely that such a program will exert a positive influence upon both academic competencies, as well as intellectual functioning. Programs of this nature should proceed along two main dimensions: On one hand, they should afford the child increased freedom to make at least some of the decisions about what he is undertaking, and secondly situations and movement and action problems should be presented which contain increased difficulty, as the child evidences the ability to engage in the simpler intellectual operations.

Essentially, therefore, the research tells us that we cannot expect too much in what learning theorists call "transfer width" . . . transfer from program content to objectives is likely to take place *only* if the content of the program contains experiences which are compatible to stated objectives. A program containing a few simple movement experiences is likely to modify only those movement qualities contained in the actions presented and little else. Whereas, a program of action experiences in which children are required to make perceptual judgments, to create, to make decisions, to memorize and to use their intellectual abilities within many dimensions is likely to positively influence a wide variety of abilities.

The viable research literature over the past 26 years has informed us that movement experiences are potentially powerful tools. If these tools are properly sharpened, aimed and combined in reasonable ways, our contributions as physical educators and special educators are likely to be helpful ones in the lives of the children we hope to serve.

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Leisure Time Activities For The Handicapped Youngster

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Leisure time activity is an area that has been sorely neglected when planning for the handicapped person. Today we shall look at this issue and suggest ways or guidelines that can be used relating to this problem.

First let's look at the meaning of leisure and what this word means in our society. I like to define leisure as "Time spent in self-determined activities and experiences during ones economic free time that allows for psychological and socially pleasant opportunities for recreation, creativity, personal growth and service to others". Traditionally leisure time is time spent in activity after one has completed job tasks. What about those persons free from job tasks for whatever reason, (i.e. retired, Welfare recipient, and one we focus on today, the handicapped.) Let's take a closer look at what leisure time means to the handicapped.

1. Isolation
2. Limited life space
3. Architural Barriers
4. Focus on self
5. Transportation problems

Now lets look at what types of youngsters we are referring to when we say handicapped. In general I am referring to (1) severe, moderate, or mild physically or multipally handicapped, including the blind and deaf, (2) profound, trainable or educable mentally retarded and (3) emotionally disturbed. These youngsters are community based rather than institutionalized.

Now that we have looked at the concept of leisure and type of youngsters we will be focusing on let's look at the goals for developing leisure time activities.

It is most important when planning leisure activities that goals be determined before involving youngsters in your programs for the following reasons:

47

1. Development of meaningful activities
2. Evaluation tool
3. Diagnostic tool
4. Determine modification
5. Development of new techniques and methods.

These are the guidelines I use when establishing goals or objectives for programs.

1. To increase growth and development
2. To reduce isolation
3. To encourage social interaction
4. To develop better self esteem or awareness
5. To re-direct child attention from self
6. To provide activity for daily living
7. To motivate interest in new activities
8. To provide a *successful* learning experience.
9. To help prepare child for adult roles.

Next we move to programming for handicapped. Below are several steps you should remember in this area.

1. Determine needs for operation of programs
   A. Transportation
   B. Facilities
   C. Activities
   D. Chronological ages
   E. Program requirements, etc.
2. Look at existing programs and facilities to determine modification at least cost.
3. Develop methods for grouping children in effective programming.
4. Determine similarities and differences between those with handicaps vs. non-handicapped.
5. Look at level of functioning and program to raise.

Once the above areas have been finalized activities can be planned. Many activities utilized in community recreation programs are successful with the handicapped, however I have found the following to be most successful.

1. Arts and Crafts
2. Dramatics
3. Bowling
4. Teenage Rap Session
5. Grooming and Social Graces Classes
6. Swimming
7. Special Olympics
8. Camping
9. Scouting
10. Community Trips - My resource book is "*Around the Town With Ease*" published by Junior League of Los Angeles.

In summary leisure time planning for the handicapped is most urgent and necessary. In terms of time it is something they have plenty of used constructively. It can make the difference between a well adjusted, coping individual and a misfit in our society.

The Right Style For The Right Child

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University Elementary School, UCLA

In this day of modern educational techniques we often hear the phrases "let's be innovative" or "let's get involvement" or "let's individualize"; better perhaps we should hear, "let's get the right style".

In too many cases we have let ourselves be submerged under the idea of teacher says child shall do type of philosophy. For many instructors they often feel more comfortable with a command style or approach to their teaching. For others perhaps they have never been exposed to looking at other possibilities for presenting challenges to children. Whatever the case not all children probably learn best under one style but rather a variety of styles.

In order to effectively present challenges, concepts, principles and information to students a good teacher should be aware of the wide possible variables in the teaching/learning act. Such variables as student involvement in lesson planning, student involvement in peer teaching, space, force, time, equipment, evaluation, types of communication sequential learning tasks and many more variables are all subject to change when given the opportunity to change.

A teacher to be most effective in terms of individualization then should be familar with possible teaching styles and their usage with different learning groups. In today's session participants will get an opportunity to role play as students experiencing various teaching styles. After each style is completed participants will get an opportunity to analyze the components of each style and then review the important points. Six teaching styles will be covered during the length of the session: Command, Receprocal, Individual, Small Group, Problem Solving in Small Group and Problem Solving Individually.

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The Role of the School Stimulating Physical Development of the Mentally Retarded Child

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Consultant
Riverside County Superintendent of Schools

The objectives of the physical education program for mentally retarded (I detest the word "retarded", that this child takes a longer period of time to learn what the normal child would learn, what ever the "normal" child might be? I feel that we all are retarded in some areas) are to provide happiness, enjoyment and pleasure for each boy and girl, and an opportunity to develop self-confidence and self-reliance by experiencing success. In a physical education program, I feel that the child's attitude and values are just as important as the skills he is learning. I think we should try to replace and reduce the fear and stress of trying something new with positive values and attitudes. We can do this by positive reinforcement (giving ribbons or T-shirts). The program should be noncompetitive since many of these children have suffered too much frustration and failure. Each boy and girl may learn without embarrassment or fear of making mistakes. Our program should be one of accepting each boy's and girls's liabilities and assets and taking this into consideration. The teacher, if conscientious, must prepare to meet the individual needs – this takes time, equipment and individual planning. We hope through physical education that each boy and girl will gain a better feeling of self-worth, where each experiences success. We hope to improve his personal adjustments of acceptance of self and others along with the development of proper attitudes. I think that we, as physical education instructors, can provide

understanding, security, and opportunities for new experiences and recognition as we would for any boy or girl.

We need teachers that realize the children might be "a little slow learning in one area", "a little sensitive to change" – it's not either "none" or "all", but a matter of degree of "sometimes", "usually", and "frequently". We need teachers who will integrate the slow learning child with the children in regular classrooms (for the time tolerance level will permit), in regular physical education and "recess time", (even if the noon supervisors need a special workshop) besides having his own physical education adjusted to his individual needs. We need the type of teaching that is not "telling" or "explaining", but inspirational (the slow learning responses to involvement and demonstration. They remember better what they see than what they hear) type of teaching where the child will do the activity at home, where you know if you are walking home from school and see the child doing the activity that you taught during the day -- you know it's coming from within rather than without. I feel it is not the quantity of time, but the quality of the time the instructor spends with the student.

There are many approaches – sequential step by step approach taking one level at a time and not moving to next level until child has achieved success: creative movement where child sets up his own criteria in throwing a ball against a wall or experimenting in all the different ways he can use a ball. There is a method that I feel is quite successful, which is teaching the use of equipment and the exercise program in the way that the body develops from the head to the foot. If one is going to teach the "jumping jack" – teach the arm movement first, then the leg movement. If one is going to teach jumping rope, first put the rope over head, then behind neck, back, bring up one knee with the rope under knee, then rope back and forth over head, then step over rope with one foot and back, then jump over with two feet and back, etc.

Many children have to be exposed to a wide variety of programs and others to one program in order to break through the filament that is surrounding them. I feel we as physical education teachers cannot hand the child the "key" to open the door to find his way in life but we can structure situations realistically where maybe on a certain day, at a certain time all the factors will fall into place. Maybe the child has to find the "key" within himself. In other words, they need exposure to a variety of programs, sort of a "smorgasbord approach"!

There are three types of attention spans – brief attention span, concentrated attention span and the selective attention span. Brief attention span in physical education for a slow learning child, is one where he will walk over, pick something up, and lay it down. This one should be eliminated. The concentrated attention span is one where he picks up physical education equipment and plays with it a long time. This you want to reinforce because it might have a positive transfer to other areas. The selective attention span is one where you only want to give the child a choice of three pieces of equipment to play (limiting his choice -- so he isn't distracted). Also, posture exercises probably will help his attention span, therefore improve his school achievement.

Physical education equipment such as balls, jump ropes, etc. are tools in communication – maybe it is not the program, but the amount of individual attention and empathy provided that makes the difference in the physical education program for the special education child.

We must give the mentally retarded "slow learning" child success in non-verbal areas while working on the verbal areas in the classroom. We must give him the motivation to come to school, thereby, giving him success in at least one area. Emphasis should be on working together, not competing with each other, where they don't have to risk too much. Many of these children were first hyperactive, then the principal put them with a dominating type of teacher, where they started to withdraw and finally developed an indifferent attitude, where the child did not want to experience any more failure. Therefore, he did not try because there wouldn't be any results and he could protect that island he calls himself. Many of these children suffer so much failure, that when they do achieve real well, they will try

extra hard in front of their peers and "blow it". Some of these children lose their defenses when they are not around their brothers and sisters to be measured up to. Also, many want to be "first" and the "best" because of this -- besides teaching leadership, one must emphasize fellowship as well as the foresight, the hindsight approach. Emphasis should be on the positive, the ability – not the disability.

Many children today, not only mentally retarded "slow learning" children, need the principle of "putting things off to a further time". One may give the example of a mother and a four year old child, where the mother gives the child a penny for a piece of gum and tells the child do not put this into your mouth until you have paid the cashier. Now the child has to stand in line and wait (put off that instant gratification of putting the gum into his mouth). Well, the basketball player does the same thing when dribbling down the court. Should he take a shot or pass it to a teammate? So he puts off his gratification for the sake of the team. What better justification could one have for a physical education program for exceptional children.

I wish the fathers in the home would say, "I don't know," once in awhile instead of coming up with all the answers about sports. Many children get the impression that they must be perfect in order to play a certain sport. They do not realize that some imperfection is necessary for good mental health. Even in teaching remedial reading, the teacher should work on the child's strengths. He might want to shoot baskets or play 4-square with him before sitting down to work on the areas that he is weak in. In other words, work on his strengths before the weaknesses. Also, many teachers will use P.E. as punishment in special classes or in the primary school by having a child run around the field or to the fence and back, yet, this might be his only area of success for a retarded child, let's not take this area from them.

What will work for one child, will not work for another. Also, surrounding him with a great deal of equipment may make him secure. Giving him something in his hands while walking the balance beam will give him a sense of security like carrying his teddy bear. Such games as 8-square gives a child a release of energy, yet, he has to control his body within certain set limits. Games such as Russian handball, where a child builds his own skills from simple to complex, start by throwing a ball up against the wall and catching it with two hands in front of him, then to one side, etc.

Many mentally retarded children will be easy to do counseling with by keeping their hands busy with a "squeeze-E", sponge, or some other object. Physical education can be a substitute for lack of success in the verbal areas. It can give a fast release of energy in a short period of time. Even such things as having exercise booths in back of the classroom where a child can go back and do two or three exercises with poi-poi balls or sponge balls to squeeze and then go back to his seat. The child is not wandering around the classroom, but has purposeful movement to a particular place and it will help improve his attention span. It would probably be a good idea to provide each child with one of these sponges to squeeze at his desk as a release of tension, rather than hitting his neighbor.

Many children that are classified as retarded have been moved from one place to another, or have learning gaps because of this mobility of population. What they need is a routine in the home such as meals, especially a routine in physical education, where they are all doing the same thing at the same time a sense of being with the group like "choral reading." Routine serves as a "home base" -- something to come back to. I do believe in movement exploration also. Physical education might be placed in some particular areas where a child can get some sense of security and emotional stability by doing things together such as simple exercises. Many of the mentally retarded feel more secure when they know what is coming next. Peer teaching of older slow-learning child to teach younger ones (help by the stations in an obstacle course) thus, able to review what they have learned early.

Many children, especially boys, have difficulty in handwriting. When their eyes see the number "4" on the chalkboard, the message comes in through the eyes (input), but the child can not write it down. The reasons he cannot write might be the fact that the child's hands do not have enough experienced background. Also, we might be setting up a learning block by putting the sensory system ahead of the

motor, when the motor system was there first when the child was born. How do we in physical education correct this? We can have the child work with jacks, lumni sticks; older boys – hand grips, squeezees and sponge balls. This will also limber up his hands for coloring, cutting, and pasting. Put a rubber band around the pencil so his hand won't slip all the way down.

Let's talk about laterality or awareness of the both sides of the body – as I term it. Many of the children need to do exercises from the side to the front – side lunge to front lunge, trunk bending to side and then to the front. They appear to have weakness in movement in this area. Also, I feel that many children cannot cross the midline of their body. When they read from left to right, they stop in the middle of the page or when they do handwriting from left to right they stop at the midline of their body. Mimic exercises such as the windshield wiper, chopping wood (demonstration), should be used. I definitely feel that one should be able to get the body to move left to right, before the eyes can move left to right. After all, we live in a left to right society, and I do believe that children read across the page and not down the page as adults do in fixations. Also, exercises like "swinging arms" (demonstration) while keeping the eyes and head looking straight ahead will help anchor the body and cut down on the head movement in reading.

Another point, that has come up more recently is the justification of equipment. Administrators want to know why one has the equipment such as the balance beam in the classroom. Can you give five good reasons why you have the balance beam in the classroom?

1. Learn to maintain balance under changing relationships.
2. Pinpoint the center of gravity in the body.
3. Improve movement from left to right.
4. Develop lateral movement by starting in the center of the beam and moving from left to right, right to left.
5. Develop better location sense where the arms and legs are by gradually bringing the head up and looking at visual target.
6. Control yourself on a limited surface.
7. By getting better self-image – ducking under a stick to get an idea of how tall one is. By going through a hula hoop without touching the sides – get an idea of how the body fits in and out of things.
8. Increase the attention span.

I would like to conclude my talk today by stating some very definite ways to work with slow learning children:

1. Direct command and direct praise approach.
2. Prompt approach in starting to work.
3. Be consistant.
4. Read non-verbal body mannerisms and facial expressions – give cues to what is coming next.
5. Sometimes the hand on the shoulder or pat on the back is worth more than any verbal praise.
6. Older children get status from younger children depending upon them.
7. Younger children get recognition from the older children.
8. Teach the hyperactive child to "put on the brakes."
9. Use "demonstrations" and "involvement" teaching rather than words.
10. Will relax under a routine of exercises.
11. Physical exercise will release tension.
12. Better control of physical muscles might result in a better control of emotional-intellectual of self.

13. Set definite limits and remain flexible within those limits.
14. Build tolerance level gradually.

Actually, there are too many points to emphasize in this brief presentation. However, I would be most happy to provide a workshop of twelve hours with your teachers spaced over a period of two days. Thank you for your consideration and attention during this time. A slide presentation will follow.

Behavior Modification: It's Role In The Instruction Of Physical Education For The Educationally Handicapped

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Physical education in the State of California is considered an integral part of an elementary school's instructional program (Educational Code, 1969). Within many classrooms for the educationally handicapped (EH), the State's mandated physical education period has become synonymous with recess or free play. For the most part his lack of an instructional physical education period has been due to the inability of the classroom teacher to control the maladaptive behaviors exhibited by many of her students on the playground.

The unstructured playground activities can be substantiated not only by on-site visitations of EH classrooms but by instructional texts written for the classroom teacher of the educationally handicapped. Some authors completely ignore physical education in their discussion of the school's programs for educationally handicapped (Hewett, 1969). Other authors (Haring & Phillips, 1962) stated that in their program for emotionally disturbed children a daily physical education program was reduced to one period a week because these children could not abide by simple game rules. Physical education was considered a reward. Cruickshank, Bentzen, Ratzeburg, and Tannhauser (1968) stated,

> "It is of paramount importance to note that the program of physical activity will not begin until after all the children have made a successful adjustment to the structured daily program and have begun to evidence a degree of success in school achievement."

None of the above authors have given specific instructions as to playground management techniques when and if a program of physical instruction was initiated.

As a group, EH children are below average in gross-motor skills when compared to their normal counterparts (Cratty, 1969; Poindexter, 1969). In addition to the need of motor skill development, there are indirect benefits of physical education (Council for Exceptional Children, 1966). Edson (1969) suggests that the EH child may gain peer acceptance, a sense of belonging and recognition through physical education activities when it cannot be gained in the classroom.

Because of the possibility of low motor skills and the indirect benefits of physical education, the approaches of ignoring, reducing, or postponing physical education for the EH may be an expedient approach, but it does not seem beneficial in the total development of the child.

Some success has been reported in the control of maladaptive behavior by the use of movement exploration (Fletcher, 1972). This is one technique in the instruction of basic motor skills which eliminates competition, waiting for turns, keeps the child active, and there is no teacher demonstration (Hackett & Jenson, 1970). Taylor and Sherrill (1969) have placed limitations on this technique when used with the educationally handicapped. First, many of these children may be unable to ignore movements of the other children which may hinder the child's ability to concentrate. These children would not benefit from group instruction of movement exploration. Secondly the teacher must be very careful to structure the environment and setting limits. Others (Cruickshank, et al. 1968; Edson, 1969; Poindexter, 1969), also pointed to the need of a structured setting and teacher support. Further, under this approach, there is no provision for formal instruction of traditional group games.

Behavior modification is another method which has shown positive results in the control of deviate behavior in play activities. The basic tenet of this technique, as developed by B.F. Skinner (1953), is that the human organism will not repeat behaviors for which it is not rewarded. This method enables the instructor to identify maladaptive behaviors which interfere with learning and aid the child to develop more socially acceptable behaviors. While many special educators have perfected this classroom management technique, few have applied its principles to their physical education program.

The purpose of this presentation will be to discuss one approach to behavioral management of the educationally handicapped within an instructional physical education program. Also a film will be presented to visually demonstrate the instruction of both individual and group physical education activities to EH children.

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Moving And Learning

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The teaching of movement skills and creative movement enhances the total development of the child – his physical and psychological abilities, his feelings about himself and about others. In short, movement education can affect how the child adapts to and masters his environment. The development of motor skills is a central goal in movement education, but movement education can also help the child to communicate better, to perceive more accurately, and to become more adept at problem solutions.

The central task of movement education is to develop the child's sensory-motor functions. Sensory-motor functions develop maximally during the first 18 months or 2 years of life. During this time span the child learns to move and manipulate objects; perhaps most importantly, he becomes aware of himself as a person separate from his environment. During the sensory-motor period the child becomes aware that he is both an object and an actor in the world.

Movement education therefore includes not only training the child's ability to move, but enhancing his ability to process the sense data which initiate and direct movement. Barsch, Kephart, Getman and others are among the leaders in this field who have emphasized the importance of awareness and perception in movement education.

The child's fine motor coordination – his ability to handle objects skillfully and to execute precise directed movements with delimited muscle groups – can be developed by arts and crafts, but these are seldom a regular part of the public school curriculum except perhaps at the preschool or kindergarten level. Too often the child is expected to print or write legibly in the primary grades without sufficient readiness work. Too often his training in movement education consists only of permission to run about and to use swings and other equipment in the play yard, and perhaps instruction in games and sports in the upper grades. Both fine and gross motor coordination are important and need to be considered

during movement education, (although the development of fine motor coordination is also a classroom function), but movement education which focuses on movement alone is incomplete.

The use of movement education to develop and enhance awareness -- awareness of one's own body and of the world outside - is generally neglected. Such neglect has certainly contributed to the striving of many, if not most, adolescents and young adults - even older adults -- for altered forms of consciousness, and their attempts to become more aware of other human beings and of their total environment by such methods as sensitivity and encounter groups. Awareness of oneself as a total person and of others are both necessary for empathy and compassion; the general lack of such qualities today stems, at least in part, from lack of opportunity to develop such awareness. Movement education has the potential to fill a critical need in our culture.

Although movement education is certainly necessary and important for all children, it is of special importance for children with handicaps, because these children so often have deficits in movement, in their ability to perceive and to process information from the world around them, and in their awareness of their own bodies. They therefore do not know how to interact in the world of space and time.

In our movement education program, movement skills are trained by focussing on the various attributes of movement isolated by factor analytic studies: speed, strength, agility, flexibility, endurance, balance, and coordination. The Frostig Movement Skills Test Battery has been developed by us to assess children in each of these attributes (except endurance). This test takes about 25 minutes to administer to a single child. Three or four children can be tested together in a 40-45 minute time period.

Our movement education program, however, is concerned not only with movement skills, but with helping the child become aware of others and of time and space.

Awareness of space is developed by helping the child (a) to move freely in space; (b) to move in different patterns, for instance, in zigzag lines, in circles, in a figure eight; (c) to move in different directions, as forwards, backwards, sideways; (d) to combine moving in different patterns and in different directions at the same time; (e) to move through obstacle courses, requiring the child either to touch the obstacles each time he passes them, or to avoid them; (f) to move in relationship to moving patterns formed by the movements of other children; (g) to become aware of one's own personal space – how far one can reach and with what movement one can reach farthest, how one can make the body small or occupy much space, how one can be high or low to the ground, and so on.

Awareness of time is developed by such exercises as having the child move in different rhythms or having him observe how long it takes to run as rapidly as he can from one end of the gym to the other, and how long it will take him when he walks as slowly as he can, and so on.

Exercises which help the child to become aware of other children or of synchronized movement include asking two or more children to execute the same movement at the same time and in the same space (e.g., four children are asked to put one hand and one foot simultaneously into a square formed by dowels or drawn on the floor); having children do a movement together (for instance, playing "cart and horse"); having children move in relation to another's body (e.g., crawling under an arch formed by another child's bent body); and having children help each other (e.g., helping another child walk on the balance beam). Taking turns, keeping the same distance in running, or running without losing the shape of a circle, are other examples of activities which help the child become aware of others.

All of these exercises make the child more aware of his own body and what he can do, how he can master his body and master space.

Creativity is greatly enhanced through movement. The child learns to develop his own movement sequences. He learns to find solutions to problems given to him by the teacher.

As already mentioned, it is most important for children with learning difficulties to engage in movement education, because movement education helps these children to develop lagging abilities, e.g.,

planning, imagery, imitation, verbal expression, control of behavior, attention and concentration. When the child moves across the balance beam, he has to concentrate. When he has to follow the directions of the teacher quickly - for instance, to start or stop a movement -- he has to be in a state of alertness and to pay careful attention. When he plans a movement sequence, he not only has to memorize the sequence, but he has to plan it and he has to imagine it. When he does not know a movement, he has to learn to imitate what is shown to him.

Movement is also exceedingly important for the development of language, even when language is not directly used. A famous neurologist, de Ajuriaguerra, has made this assertion after many studies. He, in collaboration with Madam Naville at the University of Geneva, has developed a training program for children with neurological handicaps.

Language is not only influenced by the movement itself but can also be trained more directly by giving the child an opportunity to verbalize what his plans are or what he has done; examples will be given.

In summary, this lecture will give a synopsis concerning the author's point of view of the form and goals of movement education. Some materials and slides will be shown to illustrate this discussion.

Multi-Disciplinarian Approach To Working With Handicapped Children

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A team composed of members of the education, remedial physical education, therapy, and medical departments of the Harlan Shoemaker Elementary School in San Pedro, California, have been engaged in an experimental program to enhance the learning process of physically handicapped kindergarten and first grade students. We used a sensory-motor program based upon the theories of Dr. A. Jean Ayres. We engaged in this approach, drawing upon our varied experiences, with the hope that we would facilitate the developmental sequences related to learning and thus create a better learning environment.

Dr. A. Jean Ayres theories that disorders in sensory integration account for some aspects of learning disorders and that improving sensory integration can help academic learning. It is this sensory integration that is basic to the total growth of the child and aids in the development of perceptual motor skills. It provides an organized, developmental sequence of sensory stimuli, combined with motor activities, increases integration of primitive brain leve. and allows the higher cortical centers to function. This developmental sequence of sensory modalities places initial emphasis on increasing input to the tactile and vestibular systems, and later, on increasing the input to the proprioceptive, auditory, and visual systems. Through these processes, one of the most fundamental problems of the physically handicapped child (similar to the learning disabled child) – insufficient sensory stimulation – can be improved.

In addition to insufficient sensory experiences, the handicapped child may also have inadequately integrated Brain Stem reflexes. These reflexes seem to interfere with the maturation of higher cortical centers. Anti-reflex positioning can improve their integration. This positioning, along with sensory integration facilitates neurological development and therefore, learning.

We formulated our program to meet these two needs, increased sensory and reflex integration, by incorporating the following activities which were classified into three inter-related phases: (1) the development of tactile, vestibular, proprioceptive, auditory, and visual function, (2) the development of

body scheme and motor planning, and (3) the development of motor skills and spatial relationships. We devised these activities within the developmental levels prone and supine; and gradually included activities in crawling, creeping, sitting, kneeling, standing, walking, and running. Many activities in each perceptual area provided integration of more than one perceptual-motor skill. The areas and activities included the following:

Sensory Awareness
- hammock
- resistive crawling, rolling
- scooter boards

Motor Development
- bobath ball
- balance boards and T-stools
- scooter boards

Body Awareness
- textured rolling and crawling
- movement exploration
- body identification

Laterality-Directionality
- rocking board
- trampoline
- angels-in-the-snow

Bilateral Integration
- scooter boards
- trampoline
- ball skills

Motor Planning
- trampoline
- scooter boards
- T-stools

Spatial Relationship
- obstacle course
- movement exploration
- mazes

Eye-Hand Coordination
- ball skills
- hammock
- scooter boards

Figure-Ground Discrimination
- Letters, shapes, number, colors
- mazes
- discrimination games

Definition of Terms

PERCEPTION: the recognition, interpretation, and use of information about ourselves, and our environment as it comes through our sensory channels.

VESTIBULAR SYSTEM: a special proprioceptive system that functions to maintain equilibrium by providing both an awareness of motion and position in space relative to gravity.

TACTILE SENSE: light touch sensation perceived by the activated sensory stimulators.

PROPRIOCEPTION: that sensation perceived in the muscles, joints, and ligaments of the body providing information about the relationship of body parts to each other.

BRAIN STEM: the portion of the brain involving the medulla, pons, midbrain, and diencephalon.

TONIC NECK REFLEXES: postural mechanisms in which movement of the head in relation to the body alters the posture of the limbs. These primitive reflexes persist in the newborn through six months of age and include the following:

Asymmetrical Tonic Neck Reflex (ATNR) - postural mechanisms occuring as the head is turned to one side. The limbs on the side to which the head is turned extend and the limbs on the opposite side flex.

Symmetrical Tonic Neck Reflex (STNR) - postural reaction in which flexion of the head causes flexion of the upper limbs and extension of the lower limbs. Extension of the head causes extension of the upper limbs and flexion of the lower limbs.

TONIC LABYRINTHINE REFLEX: postural reaction determined by the position of the head in space which affects limb posture. Thus, if a child is held in the supine position, the limbs extend. When the infant is held in the prone position, the limbs flex.

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The Relationship Of Motor Development To Learning

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Learning is a three lane highway wherein constant interaction is present between physical, mental, and emotional factors. The complexity of this highway is comparable to our own freeway systems here in California. When the sequence of development breaks down in any one of the three lanes, the other lanes are affected. We know that all aspects of development interact and that a child's readiness for learning is contingent upon uninterrupted growth in each of these areas.

Motor development serves as a sort of night-cap to the other areas in that it provides the child with tne stamina and motivation for the pursuit of exploration and experience that follow in the days ahead. As a requisite to task-motivation it can be said to portray a "flag-is-down" situation or vice versa as readiness or the lack of readiness prevails.

The safe lane on most of our freeways is the one where the speed is not too slow nor too dangerously fast. The same is true of the motor development of the child; his movement can not be at either extreme if learning or his "traffic" is to proceed appropriately.

The true significance of the relationship of motor development to learning centers around the early establishment of motor patterns in what we call the formative years of growth or basically the preschool years. Some authorities would extend the formative years to at least adolescence but regardless of the years involved we are confronted with an on-going development that warrants the concern of today's "putting-it-all-togetherness". There is not time to quit. Let us examine a few of the high points in this on-going process. (Time will not permit a detailed discussion).

Age Level	Basic Motor Involvement
Birth to 3 months	How a child handles his naive reflex movements and makes the transition to his own motor control actually sets the stage for a freeway to his over-all development.
3 months to 9 months	Eye, hand, and body must begin to work together here for the drive ahead. Sensory exploration at this age is the forerunner of readiness for the heavy traffic ahead. At approximately seven months of age a child goes through motor performances that create a sort of prelude to speech production. At such time he establishes and enhances a breathing pattern that is essential to continuity in sound utterances. Many other preparations for future travel to maturity could be identified accordingly with this age level.
9 months to 15 months	How a child handles his first mobility determines his emotional security. This is the period when tantrums often begin and there appears to be a high correlation between such tantrums and motor confusion or the inability to cope with newly acquired mobility. To be mobile and get from here to there after months of immobility is a dramatic milestone in a child's development. The world is so full of splendor and sensory gratification in exploration that to be "plopped" into a slow lane (such as a playpen) for hour after hour is a devastating experience. To be an onlooker instead of a mover may be a crushing blow to the child's emotional stability. It is the equivalent of being "stalled" in rush hour traffic and is certainly no enhancement to learning. On the contrary when children experience a balance between freedom of movement and the establishment of limits they are secure.
15 months to 24 months	This is the period when locomotion widens the child's horizon and causes him to encounter social exchanges with others in his age range. His motor performance either provides him with self assurance in coping with peers or it causes him to withdraw from social interaction which in turn affects his learning.
2 years to 5 years	These are the years when gross motor performances tend to bring about the fusion of sensory information that results in perceptual growth. Auditory recognition, spatial relationships, visual discrimination, the recognition of size, shape, form, color, etc., are made possible by the child's movement within his environment. Movement is directly related to speech production as the child begins to reproduce the sounds he has experienced in his interaction with others. Thus, movement is the hub of the early learning that sets the stage for later cognitive learning and development.
5 years to 12 years	This is the period when fine motor performance begins to emerge and more advanced learning is in the making. If a good sequential groundwork in motor ability has been laid prior to these years fine motor skills are more readily and easily mastered and learning is the equivalent to the easy traffic we experience on one of our beloved freeways when all lanes are free and no clogging has occured.

In summary, learning may be said to be a type of complex operation which comprises a variety of factors and the most significant of these factors is movement or motor development. As we reflect upon life itself we soon realize the extent to which motor activities predominate in the successful adjustment to each new venture that we encounter in our spheres of endeavor. Because these skills of adjustment are dependent in some way upon motor development it behooves us to look for and maintain more effective methods of MOTOR traffic among our children.

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Developing School, District And County Remedial Physical Education Programs

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The Adaptive Physical Education program in the Garden Grove Unified School District began in September, 1969 with two full-time men teachers who were assigned to the seven District high schools and three of the junior high schools. Because of this staffing limitation, it was necessary for the men to work with girl students as well as boys.

In February of that school year, another man teacher was added together with a woman teacher. In September, 1970, three women and one man were employed, giving a balanced staff of four men teachers and four women teachers. This allowed assignment of women to girls P.E. classes at the high school level, although junior high school classes are still conducted on a co-educational basis. Adaptive P.E. teachers are also assigned to TMR classes and to elementary schools which house classes for physically handicapped.

Procedures listed in the following outline were used in organizing the program and emphasis was placed on orientation of school principals and other administrators to the forms, procedures and regulations which were introduced at the outset of the program.

The teachers make a real effort to maintain communication at the school level with administrators, P.E. department chairmen, counselors, and nurses. Monthly staff meetings are held with the adaptive teachers and screening sessions for student referrals are conducted at six week intervals.

As was mentioned earlier, the teachers are scheduled for five instructional periods per day with the sixth period of responsibility reserved for staff meetings, screening sessions, planning activities, and conferencing.

Organization of a Remedial Physical Education Program

I. Determination of need (based on State Remedial P.E. guidelines).
   A. Availability of qualified students.
      1. In regular classes.
      2. In special education classes.
   B. District commitment
      1. Administrative support regarding school staff members.
      2. Funding support
      3. Facilities

II. Selection of staff
   A. Qualifications
      1. Personal
      2. Professional
      3. Background of experience

III. Establishment of teaching schedule
   A. Distribution of staff
      1. Size of school
      2. Number of Special Education classes
   B. Scheduling of facilities.
      1. Cooperation of school staff
         a. Principal orientation – handbook, regulations, procedures, schedules.
         b. Physical Education department chairman – handbook, regulations, schedules

IV. Referral and screening of students
   A. Development of referral forms
      1. Use of State handbook and District expertise
   B. Involvement of school personnel
      1. Nurse
      2. Counselor
      3. P.E. teachers
      4. Principal
      5. Special Education teachers
   C. Selection of Admissions and Dismissal Committee
      1. Physician
      2. Nurse
      3. Guidance or Special Education person
      4. Remedial P.E. teacher

V. Typical problems
   A. Availability of facilities
      1. Scheduling of a room or pool with or around regular classes.

2. Storage of equipment – losses, transportation of items.
3. Purchasing

B. Staff cooperation
1. Principal – Encouragement and support
2. Nurse and Counselor – Referral and follow-up
3. P.E. department chairman and teachers – Cooperation and interaction

VI. Suggestions for program enrichment
A. Regular sports
1. Walk through football plays to develop knowledge and understanding
2. Teach spectator skill when participation is not feasible
3. Modify rules and techniques so that learning and enjoyment can take place.

B. Unusual sports
1. Develop units and invite regular classes to participate (concept of having something to give and share), to encourage reciprocity
a. Fly-tying and fly-casting
b. Back packing
c. Cycling
d. Rowing and canoeing
e. Scuba diving
f. Skiing

Submitted by Lloyd Jones

Developing a County Remedial Physical Education Program

In the state of California physical education is a mandatory subject for all pupils in public schools (EC 8572). Provisions must be made for each pupil, regardless of his physical condition, to participate in the type of program that will be most beneficial to him. The aim of physical education is the same as that of general education; the maximum development of the individual for citizenship in a democratic society in accordance with his fullest potentialities.

If physical education is to achieve its avowed purpose of contributing to the fullest development of all pupils, then adequate provisions must be made for those with disabilities. It was this belief that all children in the programs operated by the Office of the Los Angeles County Superintendent of Schools deserved the very best educational services available that gave rise to the Developmental-Remedial Physical Education program developed by the Division of Special Education.

It will be the purpose of this presentation to map out the steps taken in developing a Remedial Physical Education program for handicapped children and give some degree of insight into the use of System Analysis in developing similar programs at the various levels of public education.

Los Angeles County is in many ways a unique entity due to its large geographic size (4083.21 square miles) and its great number of school age children (1.6 million). Of the total population of the State of California, 35 per cent are considered to live within the limits of the county. It is further estimated that approximately 40 per cent of the exceptional children in the State also reside within the county line. During 1972-73 school year, the Division of Special Education operated over 300 classes for handicapped children. All of these factors had to be considered when deciding upon a method for designing the remedial physical education program to be implemented within the county schools office.

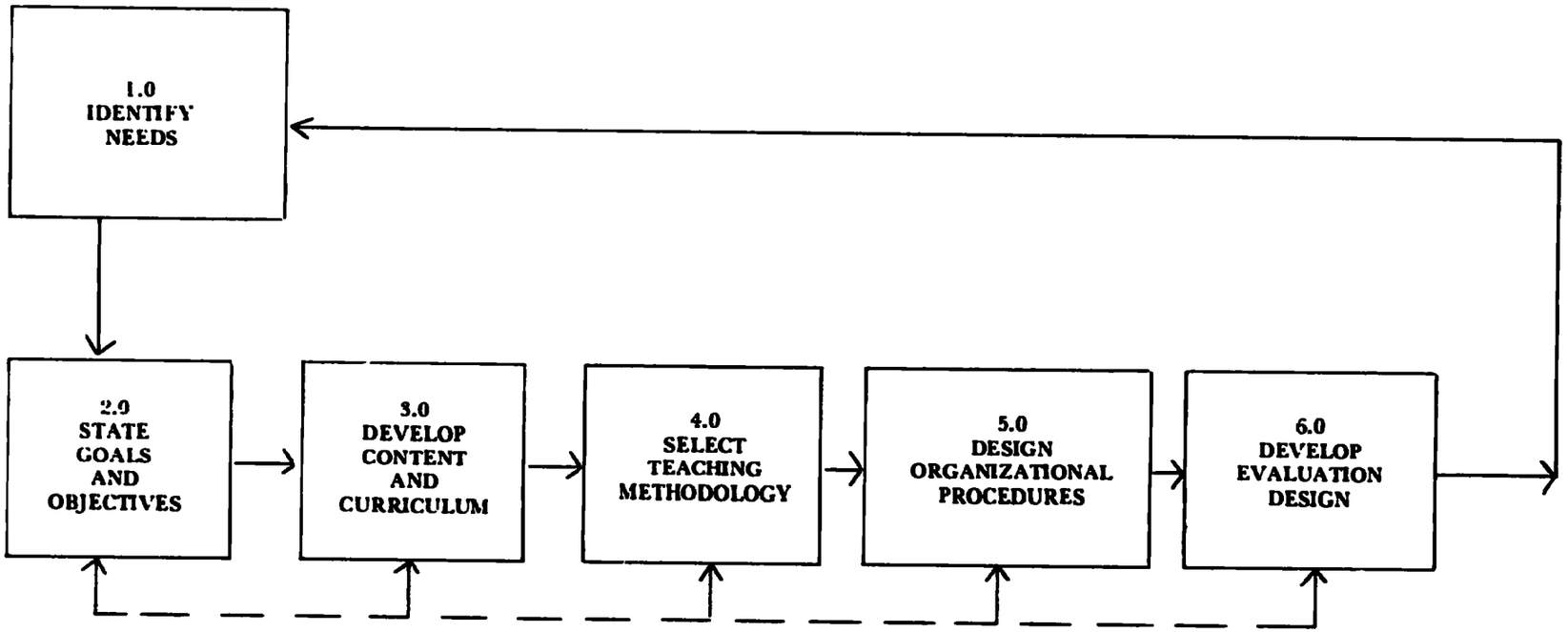
The technique of System Analysis was finally selected because of its established effectiveness in developing educational programs and designs. The System Analysis approach includes assessment of need

through the identification of educational discrepancies between "what is" and "what should be." This determination follows a logical progression and includes the steps necessary for the reduction in this discrepancy. This is called the Mission Profile, and includes: (1) Identify Need, (2) State Goals and Objectives, (3) Develop Content and Curriculum, (4) Select Teaching Methodology, (5) Design Organizational Procedures, and (6) Develop Evaluation Design. (See Figure 1 and 2).

The first step in the Mission Profile is identifying the needs of the target population. If a segment of our school age population is not receiving educational service commensurate with its needs and abilities, then we can rightly justify developing a program to reduce this inequity. Criteria must be established to identify this population, including the similarities and differences of individuals in the population. Studies by many authors as well as Federal and State Bureaus, provide data which can be used in general planning. These figures reflecting statistical estimates of exceptional children aid in preparing guidelines for identifying the target population.

The second step in the analysis is the definition of goals and objectives based on the identified needs. In the development of an educational program, goals and objectives must be clearly stated and from them Performance Requirements derived.

Submitted by G. Robert Roice



OBJECTIVE: By the end of the 1971-72 school year, the Developmental Remedial Physical Education Staff will produce, in writing, a complete organizational design of the program for physical education of the handicapped child.

FIGURE 1

MISSION PROFILE

Developmental-Remedial
Physical Education

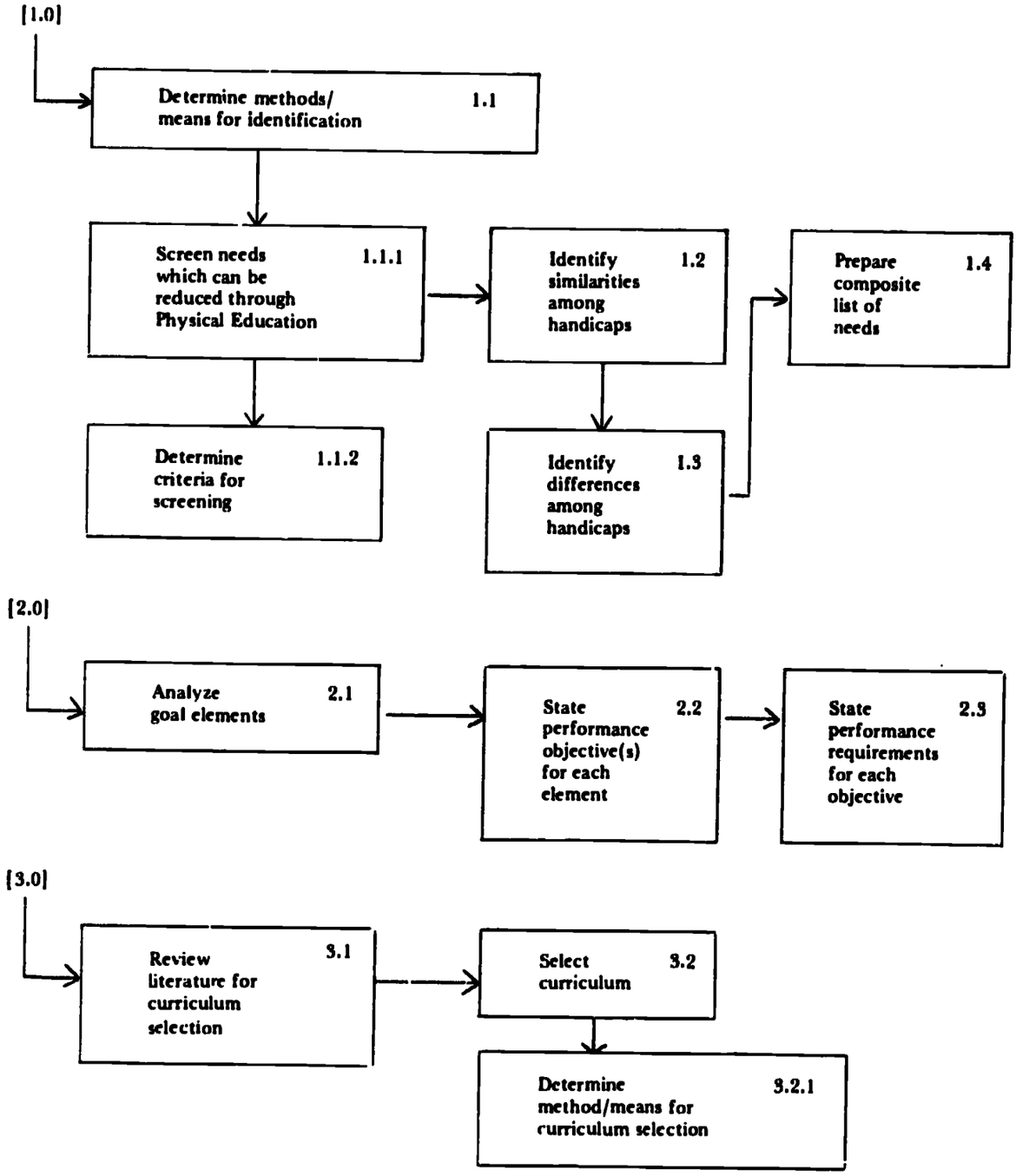
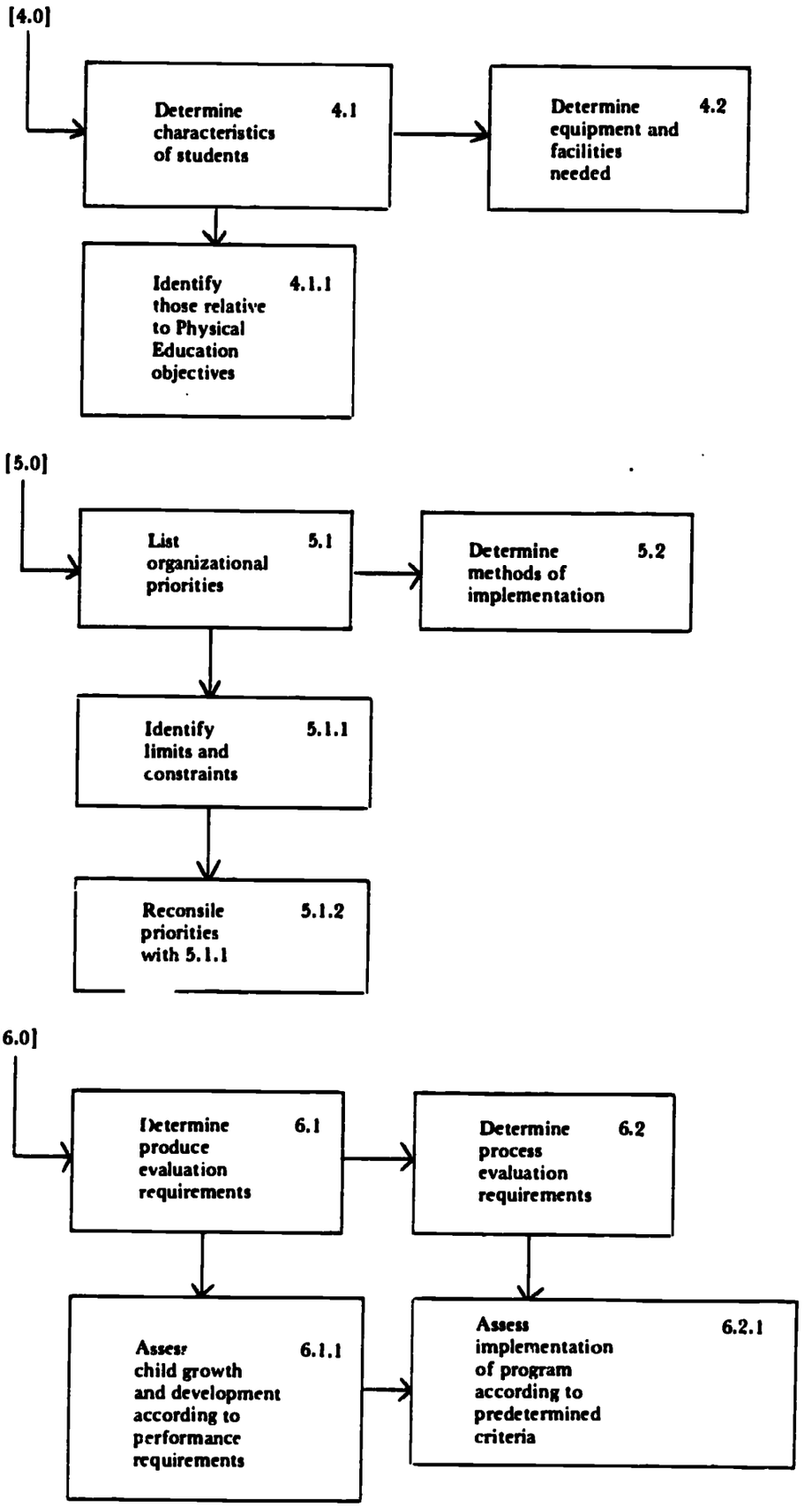


FIGURE 2

FLOW BLOCK DIAGRAM

Developmental-Remedial
Physical Education


[4.0]
Determine characteristics of students 4.1
Determine equipment and facilities needed 4.2
Identify those relative to Physical Education objectives 4.1.1
[5.0]
List organizational priorities 5.1
Determine methods of implementation 5.2
Identify limits and constraints 5.1.1
Reconsile priorities with 5.1.1 5.1.2
[6.0]
Determine produce evaluation requirements 6.1
Determine process evaluation requirements 6.2
Assess child growth and development according to performance requirements 6.1.1
Assess implementation of program according to predetermined criteria 6.2.1

The modern adapted physical education program is based upon the premise that the handicapped individual wants to be an accepted and active participant in the normal community, and that he should be given every educational opportunity to develop his potential so that he may become a well-adjusted, contributing member of society. The aim of developmental-remedial physical education is consistent with and an integral part of the aim of education; by accentuating the positive and emphasizing abilities instead of disabilities, education is put into remedial physical education, and remedial physical education is put into education and special education for handicapped children.

The outcomes of remedial physical education draw from the objectives of general education, but should be more specific and definitive in terms of the special group of students to be served. The objectives should represent definite goals that are attainable by students in the program; however, all students would not be expected to attain all of the objectives. A developmental-remedial physical education program organized so that all of the objectives are considered makes it possible for each student to meet those objectives of special importance to him. The aim, therefore, of remedial physical education is to aid the student with a handicap to achieve physical, mental, emotional, and social growth, commensurate with his handicap, through a carefully planned program of regular and special education and recreation activities.

The development of curriculum for a developmental-remedial physical education program must serve the stated goals and objectives of the program. As has been stated, these goals and objectives are based upon the identified needs of the target population. Curriculum must be, in part, determined by the age and grade level at a given school. It is essential that the scope of activities in the remedial program are the same as those for the general program. The only real difference exists in cases where special or therapeutic exercises are prescribed for certain conditions that may improve through the use of exercises.

It is essential that the educator be aware of the needs of his students and select and implement his curriculum in accordance with the goals and objectives set for the developmental-remedial physical education class.

The development of teaching methodology and strategies include many facets of organization and administration, such as class size, duration of class period, frequency of instruction, facilities, length of time devoted to activities, and so forth. These segments of the teaching plan will be discussed more fully in the section concerned with Organization and Administration.

The methods of teaching remedial and developmental physical education will be conditioned by many factors in addition to those mentioned above. Primary consideration must be given to the level of development of pupils in the group, their previous experience in play situations, and the kinds of disabilities within the group.

The outcomes being sought, which were identified in the process of establishing goals and objectives, will be factors in shaping both content and methods. Teaching in the remedial program should be directed toward specific ends. Some of these ends are identical to those of the regular program, and others are different.

The teaching methodology must, therefore, be an extension of the previous steps in the Mission Profile. The curriculum, based upon the stated goals and objectives, derived from the identification of the needs of the child, must be implemented using appropriate techniques suited to the ability of the child. This necessitates building upon the student's strengths in order to overcome or minimize his weaknesses.

The design or organizational procedures will include the schedule of classes, the frequency of instruction, class size, screening procedures, class organization criteria, facility and equipment needs, communication between faculty and remedial physical education instructor, and general administrative policies. Each of these areas must be clearly outlined and analyzed so as to provide the most efficient

service, with the least confusion. Do to the specificity of these areas, and the existing policies in the various units developing remedial physical education programs, they will not be expanded at this point.

The last step in the Mission Profile is to develop an Evaluation Design. The development of an evaluation design will serve two purposes. The first is concerned with the student's achievements in terms of learning and development. These are based upon the stated goals and objectives set forth in the beginning of planning, and based upon the identified needs of the students. The goals and objectives should be clear and concise statements identifying the end results being sought, and implying intent, purpose or commitment to achieve these ends. The function of the evaluation design is to assess the degree of accomplishment of these objectives.

The techniques used to secure the desired information regarding student progress will vary. There are some items that can be measured specifically and accurately, such as physical fitness, agility, muscular strength and cardiovascular efficiency. On the other hand, certain traits, adjustment gains of a psychological and social nature, do not readily lend themselves to objective measurements. It is important that the teacher not assume that objective measurements are superior to subjective appraisal. Both kind of evaluation have their place, and both should be used. There is some question as to how subjective some objective measurements are, and vice versa. Both are excellent tools in the hands of the well-trained remedial physical education specialist.

The use of performance requirements in the development of the system design is a necessity for the evaluative procedure. Performance requirements are statements of what must be done in order to achieve desired objectives. These should define the goals, objectives, and curriculum development, and specify what must be done to achieve the desired outcomes in these areas. Without performance requirements, there is no systematic basis for evaluation.

As was stated earlier, there are two aspects to evaluation. The second part of the evaluation design is concerned with the total program's effectiveness. This tests the process phase of operation, is an on-going procedure and should take place between steps as well as during final assessment. The evaluation of the total program is concerned with the effectiveness of the Mission Profile. It seeks to trace the common thread that flows from Need Assessment to Evaluation. In summary, the steps are as follows: 1.0 Identify Needs, which includes locating the segment of the school population that is unserved and assessing their needs which are being unmet by the regular physical education program. 2.0 State Goals and Objectives. Goals are action commitments while objectives define the goals in terms of accomplishing solutions to problems which have been derived from the identified needs. The objectives of the remedial physical education program are based upon the identified needs of the handicapped population. They are stated in terms of observable and measurable outcomes, i.e., "A precise statement of competency or behavioral change expectancies, containing conditions and criteria expressed in terms of observable and measurable performance." 3.0 Development of Content and Curriculum. The development of the curriculum must be based upon the goals and objectives of the program. The curriculum is one of the means of accomplishing the goals of the program and thereby satisfying the needs of the student. 4.0 Develop Teaching Methodology. This is closely related to Organization and Administration and is concerned with implementing the curriculum derived from the goals and objectives. This, the second means of accomplishing the goals of the program, more than any other, is directly concerned with the individual needs of the student and how best to meet these needs 5.0 The Design of Organizational Procedures is concerned with pulling all of the previous steps into harmony and providing the setting for accomplishing the goals of the program. Organizational procedures must be in accordance with the educational objectives of the program. 6.0 Develop Evaluation Design. This is the step that indicates of and to what degree the goals and objectives have been accomplished. The evaluative design is directly related to the statement of goals and objectives and should be stated in observable and measurable terms.

The evaluative design should indicate the reduction of discrepancy between "what is" and "what should be," and point the direction for future decisions and action.

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THE TRAVELING ADAPTIVE PHYSICAL EDUCATION PROGRAM

Meeting the Needs

The Anaheim Union High School District felt that it was necessary to expand the adaptive program on the junior high level to bring it up to the quality of the senior high level. Because of class loads in the regular program it was necessary to provide a teacher for the adaptive program without using the existing staff. Curriculum consultant, Richard Glover, came upon the idea of using a traveling teacher to cover all the junior highs with a quality program. The first traveling adaptive staff of 1964 consisted of two men and one woman to cover the junior highs in the district. Each of us was assigned six schools to establish a program that would be in keeping with the district's and state's aims and objectives.

Traveling Hardships

Dashing from school to school in itself is a problem, but trying to maintain a schedule and carrying your necessary equipment and records in your car compounds the problem. A day was typified by arriving as the tardy bell rang and leaving as soon as the class was in the showers supervised by the regular staff. We knew in advance that our first year of establishing a new program would be both hard and frustrating, because we lacked a great deal of equipment and we had to work around the schools' established regular program. We had to convince department heads that the program would improve as soon as we received state funds the following year.

The most frequently asked question when starting a program is "Where do we get the funds?" The answer is that a district or school must resign themselves to the fact that the program must be established in order to become eligible for state funds. Department chairmen proved to be the factor that made our program in Anaheim work the first year. Department chairmen bent over backwards to provide space, equipment, and help that was necessary for a quality program.

Equipment Problems

The newer schools lacked the required or needed equipment, but by "robbing from the rich and giving to the poor" we managed. When mats were not being used at one school we would haul them to another for use. This method was used with such equipment as golf clubs, tennis rackets, trampolines, archery tackle and so on. Weights were color coded so that we could remember from which school we had borrowed them. At one school we went so far as to make barbells out of large coffee cans, galvanized pipe and concrete. Pulleys with ropes were installed on the ceiling to get reciprocal action for hemiplegia students. We found that it was not necessary to have expensive, elaborate quipment to accomplish our goals. With a little imagination, resource material, and work, we were surprised at the amount of exercises we could do with 2-1/2, 5, and 10 pound weight plates, wood dowling, weighted pipes, and ace bandages. One of the most successful items of equipment was a record player for doing exercises to music. I must admit that it was time consuming, and hard work, but as I look at the equipment I now use, what with exergenies, universal gym, leg and body weights, jump ropes, dumbbells, barbells and all, I liked it better when I worked with the imaginative equipment because I felt more involved with my classes.

A Matter of Education

School nurses and counselors had to be made aware of the state laws concerning adaptive physical education and the necessary forms. They also had to keep our program from becoming a dumping ground for students with minor problems who would be better off in a regular physical education program.

Our class load was low at first, but soon grew to the point that we had to literally kick students out to accommodate those who were waiting to get in.

Our students grew to enjoy working with weights, and were benefiting from the corrective exercises. The program proved to be an influence on the regular program, as they soon added a weight lifting and circuit training unit to the curriculum.

Program Content

When asked what kind of program I ran, I would always refer to it as a "modified block, flexible finger program." For example, what I ran at one school, I was unable to run at another because of equipment and facility problems. In essence, the program consisted of three days of corrective exercises, and weight training, (part of one day used for testing) and the remaining two days for modified games and activities.

Testing

Testing was done on an individual basis, taking into consideration the boy's size, grade, and physical handicap. Half of the tests were of a standard nature, such as push-ups, pull-ups, sit-ups, and half were of a weight-lifting nature. These included the bench press, military press, and curls. All tests were modified to fit the individual. Additional tests were given, but were not of a grading nature such as block transfer, shuttle run and so on to test coordination, dominance and reaction.

Activities

I like to stick to activities that are of a dual and individual nature stressing the carry over values. Although the most hated activities when I first began were archery and golf, I made the activity co-ed and introduced wand shoots, tournaments, baloon shoots, clout shoots, archery golf and all of a sudden it became the best activity. A boy who is a leg amputee can get along fine in golf and archery, not only now, but later in life when he seeks leisure time activities. A boy who is a hemiplegic can enjoy golf, but will have a few problems with archery. With a slight amount of modification in procedures he can enjoy success in this field.

Modified Games

I have found that any and every game can be modified to meet the students' needs. Establishing additional rules and limitations on a game does not detract from the exercise and enjoyment one can get from the activity. Some modified games such as softball with a 16" ki'ten ball, sacket, and volley tennis have proved so successful that the regular physical education classes are borrowing my equipment. I never hesitate to try new games and activities with my classes.

Special Activities

Co-ed participation seems to enhance our program, and we now join with our girls' adaptive classes to take part in volley tennis, archery, golf, swimming, tumbling, trampoline, and for that matter, we often share the adaptive room where girls work right alongside the boys on the universal gym.

A Final Word

We feel our program is good, but we are not so satisfied with it that we won't try to improve it. The challenge is always there, and we hope we can meet the challenge. The real challenge is the student who has a problem, and I must do my utmost to convince him that he can help himself and live a near normal life.

Submitted by Rick Schlichting

Activities For Handicapped Infants and Children "A Physician's Viewpoint"

DR. MARGARET H. JONES
Professor Emeritus of Pediatrics,
UCLA Medical School

Studies of activities and behaviors of normal term infants provide a basis for comparison with those who have been subjected to environmental deprivation or have sensory and/or motor deficits. It is essential to remember that beginning at birth the child's behavior is intimately related to the mother's (or caretaker's) handling. In turn the mother's actions are related to the infant's response. The equation, action↔reaction, is a two way see-saw. Even the normal child's development suffers if he is deprived of interpersonal contact and appropriately stimulating environment. Obviously the infants with sensory and/or motor abnormality has greater problems in learning and in personality development. If the presence of a deficit is not known or it's extent not defined in infancy, goals set and responses expected may be quite unrealistic. Thus defeat upon defeat is experienced by both infant and mother.

The role of the physician becomes important in early infancy in respect to early definitive diagnosis and determination of possible cause of any particular developmental delay. Often the physician finds difficulties in making a definitive diagnosis or in accurately defining the extent of the deficit and therefore the prognosis is difficult in terms of improvement to be expected either with or without treatment. Is the delay because of a familial pattern of development, is some hereditary or congenital factor operative, has the child a hearing or visual loss, has he some infection, metabolic, endocrine or other condition? What type of handling and environmental stimulation has he experienced? Scientific advances in many areas have provided some answers but knowledge is still insufficient to find causes for many of the conditions seen or to at times detect accurately the degree of vision or hearing loss during very early infancy. Evaluation of postural and righting reflexes is particularly helpful in detecting

deviations from normal development. Examples of these will be presented for both normal and abnormal children.

Suggested Activities

Even though development may be delayed the sequences seen in the normal child in general can be expected in the handicapped. Assistance may be needed to help the handicapped child to develop motor skills. Cues given by the child may provide helpful information on which to base an activity program. Is the child paying appropriate attention to visual, auditory, tactile and kinesthetic stimuli? Is he sucking, chewing, coordinating breathing and feeding normally, vocalizing at age level?

Activities to be considered may be grouped as follows:

1. In the First 18 Months

In this period, personal interaction between the mother and child is of great importance in the development of what Erickson terms as basic trust. It is also important in development of both verbal and non-verbal communication. Delay in acquisition of motor skills as well as in communication may retard the natural maturation of the infant and tend to permit the development of a mother-child symbiotic relationship.

Although passive calisthenics or range of motion exercises are useful to preserve joint mobility, assistance in the development of head and trunk control, balance reactions, reach, grasp and release, the child's exploration of his own body parts especially crossing the midline with the hand, may be needed. If feeding, vocalization or nasal breathing are problems, especially trained paramedical personnel offer the greatest assistance and probably this is most effective if begun as early in infancy as the deficits are determined.

2. 18-36 Months of Age

This is the period when normally the infant develops autonomy. At least by this time it is hoped that such specific aids as are needed for vision, hearing, hand skills and locomotion are available. In addition, equipment and toys need to be selected on an individual basis depending on the child's problems. Frequently they require adaptation to meet the child's needs. For example playing and eating may be carried out in a standing as well as a sitting position if the child should spend more time in an upright position. Sitting may be done on an ordinary chair or on a sawhorse in order to develop better side to side balance or corners made out of cardboard boxes and padded may be used. Even though these children are young, group activities such as painting, clay use, pudding making, music and story telling can be initiated.

It is important to remember in planning activities involving sensory motor training that alerting experiences are not enough. As stated recently by Dr. Katherine Grove, sensory experiences must be organized. Those with una sensory input tend to "float away". For example in helping a child to draw a vertical line downward on a piece of paper the motion may be accomplished by a voice which starts louder and decreases as the hand goes down. Activities need to be associated with meaningful experiences.

Experience with real objects, (real food), live things (animals) and growing things (garden training area with real plants, trees and grass) is recommended.

Particularly in this age group, a new look appears to be needed in programming. Examples of innovations such as "Sensory Story", use of "Confined Space" and a specially designed "safe" environment, "The Fun House" will be presented.

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Physical Education For Secondary TMR: We Give Them Hope

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Hope School opened its doors in September, 1969 to serve the trainable mentally retarded of the Anaheim Union High School District, Anaheim, California.

Hope School aims at the education of its students for a contributing place in the community and their homes, with the main thrust of the program vocational. A positive self-attitude is built -- "You can do."

Students are grouped according to vocational ability, with changes between groups occurring frequently. Cooperation with parents is guided by homeroom teachers, with homeroom groupings including students from all ability levels in each room. Activities draw from various ability groupings.

Instruction is offered to students ages 15 through 21, in several departments.

Our Philosophy

Our philosophy in physical education is to develop each individual to the fullest of his capacity within his physical handicaps.

Each student is in physical education class four days a week, each class averages fifty minutes. Each class is co-educational. A teacher aide is with me each period and during most classes a student aide from the junior high next door is also with me. We suit out and take showers each class. Most students can dress and take showers as quickly as a normal class The lower groups are much slower. This is a tremendous teaching challenge, having these youngsters suit out properly, hang their clothing, take showers, and practice body hygiene. This takes much patience and understanding from the teacher. Some of our students have never been exposed to this situation before. Their parents have always dressed them. For some it is quite a task to put their socks or underwear on, button a shirt, or tie their shoes. Through daily programming all can dress by themselves with some help from the instructor in getting their shorts on frontwards and right side out. About a half dozen haven't mastered tieing their shoes yet but we are still trying. Some of you may say "My job is physical education not spending my valuable time

teaching daily skills that should have been taught long ago by someone else." I have given this a lot of thought and the only conclusion I have reached is "If you don't, who will and when?" In four years time I have seen much progress in learning situations in the shower area. With our higher groups, after a good workout the dressing room is closely related to a normal school with laughing, kidding, hollering, goosing, praising and talking about what they did right or wrong during the class.

Many of our youngsters have physical handicaps. One of the most severe would be a young man who has cerebral palsy and is in a wheelchair – a very happy-go-lucky youngster who has a great sense of humor and is smiling most of the time. One leg is totally paralyzed and the other is 90%. One arm is totally paralyzed with little movement in one hand and the other arm about 50% of capacity. For his exercise we literally have to lift him from the wheelchair to the mat and he does about ten sit-ups while pulling up with his good arm. He carries a rubber ball with him all the time to work with his good hand and also the bad one. He gets a big kick out of sitting in his wheelchair and putting both feet on another student's feet while they do sit-ups. We also use a light weight for him to do curls and throw a ball to him to catch. We are timing him in a 50-yard dash with the wheelchair hoping he can increase his speed. It is a very low speed now but it will increase. He really screams with delight and praises others at the end of the students running a race.

We have another student who has incurable cancer. This is a little gal who is obese, uncoordinated and whose balance is bad. She spends most of the P.E. period on a three-wheel bicycle. For those of you who teach the trainable mentally retarded, this is a great training instrument. Many of our students have poor depth perception and the three-wheeler training gives them confidence to try and master the two-wheel bicycle. I'll never forget a little Downs Syndrome guy who would whisper and you would have to strain your ears to hear what he said. He learned to ride a bicycle that way and a few days later he came up to me and said "Hello, Mr. Kemp" in a normal voice. I asked him what happened. He said, "I got me a new voice." Who knows what happened but remember these youngsters have been losers all their lives and any situation that they master is a great booster to their morale.

We have another young man who is totally blind. His daily workout includes sixty sit-ups, weight lifting and running five 50-yard dashes toward my voice. I try to continue talking so he can bead in on my voice and if he gets out of his lane I holler left or right and this distress signal is a whistle for him to stop. He runs a 50 in less than 10 seconds. The two of us have never had an accident working together for four years. This guy has a nice set of shoulders and a slim waist line.

We have another young man who is legally blind, epileptic and his balance is very bad. His main exercises consist of the stationary bicycle, sit-ups and push-ups. He can see very little. There is a little passageway in our fence to the next campus and I have him walk to the bleachers about 500 yards away and come back and find his way through the passage. He enjoys this task and is getting exercise.

Your epileptics whose seizures are not under control should never be allowed to rope climb, lift weights over their head or bench press even with supervision. If you have them do curls it is a must that you are right there with them. When they are taking showers you turn the water on and off and be there at all times until they get out of the shower. I'll never forget an incident in college. We had an athlete get a head injury and the coach sent him in to dress. Just as he turned the hot water on in the shower he passed out. Before anyone noticed him he was scarred for life on his face and shoulders. In working with the retarded first of all you have to consider safety at all times. I was observing a student teacher one day at our school and he had different students at different stations. He had four youngsters running a 50-yard dash and a basketball was laying between the lanes about half way. Just as I saw the ball he said go and you could see it coming but it was too late. A little gal stepped on it and took a good spill, but luckily just abrasions. It is also a must for you to put your equipment away that you are not using. I left some weights out for my next class one day but we had a fifteen minute recess first. I glanced back and a little gal had the weights over her head losing her balance and going backward. Luckily I was close

enough to prevent a serious accident. I never let our students lift weights over their heads. Mostly, workouts consist of curls, upright rows and bench pressing.

Many of our students are obese. This is sad because the parents could in almost every case control this by having the students diet. It is so easy to turn the television on and give the youngster popcorn and candy and say, "Now you stay in there and be quiet and a good boy."

We had a success story with one youngster who weighed 330 pounds and he lost to 180. His foster mother cooperated all the way with keeping him on a diet. Every Friday I would send him over to the junior high campus next door for a weighing in ceremony and the coach would sign a slip and he would come back all smiles and show it to everyone he saw that day. For a couple of weeks he started gaining weight and we couldn't understand why until we found out one of the custodians had befriended him and would take him by the cafeteria as a reward for his help as a custodial aide. In the beginning he was so obese he couldn't do any sit-ups or push-ups and barely run. Later he could do 80 sit-ups, 40 push-ups and participate in various sporting events. We try to have as vigorous a program as possible for our obese students but one student in particular, after two 50-yard dashes, sits down and says, "That's it." I say, "Just one more." She in return says, "No way – you must think I'm some kind of a nut!" Our homemaking department has started a diet table at lunch time, with the permission of the parents. One young man made sure his note didn't reach home. Retarded, yes, but remember they are closer to normal than most people realize. They have feelings just like you and I. It makes you feel sad just how obese they will get when these students reach 21 and graduate from school with no exercise or school social events.

Another success story was that of a Cuban boy who was very obese with multiple handicaps and almost totally blind. He could not speak English and was going home and would take off. On one of these occasions I was walking along beside him and pleading with him to get in the truck a fellow teacher was driving. On cross streets I was out in front stopping traffic because as far as he was concerned he was going home. Finally, after about six blocks we made the decision to force him into the truck. Finally reaching our objective with a teacher on each side ducking and dodging, we returned to the school. Today this young man has lost 60 pounds and has a good attitude toward our school and will come up to you and say, "Let's arm wrestle."

Three of our students have heart murmers. With these students we have a good work out and do about everything including running, but only moderately. If these youngsters' complexion would turn pale I would know that I had pushed them too much and would immediately stop all activity that day. This has not happened.

One of our youngsters was perfectly normal until he was ten years of age and was in a serious truck accident. He played little league ball and any other games a normal boy would play. Almost every bone in his body was broken, he suffered severe brain damage, and epilepsy. He had numerous operations on one leg and used to wear a brace on that leg and walk on crutches. We use an iron shoe which he wears for exercises. He lost 70% of the use of one arm and we use weights and hand grips to build strength. He rides the stationary bicycle and the three-wheeler. Lately I have been letting him run 50 yards and it takes him about 30 seconds. He enjoys throwing a ball back and forth.

The ideal teaching situation with the trainable mentally retarded in physical education would be fifteen aides helping on a one-to-one basis at fifteen different stations with an individual schedule for each person to move to different stations. Unfortunately this is impossible, so you have to let your aides or yourself work with the most severely handicapped children and the others stay as a group. Each person still works at his own level at different exercises. We all do sit-ups each day – as many as we can. Some of our obese students can't do this the correct way with their hands behind their back so they do as many as they can with their hands out front. When we first began four years ago the average was five sit-ups and now the average would be close to 50 sit-ups. We also do as many push-ups as possible. We do

calisthenics together. Our higher groups stay together on the count of four real well. Jumping jacks was the hardest thing for them to conquer. We run everyday. This is a must. 75% of all your muscles are in your calfs, thighs and lower back, so why not run. We jump the rope quite often. We try to lift weights twice a week. I remember when we first started physical education some of our students could not curl a 20 pound bar one time. The only way you are ever going to get stronger is by lifting something -- so weights are a must. I used to get notes from parents saying "My son's muscles are sore so don't let him suit out for physical education today." Why wouldn't they be sore -- they have never used them before! We try to have a fun game activity each day such as kick ball, a relay game or just shooting baskets.

In working with the retarded I try to keep it as close to a normal situation as possible. In teaching situations I use a lot of emotions. I always praise the students at anything they achieve, regardless how small and criticize when I know they could do better. I don't baby them. I talk rough and holler a lot of the time. Most of the students will try anything you say but it is my responsibility to know what they can achieve and not bring them on too fast, to know their limitations and not ask for the impossible.

Our school colors are cardinal and gold and being their coach I dress the part with cardinal shorts and shoes and gold shirt and also an athletic jacket with the school name.

With students fortunate enough not to have a severe physical handicap, we stress athletics. The students love it because all their lives they have been on the outside and now they compete just like any other youngster. Some are faithful followers as spectators to different sports that are televised. Each morning after an event has been televised the students tell me who won the game and about the outstanding plays that took place. One of our outstanding athletes three years ago would come to school with self-inflicted abrasions under each eye. He had used a rag to rub his face raw and bleeding. He said "Two people mugged me in the alley." This was to get recognition. Since he has become active in athletics we no longer see this behavior because the recognition is on the playing field.

We have a flag football team that plays against other TMR schools. Every boy that wants to suit out is given a uniform. Most of the students love that uniform. We load our student body in two buses and play other schools as far away as 50 miles or they come to our school. We have our cheerleaders and drill team dress in their outfits. We have our signs posted on their fence – "Hope School is number one!" There has never been a serious injury.

I'll never forget this one school we were playing against. The principal was a lady. One of my boys came running off the field with a slightly bloody nose. She said, "Oh, this game is just too brutal for our students." I thought she was going to pass out when I took his hand and wiped the blood off and said "Get back in there, boy." We have over-protected these students too much and too long. They may be retarded but this is no reason they should not be physically fit. The parents are not going to be around all their lives to protect their child.

A few years ago the experts said there was no such thing as competition with the trainable mentally retarded. When you see a double reverse pass play for a touchdown and the congratulations, happiness and cheers you know that they were wrong. Our students will tell you right quick that Hope School is number one and no one beats us.

Our basketball team has grown so much that we played eight "normal" junior highs last year – their average eighth grade physical education class. This year we will do the same, only ninth grade classes. We have never lost a football or basketball game. We usually score between 40 and 50 points a game. Every student that suits out usually gets in a game.

We have a girls' volleyball, softball and kickball team competing against other schools. We also have a boys' volleyball, softball and kickball team.

We have boys' and girls' swimming teams. We do not have a pool so we use the pool at one of the high schools close by. Each year around the first of March during lunch hour we take around 30 students on a bus each day for a workout. We train for 25-yard freestyle, 50-yard freestyle, 25-yard backstroke and

100-yard relay. Our students have done very well, winning eight gold medals at the State Special Olympics and our girls won first in the swimming relay team. One of our boys won a gold medal in the National Special Olympics.

We have been fortunate each year to have an outstanding girl student teacher or an aide to train the girls in modern dancing. They have their leotards and go through their routines. This is just one other learning situation that they are exposed to.

We have a boys' and girls' track team that compete with other schools. A beautiful race to watch is the 440-yard relay with retarded youngsters timing their handoffs and competition at its best.

We also compete in the Special Olympics. The Special Olympics is going into its fifth year. The first year only 2,500 competed nationwide but last year 450,000 competed. I would like to see more professional physical education people involved in the program to strengthen it. However, what makes the Special Olympics unique is that almost anyone can compete regardless of their physical handicap. They have categories broken down to age and sex and five different divisions in each event. The running events are 50-yard dash, 300-yard run or walk, 440-yard relay. Field events are softball throw, standing broad jump and high jump. You may have a student that cannot jump but six inches in the standing broad jump or throw the softball but 20 feet. Yet he or she will be competing in a division of students with similar skills. On that given day he or she will be an athlete just like anyone else, competing and having fun. The Special Olympics also has swimming events. The Special Olympics encourages competition meets with other schools and one big meet later in the year that is called the county meet. Each county gets a quota that they can send to the state meet. Orange County quota last year was 75 and 28 of them were students from Hope School that qualified on the basis of their skills.

Each year we have an athletic banquet. We try to get an outstanding sports figure for our guest speaker such as Sid Smith, All American from USC and who now plays with the Kansas City Chiefs, or Danny Villanueva, who played with the Los Angeles Rams and Dallas Cowboys. Last year Danny said, "Believe me, I really enjoyed it and was very impressed." We give as much recognition to the students as possible, such as certificates and trophies, and each student goes home with at least one award.

We are going to have a homecoming game this year and invite all our graduates to attend. We do our homework and lesson plans. We realize that retardation could happen to anyone of us or our family at any given time and if it did we would certainly want them to get a fair shake.

Assessment Of Motor Skills

DR. JACK KEOGH, Chairman
Professor, Department of Kinesiology
University of California, Los Angeles

DR. JANET SEAMAN, Assistant Professor
Department of Physical Education and Athletics
California State University, Los Angeles

MR. ROY MORRIS, Assistant Professor
Department of Physical Therapy,
California State University, Long Beach

This will be a set of brief presentations by three speakers, each indicating several major points or concerns from her or his professional orientation. Assessment of motor skills is a topic for textbooks and semester courses with considerable selection and exclusion needed even when such extended opportunities to study the topic are available. The conference planning committee selected three professionals and asked us to organize a panel discussion on this persistant but never-to-be-resolved topic. Facing such obvious problems of where to start and who is our audience, we decided not to present specific ways to assess motor skills and not to discuss reliability, validity, and other golden rules of measurement. Wishing to present something that our audience would feel was important enough for later thought and application, we decided that each of us would do "our thing" – a brief presentation of one or two items that are of major importance to us in our work. This we have done as can be seen in the topic statements provided below, as prepared by the indicated speaker.

Janet Seaman

This fall a motor-testing program was begun at Cal State, L.A. The purposes were: 1) to provide a learning experience for advanced undergraduate and graduate students in adapted physical education, 2) to fulfill a need to gather data for assessment of students enrolled in classes for the educationally handicapped at the Associated Clinics School, and 3) to provide baseline information for physical education students doing field work teaching at the site. Thus far the program has met with favorable response from the school staff.

The philosophy behind the program of adapted physical education at Cal State, L.A. is to prepare physical educators to deal objectively with the multi-faceted motor problems of handicapped children and youth. Interaction among medical personnel, classroom teachers, psychologists and physical educators is becoming increasingly more important. Therefore, we are using the aforementioned approach to prepare physical educators for these kinds of demands.

Jack Keogh

The past decade has brought forth an increased need to assess motor performance of children with the recognition that we lack appropriate tools and techniques for doing the job. It is proposed that this dilemma may be partially resolved in two ways.

1. *Need* to assess motor performance of children *is exaggerated and unnecessary* in many cases. The outcomes we seek may not require assessment of motor skills.
2. If necessary to assess motor skills, many measurement problems can be minimized by focusing upon *assessment of motor adequacy*. Current assessment thinking is derived from and guided by a concern for superior performance rather than a functional concern of what a child needs to do to meet the requirements and expectations in his environments.

Program Considerations For Children With Movement Problems

JERRY ANOOSHIAN, REINHARD BERGEL,
JIM CALKINS, DAVID HABLEWITZ,
HUGH MC CRACKEN, NANCY RASHMAN,
JIM STIEHL, PAT WARE, KATIE WESCHE
Graduate Students,
Department of Kinesiology
University of California, Los Angeles

PROFESSOR JACK F. KOEGH, Program Director
PROFESSOR BRYANT J. CRATTY, Participating Faculty

A two year program of graduate study and training has been established at the University of California, Los Angeles, for physical educators who will work with physically awkward children, both to remediate movement problems and to use physical activity as an adjunctive, instructional medium for the remediation of other educational problems. Upon successful completion of the program, students will be awarded an M.S. degree and will receive a departmental letter of completion to certify the directed experiences beyond the formal course and degree requirements. The M.S. degree in the UCLA Department of Physical Education was revised in 1966 and was accepted by the UCLA Graduate Division as a research degree. The combination of this new degree plan and additional professional training is designed to prepare graduates who will provide professional leadership in the development of physical activity programs for children in special education programs and who will have a sound basis for advanced graduate study should they wish to pursue a research career.

The focus of this program is upon the physically awkward child as distinguished from the physically handicapped child who has more clearly defined medical problems. Many physically handicapped

children have distinct, medically diagnosed problems that involve movement limitations for which specific treatment programs have been prescribed. In contrast, the physically awkward child does not have such a clear definition, but he is distinguished by his ineptness in daily living and play activities. Such physical ineptness often is observed in children who have learning problems, although the nature of the awkwardness is quite variable, and the same may be said for the prescriptive measures employed. The UCLA program of graduate study and training will be concerned with physically awkward children who are motorically between physically handicapped and "normal" children.

It is anticipated that graduates of this program will be initially employed by public schools or by private educational therapy centers to develop physical activity programs for children who have learning problems. Moreover, active concern for motor performance of children, as such or in relation to other educational concerns, is in a pioneer stage of development, and therefore provides professionals in this area with an unusual opportunity to influence future thought and practice. Although the immediate and most obvious objective of this program is to prepare individuals for work with physically awkward children, it is a basic conviction that such preparation must include course work and training with other specialists and must include elementary research training. This additional preparation for interaction with other specialists in combination with research training is critical if graduates are to be effective in this pioneer stage of theoretical and practical developments.

Students take six quarters of work, which includes M.S. degree course work, additional course work, and training experiences. Twelve courses are required: Six in physical education, four in psychology, and two in special education. The six training experiences include three quarters of work in physical activity programs, one quarter in classroom work in a special education program, one quarter of work as a research assistant, and one quarter of work assigned on the basis of individual need. The training experiences are 12 to 15 hours per week and include attendance at a weekly seminar, which is non-credit, for 2-3 hours per weekly session. Special lectures, case reviews, demonstrations, and similar matters are included. The seminar serves as a focal point to integrate the many and varied aspects of the program and to provide more direct contact among teachers and students.

Fellowship awards of $2200 plus academic fees are available through a grant from the Bureau of Education for the Handicapped, Division of Training Grants. Applicants to the program must qualify for admission to the Graduate Division of the university and must be accepted for graduate study by the Department of Physical Education. Minimally, this requires a 3.00 (B) GPA and a physical education undergraduate major, although applicants with a special education major are considered. Undergraduate academic achievement, Graduate Record Examination scores, and letters of recommendation are required when making application. Interviews are required where possible.

Study and Training Objectives

1. To understand basic aspects of motor development and motor learning.
2. To be experienced in physical education instructional activities for children.
3. To understand and to be able to apply motor assessment procedures.
4. To be experienced in the use of physical activity as an instructional medium.
5. To understand current educational and psychological thought and practice which relate to learning problems.
6. To be exposed to and to understand special education teaching methods.
7. To understand elementary research techniques and strategies as applied to childrens' movement and learning problems.
8. To achieve an integration of course work, field experience, and research training.

Program of Study and Training

1. Required and elective courses

   A. Physical Education: (6)

	122	Perceptual-Motor Eduation
*	227	Human Movement Learning
*	280C	Studies of Children with Movement Problems
*	275	Research in Human Movement

   *Electives (must choose two):

201	Social Bases of Leisure and Recreation
205	Advanced Kinesiotherapy
220	Exercise Physiology
225	Human Movement Behavior
235	Evaluation Procedures
280E	Kinesthesis and Gross Action Patterns
280G	Neuromuscular Mechanisms and Motor Performance

   B. Psychology: (4)

*	132A	Learning Disorders
	132B	Learning Disorders: Laboratory
*	200B	Learning II
*	240	Developmental Psychology

   C. Education: (two from list below)

225	Issues in the Education of Exceptional Children
226A-B	Medical-Biological-Psychosocial Aspects of Mental Retardation
227A-B	Research on the Education of the Emotionally Disturbed and Childr with Learning Disabilities

2. Six quarters of training experiences

   A. Three quarters in programs where specific motor training programs are employed.

   B. One quarter in a special education program involving classroom activities.

   C. One quarter as research assistant in a project involving motor performance of children.

   D. One quarter elective.

*M.S. degree courses (plus thesis or comprehensive examination).

"Water Learning"

CONNIE LAWERENCE
Principal, Joseph M. McKinnon School

The basic philosophy of a "Water Learning" program is to use and explore water as an educational environment. The primary emphasis is to introduce and reinforce concepts taught in a day to day curriculum for the mentally retarded and handicapped. Examples would be: responding to directions; stimulating language development; sharpening visual and auditory perception, discrimination and memory; self-help skills and problem solving.

It is advocated that water be introduced to the exceptional child at infancy. Water learning is adaptable to various age groups. The concepts mentioned can be developed progressively with activities appropriate to the level of the particular child.

Swimming is not emphasized but may occur naturally through related activities.

Water is a natural motivator. It does not need to be a pool. It can be running through sprinklers on a warm day, looking through water prisms, or painting a square of concrete with water and watching it evaporate.

Water's reinforcement potential has been relatively untapped as related to education. The excitement it creates can be channeled to reinforce concepts taught before and after as well as during contact with the water.

It opens a new world for teacher creativity and learner experience by freeing both from the concepts of a classroom. Children that were difficult to direct in a classroom have responded openly in a water environment. They can expend their energy through activities that allow spontaneous learning.

The teacher is encouraged by the openness of the situation to experiment with various methods and equipment to meet the child's needs.

Water learning advocates the use of inexpensive equipment to assist in teaching. Brightly colored paint brushes attract the child's attention. He can be directed to paint various limbs, getting wet for pool

activities and learning body parts. He can paint a given area with water or desired shapes for later learning and work on coordination at basic or more advanced stages.

Water's physical properties add new dimensions to such areas as coordination and balance. It is easier to support weight in water. Limbs are lighter and easier to move, helping the handicapped.

Self-help skills can be taught in a natural setting, such as dressing as the child changes to and from his swim suit.

Water learning suggests many new ways of teaching certain concepts. Color discrimination can be taught by having children gather red, yellow and blue ping-pong balls, and putting them in the corresponding colored floating hula hoops. While doing this activity, they are also learning to stabilize and mobilize in the water.

In a water environment the child is highly motivated. The teacher can explore new methods to tap this motivation to teach basic concepts. Making learning experiences from as many situations encountered as possible benefits both child and teacher.

The Physician In Remedial Physical Education

MARY M. LEYDORF, M.D.,
Rosemead, California

Summary of Discussion: The discussion will consist of six inter-related topics as outlined below. There will be time for questions at the end of each segment, as well as at the end of the completed discussion.

I. The medical evaluation of the child: Emphasis will be on the medical study of the child as a whole, with the special aspects that pertain to motoric development outlined in the physical examination, neurological examination, and developmental examination of the child. Included will be the medical prescription and recommendations incorporated following such an evaluation for remedial physical education.

II. Remedial physical education and Physical therapy: Discussion will include the possible spectrum between physical education remedial physical education – and physical therapy. The question to integrated programs as pertains to staffing, and integrated programming as pertains to the child's participation and scheduling.

III. The concept of motoric immaturity: Discussion of the "awkward" child, disorders of balance and coordination, prognosis and remedial recommendations.

IV. Re "Physical Education Phobis": Presentation of a case study, discussion of early identification, and considerations as to prevention as well as the therapeutic recommendations.

V. Drug therapies and remedial physical education: Discussion of the effects of medications on motor skills, balance and coordination.

VI. Areas of future research: A summary of pertinent current medical knowledge that applies to the remedial physical education programs, and a suggestion of areas of knowledge that are weak with consideration of future research in these areas.

In the time remaining following the discussion of the above outline, there will be a question and answer period in order to cover other topics of interest to members of the audience as they pertain to the physicians role in remedial education.

Hap Palmer Records

HAP PALMER
Creator and Producer of
16 records for Educational Activities Inc.

Learning Basic Skills Through Music – Vol. 1 and Vol. 2
Learning Basic Skills Through Music – Building Vocabulary
Learning Basic Skills Through Music – Health and Safety
Mod Marches
Simplified Folk Songs
Folk Song Carnival
Patriotic and Morning Time Songs
Modern Tunes for Rhythms and Instruments
Holiday Songs and Rhythms
Creative Movement and Rhythmic Exploration
Getting to Know Myself
Math Readiness – Vocabulary and Concepts
Math Readiness – Addition and Subtraction
Singing Multiplication Tables
Alamomo and The Nothing Song and Sam Jam The Magic Man

Remedial Physical Education For The Minimum And Maximum Physically Handicapped

MR. MILT PETTIT
Remedial Physical Education Teacher
Chula Vista Unified School District

How does one decide who has a minor physical handicap or who has a major physical handicap? This is a very difficult area at best and becomes even more difficult when trying to make catagorical separations. What we, as physical education people, may feel is a minor handicap to one child might, in fact, be a major problem. Often times it is not the degree or severity of the handicap which is important, but rather how that individual person perceives his handicap.

No matter how scientific or objective we attempt to be, it is of the utmost importance that we consider each child as a distinct personality and attempt to bring physical and social success into that life. I am reminded of a young teenager who was a hemiplegic. In this case, it meant that she had mild involvement of the arm and leg on one side of her body. She moved well and had a good deal of coordination. She would be considered as mildly orthopedically handicapped. However, her main problem was not physical but emotional and psychological. She was extremely shy and would not answer even the simplest questions in class. Her self-confidence was nil. In order to attempt to give this individual success, I worked with her on the trapoline. She gained considerable skill and would be asked to demonstrate certain basic skills for the other children and visitors. She became less shy, began to smile more, and opened up somewhat in class. She had accomplished something which her brothers and sisters had not. She was proud of her success and it began to change her point of view toward herself. The point of all of this is to indicate that although this girl was minimally handicapped physically, she had a major psychological problem.

Conversely, you have a wheel chair confined athetoid youngster who is severely physically handicapped. However, because of family background or basic personality this child is socially well adjusted, out going, and does not tend to dwell on the extent or the severity of his handicap. He enjoys games and activities although unable to do a great deal.

So, who is the more handicapped? Again, a very difficult question to answer and one which, in all probability, will be worked out on an individual basis between the physical education instructor and the particular child.

Is the TMR child physically handicapped? His movement and physical education skills are well below that of the average child. Posture is often a real problem. I know that many of the trainable youngsters which I work with also have specific physical handicaps such as cerebral palsy or hydrocephalus. The important thing here is that we, as teachers, realize the importance of using the physical education channel to reach the retarded. Perhaps, after skill and game competencies improve, so will that "all important" classroom behavior, attention span, and learning. And what about adult workshops which have the adults making things with their hands but ignore the necessity of some type of daily physical education or fitness program? Would productivity be increased if an exercise or game period were incorporated into each day's program for 20 minutes?

Regardless of the degree of handicap, the most important element in working with orthopedically handicapped youngsters is to give them a chance to participate in physical activity and have success. I feel that individual success is crucial to the physical, social, and emotional development of a handicapped youngster. Very probably this may be the first time someone has been interested enough to take the time and effort to help improve a particular motor skill.

Physical education is a natural channel through which to go to meet a particular youngster where he is motorically and psychologically. At this point, it will be up to the instructor to know how to deal with and make friends with each child. To show maudlin sympathy toward a handicapped youngster is doing a disservice to that child. On the other hand, a basic understanding of the individual's handicap will do much to encourage that child to do all that he can do for himself. Genuine praise for the smallest degree of effort and/or achievement will do much to build up that child's success syndrome which is so vital toward developing a good self-concept and in turn self-confidence.

Particular skill levels are not easily attained in many "normal" children. They are doubly difficult to achieve with the handicapped. However, children who are handicapped continually amaze me with their genuine willingness to work toward an actual achievement of specific skills and concepts. Most handicapped youngsters are extremely receptive and interested in pleasing you, their teacher. How many children who are "average" do you know who cry when they have to go home because they are too sick to stay in school? It happens. Regardless of spasticity or lack of hand-eye coordination most children will try to do what you ask of them. It is in this light that the physical education teacher be able to establish realistic and attainable goals and objectives for each child to work toward.

LOVE YOUR CHILDREN! Difficult to do? Well perhaps this is an ingredient which is essential toward getting the best out of each child. I have found that children are children regardless of how they happen to walk or talk. They all have the same needs and drives that we do and to capitalize and recognize these same needs will do much to bring out the best in each child.

Types of Handicaps

I have found that most children who are orthopedically handicapped are, in reality, multiply handicapped. That is to say, they have more than just one problem. True they may have one physical handicap but many have underlying emotional and perceptual handicaps. Some of the handicaps which you may encounter are as follows:

A. Cerebral Palsy
   1. Spastic
   2. Athetoid
   3. Ataxic

B. Muscular dystrophy
C. Spina bifida
D. Heart condition
E. Brain damaged
F. Osteogenesis In.perfecta
G. Mentally retarded
H. Epilepsy

Program Organization

It is essential to make the activities fun and interesting for the youngsters. Games and skills should be modified as little as possible so that they maintain as much of the original game as possible.

Game instruction should be kept to a minimum but is needed prior to any new activity. Helping a child physically move through the skill components of an activity is helpful. Repetition of motor skills must be stressed so that they may be carried over into the different types of associated activity.

Safety rules are very necessary to go over prior to an activity. This is particularly true when beginning a trampoline, swimming, tumbling, or archery program.

Orthopedically handicapped children need to learn sportsmanship and especially how to win and lose. Because, in many cases, they have not been able to compete in team games previously, their sportsmanship concept is poor.

Class organization may be composed of one class. This group then participating in a specific activity such as volleyball. The single class may be broken into two groups each working on different activities or skills. Here the help of your assistant is essential.

Two classes may be combined with two teachers and aides helping. The group may be broken into one major activity with either one or two splinter activities being conducted simultaneously. Regardless of which type of class organization is employed, careful supervision must always be given.

College volunteers or elementary school children can be very helpful in meeting the objectives of physical education for the orthopedically handicapped. Initially, a good deal of supervision is necessary if these types of helpers are to be used.

Hopefully, the skills which the children learn from a good physical education curriculum will carry over into high school and community recreation programs. The importance of teaching skills cannot be over emphasized. Unless the children learn the skills they will not meet with success in future activity.

In terms of equipment, some of the most functional equipment available is that which is made by the individual physical education instructor as specific needs develop within your program.

Suggested List of Activities for the Orthopedically Handicapped

Individual ball work (progress from large to small ball)
- Movement
- Throwing-catching
- Bouncing

Lummi sticks

Chinese rhythm sticks

Bean bags
- Throwing patterns
- Mirror activity
- Bean bag basketball
- Relays

Parachute

Bike inner tubes

Car inner tubes

Balance beams and boards

Games
- Red light-green light
- Circle pass
- "SKUNK" - circle pass (child w/ball when music stops has an "S")

- Volleyball
- Softball (whiffle ball)
- Hand ball (hit 6" playground ball off of a batting "T")
- Field hockey (use plastic sticks)
- Speed-a-way (get ball into goal by throwing, bouncing, dribbling)
- Frizbee baseball
- Modified football
- Badminton
- Basketball

Shuffle board
Croquet
Darts
Dart guns (rubber tipped)
Bowling
Obstacle course (2 types)

- Wheel chair (arm and head activity)
- Ambulatory

Rhythms
Relays

- Pass ball over head in line
- Go around cone and back
- Pass ball sideways
- Throwing (each throw 5 bean bags to a choice of targets)

Hit suspended swinging ball

- Line formation
- Circle formation

Tumbling
Archery (only 1 or 2 students at a time)
Trampoline
Swimming
Pitch back
Purex catch
Circle hit

- Lie on tummies, keep beach ball going – no catching.

Table tether ball
Golf

- Putting on grass or rug into a box
- Clock golf - in circle.

From Here To There Exactly — Where Are You Going?

DR. LORINE PROCHASKA
Consultant Research and Development,
Remedial Physical Education
Los Angeles County Superintendent of Schools

If you don't know your destination, does it make much difference what you do or how you do it? How do you map a learning path in remedial physical education which provides predictable achievement for handicapped children?

What About Needs Assessment?

Needs are defined as the discrepancy between "what is" and "what should be." Determining the difference enables us to state the problem – what must be done to move the learner from here to there.

Analysis of who the learner is, his "now" status, with regard to motor-skill development, level of knowledge, cultural and family background, previous experiences, strengths, limitations and other specifically relevant factors gives us information needed to work toward resolving the problem.

Frostig (1) states that "A child's physical fitness and the quality of his movements influence (and in turn are influenced by) all of his psychological abilities – his abilities to communicate, to perceive, and to solve problems – and the way he feels and interacts with others."

The next step is to make judgements, based on learner characteristics, for projection of possible achievement levels, always leaving the top open for more than we may have guessed.

How Are Objectives Determined?

Are stated objectives "real world" purposes, or are they merely wishful thinking, or are they limiting? Have objectives been derived from assessed learner characteristics and identified learning styles? Are they organized in sequential steps, small enough to hope for actual achievement? Does each have precise, observable techniques for measuring performance achievement? In other words, are they complete performance objectives?

Longitudinal studies of children show that certain abilities develop in a definite sequence. A child usually learns to walk before he learns to talk in sentences. He learns to grasp objects, such as blocks, and to put them on top of each other before he masters tools and implements, such as pencils, crayons, and scissors. He learns to talk before he learns to read and to scribble before he learns to write. (1)

An equally important observation is that certain ways of communicating with and mastering the environment develop at a maximum rate during certain age spans or developmental phases. It is important for the teacher to know when certain abilities should develop in young children and the sequence in which they unfold so that she can choose the most appropriate curriculum and teaching methods. (1)

The complete statement of objectives should reflect the developmental learning sequences. For those who, for many reasons, may develop out-of-sequence in some areas, modifications can be made in the selection of objectives and materials for the teaching curriculum.

How Is The Selection Of Activities, Organizational Patterns And Teaching Strategies Determined?

Do planned learning experiences meet pre-determined criteria for satisfying requirements of the objectives for which they were selected? Are methods compatible with activity content as well as with learning styles? According to Cratty, (2)

. . . movement activities which would be helpful in the education of retarded, neurological impaired, and emotionally disturbed children . . . generally . . . have fallen into five categories:

1. Activities intended to aid in the control of hyperactivity and to induce better attention to tasks.
2. Activities which help the control of the hands in manipulative and in writing and drawing skills.
3. Activities which promote the better structuring of time and space.
4. Movement activities which promote the better use of the body in playground skills important to good self and peer acceptance.
5. Activities involving the movement of the total body which will aid in the improvement of several types of classroom functions.

To elicite maximum learning . . . the tasks must be novel, interesting, and of optimum complexity.

Several correlates to these principles of novelty should be kept in mind.

1. Atypical children find the "too-difficult" threatening, while the "too-easy" is insulting, so that their "span" of what is novel or complex may be very narrow.
2. What is novel or complex for the teacher or a normal child may not be so for the atypical child. A simple task may prove challenging and will be practiced over and over again by the retarded child whereas the normal child will quickly lose interest.
3. An anxious child may be frightened and withdraw from a situation or task which is too complex . . .

Activities and teaching strategies selected with consideration of the above principles are more likely to promote learning as stipulated in the objectives.

What is the Purpose of Evaluation?

Evaluation is more than a test, or recording of desired responses. Various kinds of measures can be used to tell whether a learner has succeeded at a given task.

The type of evaluation instrument used in Instructional System Design is referred to as a *Criterion-Referenced Test.* It is designed specifically to assess achievement of *criteria* stated in the performance objective. The criterion-referenced test measures *only* that which is stated in the objective and is a *total* measurement of the concepts/content/or skills stated or implied by the performance objective for which it was designed.

Criterion testing is done for two reasons. The *first* is to determine the validity of the instruction offered. How do we know that our instruction is adequate for the purpose? (It is far easier to *assume* that "instruction" is always adequate – a constant, and that only the students vary.) Once we have tried out the instructional procedures on enough students, and revised the ineffective areas, we can be fairly certain that the instruction "works".

The second reason for criterion testing is to determine whether the students have achieved all of the performance

objectives. Criterion testing becomes a monitor of student mastery behavior. A criterion test or activity is used as an information gathering procedure and can be used to inform the student where his weak areas are, and, perhaps, what he should do about them. (3)

Thus, perhaps the most important function of evaluation is that of decision-making. Data showing learner achievement or failure serves as the basis for modification to insure achievement. The modification may be in degree of content complexity, teaching strategy, or even the original objective.

What About Planning for Predictable Achievement?

An Instructional System Design is a systematic method for planning a program based upon identified needs of the target population. It starts with analyzing where we want the learner to end after he has received all instruction. Note that the starting point for planning is the desired terminal performance – where we want to go, not the beginning steps – where we are. From the desired end achievements, all intermediate steps to the current status are derived.

Thus, a hierarchy of objectives from large and complex to small and simple has been stated. To this framework is then added the relevant and appropriate materials, teaching strategies, and evaluation techniques. The teaching program to be used is derived from all items previously analyzed, resulting in a "road map" for predictable achievement. We now know: Exactly – Where We Are Going.

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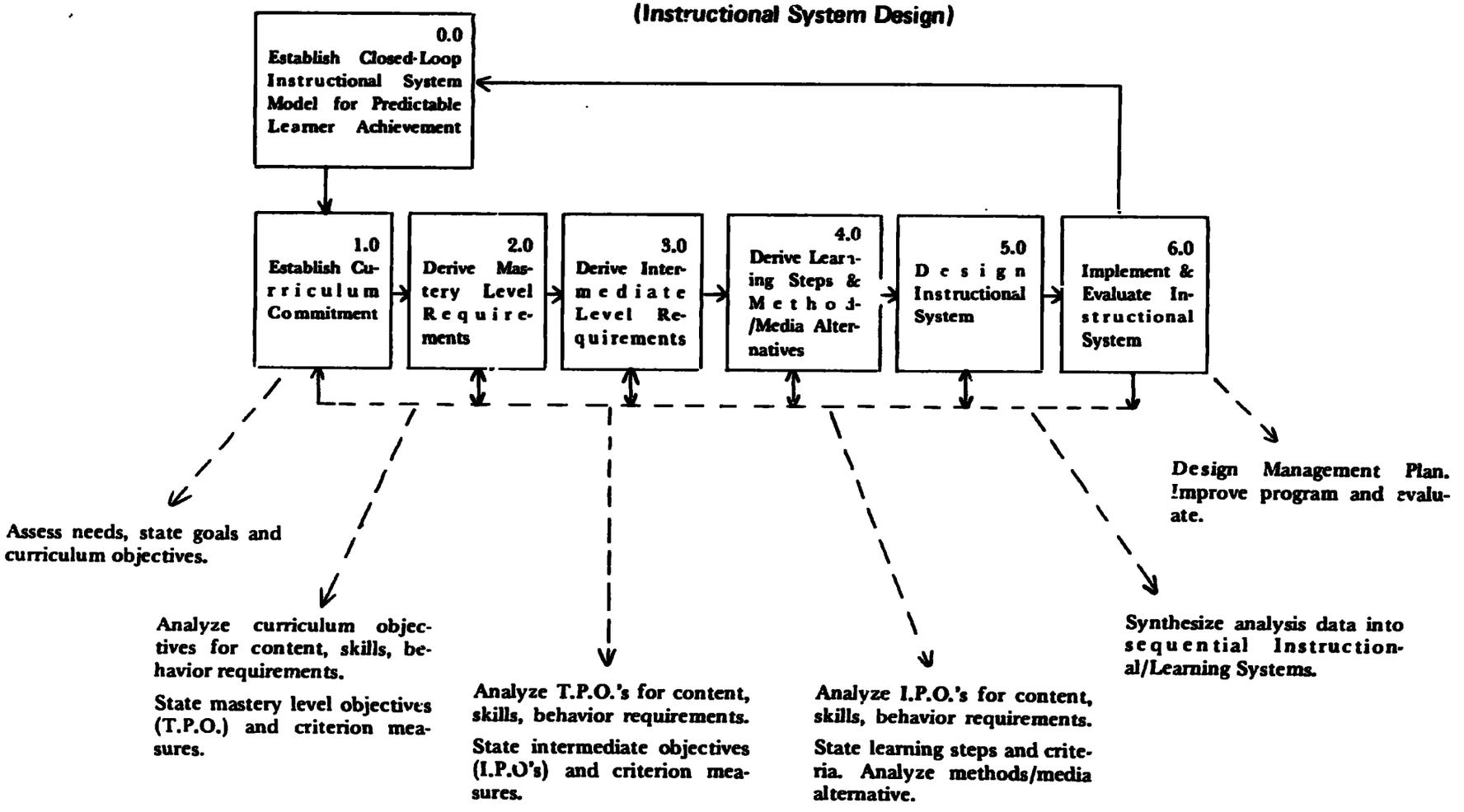
SAFE MODELS FOR PREDICTION:
(Instructional System Design)



- Predicts What Must Be Done To Produce Learning/Instruction Systems
- State Major Functions To Be Performed
- Shows Order And Sequence

Physical Education For Elementary TMR

AL PROUD
Remedial Physical Education Teacher
Marin County Schools

Exercise Program for the Mentally Retarded

Generally a short exercise or warm-up period is advisable before starting your activity of the day. This period of time may be very short, three to five minutes may be quite adequate. I firmly believe that the few minutes spent for exercising is vital to the success of your program for that day. Not only is this time a warm-up period (body readiness for activity) but it also prepares the student mentally for activity. The student is soon to realize that now is the time for physical activity and to follow the teacher's instructions. The success of the class may well depend on the enthusiasm and discipline shown by the teacher in this short period of time.

A specific place is necessary for exercises. On black top, marks may be painted and spaced to give the student a definite working area. Chalk marks can be used and will remain for several days. (diagram)

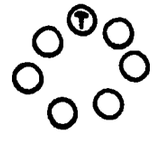
T

X X X X X

X X X X

If the class is to be held inside, marks can be applied by placing masking tape on the floor (short strips of two or three inches). To mak · the tape more visable, mark its surface with a magic marker. The use of masking tape on the surface should not anger the custodian.

I have found the use of hula hoops to be very beneficial. Place the hoops in a circle and each student stands in one. The hoop is his working area just as the mark was. (diagram)



Exercises may be performed with or without music. The right music can add to the effectiveness of the exercises.

When conducting the exercises, don't bore the students. Move from one exercise to another quickly. Moving quickly demands the student's attention and may gain their interest to find what you will have them do next.

When conducting the exercises, always remember: *Enthusiasm Generates Enthusiasm.*

Exercises

Finger-flickers - Opening and closing hands. Hands above head, in front, to sides. Do fast, slow.

Neck Movements - Hands on hips, move head in circle, then change direction. Move head up and down. Move head side to side.

Hands on Hips - Forward and back. Side to side. Around, change direction.

Toe Raises - Up and down on toes (hands on hips). Toe raises on one foot then on other.

Balancing - Balance on one foot then other. Do same with eyes closed. Balance and do finger-flickers. Do same with eyes closed. Balance and shake hands and foot, alternate feet.

Jump-ups - Jump and reach as high as can. Jump around in circles. Jump around in circles. Jump the other way. Do same and shake hands.

Push-ups - Girls do on knees. Boys off knees if can.

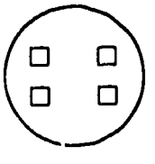
Arm Circles - Rotate arms in front of body, then to side.

Sit-ups With knees bent. (on mats or rug)

Leg Raises - Supine position (on back) knees straight, raise up and down. Do in a scissor fashion, out and in.

All Fours Hands and feet only touching (push-up position). Raise a foot, replace and raise the other foot. Remove a hand, replace hand and remove other hand. Remove a hand and a foot, replace and do same with other hand and foot.
Now turn over without touching any other body part and do the same routine.

Running Place chairs or traffic cones in a square. Have students run around them. Can enlarge the square as students improve. (diagram)



These exercises can be done in all or in part (choosing a few). However done, do not dwell too long on any one exercise, keep them moving and you will keep the students moving.

Activities to Music

Two good records to use:
"Miss Frenchy Brown" by Herb Alpert
"Whip Cream" by Herb Alpert

Exercise to music:
Can use the above listed exercises. Use standing exercises.

Exercises to Music (sitting):

Touch toes.
Hands joined behind head, twist trunk side to side.
Raise one leg in air, rotate foot up and down. Change feet.
Raise one leg then other.
Bend knee to chest, then other knee to chest.
Bend both knees to chest, same time.
Cross one leg over other, then alternate other leg.
On back, ride a bicycle
Sit-ups.
Push-ups.
If time, stand and run in place.

*Always alternate hands when can.

Sports Activities to Music:
No equipment needed, just imagination.

Throwing and catching a ball.
Hitting a ball.
Bouncing a ball.
Shooting a basket.
Passing a ball.
Kicking a ball.
Playing volleyball – tipping and serving a ball.
Bowling a ball.
Tennis – forehand, backhand, serve.
Golf – driving and putting a ball.
Swimming – Crawl, breast, back, side and butterfly strokes.

Playing Musical Instruments to Music:

Playing the piano
Playing the guitar.
Playing the trumpet.
Playing the trombone.
Playing the violin.
Playing the drums.
Playing the clarinet.
Playing the sax.
Playing the flute.

Occupations to Music:

Painting (painting the wall, ceiling)
Carpenter work (hammering, sawing)
Housekeeping (vacuuming, washing and drying dishes)
Yard work (hoeing, raking, shoveling, mowing)
Driving

Getting Ready to Go to School:

Washing (face, ears, neck, arms, elbows, knees)
Brushing teeth.
Combing and brushing hair.
Shinning shoes.
Cleaning nails.
Eating breakfast.
Walking, running to school.

Skill Development Activities

Lumi Sticks Activity

Can be done in a circle, standing or seated (legs extended). Let the student select the color he wishes to use. Have the student name the color of the lumi stick if he can.

1. Move stick around in a circular motion with the fingers.
   Move stick in other direction.
   Exchange hands and do same.
2. Twirl like a baton (up, down, side).
   Exchange hands and do same.
3. Worm crawling up a tree – move finges up and then down stick.
   Exchange hands and do same.
4. Toss from hand to hand (easy toss).
5. Pass around the body.
   Exchange directions.
6. Pass around and in and out legs.
   Exchange directions.
7. Flip in air and catch (easy toss).
   Exchange hands.
8. Bounce on floor and catch.
   Exchange hands.
9. Roll back and forth on floor.
10. Spin on floor (both directions).
11. Hold stick in front (hand on each end) drop and try and catch before it hits floor.
12. Balance on back of hand or wrist (horizontally). Exchange hands.
13. Balance on palm, then on fingers, exchange hands.
14. Balance on floor.
    Move hands and arms around stick without knocking over.
    Walk around stick.

Two Lumi Sticks

Let student select another stick, different color.

1. Same activities with two as was done with one. Both hands must now be active.
2. Balance both on floor, move body parts in and out and around sticks (hands, feet, arms, head, elbows).
3. Make a "T" by balancing one stick on the other. Remove top stick of "T" without knocking down other stick.
4. Set both sticks in front, pick one up and pass it around your body, set it down and do same with other stick. How fast can you go? Exchange directions.
5. Hammer and Nail – Hold one stick and hit the other down through the other hand. Exchange hands. Do same with eyes closed.
6. Hold both sticks in front horizontally, hit ends together. Do same with eyes closed.
7. Make various sounds by hitting sticks together. Have students repeat sounds.
8. Place sticks on floor, have students step over them.

Hula Hoop Activity

1. Roll beside you. Can have races rolling hoops.
2. Step in and out.
3. Use as a jump rope.
4. Spin on floor. (around and with a back spin)
5. Set hoops on floor (circle) have students walk over.
6. Set hoops on floor (up-right) and have students step through.
7. Rotate hoops (hula hoop fashion) around the neck, waist, arms, legs.
8. Toss objects through the hoops (up-right).
9. Toss objects into the hoops (on floor).
10. Use hoops to ring objects (chair, another students, traffic cone).

Kick the Can

Use aluminum discard cans (coke, beer). These cans are light and will not damage the students shoe or foot nor will it hurt another if hit with it. An advantage of these cans over the use of balls is that the can does not travel far and the student gets to kick a great deal.

1. Give each student a can to kick. The better skilled kickers I will try and steal the can from (a little competition).
2. Have students line up and have a race to a designated point. Have several races, students enjoy this activity.

Bowling

Tennis balls and paper cups are needed.

1. Students are paired off. Seated, each has a paper cup between his legs. A tennis ball is rolled back and forth by the students trying to knock the other's cup over. Start with the pairs close together. Increase the distance as skill increases.
2. Same activity with pairs. Each stands and plays.
3. Team play. Teams are in a line. Each player (standing) rolls ball to hit cup (one turn) then goes to the end of his team's line. There is a scorer-retriever for each team. A starting distance of 8 to 10 feet should be challenging. First team to reach so many points wins. May play several games. May also play game for time – team or player (if pairs) with most points in certain time (2, 5, 10 minutes) wins game.

Circle Kick (close circle needed)

1. Standing. Kick with feet, toe, side. Try and keep ball in the circle.
2. Seated. Kick with feet, no hands. Try and keep ball in the circle.
3. Do same with several balls in circle.

Circle Hit (close circle needed)

1. Seated, legs crossed. Hit ball with fist. Try and keep it in the circle.
2. Do with several balls.

Circle Pass

1. Pass different size balls around in circle (clock-wise). Student must pay attention and also learns to handle different size objects.
2. Do same other direction.

Sponge Activities:

Make sponge squares (6" x 6"). Can cut sponge with an electric carving knife. Cement glue will glue pieces of sponge.

Each child should have a sponge square.

1. Kick the sponge when on ground.
2. Pick sponge up and try and kick it when tossed. (football style)
3. Toss and catch.
4. Toss and catch with partners.
5. Toss and hit.
6. Can play bombardment. (throwing sponge at each other)
7. Play dodge ball with a sponge square. Area needed is small plus child can not get hurt from sponge.

Rope Skills: Need two 16 foot ropes.

1. One rope:
   (Students lined up, jump rope one at a time.)
   a. Jump the fence. Increase height of rope.
   b. Duck under. Lower and lower until crawling.
   c. Jumping over and back.
   d. Run through while rope is turning.

2. Two ropes:
   (Ropes on ground, parallel to each other.)
   a. Jump the stream. Increase distance of ropes.
   b. Jump in and out of ropes.
   c. Jump hurdles. Raise ropes, students jump one and then the other. Can be raised.
   d. Ropes raised several inches, jump in and out. Ropes can be raised.
   e. One rope low and one high. Students go over and under.
   f. One rope high and one low. Students go under and over.

Locomotor Movement

1. Bear walk (all 4's) Front, backwards, sideways.
2. Crab walk (all 4's) Front, backwards, sideways

3. Duck walk – Front, backwards, sideways.
4. Elbows and Knees – Front, backwards, sideways.
5. Hop – (two feet) – Front, backwards, sideways, circle.
6. Hop – (one foot) – Front, backwards, sideways, circle.

Do same with hula hoops placed on floor. Students try and go through movements without touching hoop rings.

Balance Beam Activity

Use a balance beam on the floor or elevated.

1. Walk forward.
2. Walk forward, stop and balance on two feet, then one foot.
3. Walk forward, stop and kneel.
4. Walk backwards.
5. Walk backwards, turn and walk forward.
6. Walk forward, stop, balance on two feet and catch a ball.
7. Balance on one foot and catch a ball.

Place board on an incline.

1. Walk up incline.
2. Walk down.
3. Walk up backwards.
4. Walk down backwards.
5. Walk up, turn and walk backwards.
6. Balance on two feet, then one foot.

Board flat, lay down on back and balance self.
Do same, but try and stand without falling.

* Can use a hula hoop on beam. Have students step over (in and out). Raise hoop higher and higher. Stand hoop, have students walk thru.

Blowing Exercises

1. Students while lying blow ping pong balls with a hula hoop.

Sticks and Tennis Balls

1. Pair off students. Seated facing each other, legs extended and spread out, each with a stick, students hit ball back and forth. At start have students place feet near partners. Progress activity by having students move further from each other, legs still spread out.
2. Standing, each student with a stick and ball hit the ball with stick and try to keep it bouncing.

Skating (indoor adjustable)

Progression:

1. One skate on a rug
2. One skate on floor
3. Two skates on rug
4. Two skates on floor

If assistance is needed, have someone help support or use a chair for skater to push in front for support.

Skating activities:

1. Hockey on skates
2. Hula hoop on skates
3. Bounce a ball on skates
4. Musical chairs on skates
5. Dance on skates

Trampoline

An excellent activity which teaches body awareness. Overcoming the fear of the height while performing on the trampoline is an accomplishment for many students.

Progression:

1. Have student bounce.
2. Bounce in a circle, change directions.
3. Seat drop
4. Knee drop
5. Knee-seat combination
6. Seat-knee combination
7. Knee drop, then seat drop in other direction
8. Seat drop, then knee drop in other direction
9. Knee drop, then knee drop in other direction
10. Seat drop, then seat drop in other direction
11. Knee drop in a front drop (stomach)
12. Front drop from a standing position
13. Knee drop to a front flip
14. Front flip from standing position
15. Front standing position, knees bent, fall back hitting upper back and shoulders, then springing back to up-right position.

Always have spotters present. You never know when the student may want to try something on his own. Some students may have a complete lack of fear and can become careless while on the trampoline.

NAME _____ SCHOOL _____

DATE _____

Progressive Skills for Non-Swimmers

Circle number if completed.

1. Skills may be done with a group in a circle. If child is too small to stand in shallow end, skills are taught with individual help.
    A. Wet face
    B. Splash water in face
    C. Face in water (head not submerged) Open eyes if can
    D. Bob up and down (only to shoulders, then to neck)
    E. Bob (head under and up, eyes open)
    F. Bobbing for rhythmic breathing
    G. Blowing bubbles (face only)
    H. Blowing bubbles (head submerged)
2. Prone float (face Down)
3. Prone glide
4. Flutter kick (practice on deck and in water)
5. Prone glide and flutter kick
6. Arm stroke (reach and pull, arms out of water when reaching) Can Practice standing or walking
7. Prone glide, kick and arm movements (if kick needs improvement, use kick boards)
8. Floating (on back)
9. Floating on back with finning or sculling motion
10. Diving
    A. Sitting on deck
    B. Standing on deck
    C. Deep end
    D. Diving board
11. Treading water

Remarks

Non-swimmers – start with No. 1

Intermediate swimmers – start with No. 2 and move on.

Swimmers – start with No. 2 for review and move on.

EQUIPMENT LIST

ITEM	*COMPANY*	*COST*	*GRADE LEVEL*
RCA First Folk Dances (LPM-1625) 33 1/3	Ginn and Company 2550 Hanover St. Palo Alto, Ca 94303	$3.10	K-2nd
RCA Folk Dances for Fun (LPM-1624) 33 1/3	Same as above	$3.10	2nd-4th
RCA All-Purpose Folk Dances (LPM-1623) 32 1/3	Same as above	$3.10	2nd-4th
Lummi Sticks Instructional Album, 24 sticks	Educational Activities	$4.25	K-5th
Hula Hoops	Wham-O Company	$1.25 each	1st-6th
Traffic Cones (seconds) 18" Yellow Plastic	Interstate Rubber Production Corp. 908 Avila Street Los Angeles, CA 90012	$1.25 each	
Squeez-ez (Foam-rubber grips)	Special Aids Div. Olympia Mat Mfg. Co. Montclair, CA 91753	$1.00 each	K-12th
Plastic Hockey Sticks, Cat. No. 08-175, 12 plastic sticks, balls, pucks	Conlin Bros. 7058 S. Greenleaf Ave. P.O. Box 798 Whittier, CA 90602	$25.00 a set	
Trampoline (various sizes)	American Athletic Co. Jefferson, Iowa		K-12th
Gregory Jump Ropes No. 80 7 foot ($1.25 each) 9 foot ($1.25 each) 16 foot ($2.50 each)	J.E. Gregory Co., Inc. 307 Radio Central Bldg. Spokane, Washington 99204		

Considerations In Physical Fitness For The Handicapped

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Physical fitness is an elusive concept. While it is held by some to be a general quality reflecting buoyant health and the ability to withstand without undue fatigue the physical and psychological stresses of the normal working day, it has been shown to be highly task specific. Athletes well trained for one type of task, such as endurance swimming are not necessarily in condition for a different type of task, such as distance running. The person with great muscular strength, often, is not highly flexible, nor does he necessarily perform well on tasks requiring cardio-respiratory endurance.

While the research clearly indicates that the results of physical conditioning are largely task specific, there is considerable evidence which indicates that there are basic components of a physiological nature that are necessary if one is to carry on effectively the daily work and recreational pursuits common to most people in our culture (Cureton, 1945; Fleishman, 1965). While it is true that such activities can be carried on within a wide range of energy expenditure, the comfortable work limits of the individual are a reflection of what is loosely referred to as "physical fitness" is likely to show signs of fatigue during the day, with a corresponding decline in productivity.

The recognition that physical fitness cannot be adequately described as a unitary trait, but rather that it must be considered as a composite of many characteristics has led researchers to turn to a consideration of those physiological traits and performance abilities that differentiate the biologically and functionally able person from those who are less able. The assumption here is that the former, having the superior physiological response capability, are best equipped to meet successfully and without undue strain the normal and the unusual demands of daily life. Thus an important aspect of physical fitness is held to be one's aerobic working capacity, the amount of energy one can release over long periods of continuous work (a reflection of the health and functional capacity of the heart and circulatory system). Other general qualities of physical fitness that most authorities agree upon are muscular strength,

muscular endurance, flexibility, body agility, coordination, and balance (Cureton, 1945; Fleishman, 1965). Some of these attributes can be measured directly in children and adults, others must be assessed indirectly. Unfortunately, most of the research on physical fitness had been conducted on college age males, some on high school boys and girls, very little on children of elementary school age and still less on handicapped children. Tests of physical fitness for use with school children have usually been oriented to track and field type measures. This is a reflection of the belief that most of the basic components of fitness mentioned above are incorporated in varying degrees in tests of running, jumping, and throwing, and partly because such tests are administratively feasible.

With this as a background let us consider what is currently known about the physical fitness of a class of handicapped children, namely the mentally retarded, and indicate the direction that should be taken if this segment of the school population is to be effectively served.

If one views physical fitness in its broadest sense, namely as the performance level of children in the broad domain of large muscle activity, educable mentally retarded children are on the average two to four years below the performance level of intellectually normal children. This was demonstrated by our own research on a sample of Madison and Milwaukee children (Francis and Rarick, 1960) and later confirmed on a national sample of 4200 EMR children (Rarick, et al, 1970). TMR children on similar activities lag 3 to 5 years behind normal children (Hayden, 1964). The extent to which the retardation in motor proficiency is due to mental deficiency or to lack of opportunity is at this point not clear, although the above cited national study showed that half of these children received no formal instruction in physical education and only 1 child in 5 received as much as 30 to 60 minutes of instruction per week.

If one assumes that retarded children can improve their physical abilities under competent instruction, and experience and research have shown this can be done, then the primary consideration is, how can this be most effectively accomplished. In the writer's judgment, it can be done most easily by focusing attention on the basic components that underlie the specific abilities used in the physical activities of our culture. If one were to identify the components that account for the major part of the variance in the overall performance level of these children, then we would have a rational basis for curriculum construction in physical education.

Approximately six months ago we completed a 30 month research project (Rarick and Dobbins, 1972) in which we identified the basic components in the motor performance of a sample of 261 educable mentally retarded boys and girls in two age ranges, namely, 6-9 years and 10-13 years. Some 60 fine and gross motor tests (which were believed to encompass the broad domain of man's physical abilities) were administered to these children and also to a sample of 145 normal children in the age range 6 to 9 years. Thus, the tests were given to six groups of children stratified by sex, age, and disability. Factor analysis was used to extract the components that accounted for the variance in performance on these tests. The factors that were extracted did in fact account for over 75 percent of the variance in all groups.

The factor structure while differing somewhat by age and sex within and between the EMR and the normal groups was nevertheless remarkably similar. Four factors or basic components were common to the six groups: (1) Strength-Power-Body Size; (2) Coordination of Limb and Body Movements; (3) Fine Visual-Motor Coordination; and (4) Body Fat. A single flexibility factor did not emerge. A balance factor was extracted in all groups, but the elements of static and dynamic balance were not differentiated. Thus, one would conclude that the basic components that account for individual differences in the motor performance of both retarded and normal children do not differ greatly.

In terms of performance level and variability of performance, however, substantial differences were found between the EMR and the normal children. On all tasks, with the exception of certain strength tests, the EMR children's average performance was well below that of normal children of the same age and sex. On many tasks, particularly those of balance, flexibility and muscular endurance, EMR children of 11, 12 and 13 years of age performed more poorly than the normal six year old. Both the EMR boys

and girls had substantially more body fat than the normal children, a reflection of limited physical activity and poor fitness.

The variability in performance of the EMR boys and girls on most tests was substantially greater than for the normal children. A small percentage of the retarded ranked above the 75th percentile of normals, some as high as the 95th percentile, although the majority clustered below the 10th percentile.

It is worth noting that as a group the EMR children were less retarded motorically than intellectually, for the EMR boys were on the average .91 standard deviations and the girls 1.5 standard deviations below the mean performance of normal children of the same sex, whereas the average I.Q. of the EMR children was approximately 2 standard deviations below that of the normal children. On tests of fine motor coordination the magnitude of retardation of the EMR children was approximately the same as on gross motor tests.

In view of the similarity in factor structure of EMR and normal children one cannot ascribe the low fitness level of EMR children to any fundamental motoric disability. It would seem evident that lack of opportunity is the problem.

In view of the findings of the research just described the following recommendations are made for curriculum construction in physical education for retarded children:

(1) *Individualization of instruction.* The great variability in performance levels of retarded children points to the importance of this.

(2) *Assessment of motor abilities.* This must be done if there is to be intelligent individualization of instruction.

(3) *Program emphases for the retarded as a group.*

- (a) *Muscular strength and power.* Approximately 30 percent of the time should be devoted to vigorous activity that places demands on the muscles of the trunk and limbs.
- (b) *Coordination of limb and body movements.* Ten to 20 percent of the time should be given to activities that call upon (1) changes in the body's orientation in space; (2) movements of the limbs in the projection and retrieval of objects.
- (c) *Balance.* Some 5 to 10 percent of the time should be devoted to activities rich in the elements of balance (both static and dynamic).
- (d) *Flexibility.* While no flexibility factor as such emerged in our study, approximately 5 percent of the program should include activities requiring body flexibility. This seems necessary in view of the poor performance of the retarded on the flexibility tests.
- (e) *Fine Visual-Motor Coordination.* While activities involving these abilities can hardly be classed as fitness activities, the physical education program is in a position to assist retarded children in these important abilities.
- (f) *Energy expenditure.* In view of the excess body fat noted in retardates their daily physical education program should be sufficiently vigorous to require considerable energy expenditure. It is highly important that these children be helped to acquire the necessary motor skills so that pleasure and satisfaction is achieved in motor activities, thus developing a desire to move and be active.

In summary, it is clear that the physical fitness and motor performance of retarded children need not be at the present low level. This is in part due to general public apathy (funds) and in part to lack of trained instructional personnel. The positive effects of *good* physical education programs on these children have been reported in numerous research studies. A few communities are making headway in providing sound instructional programs, but much remains to be done if we are to help retarded children and those with other handicapping conditions achieve their potential.

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Team Sports For The Mentally Retarded And Physically Handicapped

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Team sports for the orthopedically handicapped and the mentally retarded person are the adaption of the "game concept" to meet individual needs. One theoretical model of motor development for all handicapped persons would not be valid. The physically or mentally handicapped person is an atypical person. The professional physical educator must develop a theoretical model to meet each individuals's needs. The purpose of a motor development model is to construct a rational approach to physical instruction and activities. The process must be systematic, observable, and open to imperical evaluation. A theoretical model is a tool to aid the physical educator in achieving behavioral goals for the atypical person.

A successful model for teaching team sports to the orthopedically handicapped and the mentally retarded should include a marriage of the principles of behavioral modification and the game concept. Physically handicapped and retarded children share much in common, yet have marked differences.

Some basic hypotheses underlying a model or approach to teaching successful team sports for these individuals are as follows:

(1) Linking a higher probability behavior (activity enjoyed by the individual) with a lower probability behavior (activity the individual does not do) is a successful modivational approach.

(2) Individuals with the poorest physical fitness and movement patterns should be provided the greatest amount of experience in adapting team sports.

(3) Modification of the game concept in team sports for the handicapped person does not decrease the personal value of the game to the player.

(4) The most frequent modifier and maintainer of social behavior is successful social interaction which adapted team sports promote.

(5) A successful team sports activity for the handicapped and the mentally retarded focuses on that behavior which is most modivational to the player (shooting baskets, kicking a ball, pitching, etc.) and that insures every player will get to do it.

(6) Individual achievement and contribution is emphasized over the demand for a winning team.

Team sports must be developed around the skill level of the group and modified to meet individual needs. Adaptive activities may vary greatly between orthopedically handicapped and the retarded. Many OH children understand complex discussions of rules, strategies, and related topics. Others, like the retarded, need to be given easily understandable game concepts and skill instruction. When the teacher's demonstration of a skill is not comprehended, they must be taken mechanically through the movement.

Many OH and retarded children will begin team sports with a conceptualization of the game. To develop team sports, the teacher needs to first assess the player's skill level; second, determine the player's comprehension level; third, make appropriate game modifications; and fourth, break the game down to its simplest concepts.

Players participate in team sports and learn new concepts as the teacher introduces them. Team sports that can be modified are soccer, kickball, softball, wiffleball, flag football, basketball, volleyball, and others.

Kickball and wiffleball are modifications of baseball. They provide excellent game experience for children with the least capabilities. Kicking the ball or batting is enjoyed by all players.

Flag football and basketball are more complicated games demanding greater movement. Many retarded students are chaos on the field. Running the wrong way is common. My team once made 12 points for the other team. After a year of flag football, they won the last two games.

Soccer is an excellent team activity for the retarded. Its major game concept is to kick the ball in one direction into the goal without using your hands. As players improve, the game concept is expanded. Kicking a ball is reinforcing to most mentally retarded children. Soccer has a built-in modivational system. Every player can have contact with the ball. At its simplest skill level, little coordination of upper body (arms and hands) and lower body (legs and feet) is necessary. Coordination of upper body is difficult or impossible for many of the mentally retarded. The fast pace keeps their attention. Its strenuous physical activity gives players maximum exercise in a minimum time period. After a season of soccer, your students should do well in the Special Olympics. Concept and movement skills mastered in team sports are often transferred to other activities.

Summary

Team sports develop physical fitness. They provide successful experiences in social, as well as motor, skills. Adaption of these activities to the needs of handicapped children emphasizes what the atypical child can accomplish. It offers them the rewards of self-confidence. This is the essential tool needed to interact in the world around them. A philosophy of instruction must be developed on a theoretical model that represents the individual's needs and abilities. The degree to which the atypical child achieves determines the validity of the model.

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Creating A Language Rich Environment Through Physical Education

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The intent of this paper will not be to discuss the various theories of Language Acquisition, pathology affecting language and faulty speech, or even alternate learning strategies. It will be the intent, however, to explore just one area of the teaching-learning process, that of *Communication.*

Frequently we lose sight of the basic ingredients to teaching, or as I would prefer to say, facilitating learning in children. We must ask ourselves the question: "Who is the Learner?" Let us hope that along with this we automatically ask "What does he need to know, and how best can I help him acquire this knowledge?"

Few would argue that an essential part of the learning process is tl of communication. How often have you seen a class of young eager children, bursting with energy, clustered around a somewhat larger central figure awaiting instruction, cues, admonishment, and all of the other one-directional type of teaching? Under this classical setting, the mark of a good lesson, therefore, is how quickly the children lined up, performed the specific activity required, were well behaved, and, ultimately, quiet. I do not wish to say that these are not important qualities or that they may not be essential under some circumstances. I do wish to point out how little intellectual involvement there is on the part of the child, other than that of actor or performer. Are we not looking for more than just good performers of physical stunts in teaching children through physical education?

Normal Language Acquisition in Children

Most people know, at least vaguely, what language is. Yet, the term language is frequently interchanged with the term speech. Actually, language is the broader, more encompassing term, referring to a learned process of which speech is one part. According to Wood, language is an organized system of linguistic symbols (words), encompassing reading and writing as well as the spoken word. It is, therefore, through language that we express our feelings, discuss our ideas, and present our points of view.

The intricate process of language development is dependent upon the organism's abilities to receive, integrate, and express linguistic symbols. These linguistic symbols are received through two of our sensory channels; vision and audition. The reception of the written word is obviously received through reading with the reception of the spoken word through listening. As a correlate, the expression of language finds its outlet through writing and speaking. These functions, of course, require vision, audition, and motor skills.

Even more complex than either the reception or the expression of language is the way in which the individual integrates linguistic symbols. This integration entails numerous aspects of thought behavior, such as: memory, recall, cognition, imagery, and association. These areas, therefore, become of interest to the teacher in attempting to assist the child in developing and using language.

Developmentally, children progress through stages in acquiring language. According to Eisenson, the stages begin with the child's announcement of his entry into the postuterine world with a cry and progress through cooing, babbling, lalling, echolalia and identification language all during the first year. Eisenson considers these parts of what he calls the *Prelingual* stage.

True speech begins at about 18 months of age for most children. Eisenson refers to this as the *Anticipatory Language* stage for with it comes the child's awareness that his utterances can generally produce certain responses and in fact, prepares himself for that response. This can be seen in the child's preparation to be picked up when saying "up" or looking for a glass when asking for water. Words thus used have the power of magic as the child gets what he wants.

By the age of two, most children have vocabularies of fifty to one hundred words or more. This increase in vocabulary is not, however, the most distinctive achievement of this period, for he now begins to combine words into phrase-sentences. This marks the beginning of Syntactic Speech.

By three years of age most children can understand thousands of words and have a productive vocabulary that may reach or exceed a thousand words. Syntax approximates that of adult speakers during this period and by the time the child is four he may be showing evidence of developing his own rhetorical style. Eisenson believes that except for articulation the linguistic system is essentially complete by this time. Other authors suggest that the general basis for language is not complete but more complex forms will continue to develop up to about age 7.

Causes of Delayed Language Acquisition

The cause of delayed speech and language development are viewed most frequently from two standpoints: as those problems stemming from organic involvement, and as those non-organic factors which, perhaps for lack of a more precise term, are called functional problems. Still another way of viewing causes of delayed speech and language development, and the way in which causes will be discussed here, is to consider what is needed for adequate speech and language development and then to consider what problems can interrupt or impede this process.

Adequate speech and language develops as a result of a fortunate combination of factors. Integrity of the central nervous system, adequate mental abilities, well-functioning sensory pathways, emotional stability, a stimulating speech environment, and adequate maturation are all needed for normal speech and language development. Hence, speech and language development can be delayed permanently, or impeded temporarily, by problems associated with central nervous system impairment, mental retardation, hearing loss, emotional disturbance, environmental deprivation, or immaturity. These various disorders may occur either separately or in combination. Looking back over these stumbling blocks to normal development, one can see that there really is very little the teacher can do in changing most of these conditions. We can not honestly hope to improve the child with CNS damage, or suddenly make the deaf child hear. We can, however, effect some change in the child's language environment. It is to this end that the following "approach" is directed.

An Approach to Facilitating Language Through Physical Education

The activities which will be discussed in this presentation are designed to have several essential ingredients. There is nothing innovative or magic about their construction, and in fact, most are merely modifications of regular physical education and recreational activities. It is the method by which they are conducted that makes them language oriented. The basic parts of this learning recipe are threefold: security, reward, and a liberal sprinkling of activities requiring communication.

We are in the process of developing a language rich environment and for this to be effective, the child must feel secure. Many children do not verbally participate in their classroom or physical education activities because they are fearful. The fear of being wrong, saying something inappropriate, or having to ask for instructions to be repeated is embarrassing for all of us, but more so for the child with a communicative disorder or an emotional problem. Our intent, therefore, must be to relieve this tension and create an atmosphere of acceptance and ease. Once this has been accomplished, we will be ready to add the second ingredient.

B.F. Skinner, in 1953, developed a technique based upon the idea that the human organism tends to repeat those experiences which bring pleasure and avoid those that do not. This technique, variously known as Operant conditioning or Behavior Modification depends upon reward or reinforcers for appropriate behavior. Though some disagree with the extent to which this approach is used, most do concede that it is basically sound and does produce results. Reward and reinforcement are, therefore, indispensable in these activities.

The third ingredient is the actual lesson itself. These lessons may be modifications of regular physical education activities, such as having the child tell you what he is going to do if he hits the ball in a baseball game, or what stunt he is going to perform on the trampoline. This may be followed by the student explaining what he has done, why he did it, how he will do it next time, several different ways in which he could do the activity, and so forth. The emphasis, of course, is on the child verbalizing his actions. The modification of "What are you going to do," "What are you doing," and "What have you done," brings a whole new dimension into the regular physical education activity.

Activities using records are excellent for creating a language rich atmosphere. These may start in the simple Rondo or chant form and eventually evolve into singing and response types of rhythms. Considerable work is being done with handicapped children using the German method of Orff-Schulwerk.

Learning Grids and other types of activities involving children moving on appropriately marked areas of the playground or floor can be used to facilitate language with children. Asking students to spell words with which they are having trouble by jumping into the various squares, or answering questions asked by other students can be a helpful method by which the child can become more involved in the learning process. Games of this type can be created by the students themselves with a myriad of variations available. Another activity, which I shall call *Coding* has excellent application for children at the higher cognitive levels. It basically consists of students assigning auditory cue, such as a clap, whistle, or spoken word, to a motor activity, such as one hop, two jumps, or a somersault. One student will give a series of auditory cues which the other students will *decode* into physical movements. This can, of course, be reversed with the student's moving in various ways and the other child's giving back the verbal equivalent. Colors, number, action verbs, and so forth can be reinforced in this manner, as can recall, serial memory, and association.

Such games as Simon Says, Mother May I, Play Acting, Physical Education Imagery, Rhythmic Dances and many more, all can be sued successfully in facilitating language in children. Additional language oriented games can be found in the creative minds of both the children and teachers in our schools today.

This presentation does not purport to answer all questions about facilitating language in non-verbal children. It lays no claim to unique ideas or revolutionary theories. If by chance, it might in some way stimulate awareness of the language and communication needs of children, foster a new thought, or provoke a fresh idea, it will have more than served its purpose.

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Move For Fun

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The MOVE FOR FUN project in the Pasadena Unified School District is federally funded through the Education for the Handicapped Act, Title VI-B. Title VI-B funds are set aside for innovative programs in Special Education. At present MOVE FOR FUN is the only motor development project funded by Title VI-B in California.

The purpose of the project is to develop gross and fine motor skills in handicapped students for recreational and leisure-time activities. Many of the orthopedically handicapped and retarded students are trained in vocational skills to work in workshops or community jobs but their need for skills for leisure-time activities are not met. The MOVE FOR FUN project is trying to meet that need.

The Project Staff is based at Roosevelt School for the Handicapped and works with 100 physically handicapped children and 100 severely retarded children ages 3-21 years. There are two full-time Remedial Physical Education teachers and two Physical Education Aides at Roosevelt that work with every child in the school at least 20 minutes per day in a movement education or recreation activity. Each classroom teacher and aide assists the Physical Education teacher and is instructed in methods and techniques of teaching motor skills. There is also a full-time travelling teacher that uses a 12 passenger van to transport students on short field trips to recreational areas and has demonstration classes in other Special Education classes throughout the District.

The younger children in the program are directed in activities to improve body image, spatial awareness, balance skills, and creative movement in dance. Many of the movement educational activities include tumbling, balance and climbing activities on the tressel tree apparatus, balance and agility skills on the trampoline, obstacle courses for problem solving, and parachute activities for physical fitness and arm strengthening.

The teenage students, who are able to participate in strenuous activities, are directed in team sports activities such as flag football, soccer, baseball, and basketball. Many of the students have taken a greater interest in spectator sports because they are learning and understanding the fundamentals of the game in physical education activities at school.

Individual sports such as bowling, golf, tennis, swimming, horseshoes, shuffleboard and horseback riding are included in our program. We are trying to use as many community facilities as possible to acquaint the students with local recreational areas where they can go after school hours. The Project Move is adapting individual sports for wheelchair children. For example in bowling, shuffleboard cues are used by the children in wheelchairs to propel and guide the ball down the lane. This is just one way that Project MOVE FOR FUN is adapting normal recreational facilities toward the recreational needs for handicapped children. If a handicapped student becomes familiar with a local community facility and acquires the skills of the game, then the chances of them using that skill is greater.

Training for the Special Olympics and the Crippled Children's Sports Festival is also part of our program. This training improves overall exercise and competitive skills for track and field events and swimming competition. The Ten-Mile Club was initiated to help train the children for these programs as well as to help develop cardio-respiratory fitness and endurance. Every child has participated on a voluntary basis and last year two boys ran over 100 miles. This year 150 students have received their 10 mile ribbon. Teachers and Aides have been jogging with their classes also.

The results of our efforts have been very satisfying. The children have developed more self-image and self-confidence than in areas of movement. Their attitudes have improved in trying new activities and their increased attention span has carried over into regular classroom activities.

After the federal funds are depleted in June 1974, the program will continue to be funded through the California State Remedial Physical Education reimbursement fund. There will be two fulltime teachers at Roosevelt and one travelling teacher.

A Sequential Guide For Developing Movement Skills And Concepts Through Creative Dance

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It is ordinarily assumed that certain movement skills are prerequisite to dance. We may call these skills "movement vocabulary". This movement vocabulary is the medium through which a dance composition is created. The handicapped child, due to a myriad of causes (which will not be dealt with here) often has a very limited repertoire of these movement skills. Thus, the teacher of creative dance is confronted with a two part problem; to lead the child in the exploration of the concepts of space, force, time, and relationships of composition, and at the same time, to help him develop the media or movement vocabulary through which these concepts are explored.

The *Sequential Guide* presented here was designed as a teaching tool to implement this two edged approach. It insures a cumulative interaction between movement skills and movement concepts. This Guide is a framework for building a movement vocabulary while simultaneously exploring the movement concepts.

Down the left column of the Guide are listed eleven sequential ability levels to which all other Guide entries are keyed. Associated with each ability level are certain Movement Skills, Movement Concepts,[2] and Compositions; these are shown horizontally. This format insures that each movement concept and skill is introduced according to ability level and all items of each level are completed before moving to the next ability level. Each skill and each element of the concepts is repeatedly reinforced as the child

progresses through each step. Each time a new skill or concept is introduced, its relationship to the skills and concepts of the preceding steps is cemented, since each new concept is explored through all the movement skills and each new movement skill is exposed to each of the elements of the movement concepts.

To clarify the use of the Guide, an explanation of the graphic example will show the interaction.

The jump is a basic locomotor skill emphasized in step 5. Through various combinations, all of the skills and concepts included in progressions 1 through 5 can be reinforced with this new movement. For example, a random selection of three combinations might be:

"Jump and clap your hands when you land each time".
(percussion, element of force)

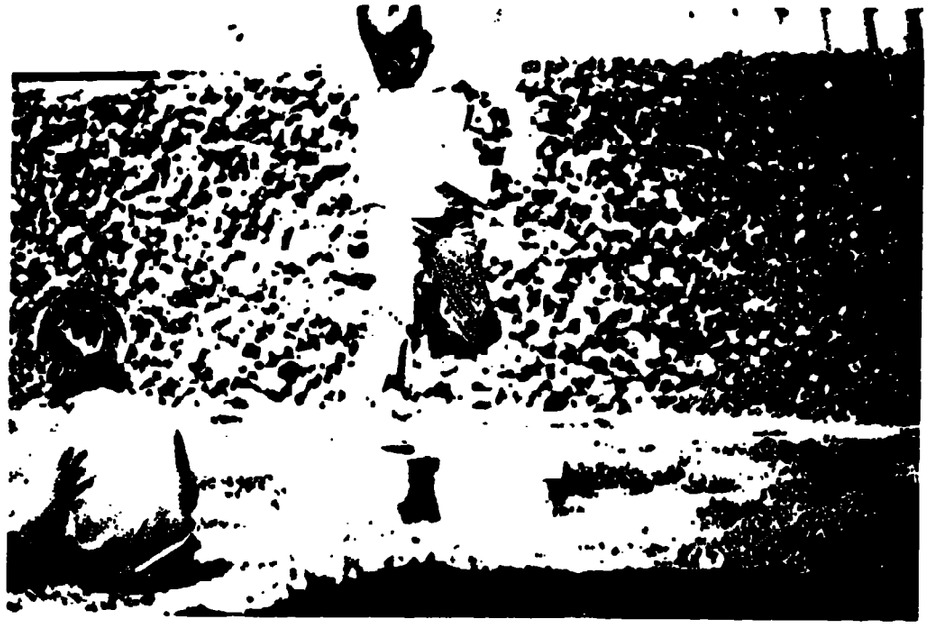
"Jump low, like a ball bounces when it has lost most of its air".
(level, element of space)

"Jump forward as fast as you can"
(tempo, element of time)

As other skills and concepts are introduced in progressions 6 through 11, each of these will utilize the jumping skill in a new way. The same pattern of interaction is repeated with every other skill and concept named in the Guide.

If any movement skills are not appropriate for a particular student, the concepts can still be explored through whatever movement skills that student can manage. For example, a student with no locomotor movement (level 1, body positions) can, by means of axial movements, explore all elements through all the steps; or, a student whose understanding of the concepts is limited to the beginning steps could still progress through all the movement skills.

The Guide, therefore, insures that every element of the three movement concepts can be pursued by each student, regardless of physical or mental capability.



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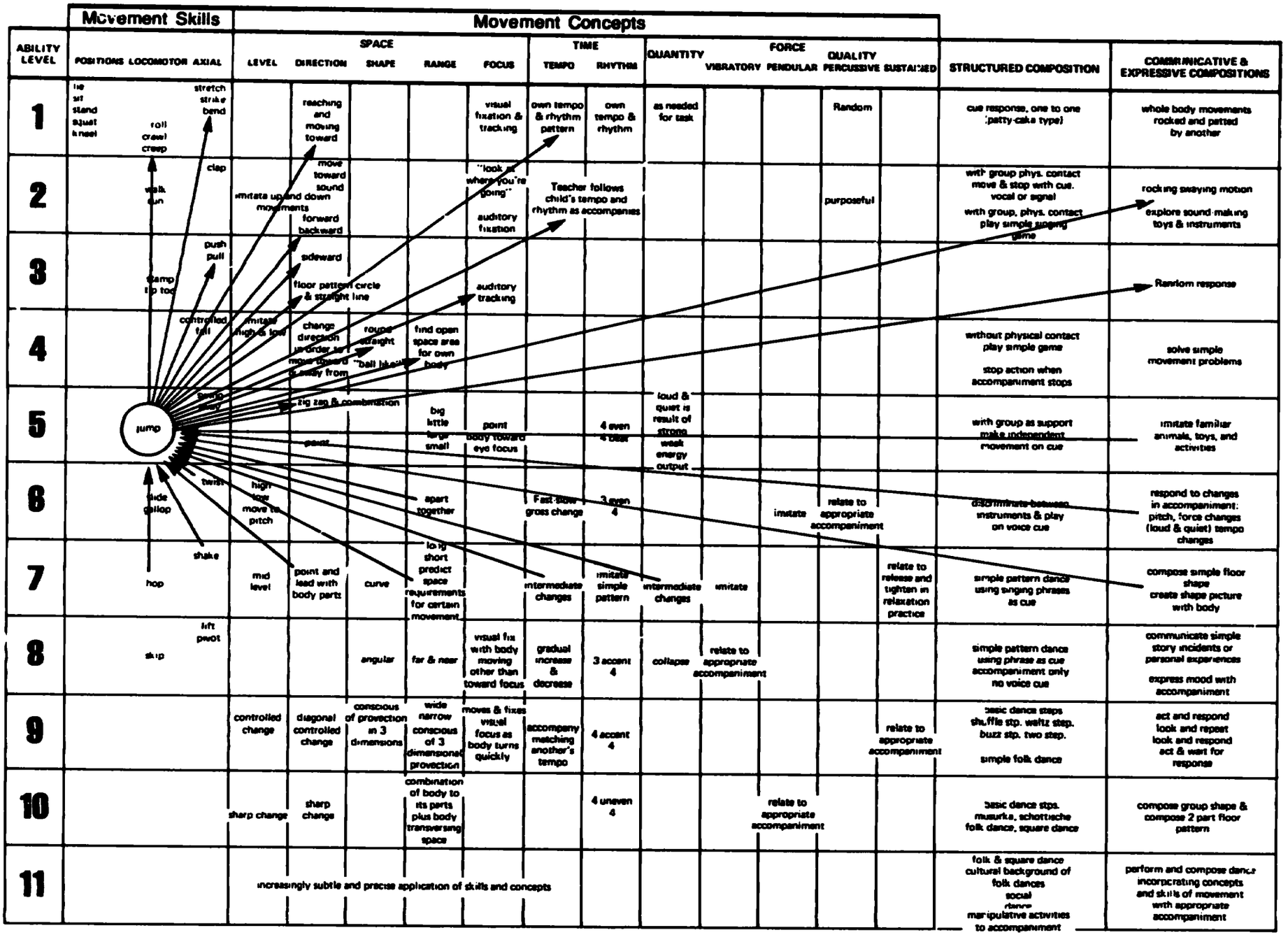
SEQUENTIAL GUIDE

ABILITY LEVEL	Movement Skills: POSITIONS	LOCOMOTOR	AXIAL	Movement Concepts: SPACE: LEVEL	DIRECTION	SHAPE	RANGE	FOCUS	TIME: TEMPO	RHYTHM	FORCE: QUANTITY	VIBRATORY	PENDULAR	QUALITY: PERCUSSIVE	SUSTAINED	STRUCTURED COMPOSITION	COMMUNICATIVE & EXPRESSIVE COMPOSITIONS
1	lie sit stand squat kneel	roll crawl creep	stretch strike bend		reaching and moving toward			visual fixation & tracking	own tempo & rhythm pattern	own tempo & rhythm	as needed for task			Random		cue response, one to one (patty cake type)	whole body movements rocked and patted by another
2		walk run	clap	imitate up and down movements	move toward sound forward backward			"look at where you're going" auditory fixation	Teacher follows child's tempo and rhythm as accompanies					purposeful		with group phys. contact move & stop with cue. vocal or signal with group, phys. contact play simple singing game	rocking swaying motion explore sound-making toys & instruments
3		stamp tip toe	push pull		sideward floor pattern circle & straight line			auditory tracking									Random response
4			controlled fall	imitate high & low	change direction in order to move toward & away from	round straight "ball like"	find open space area for own body									without physical contact play simple game stop action when accompaniment stops	solve simple movement problems
5		jump	swing sway		zig zag & combination point		big little large small	point body toward eye focus		4 even 4 beat	loud & quiet is result of strong weak energy output					with group as support make independent movement on cue	imitate familiar animals, toys, and activities
6		slide gallop	twist	high low move to pitch			apart together		Fast-slow gross change	3 even 4			imitate	relate to appropriate accompaniment		discriminate between instruments & play on voice cue	respond to changes in accompaniment: pitch, force changes (loud & quiet) tempo changes
7		hop	shake	med level	point and lead with body parts	curve	long short predict space requirements for certain movement		intermediate changes	imitate simple pattern	intermediate changes	imitate			relate to release and tighten in relaxation practice	simple pattern dance using singing phrases as cue	compose simple floor shape create shape picture with body
8		skip	lift pivot			angular	far & near	visual fix with body moving other than toward focus	gradual increase & decrease	3 accent 4	collapse	relate to appropriate accompaniment				simple pattern dance using phrase as cue accompaniment only no voice cue	communicate simple story incidents or personal experiences express mood with accompaniment
9				controlled change	diagonal controlled change	conscious of projection in 3 dimensions	wide narrow conscious of 3 dimensional projection	moves & fixes visual focus as body turns quickly	accompany matching another's tempo	4 accent 4					relate to appropriate accompaniment	basic dance steps shuffle stp. waltz step. buzz stp. two step. simple folk dance	act and respond look and repeat look and respond act & wait for response
10				sharp change	sharp change		combination of body to its parts plus body transversing space			4 uneven 4			relate to appropriate accompaniment			basic dance stps. mazurka, schottische folk dance, square dance	compose group shape & compose 2 part floor pattern
11	increasingly subtle and precise application of skills and concepts															folk & square dance cultural background of folk dances social dance manipulative activities to accompaniment	perform and compose dance incorporating concepts and skills of movement with appropriate accompaniment

SEQUENTIAL GUIDE



Movement Experiences

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Many important contributions are being made to the manner in which movement experiences may assist in improving the sensory-motor, perceptual and intellectual functioning of atypical children and youth. However, there is a paucity of attempts to spell out motivating and recreative ways in which the capacities of physically handicapped children may be extended in play. The purpose of this material is to present in easily understandable forms the manner in which recreational experiences may be adopted to answer the needs of the physically handicapped.

The teacher must have meaningful insight into the range of physical abilities, emotional and social attributes, as well as intellectual capacities of the physically handicapped in order to proceed in ways which are productive and worthwhile. It is vital that the individual working with a handicapped child, in an area of the curriculum in which his limitations are likely to be magnified, make every effort to make the child's experience successful and happy.

Basically, this presentation will cover activities that contain therapeutic, recreational and educational objectives. These activities may be further divided into two categories: (1) those that are recreative, but involve chiefly efforts of smaller muscles; and (2) rather vigorous activities requiring movement of the total body in space, either through the child's own efforts, or usually with the assistance of various mechanical devices.

Principles to be followed: (1) activities are presented with modifications listed in order of degree of difficulty; (2) tasks require a minimum amount of expensive equipment; (3) the principle of total participation is followed; (4) intellectual involvement is stressed as much as possible; (5) games and modifications are presented so that teachers may provide new and novel experiences on an almost daily basis; (6) when possible, games resemble in appearance and intent those participated in by normal children, but are modified so that they can be dealt with by children with severe movement problems.

Activities to be presented:

1. Basic lead-up activities
2. Games requiring moderate effort
3. Vigorous games
4. Learning games
5. "Obstacle" courses (combining some of the games and tasks outlined above)

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Trampoline: For The Physically Handicapped Asset Or Liability?

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It is unfortunate that many people view the trampoline as potentially dangerous. Because of this view, many school systems do not take advantage of the trampoline's many attributes. Nevertheless, the trampoline is being used in more and more schools each year, and some educators are beginning to realize its potential. As for the program of remedial physical education, no other piece of equipment can take its place for achieving certain goals.

The trampoline is a piece of equipment that can be used by even the most severely involved – barring any medical contraindication. It also can be used as a tool in diagnosing the motor dysfunctioning of children. (Hunnekans and Kiphard, 1963a, 1963b). Kephart in *The Slow Learner in the Classroom* suggests the trampoline can be used as a diagnostic tool for assessment of gross body control – postural adjustment, balance and coordination.

Other than its uses in the diagnosis of motor dysfunctions, the trampoline has been used extensively as a tool for the remediation of motor dysfunction and for physiomotor development.

Kephart says about the trampoline, "Not only must the child learn a dynamic relationship to the center of gravity and maintain a dynamic balance, but he must maintain the coordination under changing relationships. In addition, the changes in these relationships are not the result of his own effort directly, but are dependent in large part on the trampoline and its functions. The timing and rhythm that a child must develop in using a trampoline helps to show him his neuromuscular problems and help him to develop body concepts relating to direction." The mere activity of bouncing on the trampoline contributes to body image and understanding of spatial relationships.

Getman in a paper presented at an optometric extension meeting in 1959 maintained that for visually handicapped youngsters "the trampoline provides opportunities for the acquisition of basic movement control which is essential to coordination."

McCants in 1962 reported that a trampoline program was responsible for significant improvement among mentally retarded children in four motor tests (tapping, agility run, balance, and vertical jump) when compared with a group who had regular physical education classes for the same length of time. Also, there was a noticeable change in the children's academic work and social attitudes. In other words, the trampoline can be one of the finest pieces of equipment which a remedial physical education teacher can use.

The trampoline fits well into a program for the physically-handicapped child, and it will contribute to the development of body image, spatial awareness, coordination, agility and timing to a greater degree than any other piece of equipment in the same time span. The teacher need not be a professional performer nor does he need to be very proficient on the trampoline. By mastering the basic fundamentals, the teacher can teach and demonstrate trampolining satisfactorily.

As in many programs, you do run into problems. One of the first problems I had to meet was "to sell" the trampoline and how it could be used to the administration. This completed, the next problem I had to meet was that some of the children were very apprehensive, for one reason or another, about using the trampoline. In the regular classes safety is taught first. With the exceptional children you cannot rely on safety being taught. Each child, each minute of each day, can and will do something different Remember it and accept it and you will have a safe program for the physically handicapped child.

Safety Procedures for Trampoline Activities

When the trampoline is well supervised and used properly, it can become one of the safest activities in the remedial physical education program. However, a very strict set of safety rules must be followed by all those who use it.

The trampoline is placed in the center of the room, with the teacher and aide on opposite ends of it. The children are used for spotters on all four sides, with their hands up to help if a performer gets too close to the edge. Remember you cannot depend on them. Expect the unexpected, always.

Following are some suggested safety precautions:

1. No one can use the trampoline alone or when not supervised.
2. Have the proper safety pads for the trampoline.
3. Steps should be provided for mounting and dismounting.
4. Begin trampoline activities for exceptional children at a lower level than is customary for the normal child.
5. *One* child at a time should bounce on the trampoline.
6. Have children jump for short periods of time rather than for a long period of time preventing their becoming exhausted.
7. Before beginning, have children engage in some warm-up exercises.
8. Have children wear proper clothing (only stocking feet).
9. Teacher or aide checks all pockets for sharp objects.
10. Exercise good judgement. Teach the basic skills and leave the advanced stunts to someone else.
11. At the completion of each class, the trampoline should be locked up or made inoperative.

Suggested Trampoline Activities and Lessons

Activities for exceptional children on the trampoline must begin at the lowest level and nothing left to chance. If a series of progressive steps are followed, rewarding results will be obtained. Work on the trampoline is not only fun and recreational for children, it is also a great activity for exercise. I believe it is also one of the best means of improving balance, perceptual skills and spatial awareness as well as developing self-confidence for physically handicapped children.

Preliminary Activities

The first activity should be warm-up exercises to limber up the child's body. This can be a set of exercises or you may use tumbling activities as a lead-up to the trampoline work.

The second activity, and the most important, is the safety procedures. Renew the rules which you have set up for the class each day. Remember, always expect the unexpected.

The next step is the familiarization of the children with the trampoline. Have two lines or spots painted on each end of the trampoline and a cross in the middle to help the child guide his movements. Have the children push the bed of the trampoline up and down with their hands to see how it works.

During the familiarization phase, the child is expected to develop a feeling of security and confidence, and be able to follow directions.

Lesson 1

The first lesson should be aimed at teaching the child to mount and dismount the trampoline properly and to begin fundamental bouncing. I also have each child get up and walk around alternately in a clockwise and a counter-clockwise direction. The final activity each child will learn in Lesson 1 is how to break or check his bounce. Breaking the bounce is done by the child simply flexing the knees in an extreme manner the moment he lands on the bed.

Lesson 2

At the beginning of this lesson, and each succeeding lesson, it is recommended that a review session and a short demonstration be given. Each student should be expected to perform the skills learned in the previous lesson. If this is followed, the child who is learning more slowly will not be over-burdened with new skills before he has learned the preceding ones.

As you go through each day of teaching, remember that the child should begin each lesson by reviewing everything up to the point you have reached. A student who hasn't mastered the previous skills to your satisfaction should never be required to learn the new skills.

Once the child has reached this stage and has learned to follow directions, he may continue. Typically the child begins with the "all-fours" dop and proceeds to the knee drop, seat drop, and the front drop. Before the children try the activities listed above, I have them practice each one on the innertube with a canvas covering. This seems to build self-confidence.

It has been my observation over the years that each child can accomplish a great deal and enjoy the trampoline more than any other piece of equipment. Each child loves to perform and show others what he can do. I find the trampoline a very significant aid and hope that more people realize its potential as a teaching device.

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TABLE 1

Suggested Trampoline Checklist for Handicapped Children

Skills	Date Introduced	Date Completed	Score
1. Warm-up exercise			
2. Mount and dismount			
3. Check bounce			
4. "All-fours" drop			
5. Knee drop to stand (1 time)			
6. Seat drop to stand (1 time)			
7. Knee drop to stand (continuously)			
8. Seat drop to stand (continuously)			
9. Knee drop to stand, to seat drop to stand			
10. Front drop to stand			
11. Knee drop to stand, to front drop to stand			
12. Knee drop to stand, to seat drop to stand, to front drop to stand			
13. Front drop to stand, to seat drop			
14. Other activities			

Physical Education For The Deaf

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A good developmental P.E. program for the deaf children in elementary and pre-school should:

1) Enhance the development of basic motor skills by proper sequencing of activities.
2) Expose the children to as many different types of movement experiences as possible.
3) Encourage confidence and initiative in movement.
4) Increase fitness for daily living.

In my opinion one of the most satisfactory ways of accomplishing these aims is through the use of techniques involved in creative movement, movement exploration, and problem solving. All 3 techniques are similar in theory and practice and by pulling what you can use from each method, a very workable system can be developed to meet your needs and the needs of your students. For convenience purposes, I will call my composite of these techniques creative play

Sequencing tasks are essential both for the learner and the teacher if creative play is to be a successful tool. Beginning with language and situations which everyone is familiar with and moving to less familiar ground as everyone becomes comfortable with the technique is the key to success.

Creative play lends itself to the teaching of body parts, self-control, and cooperation with others, and it provides an opportunity for exploring the dimensions of movement: time, space, levels, flow, shape, weight, gravity and patterns.

Deaf children have often been accused of having little imagination and poor ability to abstract. Creative play, physically acting out situations, actions of others or ideas, enhances abstract thinking and creativity, and at the same time improves body management skills. It is also a natural environment for the growth of expressive and receptive language, a great need of the hearing impaired.

Deaf children are often shown how to do most everything. It is unusual for them to show the initiative which is expected of the hearing student. Creative play encourages confidence and initiative in movement. The student is given many opportunities to use his body successfully at his level of skill and cognition without fear of failure or reprimand.

It is extremely difficult to get the visual attention of 15 to 20 deaf children at the same time. However, when the creative movement tasks are challenging and enjoyable, there are few discipline problems because all are interested and involved. In this situation they look to the teacher for additional cues when needed, but otherwise exploration continues without disturbing incidences.

Another by-product of creative play is the increased fitness level which comes naturally when there is continuous and vigorous movement.

Creative play is not the only tool to use when teaching physical education for the deaf but it is definitely a good one to have available when you need it.

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Tumbling Activities

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I. Review of the Literature

Tumbling is the smooth transfer of weight of one segment of the body to another. Handicapped students need to be exposed to this activity for it helps them with body management and control of the whole body. It may make them aware of the body in relation to other parts. Children need a great deal of gross body movement and exploration of gravitational forces.

I feel that basic skill development is important to the development of the specific and more complex skills. Tumbling is an appropriate activity that exposes the student to such basic skills as balancing, bending, falling, rising, stretching, and stooping. As well as challenging the student in basic developmental skills tumbling also challenges the student's agility, flexibility, strength, endurance, timing, and coordination.

Through the practice of developing balance, the child learns to relate to the force of gravity and begins to formulate a reference system. He learns principles of stability and uses his center of gravity as a reference point around which to develop the concepts of up, down, right, left, and front, back or body image.

There have been innumerable investigations supporting the hypothesis that the extent to which a child can control his own activity is indicative of good intellectual performance. (3:14) Therefore, an important goal of individuals working with children in motor activities should be to help them have more effective body control and may result in increased attention span and better learning in the classroom. By no means am I trying to suggest that learning a forward roll increases a student's intelligence. The available data does suggest that there are several channels through which a teacher may influence a student's intellectual functions and it may be through groll motor activities.

One area I have not overlooked and feel very strongly about is the idea that the activity, whatever it may be, challenge the child, free him from fear of physical hurt, give him the satisfaction of some degree of success, and the activity be fun.

II. Lead Up Techniques and Adaptations

A. Lead up and adaptations to a forward roll:

1. Bend chin down to chest.
2. Feet shoulder width apart bend over at the waist and touch the knees.
3. Bend over with legs apart, knees slightly bent, both hands behind the knees and try to put the head between the legs.
4. Monkey walk – Walking bent over with the arms hanging down to the side.
5. Walk on feet and hands; knees may be slightly bent.
6. Stand – raise up and down on toes.
7. Stand – jump up and down in place.
8. Bend over put hands on mat, knees slightly bent and jump up and down keeping hands on mat.
9. Have the student lean over a table and place the hands on the mat; tuck the head so that he may better understand the hand, head placement, and the angle of the hips.
10. Roll up 2 mats and have one higher than the other and have the student stand on the higher one bending over and placing his hands on the lower one.
11. Log roll – vary the position of the legs; tucked, straight, etc., vary the arms; overhead, crossed on chest, down to side. Any suggestions?
12. Egg roll
13. Practice falling from a hand and knee position down to the side of the body to rolling.
14. Wheelbarrow
15. Shoulder roll – Standing bent over; place hands on the mat shoulder width apart; lower the body to the mat; chin on the chest; put head down to the side and legs give a little push to go over on the shoulder. The *shoulder* instead of the back of the head contacts the mat. Note: This may be a poor habit. It is probably best suited for the student that will have much difficulty of ever performing a forward roll. It is not necessarily a good practice for those that are capable of performing a forward roll.

B. Lead up and adaptations to a backward roll:

1. Walk backward
2. Sit down and move backward in many different kinds of ways.
3. Crab walk
4. Push ups to get the idea that the arms have to be used to push the body up when in position to roll over backward.
5. Lie down on back and bring knees to chest and hold onto knees with arms.
6. Bicycle like movements lying on back.
7. Lying down on the back try and bring the legs as far back as possible.

8. Rock back and forth lying on the back.
9. Backward shoulder roll – Student rolls over backward over his shoulder while instructor lifts at the hips to decrease pressure and weight on student's neck. Note: This may be the only way some students will come close to performing a backward roll. It may also be a bad habit for those that are skillfully able to perform this stunt therefore with these students it may be a good idea not to make this a habit.
10. Lying on his back show the student the placement of the hands.
11. Use Porta Pit "chair" and turn the chair over and show the students the placement of hands.

12. Practice with Porta Pit chair by turning student over in it.

13. Have the student rock back and forth emphasizing one hand placement, then the other.
14. Have the student rock back and forth and try the complete backward roll with instructor lifting up at the hips.

III. Transitions from One Stunt to Another

1. Squat-through: Start from a push up position; jump up and shoot the legs through the arms to a sitting position.

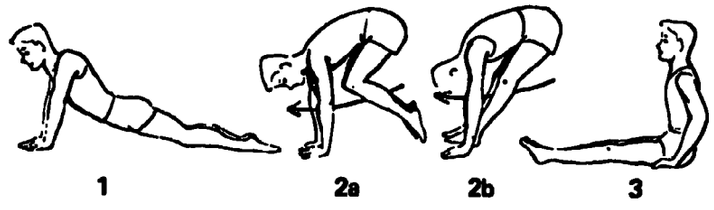


Fig. 2-11. Squat-Through

2. Swedish fall: Stand tall and fall forward and as the body approaches the floor the hands reach out and catch the body weight and one leg raises; lower body to push up position. Make adaptations to suit the student's capabilities.

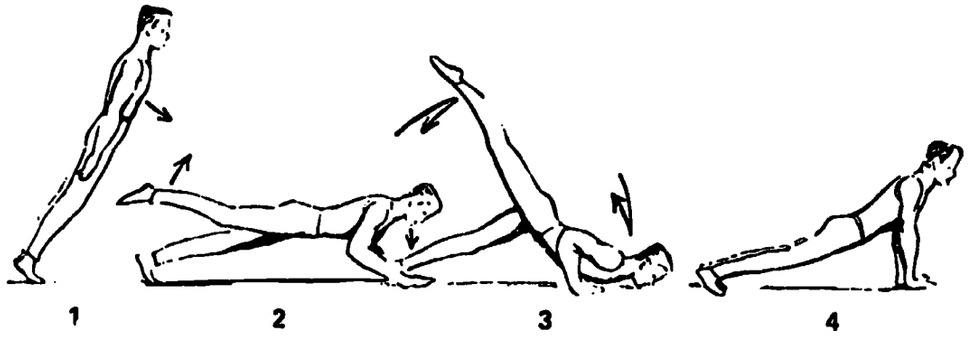


Fig. 3-2. Swedish Fall

3. Rear support: Lying on back hands shoulder width apart, push up and raise hips and head back.

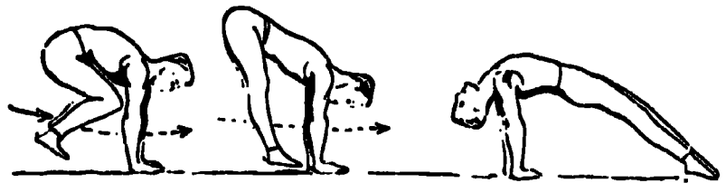


Fig. 3-3. Squat- or Stoop-Through to Rear Support

4. Turn to front support: From back support turn to front support or push up position.

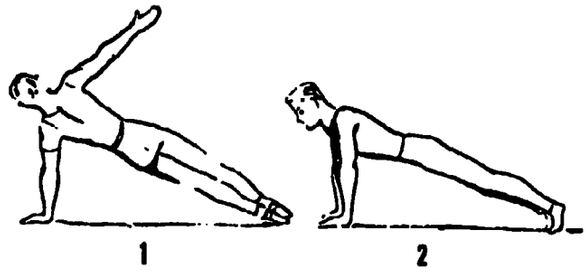


Fig. 3-4. Turn to Front Support

5. Jump-Half-Pirouette: This is a jump in the air with a 180 degree turn so that the tumbler lands facing the opposite direction.

Fig. 2-2. Jump Half-Pirouette.

IV. The Roll

It involves:

a. Starting position
b. Rotary motion whereby successive parts of the body make contact with the mat in a definite order.
c. A specific body posture
d. A specific direction
e. A specific rhythm
f. A specified duration (1 roll, 2 rolls, etc.)
g. An end position (sitting, standing, etc.)

V. The Forward Roll

A. Explanation

1. Start in a squat position; place palms flat on the mat at shoulders width apart.
2. The arms actually lower the body to the mat. The chin is placed on the chest and the legs give a little push.
3. The back of the head contacts the mat, then the back of the shoulders and the roll is actually down the spine.
4. Finish is a supine, sitting, or standing position.

B. Teaching Suggestions

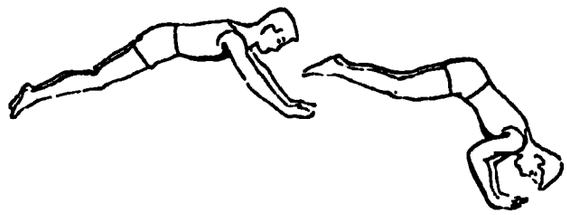
1. A spot trainer should be used as a lead up activity with the student lying on his stomach placing his hands and head down on the mat. Roll him over by manipulating the roller.
2. Use some of the suggestions and lead up activities mentioned earlier.

C. Spotting

1. Tuck the chin on the chest with one hand.
2. Put other hand under the abdomen, in front of the hips or on the back of legs on the hamstring muscles to help start the forward motion and to bear some of the tumbler's body weight.
3. The spotter should be down on his knees on the mat close to the performer.

VI. The Diving Forward Roll

Basically the same as a forward roll except the student dives forward with a slight body arch.



1 2

Fig. 3-1. Diving Forward Roll

VII. The Backward Roll

A. Explanation

1. Start from a compact sitting position.
2. Sit down with the knees bent and close to the chest.
3. Arms bent, hands placed over the shoulders and palms are facing down.
4. Back and head should touch the mat and roll over pushing up with both arms to aid the roll.
5. It is better to land on the feet then on the knees. Landing on the knees causes strain on the student.

B. Teaching Suggestions

1. Should be taught first from sitting position.
2. Lie on the back and have the student rock back and forth in a tuck position with knees close to chest.
3. The hands should make contact with the mat over the shoulders each time the performer rolls back onto the upper back.
4. Use a spot trainer.

C. Spotting

The spotter should lift some of the performer's weight as the stunt is being learned. This can be done by lifting the student at the hip level to relieve some of the weight on the neck. The spotter should not push on the lower back to help him over as this might result in injury to the neck.

VIII. Putting It All Together

I feel the major goal in tumbling and gymnastics is to be able to comprise a group of stunts into a routine. The student has a chance now to include some of the skills that have been practiced individually. Execution, form and sequential memory are factors that may be considered at this time. The instructor may prescribe a set routine for the student to execute or the student may be asked to think of a routine on his own to perform; a show me what you have learned type of situation. The most important principle to remember when teaching routines is to make sure that the student is taught to perform the routine with continuity and smoothness from one stunt to another. If the student is trying to move from a forward roll to a backward roll an example would be to do a forward roll, jump half-pirouette, backward roll. The jump half-pirouette would be the transition move to the backward roll.

IX. Something for the Advanced and Just for the Fun of It.

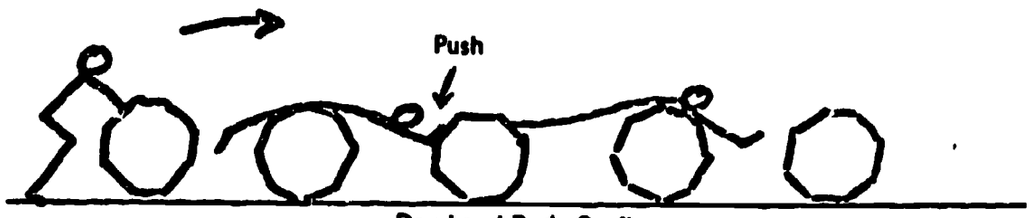
A. Modified Head Spring
One Incline mat or rolled up mat.
Three spot trainers

The student runs up the incline mat, places his head down on the first spot trainer and with or without assistance performs a headspring over the spot trainer to a stand.

B. Diving over and on spot trainers with a forward roll at the end.
3-4 spot trainers

The student runs and dives on the first spot trainer and rolls into and over the next until he gets to the last one and after the last one performs a forward roll.

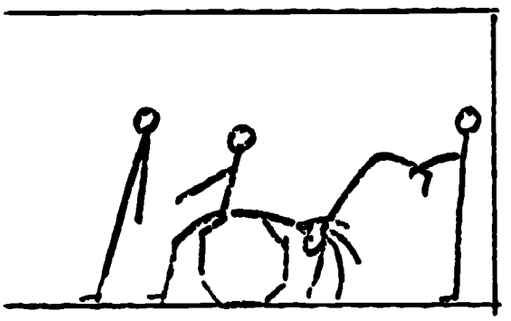
Be sure to space at least three and preferably six or more spot trainers far enough apart so they do not jam and not so far as to cause the back to sag. Always reach and push never pull.



Dry Land Body Surfing

C. Modified Back Head Spring
One spot trainer

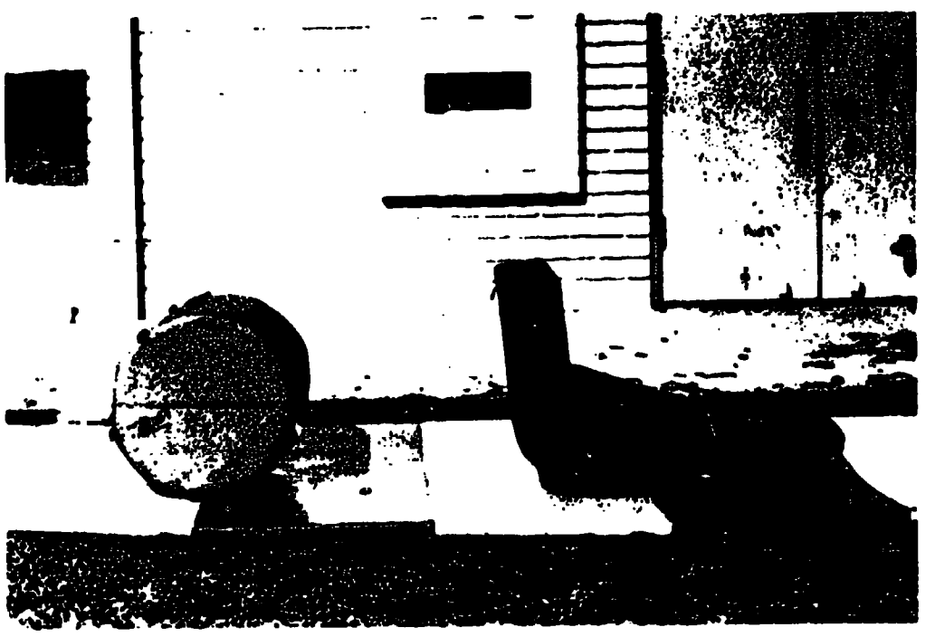
The student bends backward over a spot trainer and places his hands on the mat behind him. The student brings his feet back over his body and head while the instructor spots by putting his hand on the student's abdomen and the student finishes in a stand.



Back Hand Spring

D. Backward Roll from Porta Pit chair.
Backward Roll from chair to spot trainer.
One Porta Pit chair
One spot trainer

The student sits in equipment shaped like chair. The instructor turns the chair over backwards and the student executes a backward roll. This may be used as a lead up activity to a backward roll. A spotter should be used on the other side of the chair to help prevent the student from landing on his knees.



A spot trainer may be placed behind the chair and the student will roll onto the spot trainer from the chair thus preventing the student from landing on his knees. Use discretion as to the performer chosen to participate in this activity. The advanced student would probably have the most success with this activity.

X. Dual Tumbling or Team Tumbling

This activity may give the student a chance to not only have to execute his skills in a coordinated-smooth fashion but also try to match this timing and cooperation with someone else in order to execute a dual performance.

Examples would be to use some of the previous ideas and include other people to perform at the same time instead of individual performance.

Some suggestions:

1. Log rolls
2. Egg rolls
3. Forward rolls
4. Forward rolls over spot trainers
5. Backward rolls
6. Backward rolls over spot trainers
7. Back hand spring over spot trainers
8. Front hand spring over spot trainers
9. Any suggestions

Hopefully, the purpose of this information is not to write a list of "things to do" but to establish a foundation in which to build a multitude of ideas from a few basic skills.

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New Uses Of Equipment

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Studies have been reported that have attempted to relate physical development with academic achievement and/or learning. Reports made in this area seem to be highly controversial and somewhat inconclusive. An attempt to relate fitness and learning dates back to Socrates, in which he felt that in the process of thinking where bodies were used minimally it became a matter of common knowledge that grave mistakes were often made because of bad health (18). Plato spoke of the correlation between health bodies for healthy minds (18). Rousseau was the first pedagogue to interrelate the education of the mind and body. (18). Rousseau felt that to cultivate man's intelligence governs, such as the arms and legs which are instruments of man's intelligence (18). Sherrington, the British physiologist, elaborates on the idea that "... the muscle is the cradle of recognizable mind" (16). Sherrington points to the fundamental fact that the human thinking and imagery to be communicated must be materialized through movements which include speech, play and other modalities of motor action (16).

In reference to this Sherrington stated:

"mind, recognizable mind, seems to have arisen in connection with the motor act. Where motor integration progressed and where motor behavior progressively evolved, mind progressively evolved. That kind of motor integration which arrives at concentrating the complex mechanism on doing one thing at a time offers a situation for mind; and the doing of that one thing finds mind alongside it. But not the whole of the doing. The integrated act has its focus and there mentality has its focus." (16:213)

In a paper presented at the Second International Congress of Psychology of Sport and Physical Activity Jokl talked about "The Inner Attitude of Man" (13). The communicable content of movements, posture,

gesture and facial expression are governed in part by man's "inner attitude" which in turn affects and is affected by a multitude of environmental forces (13). Referring further to this inner attitude, Jokl stated:

"We jump with joy, we frown when perplexed, we walk away in a slow pace with head and shoulders bowed after a defeat; or we may prance around with head high and chest thrust out after victory. These interrelated moods and postures have their autonomic accompaniments . . . We become pale with fright or flushed with excitement. These are reflected in measurable changes in heart rate, blood pressure, respiration and catecholamine levels in blood and tissues; which in turn can affect a person's emotional state." (13)

Some studies have been conducted that correlate the level of physical fitness with academic achievement. Barry (1) in a factorial study of motivation, physical fitness and academic achievement in college freshmen found that there were generally significant differences in academic achievement between the physically fit and unfit groups but there usually were no significant differences in intelligence quotient. In case studies of college men with low physical fitness indices, it was found that 83 percent of the freshmen male students dismissed after one year from Syracuse University because of low grades, had Physical Fitness Index Scores below 100 (average); 39 percent had Physical Fitness Index Scores below 85. These same students had scholastic aptitude scores well above the average student (15). Hart and Shay (7) studied the physical fitness and academic achievement of college freshmen and found a significant positive correlation between grade point average and Physical Fitness Index Scores. Kobes (14) presented data of cadets at West Point comprising more than 10,000 young men that had been selected because of their high academic, emotional and physical potentials. This data revealed a significant positive relationship between initial physical performance levels and leadership ability assessed three and one half years later. It was further pointed out by Kobes that at the time the youth whose physical performance tests were rated poor, showed least satisfactory qualities as officer aspirants and were most likely to fail to graduate, to resign, or be discharged. Walker (19) in a comparative study of the physical fitness of special, average and gifted twelfth grade boys reported from the results of the California Physical Performance Test that the gifted group was superior to the special group on the 600 yard run and on the number of pull-ups performed. Generally the gifted and average groups compared favorably with the total population means on all tests whereas the special group was poorer on all tests. Sundholm (17) found significant differences in mean McCloy General Motor Capacity Test scores between high and low academic achieving seventh and eighth grade girls favoring the high achievers.

The cited studies have dealt with the relationship between physical development and academic achievement or learning with adults, college students, high school and junior high school students. The general inference made is that the more developed physical attributes a person has, the greater are his chances of greater academic achievement. No inferences were made as to why this relationship occurs.

Other studies have undertaken the task of examining the relationship between physical development and academic achievement or learning with normal elementary school children. Gruber (6) in a presentation on "Exercise and Mental Performance" interrelated man's performance in life as a function of the physical, social, emotional and intellectual resources. Gruber (6) examined the relationships between motor and intellectual performance of children. A child's learning experience begins at an early state of development. Gruber summarizes the following:

"First learning experiences come through the senses . . . touch, taste, smell, seeing, hearing, and feeling. Later, the child begins to explore the world by identifying or relating the body and its parts to objects in space. These explorations develop in the child a sense of satisfaction in that he discovers through his body that he can communicate; at the same time he experiences certain physical pleasures; becomes familiar with and controls certain possibilities of the body to take action, which in turn bring pleasures. Physical movement becomes the earliest medium for social interaction for the development of a definite personality structure and for abstract reasoning which may be associated with directed creative play". (6:4)

Gruber (6) and Ismail (10, 11, 12) have in various studies examined the correlations of various physical performance components as related to intelligence and have found that certain motor attributes and intellectual abilities were correlated. Ismail and Gruber (10, 11, 12) found that the best predictors of Otis Intelligence Quotient and Stanford Academic Achievement scores were coordination, balance, and growth type items. It was also found that speed, power and strength had low predictive capacity for estimating intellectual achievement (12). Ismail (9) conducted a study to determine the effect of a physical education program as opposed to a recess period on intellectual performance. An experimental group of fifth and sixth graders received approximately thirty minutes of physical education instruction three times a week for an entire school year. The control group of fifth and sixth graders received a daily recess period that was passed off as physical education. Both the experimental and control groups were equated on the Otis Intelligence Quotient and Stanford Academic Achievement scores at the beginning of the project. At the end of the year the following results were obtained:

"There were no significant differences in Intelligence Quotient scores between the experimental and control groups; and there were significant differences in academic achievement in favor of the experimental group, so much so that the children receiving organized physical education instruction were three to five months more advanced than the control group in terms of their reading and arithmetic achievement." (9:37)

Hunter (8) reinforces many of the studies that relate physical performance and academic achievement on learning. Hunter stresses the importance of movement in the following way:

"It is essential to emphasize the importance of current knowledge of the elements of space, time, force, and flow as they are organized in movement theory. Most behavior is movement of one kind or another; consequently, learning usually has movement as its foundation. His space perception or awareness of the relationships between forms is even more obviously developed by movement. His motor behavior is the primary channel through which cognitive and affective behavior are evident to others." (8:4)

Cratty (2, 3, 4) more recently has conducted various studies which stress the importance of transfer learning activities. It has been observed by Cratty that children favor movement activities. Movement tasks oftentimes provide a child a means to act out his thought processes. In reference to motor activity Cratty has stated:

"Motor activities may be one method for aiding some children to express the choice behavior and to improve other components of cognitive behavior, but only if the participants are encouraged to think about their movements." (3:2)

Cratty (3) has concluded that movement must involve the child in certain cognitive concepts while the movement is occurring. Hence the child is able to transfer certain motor input tasks to cognitive concepts. Cratty states the following in reference to the transfer process:

"The findings of correlative studies comparing intellectual, perceptual-motor and/or fitness scores of retardates may tell very little about the possibility of transfer occurring between the two types of attributes evaluated. Transfer between motor task performance and some percept or concept will occur generally two conditions can be met: (a) bridges of understanding must be built between the motor task and the concept; (b) a sufficient number of motor tasks intended to inculcate a given concept must be engaged in." (5:4)

Some children seldom reflect upon past experiences or attend to future tasks, but rather they are concerned with immediate situations (4). In reference to sensory feedback Cratty presents the following:

"Activities involving movement of the limbs and of the total body seem to synthesize a number of types of sensory information. As a child walks a line, he receives sensory feedback from his muscular efforts; as he watches his feet and/or the line, the visual and motor input are integrated. If simultaneously with his visual and motor activity, he must respond to a verbal command 'walk backward on the line," the structured activity forces him to integrate a third cue into his activity." (5:2)

In reference to this process of sensory feedback certain tasks may be presented to the child that require the involvement of the child's cognitive domain (19). By asking a child questions such as: "How many different ways can you jump? How many squares can you find on the playground and run on?

How many ways can you move? How slow can you move? or, How fast can you move?" presents a problem-solving approach via motor movements, which involve the child in both motor and cognitive development (20). Hunter states that:

"The current trend to move physical education from an activity whose purpose was to drain off fatigue from other learnings to a period for learning of the utmost importance is long overdue. In the art of movement is to be found the common denominator of all human expression, a foundation for learning and a release from the damaging inner tensions, so pernicious in our society." (8:7)

There exists significant evidence which demonstrates that some programs of motor education have improved a child's self-concept to the extent that the child gains confidence in his ability to succeed in the classroom (3). Through a well organized physical development success-oriented program of physical activity, a child is capable of achieving success that can be instant feedback enhancing the development of a child's self-image and self-concept which in essence will contribute to the total child's physical and mental development.

Therefore, enough factual information exists to validate the theory of an integrated development . . . body and mind are related.

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