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Carleton, WL

http://hdl.handle.net/10026.1/5558

Journal of Research and Contemporary Issues in Human Kinetics and Health Education
Department of Human Kinetics and Health Education, University of Lagos

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Utilizing Inclusion Instructional Methods to Promote Student Motivation and Success in the Movement Environment: “The Pool Model”

William L. Carleton\textsuperscript{a}, Timothy W. Henrich\textsuperscript{a}, Gregory J. Soukup, Sr.\textsuperscript{a}, Garry R. Bowyer \textsuperscript{b} \& Timothy J. Lynch\textsuperscript{c}

University of the Incarnate Word-San Antonio, Texas\textsuperscript{a}, Miami University (Ohio)\textsuperscript{b} and Plymouth - UK\textsuperscript{c}

Abstract

All students have different strengths, weaknesses and abilities in physical education class. Inclusion instructional methods make it possible for students to select difficulty levels during instruction in physical education class and help physical educators individualize instructional methods to promote learning in all students. Several different factors impact individual student success in physical education like appropriate use of facilities, equipment, student grouping and instructional objectives and methods. The challenges of teaching physical education include fostering the skill development of all students. The authors recommend that physical educators utilize a “Pool Model” approach to physical education that encourages physical educators to develop the learning environment with the success of all students in mind. The physical educator must ask and answer many different questions regarding the appropriate learning process, learning experiences and how they will modify the learning environment, facilities and activities to appropriately challenge beginner, intermediate, and advanced skill students? The “Pool Model” promotes improvement of student confidence and skill ability by changing and modifying the learning environment rather than depending on a specific pedagogical methodology. Working in partnership with various other teaching methods the “Pool Model” will promote the potential of all students to learn and become more proficient learners and movers.

Keywords: Inclusion style, Individualized Instructional Methods, Student Success, Skill Development, Adaptation of Learning Environment.
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Introduction
When physical educators look at a swimming pool they, can see several adaptations and modifications that are provided to facilitate the safety and skill level proficiency of different swimmers. Depth markers are prominently posted on the side walls and the deck, signs warn against diving into shallow areas (Figure 1) and teachers and lifeguards constantly observe swimmers to insure safe conduct and activities in the pool area. Lane and rope markers warn swimmers of water depth, and where it is safe to dive. Spring boards and diving platforms are available at varying heights, to appropriately challenge the different skill levels of swimmers and divers at the pool (Figure 2). Flotation equipment is used by physical educators to accommodate the safe learning, and improvement of skills in beginners, and low-skill swimmers, and that same equipment is also used by teachers and coaches to improve the skills and performance levels of elite swimmers (Figure 3). Other modifications like ramps and lift chairs (Figure 4) are also used by adapted physical educators to accommodate swimmers with physical limitations, and to create a more inclusive learning environment at the pool. Properly trained and certified physical educators and lifeguards as well as life-saving equipment, are necessary to protect swimmers and provide a safe and enjoyable learning environment.

(Figure 1)  (Figure 2)  (Figure 3)  (Figure 4)

When students enter the swimming area all of these adaptations and modifications, encourages student motivation and success in an inclusive learning environment. Students learn about the rules and safety features, but they can also see that different levels of ability and skill will be accommodated by the structure of the pool. After the teacher has pre-tested students, they begin to teach course skills in a learning environment that promotes student
learning and success. Beginners are often in the shallow end of the pool, intermediate swimmers in the middle and advanced swimmers are in the deep end. Student confidence is built and stress is decreased, when students are in an environment that accommodates their abilities, and progressive learning takes place (Blankenship, 2007). As students learn and become more successful, their intrinsic motivation is increased, and they can move on to more difficult swimming skills and activities, and to more challenging areas of the pool (Alderman, Beighle, Pangrazi, 2006).

One of the most exciting times for physical educators who teach swimming, is when beginners and intermediate swimmers move into the deep end of the pool, and perform more difficult strokes, and the advanced swimmers learn more difficult strokes and improve on their aerobic capacity.; Many beginners and intermediate swimmers would not get into the pool, or find success. The same is true if all advanced swimmers, were made to swim in the shallow end of the pool.

How the learning environment is organized and structured are important elements that can influence student success (Solmon, 2006). The physical educator determines these features by assessing facilities, equipment, student grouping and size, student abilities, lesson objectives, and other important considerations. The “Pool Model” encourages the teacher to develop the learning environment with the success of all students in mind. The physical educator must ask and answer many different questions regarding the learning process and experiences for their students. How does a facility and activity have appropriate challenges for the beginner, intermediate, and advanced skills student? What does the environment mean to students who are in fear of the activity, competition, or being injured? How does the activity encourage students to be movers and not competent bystanders (Siedentop & Tannehill, 2000)? These important questions can be answered by a thoughtful physical educator that is aware of individual student characteristics and how they motivate students and promote learning.

**Individualizing Challenge and Instruction for Students**

**Shallow Depth Learning**

When a physical educator knows that a low skilled student is fearful of an activity or a learning environment they should use the shallow depth learning concept of the “Pool Model”. Instruction should be slower paced, more individualized, students should be able to choose their difficult levels and modifications can be made to the activity, facilities and equipment to promote the success of students in simple games and activities. Figure 5 presents examples of this concept.
<table>
<thead>
<tr>
<th>Activity</th>
<th>Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invasion game</td>
<td>One on nobody, one on one</td>
</tr>
<tr>
<td>Net game</td>
<td>No or low net, three on three teams</td>
</tr>
<tr>
<td>Climbing wall</td>
<td>Horizontal, low heights</td>
</tr>
<tr>
<td>High jump</td>
<td>No bar, no approach</td>
</tr>
<tr>
<td>Target activity</td>
<td>Large target, closeness</td>
</tr>
</tbody>
</table>

Figure 5 - Shallow Depth Learning Activities and Modifications. (Pangrazi & Beighle, 2010).

**Mid-Depth Learning**

Mid-depth teaching concepts can be used when students are at an intermediate skill level and are more confident and competent in their skills and abilities. Physical educators should help students develop greater movement and skill competencies, work in larger groups, increase challenge and learn more positive attitudes towards competition through participation in modified or lead up games. Figure 6 presents examples of mid-depth learning activities and modifications.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invasion game</td>
<td>Three on three, four on four</td>
</tr>
<tr>
<td>Net game</td>
<td>Mid-net height, five on five</td>
</tr>
<tr>
<td>Climbing wall</td>
<td>High horizontal, mid-height vertical</td>
</tr>
<tr>
<td>High jump</td>
<td>Low bar, slow, short approach</td>
</tr>
<tr>
<td>Target activity</td>
<td>Regular target, short distance from target</td>
</tr>
</tbody>
</table>

Figure 6 - Mid-Depth Learning Activities and Modifications. (Pangrazi & Beighle, 2010).

**Deep End Learning**

Finally, when students are able to perform at an advanced level the teacher can develop a learning environment more like the deep end of a swimming pool. Movements and skills should be more mature and efficient; the activities should promote positive social interaction and team membership among peers that are more competitive and game like. Some examples of modifications that can be made with Deep End Learning are presented in Figure 7.
<table>
<thead>
<tr>
<th>Activity</th>
<th>Modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invasion game</td>
<td>Full team membership</td>
</tr>
<tr>
<td>Net game</td>
<td>Regular net height</td>
</tr>
<tr>
<td>Climbing wall</td>
<td>Vertical to the top</td>
</tr>
<tr>
<td>High jump</td>
<td>Heights as needed with normal approach</td>
</tr>
<tr>
<td>Target activity</td>
<td>Challenging distances from the target</td>
</tr>
</tbody>
</table>

Figure 7 - Deep End Learning Activities and Modifications. (Pangrazi & Beighle, 2010).

**Application of the “Pool Model”**

The “Pool Model” can be used in many different ways with a variety of different instructional models and settings to improve instruction in primary and secondary physical education classes. Teachers can use the “Pool Model” for developing the learning environment in invasion games like basketball. First teachers need to maximize the use of facilities and equipment in the class and make different game modifications and adaptations to promote individual student success. Activities must offer age and skill level appropriate to develop positive motivation of student learning and engagement and to promote student success. This can be achieved in many different ways. The teacher needs to make full use of the gym. The more times that a student is able to practice a skill correctly the faster they will master the skill. Instead of having all students practicing at one basket they need to use all of the baskets in the gym and can set up other stations in the instructional area where students can practice specific skills. Modifications can be made to the equipment to promote success for younger and less skilled students like using smaller balls or lowering the height of the goals for students. Group sizes can be modified and students grouped by similar skill level. The teacher should create a dynamic learning environment that allows students to select homogenous or heterogeneous activities. Many students enjoy playing with and against other students of their own ability but they can also find success in games with students of other abilities when rules are modified to promote meaningful participation for all. Instead of having students play standard games against each other with five students on each team they can play modified one-on-one, two-on-two, three-on-three or four-on-four games against classmates of similar or different abilities that focus on mastery of specific skills. The “Pool Model” allows the teacher to make individual adjustments to appropriately challenge students and promote greater intrinsic motivation, learning and enjoyment of the activity. Students should become active in the learning process. A reciprocal teaching style can be used to achieve this learning objective. Many students relate to peers
better than teachers and the reciprocal teaching style offers these students a more relaxed
learning environment in class. Higher skilled students become “observers” of lower skilled
students and help them learn skills and motivate them to become “doers” in the class. The social
aspect of the reciprocal learning style allows lower skilled students to benefit, learn and improve
their affective, cognitive and psychomotor skills from the individual instruction and feedback of
the higher skilled “observers” and also benefits “observers” an activity class by helping them
improve their affective and cognitive skills by accepting the responsibility of performing a
teaching role in class. This type of basketball unit is more student-centered and promotes
greater learning and motivation void of competent bystanders and encourages the student to be
an active member of the class.

Conclusion

The challenge that the “Pool Model” creates for the teacher is to have a dynamic learning
environment where all of these concepts are happening in the same class period. During a
swimming class it is often observed that all three areas of the pool are being used at the same
time depending on the activity or ability level of the student. Too often during there is only one
activity on one movement level taking place which does not usually promote learning and
success for all. Further adaptations and modifications to the learning environment could
include space, surfaces, ball sizes and ball types (Kasser and Lytle, 2005). The teacher can
direct students into the different games/activities as determined by pre-assessment of ability or
by using the inclusion teaching style of Mosston and Ashworth (2002) where students are
allowed to select their level of game and activity participation.

When teachers use the “Pool Model” for developing the learning environment they develop
the full uses of the facilities and equipment while assessing student abilities and the need for
different game modifications and adaptations. Activities need to be age appropriate and
promote the individual success of students. Equipment can be modified, team sizes increased or
decreased and rules can be adapted to meet the specific needs of different students. Games can
be changed as student skills improve to meet the challenges of continued learning, intrinsic
motivation, and to promote regular lifelong physical activity. The “Pool Model” promotes
improvement of student confidence and skill ability by changing and modifying the learning
environment rather than depending on a specific pedagogical methodology. Working in
partnership with various other teaching methods the model will promote the potential of all
students to learn and become more proficient learners and movers.
REFERENCES


