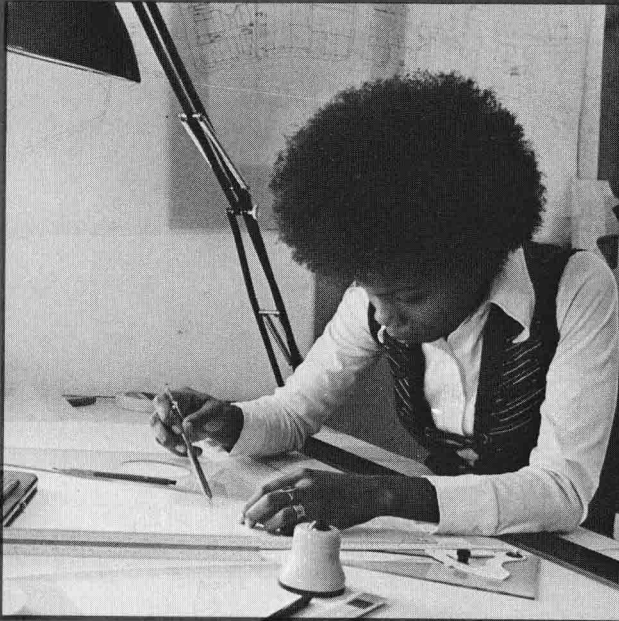


# Educational Psychology

## and its Classroom Applications

M. Daniel Smith



# EDUCATIONAL PSYCHOLOGY AND ITS CLASSROOM APPLICATIONS

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and  


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This book is designed to do what educational psychology texts have done in the past, plus some additional things. One difference is found in the third part of the book, where an attempt is made to develop a science of teaching, which is akin to instructional theory, but which is made more readable than a true theory would be. The learning theories that suggest the basic general instructional processes are introduced first, but only briefly. The student is free to read further into either the underlying theory or the methods in particular subject matters resulting from applications, or both. As a natural sequel to this material, the fourth part of the book introduces a systems approach to the design and development of instructional materials, sometimes referred to as "educational technology." This can be viewed as the engineering of teaching, based on the science of the previous part.

Another addition is a part of the book devoted to characteristics of teachers and of different learning environments; this is designed to reflect research in teacher effectiveness and in the social psychology of education, as well as to present some humanistic views of education and teaching.

In the first part of the book, which deals with characteristics of the learner, there is also a chapter on intra-individual differences and learning disabilities, a relatively new area that has much to offer the field of educational psychology.

Finally, there is some material on testing and evaluation, rather than on research and design, since the nature of the testing process is such a strong determinant of what is learned and how it is learned.

A very real attempt has been made to exemplify the process of applying theories and principles to practice. To this end, a large number of "applications inserts" have been written to provide concrete material to illustrate the relationships and processes and principles discussed. Such examples are open to criticism as to their validity, and other interpretations and views of the imaginary situations can be offered (they *are* imaginary, not case studies). Such disagreement and debate engage the learner and involve him in the subject. The main reason that educational psychology has been irrelevant in the past is because we have not taken the risks involved in applying it—not because it is inherently inapplicable! The author suggests strongly that those teaching the course be willing to "go

## PREFACE

## PREFACE

out on a limb'' in creating other applications and building bridges from theory to practice, and that students be asked to create their own applications. They will find it a very difficult task, but such attempts are excellent vehicles for testing their understanding and guiding their cognitive growth.

Suggestions, corrections, and additional examples of applications will be gratefully accepted from teachers and students alike, and will be put to use. If the book contributes in a small way to progress in teaching and learning, it will have been worth the considerable anguish of writing it.

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# THE LEARNER

**part one**

## ABOUT CHAPTER

*The development of physical and social capabilities from birth through high school is a tremendously complex and important area of study and research. This chapter can introduce you to some very broad views, but you will have to read further on your own for details. It emphasizes general collective characteristics rather than individual differences, which are discussed in Chapter Three, and primarily uses what is sometimes called the "ages and stages" approach. By reviewing some of the classification systems, you can begin to know what to expect of children at different ages, and how they progress from one stage or set of characteristics to another. You will not get to the point where you can identify these stages "on the hoof" with any real accuracy, since that takes practice, but you will recognize that many aspects of development proceed by fairly predictable stages and sequences. Of course, some learners go through them earlier than others, and some later. You can also begin to structure your observations of learners and label some ways in which they are advanced, or are slow to develop. You can also begin to form opinions as to whether a weakness is significant and serious, calling for special intervention, or is one of those individual traits that will take care of itself in time. Finally, you can begin to appreciate the many different ways in which developmental processes can be classified, and thus see how individuals can go through all the same processes as everyone else—and still be unique in their personal combination of characteristics.*



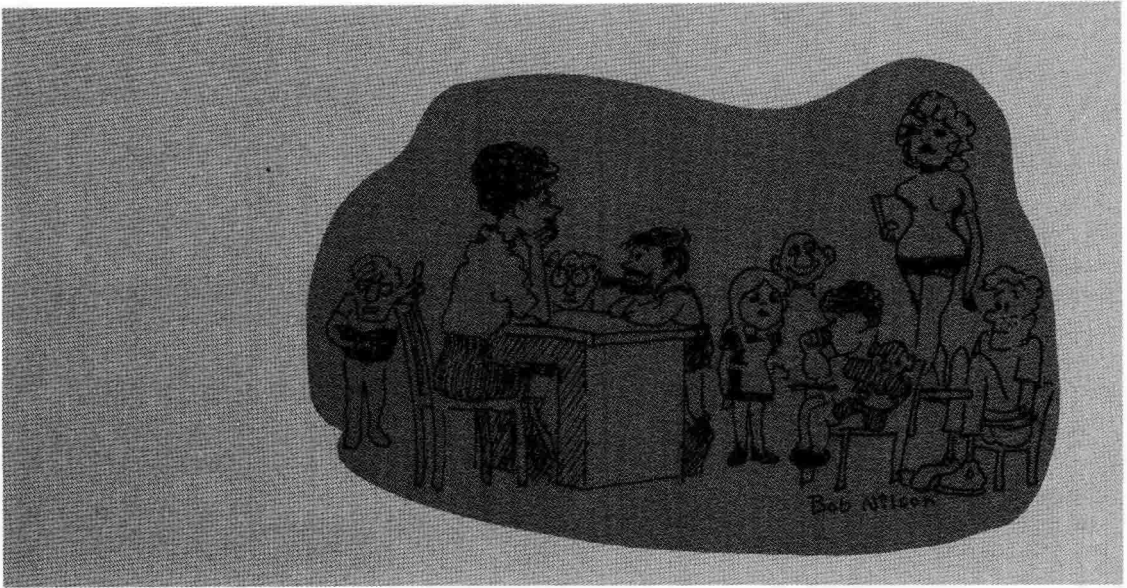
# PHYSICAL AND SOCIAL DEVELOPMENT OF THE LEARNER

## 1

### PHYSICAL DEVELOPMENT

#### Overview

Whenever you relate to young people, it is important to have some idea of what you can and cannot expect to accomplish. This calls for the recognition of common characteristics of growth and development to help you interpret the changes that occur, as well as the attitudes and behaviors that are caused by or related to growth problems. You may remember that in your own development you were ahead in some



***Every teacher must deal with the fact of developmental differences.***

ways and behind in others; you were only a rough approximation of the general pattern for your age group. Your individual development was the result of your body's progressively changing balance of forces, including sexual factors, endocrine factors, and many others. Although most people are roughly similar to one another when all these individual rates are averaged out, some are generally very fast ("early maturing") and others are quite slow ("late maturing"). You probably remember how some boys and girls became very mature in appearance at an early age. Perhaps you were one of these; or perhaps you were a girl who thought she would never develop a sexy figure, or a boy who was painfully aware that he was shorter and less manly than most of the other boys. You may recall that most of you had quite a spurt of growth in junior high, particularly the boys; this, of course, was when sexual maturation began for most of you. When you come to deal with children in these high-growth ages, then, you should expect to run up against feelings and behaviors that may seem odd or uncooperative; but most of these are the ways they have of coping with their particular developmental patterns.

These early conflicts can leave their mark in later years. If you were a late maturing person, for example, you may now have stronger social or competitive drives than those who matured earlier. These drives seem to develop because of the feelings of insecurity and

dependence that accompany the late maturing growth rates. On the other hand, if you were early maturing, you probably were and are better adjusted, have more positive attitudes toward yourself and others, and are more confident and capable of playing adult roles than your later maturing friends. However, you may also have found that, in the past, academic requirements took a backseat to social interests, and that some of those later maturing classmates of yours have been amazingly successful despite their hang-ups and insecurities.

## General Trends

Physical development is usually irregular, occurring in spurts and plateaus, with occasional backsliding. (A “plateau” is a level place on a graph that is drawn to show the growth pattern visually.) These regressions and plateaus can result from a number of factors, including hereditary patterns, illnesses, nutritional deficiencies that stunt growth, and other factors not thoroughly understood. These factors apply to cognitive development as well, as you will see in Chapter Two.

You will find also that physical as well as cognitive differences between children tend to *increase* as they grow older, when all information is taken into account. Children who are slightly shorter at a given age will, on the average, be more noticeably short later on (although some will be late maturing and will catch up or surpass the others). Similarly, differences in very young children in the walking age are only a matter of a few months, but differences in the age of reaching sexual maturity sometimes amount to several years.

Still another general characteristic of physical development is that the less refined, more general actions or responses that are characteristic of people generally appear first; the more refined and limited ones appear later. This is especially evident in the development of athletic skills, where a person may show a rough overall version of some skill initially and only later develop this into a smooth movement.

## Accelerate or Wait until Ready?

Some of the most widespread and emotionally charged debates in education have dealt with the matter of development and its implications for teaching. Some feel it permissible and desirable to intervene in the growth process; they point to the precociousness of children who are given very early training, and contrast this with the retardation that results when children are brought up in deprived environments (such as in old-fashioned orphanages or in countries decimated by war). Other theorists disagree, arguing that you cannot intervene successfully in the growth process because it is inherent in the