        To provide effective instruction, a taxonomic framework is proposed which (1)
includes all possible learner outcomes yet is understandable and manageable, (2)
provides order to currently existing taxonomies of learner outcomes, and (3)
facilitates instructional planning. Domains of organismic adaptation roughly
corresponding to (1) the need for internal regulatory mechanisms that permit survival
and growth of the organism (regulatory domain), (2) the need for interpersonal
relationships which lead to the perpetuation and social ordering of the species
(interpersonal domain), and (3) the need for competencies which permit adaptations
to external environmental demands (cognitive domain) may be identified. Each domain
is composed of three systems: regulatory-physical, emotionality, and identity;
interpersonal-sexual, status, and friendship-love; cognitive-psychomotor, intellectual,
and attitudinal. It is assumed that only cognitive or competence outcomes are
"learned." Outcomes in the vital domain are viewed as accrued "residue" from all that
happens to an organism in the course of its existence, while outcomes in the
interpersonal domain are seen as "shaped" rather than learned. (This document and
SP 002 156-SP 002 180 comprise the appendixes for the ComField Model Teacher
Education Program Specifications in SP 002 154.) (Author/SG)

APPENDIX A--A FIRST APPROXIMATION TO A TAXONOMY OF
LEARNER OUTCOME

H. Del Schalock

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A First Approximation to a Taxonomy of
Learner Outcome

H. Del Schalock

Central to the provision of any effective instructional experience is clarity as to the outcome one wishes to obtain as a consequence of the experience. This article of faith rests upon the assumption that instructional decisions are inseparably linked with the outcome or educational objective that one is striving for. Instruction involved in toilet training may be quite different than instruction involved in helping a child learn to experience disappointment without crying. Similarly, helping children make discriminations involves a different set of instructional operations than does helping them master concepts or principles. The point is, simply, that instruction takes its focus, content, and often its form, from the nature of the outcome that is being pursued. For this reason, decisions regarding the design of instructional experience must be tied to learner outcomes.

In the design of formal instructional systems, the desired outcome must be specified explicitly and defined in operational or behavioral terms. In carrying on less formal instruction the outcome desired may or may not be made explicit but it must be clearly in mind, for here, as in formal instructional systems, both the content and operations of instruction are dependent upon it. Granting the validity of this point of view, two critical questions arise: 1) "What are the most relevant classes of learner outcomes to pursue?" and 2) "How does one put these forth so as to maximize the instructional decisions intended to bring them about?" The first question, of course, is not new to education, but the second is, and it is on the second question that the present paper focuses.

Most simply stated the aim of the paper is to outline a taxonomy of learner outcomes that has utility in the design of instructional experiences. Put more exactly, the aim of the paper is to develop a first approximation to a taxonomic framework which 1) is exhaustive of all possible learner outcomes, yet is understandable and manageable; 2) provides order to the myriad of taxonomies of learner outcomes that currently exist; and 3) increases the probability that the user of the taxonomy will make sound decisions in planning either formal or informal instructional experiences. The basic assumption underlying the effort to develop such a taxonomy is that

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the instructional conditions needed to effectively b. ... about
various kinds of learner outcomes will vary according to the
classification of outcomes on the taxonomy, that is, that there is
a systematic relationship between classes of instructional content,
operations and learner outcomes. This, of course, is highly probable
since instruction has been able to be ordered with some degree of
effectiveness and since patterns in instruction are recurrent. If
it were not probable the task of the instructional designer would
seem to be relatively hopeless, for each outcome to be developed
would require the arrangement of an essentially different set of
instructional experiences. The rationale underlying the effort is
relatively straightforward: 1) such a taxonomy is needed, and 2)
it's not currently available.

An emerging theory of human development (Schalock, 1968) has
been used as a basis for ordering developmental outcomes into the
system that appear in the taxonomy. Briefly stated the theory holds
that three broad classes of adaptive systems have arisen over the
course of the evolutionary history of man, corresponding roughly to
1) the need for internal regulatory mechanisms that lead to the
survival and growth of the organism (the regulatory or vital domain);
2) the need for interpersonal-relational systems which lead to the
perpetuation and viable social ordering of the species (the inter-
personal or generative domain); and 3) the need for competencies
which permit the adaptation of the organism to the demands of the
external environment (the cognitive or competence domain). Within
each of these three major domains the theory holds that three adap-
tive systems operate, each corresponding roughly to the major acts
of adaptive demands that appeared with each benchmark of biological
evolution. Thus, as biological evolution progressed, new classes
of regulatory or vital mechanisms, new classes of interpersonal or
generative relationships and new classes of competencies or commit-
ments were needed in order to meet the demands of increasingly com-
plex organisms in increasingly complex environments. Ultimately,
through the constant process of adaptation, viable adaptive sub-
systems finally became part of the genetic inheritance of man. The
theory holds that as a consequence each human being, through the
interaction of experience and genetic programing, develops and main-
tains the nine adaptive systems outlined above. It holds further
that developmental tasks, learner outcomes and, in fact, all of
human experience gets ordered in relation to these systems. The
three major domains of human development, their adaptive systems,
and the evolutionary epochs in which the systems evolved appear in
Table 1 .

Several features of Table 1 require comment in light of existing
taxonomies. First there is no set of outcomes labeled "affective."
Instead, the taxonomy explicitly defines emotional outcomes and

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Table 1. The adaptive systems of man, ordered according to the nature of the adaptation required and the evolutionary period during which they appeared.

EVOLUTIONARY BENCHMARKS AND EPOCHS	ADAPTIVE SYSTEMS		
	Regulatory or Vital Domain	Interpersonal or Generative Domain	Cognitive or Competence Domain
Benchmark 1: The appearance of life	Physical Systems		
Evolutionary Epoch 1: organismic evolution	Emotional Systems	Sexual Systems	Psycho-motor Systems
Benchmark 2: The appearance of chordates			
Evolutionary Epoch 2: Social evolution	Identity Systems	Status Systems	Intellec-tual Systems
Benchmark 3: The appearance of man			
Evolutionary Epoch 3: Cultural evolution		Friend-ship Love Systems	Attitudinal Systems

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attitudinal outcomes, and thus separates two of the major concepts
that have come to be entwined in the notion of affective outcomes.
Conceptually, in the present scheme, attitudinal outcomes substitute
for affective outcomes (in the Krathwohlian sense) and thus are
learned, whereas emotional outcomes are more generalized and rela-
tively unaffected by learning (except, perhaps in the Pavlovian
sense).

Second, the term cognition has been used as the generic term
for all classes of learning or competence outcomes, with the term
intellectual outcomes substituting for it in the usual psychomotor-
cognitive-affective triumverate.

Third, it is assumed that only cognitive or competence outcomes
are "learned" outcomes; outcomes in the vital domain are viewed as
accruing as a "residue" from all that happens to an organism in the
course of its existence, and outcomes in the interpersonal domain
are seen as being "shaped" rather than learned. While such termino-
logical gambits may have the appearance of playing word games they
are not intended as such. In the present view the influence process
in the vital and generative domains is conceived to be something
other than teaching, and the processes by which vital and generative
outcomes evolve are viewed as something other than learning. To be
sure, one may learn about vital and generative outcomes, but one
doesn't develop outcomes in these domains through learning. What
the specific developmental and influence processes are within these
areas is yet to be determined, but there is a fair probability that
they will be something other than that which we now characterize as
learning. The present effort, including the rather crude terminology,
represents a first effort to give credence to the probability of
their existence.

The following table is illustrative of the learner outcomes
which need to be attended to. It also attempts to provide a quali-
tative definition for each of the three major domains of human out-
comes. (See Table 2)

Table 2. CLASSES OF LEARNER OUTCOMES

Domain	Regulatory or Vital			Interpersonal or Generative			Cognitive or Competence		
System	Physical	Emotionality	Identity	Sexual	Status	Friendship-Love	Psychomotor	Intellectual	Attitudinal
Components of System (Initial Breakout)	Structural Functional	happy-angry joyful-morose confident-anxious loving-hostile	Self-definition Self-direction Self-evaluation	Reproductive Capabilities Sex role: performance definition	Authority Territoriality Competition	Sensitivity Concern Sharing Respect	Laterality Reflex Directionality	Discriminations Associations Concepts Principles Operations	Interests Values Commitment
Indicative Behaviors	eating sleeping resting dressing exercising injury etc.	crying fearfulness upset over frustration etc.	boastfulness personal negation defensiveness confidence etc.	discussion of or reference to reproduction or sexuality exploration of sexual organs etc.	fighting testing conforming threatening etc.	showing another individual concern talking with a neighbor telling how much another is liked or loved etc.	skipping writing playing ocular movement manipulation construction etc.	classify order naming describing stating a principle etc.	choosing persisting initiation responsibility etc.

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CLASSES OF LEARNER OUTCOMES

Initial thinking in one system from each of the three domains

I. **Vital Domain**

    A. **Identity System**

    General Objective:

    Student will develop realistic perceptions of himself and his relationship to others.

    Sub-Objectives:

    1. Student will feel he is an adequate person

        a) makes constructive use of criticism.
        b) accepts some failure as inevitable
        c) recognizes personal limitations
        d) accepts origin and past experiences

    2. Student will feel responsible for his own behavior

        a) optomistic about his capacity to improve
        b) displays ability to correct unacceptable behavior
        c) actively seeks perception checks

    3. Student will set realistic goals and standards for himself

        a) adjust expectancies in terms of success and failure
        b) aware of situational limitations
        c) accepts social role demands

    4. Student trusts his perceptions about people

        a) will demonstrate independence in the decision-making process
        b) feels he is part of worthy groups
        c) evaluates alternative perceptions of people carefully

II. **Generative Domain**

    A. **Friendship-Love System**

    General Objective:

    Student will learn to share and develop close friendships

Sub-Objectives:

1. Student will demonstrate helping relationships

    a) recognizes a peer in need of help
    b) responds appropriately to a situation in which a peer requires help
    c) recognizes when help is no longer needed

2. Student will demonstrate he can be helped

    a) asks for help in appropriate manner
    b) responds to assistance
    c) expresses appreciation for assistance

3. Student will demonstrate that he has concern for welfare of others

    a) will demonstrate respect for property or space rights of others
    b) will assist actively in group projects
    c) will be able to identify and accept the uniqueness of each person

4. Student will demonstrate he respects the opinion and ideas of others

    a) differentiates facts, opinions, and assumptions
    b) accepts various means on issues and plans
    c) shares own ideas with others

III. Cognitive Domain

   A. Attitudinal Systems

      General Objectives:

      Student will develop attitudes toward learning which will help in becoming a flexible individual

      Sub-Objectives:

      1. Student will demonstrate he can use logic or reason in a situation before he tries a solution to a problem

      2. Student will demonstrate he has developed willingness to take a chance or try in a learning situation

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3. Student will demonstrate he will accept his own opinion when he doubts an "authority"

4. Student will demonstrate he can assess his own attitudes as well as those of others