Some negative features of instruction development are considered, with focus on four major error syndromes associated with current instructional development activities. The first, Immoderate Aspirations, deals with developers who attempt to accomplish goals which are beyond the capabilities of current development expertise. The second, Feedback Fetishes, considers developers who feel duty bound to let the learner know that his responses are correct or incorrect, and to do so with flair. The syndrome of the Simulation Craze described the activity of the developer who devised a game which would also aid the learner in accomplishing some worthwhile instructional objective. The final syndrome described is entitled "Site Visit Spectaculars," dealing with the "site visits" to development agencies by the Federal agencies upon which they are dependent for financial support. (LH)
A presentation at the symposium, In Defense Of Type III Errors, delivered at the AERA annual meeting, Chicago, Illinois, April 3-7, 1972.

THE SEAMY SIDE OF EDUCATIONAL DEVELOPMENT

W. James Popham
University of California, Los Angeles

In the melange of activity currently characterized as instructional development, one encounters both heroic feats of accomplishment as well as errors so grievous they will surely earn the sinning developer a reasonable chunk of purgatory. Caught in the midst of a lugubrious mood, I shall address my attention to the negative rather than positive features of instructional development. More specifically, I wish to discuss four major error syndromes associated with current instructional development activities.

Immoderate Aspirations

Although instructional development technology is becoming increasingly potent, there are always developers who will attempt to accomplish goals which, at this point, fall beyond the capabilities of current development expertise. Take the case, for example, of an Eastern regional laboratory staff member, who during the bulk of his life had viewed with chagrin frequent manifestations of antisemitism. Having served an apprenticeship period of two years in the product development activities at the lab, this developer set out to deal with the problem of rampant antisemitism in an ingeniously straightforward fashion. He would make everyone Jewish.
More specifically, he designed a contingency management, self-instructional ten hour program designed to teach learners to be Jewish. He applied a host of technical expertise to development of the program. For example, calling on reinforcement tactics acquired during his contingency management experiences, he developed a special variety of M & M's to be used as rewards for successful learning. The M & M's consisted of candy coated lox. Yet although they did not melt in the learners' hands, few expressed a desire to have them melt in their mouths. Accordingly, the developer abandoned this tactic in favor of a variation of Crowder's branching program in which successful learners were permitted to skip over certain instructional sequences if they displayed requisite levels of proficiency. He referred to this form of instruction as a passover program.

The substance of his 10 hour program was predictable enough; he wanted to get people to act Jewish, hence be more inclined to become Jewish. Thus, he dealt with the basic ingredients in a Jewish person's daily life such as the preparation and polite consumption of bagels. He taught learners how to conjugate key Jewish verbs, i.e., to schlep and to nudge. The program also taught the learner how to cope with Jewish environmental crises such as a seltzer drought. Learners became conversant with typical Jewish sporting events, such as the steam bath. In all, the program provided a pretty thorough overview of Jewish life. But alas, as might have been predicted, the program proved to be unsuccessful.

In my estimate, the reason is clear. The developer simply over estimated the potency of our current development technology.
He contends, however, that the poor data resulting from his initial field trial may have stemmed from an inappropriate learner group, for the major field test of the program was carried out on randomly selected diners at a Lebanese restaurant.

Feedback Fetishes

When B.F. Skinner (whose close friends refer to him as Fred and whose enemies refer to him as Mule) first articulated the basic ingredients of programmed instruction, one of those elements consisted of providing the learner with immediate knowledge of results. Many current instructional developers have been so influenced by Skinner's admonitions that they not only build feedback mechanisms into all their instructional sequences, but they embellish the nature of the feedback procedures until the learner may genuinely yearn for a preknowledge of results era.

For instance, some developers not only feel duty bound to let the learner know that his responses are correct or incorrect, but to do so with a certain amount of flair. Rather than prosaic feedback frames saying "right" or "wrong," one Southern California developer embellished all feedback frames so that the nature of the feedback depended on the gravity of the incorrectness or, as he called it, the erroricty of the learner's response. For correct answers his programs always provided a "Jolly good" or "Right on." For mildly incorrect responses the program yielded a "Rather poor" or "Slightly stupid." For worse answers, the learners were told "You, kid, are a jackass!" For really terrible blunders, the learner was given a current class schedule of EMR
courses offered in the district. For three consecutive grave errors, the program self-destructed after a suggestion that the learner soon follow suit.

Another developer at a Midwest R & D center became transfixed with the merits of chemical feedback devices. Not only did he employ special answer sheets and marking pencils so that correct responses appeared green while incorrect responses appeared red, but he devised a highly sophisticated olfactory feedback scheme. When the learner made a correct response, his paper emitted the aroma of perfume. Whenever a mild error was committed, the answer sheet emitted an aroma reminiscent of burning rubber. When a particularly serious error was made, the paper was treated so that it yielded an aroma characteristically associated with people who are afflicted both with gastric distress and inadequate muscle control.

During one unfortunate field test of this feedback system in a remedial math class, use of the device resulted in an asphyxiated teacher and experimenter plus a number of unnecessary repairs in the school's restroom facilities.

Then, of course there was a former experimental psychologist whose entire research career had taken place in the animal laboratory where, as is well known, psychologists not only employ food as a reinforcing agent, but also sexual gratification. This psychologist-turned-developer devised a program to be used with college students in which carnal satisfaction was to be employed as the feedback vehicle for correct responses. It is not certain whether this feedback variant actually contributed to learner achievement, for during six months of attempts to field test the
program with college students the developer enlisted 579 volunteer experimental Ss, but was completely unable to assemble a control group.

The Simulation Craze

A few years ago many of our developer brethren succumbed to the lure of simulation, particularly simulation games. The general ploy here, of course, was to devise a fascinating game which, at the same time, would aid the learner in accomplishing some worthwhile instructional objective. One suspects that most of these simulation game designers had visions of a Monopoly-like enterprise which erstwhile students would avidly play, hour after hour, as they probed new cognitive vistas or experienced a galaxy of affective emotional states.

In general, unfortunately, few of these instructional games proved successful. Perhaps it is hard to add an instructional dimension to simulated reality without destroying that reality. Nevertheless, several of the games were truly fascinating. For example, there was a game called CIA about America's foreign aid program. Another simulation game dealt with President Nixon's approach to domestic politics and was called ITT & Me.

Then there was the simulated typing game called Hunt and Peck designed by a firm which devised a simulated sex education game distributed under the same title.

It is not surprising, of course, that devotee's of simulation gaming techniques finally applied their talents to simulating the instructional development enterprise itself. Several years ago a California-based regional laboratory followed the classic Monopoly
metaphor in producing an R & D game. Instead of Boardwalk and Park Place, the player moved around the board landing on such real estate as MCREL and Research for Better Schools. Because they were anxious to replicate reality, the game designers were frequently, almost weekly, obliged to alter the game’s property patterns since more and more regional labs disappeared as USOE waved its funding wand. There were several noteworthy features of the game. For one thing, instead of trying to place a house or hotel on one's property, the ultimate aim was to have the government build you your own building. Rather than a pile of money-producing cards designated as Community Chest, the game had a stack of penalty cards labeled USOE Division of Regional Labs. One penalty viewed as quite severe involved sentencing a lab staff member to one year as a university professor or tribal witch doctor (two roles viewed as interchangable by the game's designers). An even more grave penalty was to be obliged to engage in serious copyright negotiations with the Office of Education. The worst penalty was the requirement to memorize, in reverse order, the acronyms of all regional labs, e.g., SWRL, SWIVE, and the highly successful MUCKUP.

For some undisclosed reason, USOE officials were reluctant to release this simulation game -- particularly in the public domain.

**Site Visit Spectaculars**

Many major development agencies, such as regional laboratories or R & D centers, which are dependent on federal funds for support have discovered that there is a key annual event which
is inordinately influential in determining their USOE funding level, namely, the site visit. Some lab directors privately opine that during the first few years of the regional laboratories' existence, these visits were weekly rather than annual affairs. At any rate, as these federally funded agencies became more aware of the import of the site visit, as well as the nuances associated with it, a new form of American folk drama emerged -- the Mock Site Visit.

Casting for these dramas usually begins a month or two before the actual site visit, or as soon as the development agency has a clue as to possible members of the site visit team. Although each actor is charged with playing a highly particularized role, there are certain standard site visitor archetypes so that preliminary casting sometimes takes place even earlier.

For example, on almost all site visit teams there is customarily the brash young research methodologist, someone in the mold of Gene Glass of a few years ago or Dave Wiley of last week. Then there is typically a broad visioned School of Education Dean along the lines of Dave Krathwohl or John Goodlad who were inordinately prolific writers prior to their attack of administrative poisoning. There is usually a former USOE official turned college professor, hence in need of the site visit consulting money. And these days there is always a minority group representative, that is, either a woman or someone who actually knows something about development.

After the final selection of site visit actors, there is, of course, the designation of a director, costume, manager, and choreographer. Then rehearsals start in earnest. Typically a Mock
Site Visit consists of a three act play with several scenes per act, each scene giving the senior staff practice in responding to questions which might be generated by different moods among site visitors. Emergency abort drills are carefully practiced in case the site visit is going badly. One favorite ploy is the feigned outbreak of major illnesses, physical or emotional, among key staff members. A less serious but equally useful technique is the unanticipated coffee break. In the midst of a given site visit session which has taken a negative turn, a senior staff person can press a hidden button which results in apologetic secretaries immediately bursting into the meeting room simultaneously pouring coffee and stuffing sweet rolls into the visitors' question-laden mouths.

On the day of dress rehearsal, a few days prior to the actual site visit, the drama typically opens with the entrance of the chairman of the site visit team usually dressed in a pinstriped grey or black suit, sometimes highlighted with a few sequins. A baby spot light picks him up as he ushers in his entourage. An entourage is a small French terrier favored by site visit chairmen. In the background a tape recorder plays an instrumental medley of "Pennies From Heaven," "Santa Claus is Coming to Town," and "Please Don't Rain on Our Parade." After the rest of the psuedo site visitors arrive, and the agency's senior staff enters, the play commences -- and sometimes lasts for a full day, including curtain calls.

These Mock Site Visits have become an important release for creatively oriented staff members who might otherwise be forced to
develop instructional materials. Unfortunately, in two instances the members of the Mock Site Visit cast left the regional labs where they were working to produce Mock Site Visit dramas commercially. One of these efforts is still running in a small San Francisco theater. It is billed as a tragedy. Clearly, the Mock Site Visit is here to stay even if federal dollars aren't.

At the outset of this analysis it was suggested that four major error syndromes would be treated. It is clear that many individual developers have succumbed to each of these mistake patterns. Rather than reveal the names of these individuals indiscriminately, I have decided to divulge them only on request and then, consistent with our nation's profit-making orientation, only for a finder's fee.