

Section 2d: ***Product/Program Development Approach***

Adult educators, including classroom instructors, often volunteer or are selected to develop new curriculum; and they also may be selected to participate in new program development or program enhancement, such as workplace and family literacy programs. Similarly, program improvement, such as implementing standards of program quality or a new curriculum or assessment procedure, may involve staff from different positions and levels. Whereas developing curriculum for an individual classroom or an agency is quite different in scope from developing an entirely new program or agency-wide system, the *process* for these developments are similar. Both, therefore, are included under this one approach. The differences will be explored below as we discuss them separately using concrete examples.

Although product and program development have been long-standing activities of adult educators, often they are not treated as professional development activities. Nonetheless, the skills developed - researching, working collaboratively, analyzing findings, and field-testing results - indeed are significant professional development activities and may have far-reaching influence on the thinking and instructional practices of teachers. There is a need, therefore, to bring to a conscious level, especially for participants, the nature and degree of professional development that occurs when Product/Program Development takes place. Not surprisingly, given available time and funding, the articulation of product and program development as an integral part of professional development activities has occurred most frequently in the K-12 context.

Underlying Assumptions

Sparks and Loucks-Horsley (1990) observe that "...instructors acquire important attitudes and skills (including information gathering, thinking, and group processes) through involvement in school improvement or curriculum-development activities."

Other assumptions upon which the Product/Program Development approach is based include:

- Adult educators, including instructors, are knowledgeable about instructional and program needs and are capable of addressing those needs; and
- New curriculum or program development is more likely to be implemented when those required to do the implementation also are involved in the development process, itself.

Theory and Background

Program Development and Change: Program development and, in many instances, curriculum development rely upon the literature on change to provide guidance for change. In fact, Wood (1989) designed a specific approach to program development through professional development. His model, not unlike many change models, is a five-stage Readiness, Planning, Training, Implementation, and Maintenance (RPTIM) model.

Another recent K-12 change model is reflected in a 3-year study of the school improvement process, called Site-based Management (SBM). The University of Southern California studied schools adopting this model in the United States, Canada, and Australia (Odden & Wohlstetter, 1995). Crucial to this approach's success was professional development in group decision making, consensus-building, conflict resolution, and leadership skills, as well as the development of teaching, learning, curriculum, and assessment. Likewise, the Total Quality Management (TQM) restructuring plan has been adopted by many K-12 schools, and at least adopted in part by some adult programs. The purpose of TQM is *continuous improvement of the organization's ability to meet or exceed its customers' needs*. Whereas management (administrators) must accept the responsibility for changing the system, all staff have to be involved in ongoing efforts to improve any given systems. Administrators work collaboratively with instructors.

In the TQM view, as adapted for education, administrator/instructor teams are the equivalent of industry's front-line workers. One professional development process used to achieve continuous improvement is *Quality Circles*. Likewise, "process portfolios" are widely used in TQM (as they are in several other approaches cited) as

assessment procedures that measure growth more broadly than does the "teach and test" mode.

Curriculum Development: Glickman (1986) suggested that a primary aim of professional development should be to improve a teacher's ability to think - and that curriculum development is a key to that process. Joyce and Showers (1988) see the process in a more integrated way, emphasizing the need for professional development as a means towards the successful implementation of curriculum development. Glatthorn (1987), who believes that curriculum development should be accomplished by groups, stresses the advantages of group dynamics including opportunities to share ideas about teaching and learning in general as well as accomplishing the specific development task.

Components of Product/Program Development

Because there are two development components under this one approach, each is discussed below.

Product Development: Product development as employed in the adult education field, usually takes one of two forms - curriculum development or resource manual/handbook development. Of the two, curriculum development is the more common. The general practice appears to be either the appointment by administration or selection by staff of representatives to serve on a curriculum development committee, which has the function of resolving specific curriculum requirements. For example, six states were heavily effected by the recent influx of immigrant populations to the United States. Few commercially published materials or curriculum guidelines were available for this population, therefore, states or agencies were "forced" to develop their own materials and guidelines, including a scope and sequence of curriculum content and sometimes suggested strategies.

Also popular, as well, are resource guides or "how-to" manuals. Resource guides, for example, may depict a matrix of publishers' resources by topic and ability level; or it may reflect available community resources that serve adult students' needs. With the increasing use of technology in the classroom, some step-by-step handbooks have been developed to assist instructors in using technology effectively.

Products, whether considered as curriculum *or resource*, are useful only if the targeted audience is already familiar and comfortable with the contents or process recommended. Those developing the products are logical choices to lead professional development activities, -from start to finish. Examples of product development can be found in many adult education programs, including those developing new training modules (e.g., Texas, Virginia, SABES in Massachusetts, and the Northwest Consortium: Oregon, Washington, Idaho, and Alaska).

Program Development. Program development also has two major components: system-wide innovation and program enhancement. Because both of these categories tend to be broader than those of product development, it is not unusual to find both curriculum and resource products included in program development.

Adult education programs generally have not had sufficient resources (time, personnel, or funding) to invest in many system-wide "restructuring" innovations common in K-12 programs. During the 1970s and early 1980s, however, many states did develop competency-based, adult programs in ESL, ABE, GED, and ASE areas, as well as in adult vocational programs. Little, if any, adult education system-wide development has occurred around Site-based Management (SBM), although limited development of Total Quality Management (TQM) programs can be found in adult education - most often at the state or regional levels.

On the other hand, widespread program enhancements and program improvements appear to exist in adult education. The development of workplace literacy and family literacy programs has become popular in recent years, for example. In large measure, the popularity of such programs has resulted from available funding and encouragement by the Federal government, the private sector, and the public domain to assist unemployed or displaced workers.

Unlike the system-wide innovations described above, program enhancements do not affect all members of the adult education agency. Rather, enhancements affect only those administrators, coordinators, and instructors involved in the new programs. Professional development beyond general awareness, therefore, targets those involved only in the enhancements aspect of the program.

As mentioned earlier, both system-wide program development and program enhancement tend to incorporate elements of product development. For example, the

competency-based movement in adult education produced many handbooks on what has come to be called competency-based education (CBE) and curriculum products. The Adult Performance Level (APL) project in Texas, the Clovis, California CBE project, and the ABLE Network and Northwest Consortium (Oregon, Washington, Alaska and Idaho) have all engaged in curriculum and product development as part of a program improvement effort. Likewise, both workplace and family literacy projects have spawned a myriad of resource and curriculum products.

Implementation

The development of a new curriculum or the establishment of a new system of school operations may evolve from several sources. Some of these sources are: state or federal directives, availability of new funding, new research data, needs assessments, dissatisfaction (general or specific), unsatisfactory levels of student achievement, and/or a public outcry. Implicit in this approach is that the need or problem is often widespread rather than individual.

The four steps for implementing a development/improvement process are:

1. identifying a need or problem,
2. developing an action plan,
3. implementing the action plan, and
4. evaluating the results.

The professional development coordinator has a key role to play as a facilitator in the Product/Program Development process. In addition, the coordinator may have other outside roles, such as that of administrator, or assigned teacher, or the coordinator may be a designated professional development specialist (depending upon the size and sophistication of the agency involved). Each of the four steps for implementing a development process is elaborated below:

Step 1: Identifying a need or problem.

As in other approaches to professional development, identification of needs and problems can be achieved through many avenues, both formal and informal. Some informal avenues include: discussions among instructors or meetings between instructors and administrators; meetings in committees formed to discuss a problem; meetings held by state or

local officials; reading about similar situations; or public outcry. Formal avenues include assessment and evaluation data and needs-assessment instruments designed to detect widespread interests or problems.

Step 2: Developing an action plan.

The first requirement of an action plan is an analysis and projections from the needs data. Several questions need to be answered usually through a group/team process, including:

- How widespread is the problem/need? (As mentioned above, if a problem is found only in isolated instances, another professional development approach might be more appropriate.)
- What will be the resulting disruptions in instruction and programs? (If disruptions are anticipated, they may be prepared for.)
- What additional information is needed? (Consultants or research data may have to be located, or surveys conducted.)

Following the above analysis is the need to brainstorm or otherwise identify alternative approaches for resolving the situation. These alternatives need to be set against such questions as:

- Will the solutions fit within budget constraints (including expertise, staff, and materials/equipment)?
- Is additional funding available?
- What time-frame would be required?
- How will disruptions of ongoing operations be accommodated?
- What approvals are necessary (e.g., administrative, committees, school boards, state officials, faculty associations)?
- What are the anticipated outcomes; how will they be determined and judged (i.e., assessed and evaluated)?

For example if it appears that existing ESL grammar-based approaches are not succeeding with newly arrived immigrant students, alternative approaches would need to be researched; decisions on a new approach made; new instructional materials located or

developed; professional development programs planned; implementation scheduled, assisted and evaluated; staff selected; and time allotted to achieve this curriculum development project.

Step 3: Implementing the plan.

Whether the plan calls for developing a product (such as the ESL curriculum for new immigrants cited above) or calls for a program enhancement (such as installing a workplace literacy program) the third step is to begin implementation of the plan. Product development may be both easier and less time-consuming than program development, which usually involves more people and has more far-reaching results, and continues over a longer period of time.

If the objective is to develop curriculum, several instructors might simply be hired over the summer to research and develop the new ESL curriculum, for example. Ideally there would be prior and continuing input from other instructional staff. Once completed, appropriate professional development would be necessary to assist those teachers implementing the new curriculum. Without this often-ignored professional development step, newly developed curriculum is likely to gather dust rather than converts. The failure of "new math" is a glowing example of imposed curriculum without appropriate instructor input or subsequent professional development.

For program development such as the design and implementation of a family literacy program, the involvement of instructional staff, administrators, support staff, and related business and community organizations must be involved. In this more complex instance, it is often wise to begin with a pilot or small scale operation using volunteers from each staff category who are committed to the development process. They are most likely to be successful in the implementation thereby encouraging more skeptical colleagues to follow. This means that professional development must be continuing over time with early participants playing key roles in facilitating the development of others.

For both product and program development to succeed, two kinds of professional development are necessary: (1) the professional development that takes place for those involved in establishing a process or developing a product; and (2) the professional development of those using the product or participating in the new program. The second level of professional development is especially crucial in adult education programs, as they have a high rate of instructor turnover.

Step 4: Assessing and evaluating results.

Assessment and evaluation in product or program development must be continuous; and in the development process, itself (such as that for curriculum), should be field-tested in pilot situations, as the process develops. Such developmental assessments ask the following types of questions:

- Are instructors able and willing to use the new curriculum in their day-to-day instruction?
- Are the new curriculum materials sufficient to meet students' and teachers' needs; and are materials easily understood by instructors?
- Does the new curriculum result in significant student achievement?
- Are the levels appropriate for student comprehension?
- Do students react positively to the new development?
- Does the curriculum sequence build on current skills and enhance new learning (e.g., English language acquisition)?

Evaluation questions include:

- Is the learning relevant? (Will students be able to use what they learn in their daily lives?)
- Is the content important? (Does it build essential skills or concepts?)
- What do the results of curriculum development mean for overall program development? (Are results linked to the future of development?)

Assessment and evaluation require wide ranging data collection and analysis on an ongoing basis. Information resulting from assessment and evaluation must be easily accessible to all stakeholders including instructors, administrators and relevant business and community groups. Failure to communicate results is a major factor in the failure of the innovation's ability to last.

When the results of assessment and evaluation are less than satisfactory in terms of goals, objectives, and expected outcomes, it is necessary to revise those elements (of the product or the program) that are not functioning as expected. The same procedures described above should

be followed. Curriculum development, especially, is an ongoing process, and, as populations change, new procedures must be developed and new resources must become available.

The following scenario is designed to show the four steps necessary for implementing the Product/Program Development approach.

SCENARIO OF A SPECIFIC PROGRAM IMPROVEMENT IMPLEMENTATION

Step 1: Identify need/problem

The state standards committee completed its deliberations on model indicators of program quality, based, themselves, on the national model for its adult education programs. Local agencies were asked to implement measures, standards, and strategies for each of the indicators. To accomplish that task, the local agency (a medium-sized, suburban community college) established a planning committee consisting of five elected instructors, the ABE and ESL Coordinators, and the administrator in charge of instruction and support services. In reviewing the new standards, the committee realizes it may not meet several of those standards, including one that specifies that ' . . . materials be adult oriented, culturally sensitive, and appropriate to student levels of preparedness.' Members of the committee decide to form a subcommittee to review materials and to make recommendations in order to meet that standard.

Step 2: Develop an action plan

The subcommittee decides that it will:

- Review existing ABE instructional materials, to determine the extent to which those materials meet the following three criteria: adult oriented, culturally sensitive, and appropriate to student levels of preparedness;
- Use the CLOZE Readability Procedure, to determine if regularly used texts are appropriate to student levels of preparedness;
- Ask selected staff and administrators to review the materials, to determine if materials are adult oriented;
- Ask representative community members to review materials for cultural sensitivity; and
- Draft recommendations for changes in the use of materials, and develop new materials, as necessary.

Step 3: Implement the Plan

The subcommittee spent four months carrying out the steps of the plan described in Step 3:

- Protocols were developed for the review of materials by community representatives, administrators, and staff; and
- CLOZE tests were administered to a random selection of students, and all frequently used texts were checked for readability levels.

Step 4: Evaluate results

Assessment of the data from Step 3 indicated that:

- Results of the CLOZE Readability Procedure disclosed that the text used for ABE classes had a reading level that was too difficult for many students;
- Community representatives found that one of the reading texts had passages that might be interpreted as culturally insensitive; and
- The instructional and administrative staffs reported that all of the materials reviewed were adult oriented.

Follow-up and Evaluation efforts determined that:

- A new ABE reading text should be purchased or instructional staff should develop a new text;
- If a new text is developed by instructors, the text must be field-tested with the appropriate student audience; and
- A wide variety of materials, such as forms, pamphlets, news articles, and the like, should be made available in order to ensure that students can select materials according to their own interests and according to their ability to 'decode' and to understand the materials.

Results of Product/Program Development

Little research has been done on the actual impact of product or program development on adult educators' day-to-day activities (or on student achievement). There are some K-12 studies, however, of the results of Product/Program Development on such areas as job satisfaction and level of commitment. In addition, in some K-12 instances, the results of program development projects in reading instruction have resulted in large gains on state reading tests (Sparks, et al., 1985).

Issues

For what may be termed successes to occur in Product/Program Development, some required situational conditions are:

- Administrative commitment to the process, including the ability to generate a well-defined vision, to motivate continuing participation, to share decision-making processes among various school-related groups, to delegate responsibility, to establish a climate that provides positive reinforcement and that rewards success at all levels, and to encourage continuing professional development;
- Adequate resources (e.g., quality time, funding, materials, human resources); and
- *Continuous* professional development, including emphasis on the skills needed for implementing and for modifying new programs and products. Product development projects completed by a few, full-time staff, or temporarily hired instructors, may have a long "shelf-life," but may have little impact, unless an ongoing program of professional development accompanies the process and the product to be achieved.

Essential to the success of newly developed products or programs is, first, the engagement of all staff for long-term application, and, second, the extent of administrative commitment and support of ongoing professional development activities.

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