

Basic Considerations For Implementing Instructional Development Programs In Higher Education:

Some Suggestions From The Literature

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The intent of this article is to provide a framework for considering issues related to instructional development programs in higher education. Instructional development is, in reality, a young movement. Popham (1974) wondered about its future, asking whether instructional improvement efforts will become an integral part of effectively functioning institutions of advanced learning or whether instructional development programs in higher education will disappear as a fad. In part, the answer to that question may lie in the ability of administrators planning and managing instructional development programs to learn from the efforts of their colleagues in other settings. The focus here is on organization and implementation rather than on instructional design procedures or models. No attempt is made to review or discuss theories, research evidence or procedures used to design and evaluate instruction. Consideration of these issues is beyond the scope of this article.

This article focuses upon providing guidance for practitioners of instructional development. This guidance is derived from a synthesis of prevailing views in the literature. Sixteen guiding principles are proposed for organizing and implementing instructional development programs in higher education.

Advice for Implementing Instructional Development Programs

In 1968 Haney, Lange, and Barson provided instructional developers with a set of heuristics for doing instructional development based on years of experience and accumulated wisdom. Instructional developers who followed these suggestions were grateful for the guidance. In 1974, Holsclaw developed a comprehensive set of procedural guidelines for instructional development based on interviews with developers from various settings. This impressive effort also relied on collective judgement and wisdom to provide direction for those of us laboring daily to improve instruction through systematic development efforts.

In an attempt to provide still more insight about how to organize and implement instructional development programs, a set of "guiding principles for implementing instructional development" has been derived from an extensive review of the literature on change and instructional development (Durzo, 1976 a). Because the literature in these areas exists in a number of widely scattered sources (some of them "fugitive documents" captured only by the ERIC System), it is important to synthesize the "recommendations" from the literature to make this collective wisdom and experience easily available to instructional developers across the country.

The guiding principles presented here should be taken for what they are—tentative conclusions, tentatively held. None of them is based on experimental research. Unlike the area of instructional

design, where much sound experimentation has been done, experimental manipulation has not yet been helpful in providing insight into the organization and management of development programs. The issues and settings are too complex to be easily amenable to experimental manipulation. Qualitative field research methodologies such as participant observation (e.g., Dodge and Bogdan, 1974; Lutz and Ramsey, 1974) may provide a useful perspective on the issues raised by these guiding principles. Until such research bears fruit, the accumulated judgement and wisdom represented in scholarly articles, papers and books must serve as the foundation upon which the practice of instructional development is based. Taking these guiding principles into account when doing instructional development does not guarantee success, but it can reduce the initial frustration resulting from unseen pitfalls and false starts.

Guiding Principles for Instructional Development

References included in this section indicate that the particular works cited support the tone and direction of a given principle, though the specific wording used here may not appear in any of them.

1. The institutional climate should encourage and support innovation. Presidents and other high administrative officers must actively support innovation. Importance must be placed on the teaching-learning process.

Unless there is high-level support for an instructional development program, the

program will operate in a "one-down" position without a clear mandate for academic change. Faculty will perceive the lack of support and may be reluctant to become involved with the agency. The "clout" necessary for changing institutional practices (e.g., registration systems, summer pay for faculty) will be hard to come by, thus negatively affecting the potential contributions of the agency.

Baldrige, 1975; Diamond et al., 1975; Dietrich & Johnson, 1967; Durzo, 1976 a, 1976 b; Eurich, 1964; Fullan, 1972; Gaff 1975 b; Greenwood et al. 1975; Hannah, 1966; Kieffer, 1971; Maier & Weidner, 1975; Mayhew, 1976; Spitzer, 1977; Watson, 1967; Whitfield & Brammer 1973.

2. An effective instructional development program requires open access to the top level of institutional administration.

Major academic change requires serious administrative commitment in actions as well as words. For this reason an instructional development agency or program should report to the chief academic officer of an institution. A wide-ranging instructional development program will have institution-wide impact, often necessitating institutional policy changes or reallocation of financial, material, and human resources. Other types of high-level administrative decisions and support may also be necessary. Without active, high-level support the potential of a development program may never be fulfilled.

Alexander & Yelon, 1972; Buhl, 1975; Detweiler, 1973; Diamond, 1971; Diamond, 1974; Diamond et al., 1975; Durzo, 1976 a, 1976 b; McMillan, 1975; Schauer, 1971.

3. Appropriate resources for academic innovation must be provided by the institution.

An instructional development agency must have a firm institutional commitment for the technical and financial resources necessary to support instructional innovation. For example, if a course depends upon the independent use of audiovisual materials and no place exists for students to use them, the course will fail and the faculty member may become hostile to both the development agency and the institution. To complete a course design effort, services such as graphic design, printing and photography, or technical assistance from evaluators, computer program-

mers and other specialists may be necessary. Projects begun without sufficient support for these activities may be compromised or may fail from undernourishment.

Clark & Guba, 1966; Diamond et al., 1975; Dietrich & Johnson, 1967; Durzo, 1976 a, 1976 b; Eurich, 1964; Gaff, 1975 a; Hannah, 1966; Kieffer, 1971; Mayhew, 1976; Whitfield & Brammer, 1973.

4. To have maximum impact on an institution's programs, select a few high-priority projects with a high prospect for long-term stability.

An instructional development agency should identify the institution's top academic priorities and choose projects which reflect them. The goal should be to complete a few major projects which have widespread impact rather than to support numerous small projects which will have little overall impact on the nature of the institution's academic program. In addition, every possible attempt should be made to assure the long-term stability of projects chosen. A key step is to select projects from departments where the staffing and enrollment patterns are relatively stable and the political climate is free from divisive problems which would eventually doom projects to failure. Another method of providing stability is to involve more than one faculty member in a project. This assures that other faculty members will be able to carry on with it even if one key person leaves the institution. Finally, the agency should structure the conditions for support of the project so that after the developmental stage is completed, the institution will continue to support the new course as a part of its normal academic program.

Diamond, 1971; Diamond et al, 1975; Durzo, 1976 a, 1976 b; Haney, Lange, & Barson, 1968; Holsclaw, 1974.

5. Assistance and support should be made available for development and implementation of academic innovations. Some organization or structure should be established to advocate and support innovation.

In order to provide both a catalyst for change and support for instructional innovation, some type of instructional development agency or support program should be established. Instructional development is a complex activity requiring considerable effort in both the design and implementation phases of the process. In order to maximize the likelihood of successful innovation, it is useful to

provide faculty with: (1) assistance during the conceptual development of the solution and, (2) technical support for the design and implementation of materials and activities (e.g., evaluation assistance, production capabilities, development of record-keeping systems).

Clark & Guba, 1966; Corprew & Davis, 1975; Diamond et al., 1975; Dietrich & Johnson, 1967; Durzo, 1976 a; Eraut, 1975; Hannah, 1966; Maier & Weidner, 1975; Rogers, 1966, 1968.

6. Program changes in one area of an organization may necessitate corresponding changes in other areas.

Academic change does not occur in a vacuum. A change in one department's basic course may also necessitate corresponding changes in all of its advanced courses, or in related courses in other departments. In addition, a developer may find that proposed course design requires significant changes in certain institutional procedures such as the registration system, use of independent learning facilities or room scheduling. To ignore the potential impact of instructional development efforts on other areas of an institution is to court disaster. Developers must always take a holistic view of proposed changes in order to anticipate their system-wide effects. Developers must attempt to identify and solve potential problems *before* they occur.

Baldrige, 1975; Benne & Birnbaum, 1969; Durzo, 1976 a; Diamond et al., 1975; Gross et al., 1971; Rogers, 1968.

7. To facilitate the development process, an instructional development procedure should be adopted and followed.

There are many different instructional development procedures or models used by agencies across the country. Each represents a particular method of applying a basic systematic approach to the development of instruction. Little research exists to guide an agency in selecting or developing a model, but the advice from the literature is clear. An instructional development procedure should be adopted and followed in order to facilitate the development process and assure communication among the individuals involved.

Diamond, 1971; Diamond et al., 1975; Durzo, 1976 a; Gerlach & Ely, 1971; Hamreus, 1971; Haney, Lange & Barson, 1968; Holsclaw, 1974; Lee, 1971; Schauer, 1971; Wittich & Schuller, 1973.

8. **Effective instructional development often requires the efforts of a team of individuals.**

The complex nature of the academic change process and the comprehensiveness of a thorough systematic instructional development effort often require many different types of talent and expertise. The use of a team approach, involving several faculty members and various professionals in instructional development and evaluation, is highly recommended as a method for bringing a wide range of human resources to bear on this complex task.

Diamond et al., 1975; Durzo, 1976 a; Faris, 1970; Gustafson 1971; Lee, 1971; Schauer, 1971; Wittich & Schuller, 1973.

9. **Academic redesign should begin with a problem-solving approach, not with solutions. A good change strategy must include a serious assessment of needs.**

In order for faculty to change their courses, they must perceive a *need* to change. This crucial step in the change process can often be accomplished through a careful assessment of the problem and analysis of potential solutions. Beginning a development project by stating instructional objectives may seem logical, but if a faculty member is not yet convinced of the need to change (or is responding to symptoms but not the real problem) the effort may be unsuccessful. The kind of psychological ownership of a solution necessary for a successful project will be much more likely if the developer and the faculty member invest appropriate time and energy in developing a thorough understanding of the problem before attempting to devise solutions.

Clark & Guba, 1966; Diamond et al., 1975; Durzo, 1976 a; Dwyer, 1976; Eraut, 1975; Fullan, 1972; Havelock, 1973; Heathers, 1974; Lippit, 1973; Spitzer, 1977; Watson, 1967.

10. **Attempt innovations that have perceived clear-cut advantages over present practice. Focus on real problems to produce tangible results. Look for action that will work.**

Part of a faculty member's decision to change from the status-quo is based on his or her perception that the proposed change will solve some important problem. Consequently, an instructional developer must use all of his or her skills to help faculty members create an alternative approach which seems to be clearly superior to past practice. It must solve

real problems which are important to the faculty member(s) involved.

Diamond, et al., 1975; Durzo, 1976 a; Dwyer, 1976; Hannah, 1966; Rogers, 1966, 1968; Watson, 1967; Zaltman et al., 1977.

11. **Assistance should be provided in both the initiation and implementation stages of the change process. Both stages must be planned and executed thoroughly.**

One important lesson from the literature on change is that the change process consists of two phases: (1) the *initiation phase* during which a person decides that a change is needed and begins work on the proposed solution, and (2) the *implementation phase* during which the innovation is actually carried out. An effective change support effort must recognize the existence of these two phases and develop assistance strategies appropriate to each. For example, a workshop concerned with college students' reading problems may be an excellent initiation strategy to convince faculty of the need for change, but may be ineffective in assisting them to develop and implement necessary solutions.

Durzo, 1976 a; Greenwood et al., 1975; Gross et al., 1971; Heathers, 1974; Lindquist, 1974; Miles, 1964; Pincus, 1974; Pressman & Wildavsky, 1974; Zaltman et al., 1973; Zaltman et al., 1977.

12. **Include evaluation. Pilot trials, evaluation and experimental demonstration of innovations are both useful in accomplishing planned change and necessary to the development process.**

Authors writing about educational change have described the importance of pilot demonstrations or trials in helping potential adopters of an innovation decide about its suitability. Moreover, the practice of pilot-testing a new program is central to the systematic approach to instructional development. Pilot demonstrations not only provide the developer and faculty the opportunity to "work out the bugs" in a design, they also enable other potential adopters to analyze the innovation. Consequently, a pilot demonstration of a PSI mathematics course will provide useful feedback to the development team and may also generate interest among other faculty in trying PSI in their courses. Evaluation is also important to assist the institution in judging the overall worth of instructional improvement efforts. Without adequate evaluation, it is not possible to

describe accurately what was accomplished. Instructional changes, attitude changes, program effectiveness and efficiency, student learning, and faculty attitudes should all be examined as a part of the evaluation process.

Baldrige, 1975; Clark & Guba, 1966; Corprew & Davis, 1975; Diamond, 1971; Diamond et al., 1975; Durzo, 1976 a, 1976 b; Engel, 1969; Gaff, 1975 b; Gerlach & Ely, 1971; Gustafson, 1971; Havelock, 1973; Hamreus, 1971; Holsclaw, 1974; Lee, 1971; Mayhew, 1976; O'Connell & Moonmaw, 1974; Popham, 1974; Rogers & Shoemaker, 1971; Schauer, 1971; Wittich & Schuller, 1973.

13. **Faculty must be willing to innovate. Initiative and support of the faculty is crucial to attempts at change and innovation.**

The organizational structure of higher education places faculty in the role of autonomous professionals operating with the freedom to choose both the content and methodology of courses they teach. Consequently, there is little merit in "forcing" faculty to innovate. Faculty must perceive the need to change before they will engage in instructional development. They must have psychological "ownership" of the ideas and procedures underlying the courses they teach.

Durzo, 1976 a; Fullan, 1972; Greenwood et al., 1975; Gross et al., 1971; Haney, Lange & Barson, 1968; Hannah, 1966; Heathers, 1974; Lindquist, 1974; Maier & Weidner, 1975.

14. **Time should be provided for faculty to engage in academic change and innovation.**

With teaching, research, scholarship, advising, committee, and community responsibilities all consuming time, there is little "creative energy time" left for faculty to do instructional development. The traditional responsibilities of a faculty member are built into his or her typical academic year with little time to spare for educational innovation. To expect faculty to do development enthusiastically on an "over-time" basis is unrealistic and should be avoided if possible. Every effort should be made to provide faculty with released time during the academic year and/or summer stipends to do development.

Brickell, 1967; Clark & Guba, 1966; Diamond et al., 1975; Dietrich & Johnson, 1967; Durzo, 1976 a; Eraut, 1975; Gaff, 1975 a; Hannah, 1966; Kief-

fer, 1971; Mayhew & Ford, 1971; Mayhew, 1976; Spitzer, 1977.

15. Faculty who engage in academic change and innovation efforts should be rewarded.

The institution should reward faculty for quality teaching and sincere attempts at innovation. Rewards such as campus recognition, faculty teaching awards and the like are a step in the right direction, but they are not enough. The most effective reward is official recognition by the institution in terms of promotion, tenure, salary, and other marks of status. Instructional development agencies should play a role in redesigning institutional reward structures so that faculty may benefit in a concrete manner from their attempts at innovation.

Diamond et al., 1975; Dietrich & Johnson, 1967; Durzo, 1976 a, 1976 b; Haney, Lange & Barson, 1968; Kieffer, 1971; Lindquist, 1974; Mayhew & Ford, 1971; Mayhew, 1976; Spitzer, 1977; Whitfield & Brammer, 1973; Zaltman et al., 1977.

16. To produce long-term change, pay careful attention to the development of faculty members' skills in instructional development.

Producing meaningful, long-term academic change requires that faculty be effectively involved in the instructional development process. Attention should be paid to the development of faculty members' skills in doing instructional development on their own. The majority of opinions in the literature suggest that an important goal of any successful program should be for faculty to learn to become instructional developers in their own right. Various workshops and training sessions have been advanced as ways to achieve this objective. However, little data about the long-term effectiveness of these approaches are available. Hammons (1975) reported that short-term workshops by themselves have not proven to be effective in producing long-range change. He suggested that certain follow-up activities be included in order to maximize the impact of workshops. In addition, he listed a set of guidelines to be followed in developing workshops which are intended to help faculty improve their skills and knowledge about the teaching-learning process.

Abedor & Gustafson, 1971; Beilby, 1974; Briley, 1971; DeBloois & Alder, 1973; Durzo, 1976 a; Faris, 1970; Gaff, 1975 b; Group for Human Develop-

ment, 1974; Gustafson, 1971; Gustafson, 1975; Hoban, 1974; Roueche & Boggs, 1970; Ullmer & Stakenas, 1971.

A Final Thought

Discussion of these guiding principles should be viewed as a continuation of earlier efforts to explore and understand the nature of instructional development. The primary purpose of this article is to stimulate other instructional developers to critically examine the notions presented here and to expand, modify, or disclaim them. Such contributions will be invaluable in expanding the foundation upon which the practice of instructional development is based.

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