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ABSTRACT

This paper embodies three presentations given at a panel discussion on organizing, planning, and managing the local school district. The first presentation on comprehensive planning for change draws a distinction between "a priori" and "a posteriori" planning and relates these two types of planning in coping with school district problems. The next presentation deals with the critical factors required to implement project management capability in a school district, and examines the advantages and limitations of project management and the uses of project management in a public relations function. The final presentation emphasizes the kinds of information needed to support organizational modification in a local school district. One important consideration is the premise that major change in school districts must be supported by an organizational structure that facilitates the communication flows and the human interactions necessary to implement change. (Author)

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PROJECT MANAGEMENT
IN A
LOCAL SCHOOL DISTRICT*

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PROJECT MANAGEMENT
IN A
LOCAL SCHOOL DISTRICT

My presentation will focus on a particular type of management which is finding wider use in local school district management operations. I am referring to the concept of project management. I would like to spend the next few minutes making some preliminary comments about the project management concept and then show you a slide/tape presentation on project management. The slide/tape presentation is part of a training package which Research for Better Schools, Inc. uses to orientate school administrators to project management.

A project management capability has been identified by educational management experts as an important management technique which local school districts need in order to put into effect desired changes or innovations once they have made a decision to do so. Such a capability is seen as a necessary, complementary process to the organizational development and comprehensive planning functions and as a necessary element of change capability. The reasoning is that a decision by the local school district to introduce a change or innovation may well never happen unless a means is provided to guide and implement such changes without disruption of local school district's on-going programs. In many instances, when a change is perceived by the school district as having failed, the blame is put on the change itself with little or no awareness that a lack of an efficient project management capability* may have had a large role in its failure.

*"Delivery capability is used synonymously with 'project management capability' and is defined in this context as that capability which makes it possible for an organization to define, monitor, adapt and control specific changes within time and cost constraints and with desired performance standards."

The introduction of an innovation such as "Individually Prescribed Instruction" or IPI which has been introduced in more than 200 schools serves as an example of the importance of a project management (PM) capability in the successful implementation of an innovation. Case studies by RBS indicate that there is a high relationship between the degree of successful implementation of IPI and the degree of an effective PM capability.

This assertion is not intended to imply that all innovations fail because of an ineffective PM capability. Some innovations obviously just can't cut the mustard, regardless of the effectiveness of a PM capability. Nor is it intended to convey the notion that an effective PM capability is the only reason for successful implementations of change or innovations in a school district. Obviously other factors -- commitment, training, adequate resources -- just to mention some, play an important role. The point being made is simply that a PM capability is one necessary and often indispensable ingredient in the successful implementing of change.

I have made numerous references to the concept of "Project" and "Project Management." What is a "Project?" What is "Project Management?" The next part of the presentation -- the tape/slide presentation -- will be concerned with these questions.

(Tape/Slide Presentation -- See Attachment)

An effective PM capability in a school district is dependent upon numerous factors. First and foremost is that school districts have adequately trained project managers and project support personnel. But a school district desiring an effective PM capability must also consider the following factors:

The willingness and ability of a local school district to commit people, money and other resources in proportion to the planned effort.

The willingness and ability of a local school district to train its top level administrators and project support personnel in the fundamental concepts of project management and to continue with an on-going in-service training program to maintain and improve the skills of existing and new personnel.

The willingness and ability of a local school district to realign to some extent its existing organization structure to facilitate the purpose of this function (realignment should be aimed at facilitating communication and involvement at all levels of management).

The willingness and ability of the local school district to establish a continuous mechanism or a set of procedures for assessing the effectiveness of the capability, which includes a willingness to establish criteria for determining effectiveness.

The willingness and ability of the local school district to tolerate the competing demands, conflicts and risks generated by all the above changes.

Other important conditions include a clear statement of purpose of the capability and acceptance by the individuals who are involved and affected by the implementation of the capability.

ATTACHMENT

Module 1
Lesson 1

1.3

Lesson 1--Building Conviction Lesson Abstract and Content Outline

ABSTRACT

A project is a unique goal-oriented activity which delivers a definable end product within time, cost, and performance specifications. Projects have project managers who perform duties and make decisions in the four phases of project management--planning, preparation, operational control, and termination. Often, school operations can be restructured such that some activities can be treated as projects, while other school activities may already be projects. Project management can result directly in a higher probability of accomplishing goals and better knowledge of costs related to goals, and indirectly in improved school community relations.

CONTENT OUTLINE

- A. The goal of this course is to orient the learner to project management and project management capability.
- B. Introduction to the training module
 - 1. The characterizations which coordinate the written material with the illustrations are introduced.
 - 2. The general nature of the other lessons in the module is presented.
- C. Definition of a project
 - 1. Project is a unique goal-oriented activity which has uncertainty about the path leading to the goal and which delivers some definable end product within time, cost and performance specifications.
 - 2. Activities in the schools which are not projects are identified.

3. The following are examples of projects where a complex activity was managed and where the project goal was realized.
 - a. Polaris missile project and Program Evaluation and Review Techniques (PERT) development.
 - b. Apollo space project
 - c. World fair sites, expositions, and Disneyland
 - d. Chevrolet's Vega product development project
 - e. Familiar Title I projects under federal ESEA Bill of 1965
 - f. Northern Virginia Technical College development project
 - g. University of Toledo teacher program development project
 - h. Numerous school building construction projects.

D. Management of projects in a local school agency

1. Description of project management

- a. Projects have project managers who perform project duties such as planning, integrating, evaluating, implementing and making decisions. Project managers' skills include goal setting, planning, time estimating, scheduling, resource allocating, budgeting, directing, and controlling.
- b. The four phases of project management are:
 - Planning
 - Implementation
 - Operational control
 - Termination or transition

2. School operations can be restructured such that some activities could be treated as projects once the rationale for doing the restructuring is justified. Such a restructuring results in the following:

- a. Forces the local school district to ask: What it wants, how to accomplish, what possible levels of performance, what items not desired, what milestones, and what is to be delivered.
- b. Yields an examination of elements of the school program as related to goals, on sequenced plans, on resource allocation plans, and on orderly-timely control of activity by comparison to plans.
- c. Higher probability of accomplishing goals.
- d. Better knowledge of costs related to goals.
- e. Leads to necessity for further delegation of authority and decision-making power.

- f. Requires integration of both a functional and a project-type management system.
 - g. Demands the acquisition of well-qualified project managers exactly when needed.
 - h. Successful school operations across the various projects rests heavily upon ability level of project managers.
 - i. School activities could be described, managed, adjusted, and evaluated, using cost effectiveness measures if the total activity is separated into segments and treated as projects.
- E. Public relations benefits when project management is used by LEA
- 1. Schools are receiving pressures from the community.
 - 2. Reports to the community have not answered the serious questions being raised.
 - 3. Conducting school operations by project segments would provide reports and information for answering the questions.

Turn the page and proceed

Lesson 1--Building Conviction

Instructions

1. Set up the recorder, projector, and screen.
2. Place the carousel slide tray for this lesson onto the projector and advance the tray to the start of Executive Orientation--Lesson One.
3. Place the cassette tape for this lesson into the recorder and rewind to the rewind stop.
4. Start the recorder and advance the slides with the "change tone."

Lesson 1--Building Conviction

Lesson Narrative

- 1.1 The objective of this orientation course is to introduce you to the concept of project management. . .
...and its capabilities.
- 1.2 As an aid to this orientation, we will need the assistance of a few characters. Let me introduce to you the main actors in our story.
- 1.3 First, Mr. Supervisor, who is a superintendent of a middle-sized city school district. He has considerable experience in project management in a school setting. He will assist us in our orientation.
- 1.4 Next, Mr. Functional Manager, a curriculum director, or personnel director, or business manager of our city school district. He is not experienced in project management but will assist us when we examine general management principles.
- 1.5 Next, Mr. Project Manager who's sole job will be the successful completion of a federally funded project. Mr. Project Manager is new to his job and will need considerable instruction.
- 1.6 Next the School Board members who will be asked to interact with this orientation.
- 1.7 And the last important character is "project."
- 1.8 The story has a moral or two. You will learn about the payoff or benefit to the school when it adopts project management.
- 1.9 Succeeding lessons of this course will deal with organizational settings and some of the relationships between projects and the functional departments of the school district.
- 1.10 A local school can establish a management capability to deal with complex projects, including federally funded projects, if top management is committed, and will support the facilitating organization and procedures which identify a project management capability.

- 1.11 In an orientation to project management, one must begin by defining basic terms. The first is obviously "project."
- 1.12 The concept of a project contains certain characteristics. Educational projects are those activities in a school setting which
- 1.13 . . . are goal oriented. The activity is aimed toward a defined goal, and therefore, it is purposeful effort.
- 1.14 Educational projects encompass some uncertainty about the path leading toward the ultimate goal. Project planning is always futuristic and involves levels of risk.
- 1.15 Projects deliver some definable end product.
- 1.16 Projects have a time schedule that includes a start date and a completion date.
- 1.17 Projects are constrained by cost limitation. Costs reflect a wide range of resources, required to achieve the desired goals.
- 1.18 And educational projects accomplish the goal within designated performance specifications. These specifications incorporate clear, explicit and complete definitions of what is to be done, and a set of criteria used to evaluate the level of accomplishment.
- 1.19 To understand the concept of a project we can contrast it with those activities in a school which are not projects.
- 1.20 An established curriculum or program in a school which is continuously operational is not considered a project. A program which does not have a specific completion time, where the costs are not examined against performance criteria, but compared to a budgeted account for operating--is not a project.
- 1.21 Functional activities like accounting, payroll, cafeteria operation, or the activities of the various teaching departments are not projects.
- 1.22 A project, then, has a specified goal, has uncertainty about how it is to be achieved, has an end product, has a start date, a completion date, a cost limit, and a level of performance acceptability.

- 1.23 Occasionally educators ask, "What is so desirable about a project rationale for conducting our activities?" or "Has project management been successful?"
- 1.24 There are many examples in industry, government and education where projects have resulted in the successful completion of a complex goal. In most cases, the major factor was the use of project management as a tool.
- 1.25 For example, the Polaris missile program which placed deterrent missiles aboard submarines of the United States Navy was treated as a special project within the Department of Defense. The project manager was given authority to select his staff and cross functional lines of the federal government to assemble resources. His planning group established a goal, worked out missions and tasks, developed a time schedule, reviewed the effort, evaluated, and revised the plan.
- 1.26 Another example is the Apollo project, a part of the NASA Space Program. The late President Kennedy gave the project a goal of putting a man on the moon prior to 1970. The staff planned the various missions, established a time schedule, reviewed, evaluated and modified their plans to accomplish the goal.
- 1.27 A final example is product development in industry. Take Chevrolet's Vega, a small car product which entered the market in the model year 1970. A project manager obtained his staff from the parent company. This project team made plans, established a target date and set performance standards. They reviewed, evaluated, and put the product on the market on schedule.
- 1.28 There are also examples of projects in the educational field. Management of these projects is often identified with requirements found in federal legislation.
- 1.29 An example is the Elementary and Secondary Education Act of 1965. A specific section, Title I (Financial Assistance to Local Education Agencies for the Education of Children of Low Income Families) specifies a requirement for a plan, periodic evaluation, review and reporting of the activity.

- 1.30 Another example is the Northern Virginia Technical College where a grant was provided to assist in developing the steps in planning, constructing, equipping and furnishing the physical plant of the college as well as those intellectual factors relevant to constructing a curriculum detailing course content, writing a catalog and securing a faculty to instruct the first 500 students enrolled. Program Evaluation and Review Technique was used as a planning tool for this project.
- 1.31 Another example of an education project dealt with educational specifications for a comprehensive elementary teacher education program at the University of Toledo. The activity, which included designing educational specifications, was treated as a project, e.g. it had a certain goal, developed the specifications in a certain time, and was submitted (a final report). The project was completed within cost and at the established level of performance.
- 1.32 We have to this point attempted to define an educational project. We consider now the managing of projects.
- 1.33 The management of a project has characteristics and techniques in addition to those described as a project itself. These characteristics are:
- 1.34 Projects have project directors, sometimes called managers. The job begins in the planning phase and ceases at project termination. Activities which are non-projects have program coordinators, sometimes called supervisors, administrators, or directors. His job is continuous and not dependent on the status of particular programs.
- 1.35 The role of a project director involves managerial duties such as: Planning and integrating the activity of people and equipment.
- 1.36 Evaluating and making decisions affecting the project process.
- 1.37 And implementing the decisions.
- 1.38 The project management missions are grouped into four phases of operation which describe the life span of a project. The phases are planning, preparation, control and termination.

- 1.39 The planning phase includes the definition of the project, the detailed planning for work flow, determining schedules and resources, and calculating costs of materials, services and manpower.
- 1.40 The preparation phase consists of acquiring the equipment, personnel and materials and organizing them so that the project can begin as planned.
- 1.41 The operational control phase consists of those activities which are aimed at detecting deviations, analyzing the problem causing the deviation, making decisions, and implementing those decisions to insure project success.
- 1.42 Termination or transition phase includes those activities which deal with ending the project. This phase occurs after completion of the goal and involves transferring records, equipment, facilities and people to other projects.
- 1.43 The project manager is the key person in the planning of projects and needs specialized skills. The project manager should receive specialized training in order to acquire the essential project management knowledge and skills.
- 1.44 The most important feature of project management is the managerial ability of the person in charge of the project. For successful project completion the project manager must also develop skills in the performance of his duties. These duties are:
 - 1.45 Time scheduling
 - 1.46 Fund allocating
 - 1.47 Resource allocating
 - 1.48 Planning specific work and scheduling
 - 1.49 Delegation of responsibility
 - 1.50 Evaluation and review
 - 1.51 Directing others
 - 1.52 Controlling

- 1.53 We turn now to some of the activities which exist in the local school district (LSD) as on-going, and could be reoriented as projects. Some examples are: curriculum selection committee, school construction program, the development or initial operation of remedial academic programs. We find it is possible to reorient many school activities as projects.
- 1.54 There are many important advantages for using project management as a total or near total activity in a local school district.
- 1.55 Changing an activity to a project forces the LSD to ask, "What do I want to attain?"
- 1.56 In turn, these questions must be asked: How do I want to accomplish it?
- 1.57 What are the possible levels of performance?
- 1.58 What is not to be included?
- 1.59 What are the milestones?
- 1.60 What is to be delivered?
- 1.61 When the LSD answers these questions, they are examining in detail the elements of a program in terms of its goal, rather than perpetuating activities which may have ceased to meet a need.
- 1.62 In this manner the local school district's total effort is focused:
- . on the goal
 - . on plans which detail the time sequence for various activities;
- 1.63 . on the plans for allocating resources;
- . on specific performance outcomes;
 - . on an orderly, timely control of the effort by comparing it with planned tasks.
- 1.64 There are some limitations connected with the installation of project management in the LSD. For one, project management cannot be applied to all activities of the LSD because some

activities are extremely difficult to identify with a goal, a start and stop time, and an end product.

- 1.65 As a consequence, current district organization now exists, both a functional and a project management system would be required which is somewhat more complex than either management type by itself.
- 1.66 Also, it is difficult to obtain qualified project managers for each project exactly when needed.
- 1.67 The advantages are many when the school operation is committed to such an organized and focused effort. There is a greater probability of accomplishment of the activity and the cost is a known factor.
- 1.68 The accomplishment of planned goals, with cost knowledge, improves the public relations function to the community concerning the school operation.
- 1.69 Another project management requires top level management to delegate authority and decision making to a greater number of subordinates, while the superintendent maintains overall responsibility and accountability.
- 1.70 It can be used widely within the LSD to improve effectiveness and efficiency in achieving overall goals.
- 1.71 Project management can spotlight resource needs for the support of the segments within the overall program. This strengthens the evaluation of these segments in terms of performance.
- 1.72 Extensive use of project management permits an examination of the deviation of operations from the plans. Problems within the overall educational program can then be pinpointed.
- 1.73 The Public Relations Benefits of Project Management bears mentioning once more. As you are aware, the public education system has been under increasingly severe attack.
- 1.74 Our schools have not been very successful in informing the public of the nature of our educational goals. It is possible that our goals are rather fuzzy and ill defined.

- 1.75 Very often the LSD issues a report to the community which tells how many students are enrolled, how many employees we have, how much money we spend per student, how many new classrooms we have built, etc. But these are all input measures.
- 1.76 With Project Management, the LSD could now define the goals in terms of output performance and achievement.
- 1.77 With project management we can improve the focus on goals; we can relate costs to the achievement of those goals; we can locate the responsible persons; and we can use the project reports to substantiate our efforts.
- 1.78 Substantial understanding about management can be gained by a large number of the district's professional staff.
- 1.79 This is realized when the total LSD's effort is separated into appropriate segments and treated as projects, and where the cost of each segment is capable of being analyzed.
- 1.80 If this activity and its achievements are summed across all appropriate segments of the LSD, then the implication is that the total school system operation would be directed in a desired fashion toward an overall goal.
- 1.81 Project management capability allows for those segments which can be considered projects to be evaluated for cost effectiveness. If the capability proves successful, the school system can subsequently use those experienced project managers and resulting project information to conduct more activities or segments of the LSD as projects.
- 1.82 In summary, the project management capability for the local school offers distinct advantages by focusing upon the various activities:
- 1) Clear goal statements are achieved.
 - 2) More detailed plans concerned with time, resources and performance.
 - 3) And an orderly review and control of the effort with respect to the plan.