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ABSTRACT

The Arizona Career Ladder Teacher Incentive Program, a pilot teacher incentive program, features: (1) successful collaboration among government, business, universities, school districts, and the teaching profession; (2) "stakeholder" initiated and monitored teacher development and performance evaluation systems with totally restructured salary schedules; and (3) a 5-year pilot research and evaluation project to develop a workable and relevant model that recognizes individual capacities and enhances appropriate role definitions and differentiation of work assignments for teacher leaders. Analysis of responses from over 4,000 participants revealed positive findings in relationships between level of teacher performance and student academic achievement. For successful change, organizations need to plan for a healthy environment that enhances interpersonal relationships, communication, and personnel development. (Author/CB)



TEACHER DEVELOPMENT AND INCENTIVE PROGRAM:

Research and Evaluation for Effective Policy Change and Reform

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ABSTRACT

TEACHER DEVELOPMENT AND INCENTIVE PROGRAM:

Research and Evaluation for Effective

Policy Change and Reform

The need for educational reform has resulted in a major national teacher development and incentive program movement. New systems are being implemented and tested to assist in alleviating the problems involved in recruitment, retention and motivation of high quality instructional leaders. Response to this movement has resulted in the development of a pilot teacher incentive program which is currently demonstrating some unique and positive features. Those include, (1) successful collaboration among government, business, universities, school districts and the teaching profession, (2) "Stakeholder" initiated teacher development and performance evaluation systems, with totally restructured salary schedules and (3) a five year pilot research and evaluation project to develop a workable and relevant model for legislative approval in 1989-90. Research results from over 4,000 participants, are demonstrating strengths and weaknesses in program components and showing positive findings in relationships between level of teacher performance and student academic achievement. For the first time on such a large scale, research results show a high level of significance (p > .0001) between measures of the psychological environment of organizations and potential for program reform. For successful change, implications are that organizations need to plan for a healthy environment which enhances interpersonal relationships, communication and personnel development.



TEACHER DEVELOPMENT AND INCENTIVE PROGRAM:

Research and Evaluation for Effective Policy Change and Educational Reform

INTRODUCTION

This paper is to present results regarding the development, research and evaluation of unique aspects of the Arizona Career Ladder Teacher Incentive Program. The developing model has some specific directions and accomplishments which have not been apparent in other plans being implemented throughout the United States. These, along with other favorable factors, have a good chance of effecting positive change and reform in Arizona and the Nation. The content is organized and presented in three general areas, as follows: (1) A brief overview of the historical perspective (2) The Arizona model which elaborates on some of the unique aspects. (3) Research methods and results, describing the process and analysis of statistical data.

Overview

Career ladders (CL) is a teacher incentive program which completely restructures the way teachers are classified and rewarded. No longer will teachers be paid based on assumed competences as a result of years of experience and additional college credit. Instructional competency and classroom performance are the major criteria of salary determination. Characteristically, three of four teaching levels are identified in a career ladder plan. Each step up the work ladder is based on systematic evaluation and brings increased pay and higher level responsibilities such as mentoring or serving as formative evaluators. Career ladder plans offer teachers the opportunity to advance both their status and salaries without having to leave the classroom for other businesses or entering administration. (Packard & Bierlein, 1986, p. 1)

Teaching has been viewed as an undesirable career choice by college entrants. For example, "In 1966, 26 percent of all university applicants entered the college of education. Only 4.8 percent of university entrants applied to the college of education in 1984" (Flowing Wells Unified School District Career Ladder Plan, 1985). In past years, teaching was viewed as a prestigious career, one which attracted a considerable number of highly qualified individuals. Teaching is now typically seen as having low salaries and low status. As a result, the more academically able individuals tend to opt for careers outside of the profession. Rosenholtz and Smylie (1984) state that, "Efforts to attract the brightest applicants, then, should focus on raising both the base pay for teachers and the social status of teaching."

The most recent Commission (1986) meeting on <u>A Nation at Risk</u> discusses the issue of needed improvements in education. Career ladder teacher incentive programs were a major part of the meeting agenda, and were discussed as one of the most promising avenues in effecting needed reform in education. This comprehensive and "systems approach" seems to be a viable solution if properly done. Career ladder systems generally involve a comprehensive type of teacher incentive plan. The literature is replete with descriptions of various models which are being implemented in several states to determine if



well-documented professional problems can satisfactorily be solved (Teacher Incentives, 1984).

Legislation resulted in the implementation of the Arizona Career Ladder Research & Evaluation Project, which was created to conduct research on the five year pilot project and to evaluate the relative successes of each district's program. Researchers from Northern Arizona University (NAU) in cooperation with those from the University of Arizona and Arizona State University, are currently in the process of collecting a combination of qualitative and quantitative data. The data are being secured through a variety of observation and measurement procedures including, surveys, district self-reports, a student achievement index, school records, direct observation and personal interviews. Based on the data collected and recommendations made through the research and evaluation project, the Joint Legislative Committee on Career Ladders will make decisions concerning statewide implementation of the revised model in 1989-90.

The Arizona Model

Arizona appears to be providing leadership in career ladders for the nation. The State has developed a pilot career ladder program which has some unique features not evident in other plans. Those include, (1) collaboration among government, business, universities, school districts and the teaching profession, (2) model features, including individually developed district teacher performance evaluation systems, and totally restructured salary schedules (not simply merit bonuses), and (3) a five year pilot research and evaluation project to develop a workable and relevant model for legislative approval.

The Collaborative Nature. It's important for a wide range of organizations, interests and concems to have an opportunity for significant input and "ownership." One major reason why Arizona is seen as having great potential for success is that the "stakeholders" have been reasonably unified in development of the plans.

Without total involvement of concerned parties, progress is strained and success is very difficult. This type of environment can even produce an adversarial relationship between parties who need to be working together. But when groups and organizations like state universities, the executive and legislative branches of government, the business community, the teaching profession and school district administrators and teachers team up to develop programs, possibilities of success are most positive and chances for significant change, improvement and reform in education are most probable.

in Arizona, the three universities, the professional organizations, the governor's office, both houses



of the legislature and nine school districts, with over 5000 teachers, are immersed in the business of educational reform. This doesn't mean that communication problems haven't emerged, but results have been suprisingly positive once the issues have been communication problems haven't emerged, but results have been suprisingly positive once the issues have been communication problems haven't emerged, but results have been suprisingly positive once the issues have been communication problems haven't emerged, but results have been suprisingly positive once the issues have been communication problems haven't emerged, but results have been suprisingly positive once the issues have been communication problems haven't emerged, but results have been groups. It is apparent, successful collaborative structure for policy and system wide change has been effected.

Features of the Arizona Model. Among several specifications, the Arizona legislation established the Joint Legislative Committee on Career Ladders (JLCCL), and Sec. 2. of the bill listed the "Requirem" its for career ladder plans" (S.B. 1336, 1985). It is important to note that districts were allowed to develop plans on a voluntary basis with teacher support. Before pilot district plans could be approved by the JLCCL, each was required to submit evidence of how the following would be accomplished.

- 1. Consultation with district teachers.
- 2. Improvement of student academic achievement.
- Plans for continued professional advancement of teachers based on skills (improved or advanced teaching skills, other skills and/or additional responsibilities).
- 4. Specific criteria established for advancement on each step of the career ladder.
- 5. How additional responsibilities were described and contracts were developed for each level.
- 6. How evaluation procedures for teachers were based on A.R.S., Sec. 15-537, including more than one measure of teacher performance.
- 7. A compensation system based on a "completely restructured salary schedule," and one in which each career level is based on objective performance evaluation.
- 8. Transition from the existing salary schedule to the new compensation plan.
- 9. Implementation of the career ladder program for teachers.
- 10. Periodic review of the career ladder program for teachers.
- 11. How the revision or adaptation system for evaluating principals provides support for the career ladder faculty development program.
- 12. Evidence of teacher support of the school district career ladder plan. (Sec. 2)

In her dissertation, Bierlein (1986, p. 18) has stated, "There are several unique qualities that distinguish Arizona's Pilot Career Ladder Project from all other such programs." She emphasises the concept of <u>restructured salary schedules</u>, which is an added and distinct element being tried. Bierlein reports that:

One key component that makes the Arizona Project different is that it requires a completely restructured salary schedule. As part of a district's program, specific ranges of compensation were established for each career level. In most plans across the nation, identified career teachers are given a "bonus" in addition to their regular salary. In Arizona's career ladder programs, once teachers have been identified for a certain level, they are placed in the range specified for that level.



Years of experience are given no weight under this type of system, only performance as determined by several indicators. This system is commensurate with a business model. (p. 19)

Another feature has to do with the <u>teacher performance evaluation systems</u>. Districts were allowed to volunteer to apply for the pilot research and development project and were able to develop (with a predominance of teacher input) their own classroom performance evaluation processes and criter a. Research plans for the future are to report on analysis and comparisons of some of the divergent instrumentation models, but for the purposes of this paper, final results need a more specific review.

Briefly, it is important to report that there are two divergent types of teacher performance evaluation instruments in the process of being compared. They are being analyzed, based on the difference between measures of teacher perceptions of acceptability and success.

One evaluation type uses a very "objective" approach in that teachers are assessed on 140 specific skill criteria. The other approach requires observation and scripting of teacher performance in 5 or 6 general areas (e.g., instructional planning, classroom management, instructional process, communication, etc.) and the data are more subjectively analyzed. Early results tend to favor the second observation and instrumentation process, but more study is needed before final reporting.

Research Methodology and Results. What makes the pilot career ladder districts different from most public schools in the rest of the country is that Arizona school districts are submitting their programs to a systematic evaluation and recycling for change over a significant period of five years. This research and program evaluation is being directed out of the Center for Excellence in Education (CEE), Research Division, at Northern Arizona University (NAU). In 1989-90, the results will be presented to the State Legislature for decision making purposes (Packard & Bierlein, 1986).

This basic research endeavor is one of a few major efforts in education to get at the truth prior to legislative decision-making. Too often, use of power groups and special interests force decisions, based on opinions and ideology, rather than on basic knowledge developed scientifically and objectively over an adequate period of time. It is a unique facet of the Arizona model that appropriate recommendations for change will be based upon objective research findings.

The pilot districts are accepting this bold challenge for a variety of reasons. Among them are a desire to work with public interests to improve teaching and, thereby, attract, retain, and motivate high quality teachers, and a need to assume greater student academic achievement results.

Evaluation Design -- The CEE (Research Division) evaluation design (a design selected for total



program evaluation over the five year pilot) is an improvement model, therefore, as a result of feedback, districts are responsible for recycling and effecting appropriate improvements or changes. The yearly cycle of data collection, analysis, reporting and feedback begins each spring so that program changes can be asssessed. As a result of scientific research procedures, districts involved are able to use the findings in continuing to review, develop and improve their individual teacher development and incentive plans. The Research Center's trend analysis and profiling will demonstrate the direction of development over the entire project.

Research Methodology -- During May of 1986, over 4225 educators received the <u>Perception Acsessment Scala</u> (Packard, Bierlein, Aleamoni & Helmstadter, 1986) so that baseline data would be available on the perceptions of those involved in the project. Perceptions were collected in the areas of.

(1) general career ladder concepts, (2) staff development and training, (3) teacher evaluation system, (4) peer evaluation, (5) career ladder placement, and (6) organizational climate. The results of the survey have been analyzed and sent to the districts for review and recycling.

From the first assessment, an extensive amount of data are being processed and analyzed. Several doctoral students are developing proposals for dissertations to study the various components of research interests and possibilities. Over the next few years, there is great potential for many more students to add to knowledge from a tremendous range of relevant variables of study within career ladder systems.

The analysis of the first data base is already showing promise for the future development of a career ladder teacher evaluation and development model which works well and has the backing of teachers.

Research Results for 1986. For the purpose of this document, reporting of data results will be limited to the following three areas, (1) career ladder program strengths, (2) career ladder program improvement needs and (3) the relationship between perceptions of career ladder program success and organizational climate.

Data were obtained through the <u>Perception Assessment Scale</u> (Packard, et. al.,1986). It contains two major components, evaluating career ladder programs and organizational climate. Evaluation was accomplished through a Likert type assessment scale. At the end of each of these sections, individuals were asked to respond to strengths and weaknesses on two open ended questions. The following provides results on response to the open ended questions.

Appendix A. Table 1, depicts career program strengths which were categorized into seven (7) distinct



areas of response. The response categories and brief descriptors are listed as follows:

- 1. Evaluation clear competencies and expectations; high standards and goals, qualified evaluators
- 2. Salary represents increased salary opportunities; more money.
- Professionalism allows teachers to excel and to do their best; teachers helping teachers, provides higher level responsibility.
- 4. <u>C. L. Placement</u> provides opportunity for advancement; good structure; fair appeal process, provision for revision; optional plan.
- 5. <u>Aids Instruction</u> retains good teachers; will help remove poor teachers, helps teachers focus on teaching and learning.
- Teacher Input improves communication between teachers and administrators; adequate teacher input into CLP development and revisions.
- 7. <u>Staff Inservice</u> provides good inservice training; administrative support.

<u>Appendix B</u>: <u>Table 2</u>, depicts career <u>program improvement needs</u> which were categorized into seven (7) distinct areas of response. The response categories and brief descriptors are listed as follows:

- 1. <u>Evaluation</u> too many/too few observations; lack of consistency between evaluators; want peer evaluators/teams of evaluators, if not already available.
- 2. Salary not adequate compensation; program needs more financial support.
- 3. <u>C. L. Placement</u> inadequate appeal process; too many changes in plan; improper placement procedures and standards; no incentive for more experienced and educated teachers; no options for part-time teachers.
- 4. Staff Inservice lack of training; not enough support with portfolio development.
- 5. <u>Communication</u> poor communication; poor clarification of expectations and procedures.
- 6. <u>Time</u> too much busy work; too much emphasis on activities outside the classroom (committees); too much time out of the classroom.
- 7. Staff Morale lowered morale among teachers; has created a stressful environment.

Appendix C. Table 3, depicts an analysis of program strengths and improvement needs as perceived by school district personnel. Perceptions are described in percentages, showing the proportional companisons for all characteristics.

From these data the CEE Research Center is already able to formulate a summative evaluation of what pilot programs are being most successful at this point. Also strengths and improvement needs within programs are clearly shown. As a result, a preliminary model may be proposed.

School Climate and Program Success. All districts involved in the career ladder educational reform movement have recognized the importance of school environment, school culture and interpersonal relationships as factors that contribute to learning. The literature also discusses this area in terms of school climate (Halpin, 1966).



The procedures and types of interpersonal communication, the way in which superiors and personnel interact, is central to morale, motivation and performance (Packard, 1984a). Research strongly indicates that business and industry and public organizations (including schools) must recognize people and their contribution to productivity and that worker performance is enhanced when their basic psychological needs are met. For the greatest possible performance a system of trust, respect, praise, etc., must be planned and implemented on a system-wide basis (Packard ,1985b; 1985c).

Packard sites evidence which indicates that the general (and specific) aspects of "organizational climate" and the success of various programs are interrelated. Any change or reform in program components or total organization is clearly tied to perceptions of interpersonal, or environmental relationships.

In the text, <u>Developing Career Ladders in Teaching</u> (1985), it is stated, "In schooling as in ecology, a change in one element of the system affects most of the others. If teachers acquire more status and prestige, more privilege and authority . . . teacher morale and school climate may be affected." Therefore, the research, evaluation, and program improvement cycle involve comparisons of success in the area of communication and climate and how well teachers and administrators are able to accept desired educational change and reform.

Appendix D: Table 4, is a scattergram depicting the relationship between assessment of organizational climate in pilot districts and response to perceived success of career ladder programs. The Pearson Product Moment correlation (r) of .49, is significant at the .0001 level of probability. There is less than 1 chance in 10,000 of this relationship happening by chance. There clearly is a relationship between organizational climate and program success.

SUMMARY

The need for effective policy change and educational reform has resulted in a major national teacher incentive program movement. Career ladder programs are being implemented and tested to assist in alleviating the problems involved in recruitment, retention and motivation of high quality teachers. This, in turn, should result in improved student academic achievement.

Arizona has developed a pilot career ladder program which he some unique features not evident in other plans. Those include, (1) collaboration among government, business, universities, school districts and the teaching profession. (2) model features, including individually developed district teacher



performance evaluation systems, and totally restructured salary schedules (not simply merit bonuses), and (3) a five year pilot research and evaluation project to develop a workable and relevant model for legislative approval.

Baseline research results from over 4,000 teachers, is already showing significant strengths and weaknesses in program components which will allow a <u>workable model</u> to be developed and recommended to the legislature for policy change and educational reform.

For the first time on such a large scale, research results show a high level of significance (p > .0001) between <u>organizational climate</u> assessment and perceptions of program potential for reform and success. Implications are that districts need to take a close look at the "health" of their systems in relationship to interpersonal relationships, communication and organizational climate. These factors definitely have an effect on program success.

One of the major components of legislation was to show the relationship between <u>teacher</u> <u>performance and student academic achievement</u>. While it is too early to report these findings, preliminary results indicate that the research will clearly show a significant relationship between teaching performance levels and student academic achievement.

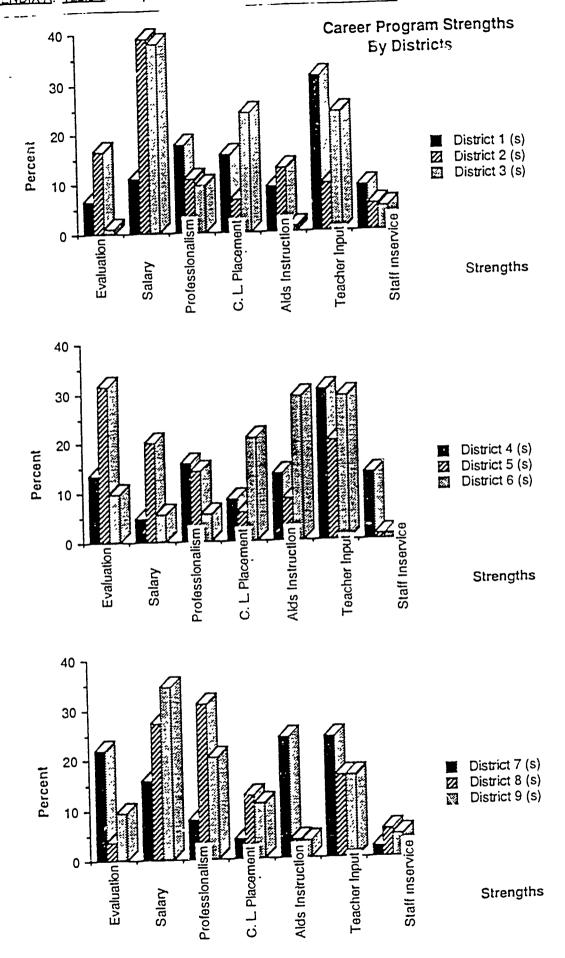
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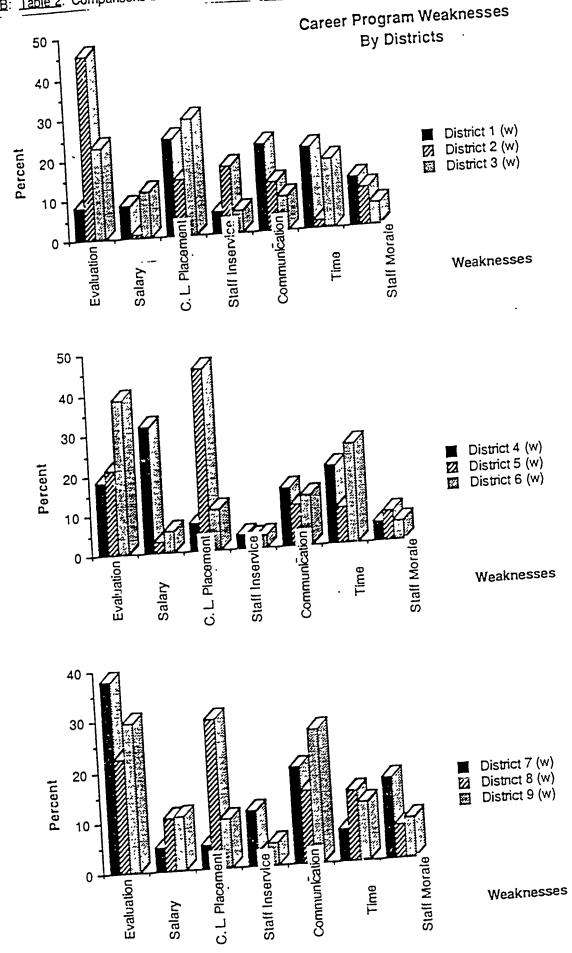


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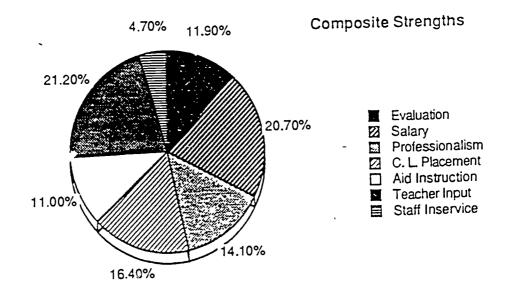


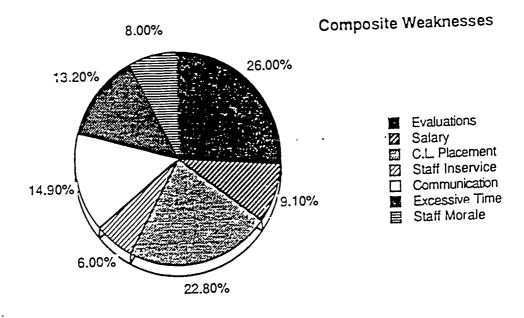














APPENDIX Q: Table 4. Scattergram of the Correlation Between Organizational Climate and Program Success.

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