

RESEARCH SUMMARY**The Role of Incentives in Educational Achievement****Olga Ebert**

Center for Literacy Studies, The University of Tennessee

Email: oleber@utk.edu

Gail Cope

Center for Literacy Studies, The University of Tennessee

Mary Ziegler

Educational Psychology Department, The University of Tennessee

Abstract

The use of incentives in education as a way to improve performance or increase achievement is common across all levels of the educational spectrum. This article examines how a bonus incentive influenced welfare recipients' participation in educational activities and achievement of educational outcomes and discusses important factors to consider in the design and administration of reward, incentive, and bonus programs.

Introduction

Do incentives influence educational outcomes for welfare recipients and other adults who have minimal formal education? For the last four years, the Center for Literacy Studies at The University of Tennessee has conducted research and demonstration projects as a part of Tennessee's welfare reform initiative. Several ongoing projects identify factors that influence the educational achievement of welfare recipients. One factor, incentives for learning, raises multiple issues that can be particularly sensitive when applied to disadvantaged populations. This article examines how incentives influence participation in educational activities and achievement of educational outcomes.

Background

Tennessee legislation enacted in 1996 created a program designed to assist welfare recipients obtain and retain employment and move toward career advancement. In addition to cash grants, the program provides job training, childcare, transportation, assistance to find employment, and transitional benefits for adults who are preparing for work. Those Families First participants who scored below the ninth grade on standardized achievement tests could choose basic skills education for 20 hours a week and not be subject to a time limitation for

benefits. Those who scored above the ninth grade could continue to pursue a General Education Development (GED) credential while working part-time.

The use of incentives in education as a way to improve performance or increase achievement is common across all levels of the educational spectrum. Tennessee welfare reform initiatives recently introduced cash incentives, or the *Completion Bonus*, for reaching education, training, and employment outcomes. Adult education participants become entitled to a cash bonus when they advance a literacy level (levels begin at the second, sixth, and ninth grade of literacy functioning), or pass the GED. The achievement is reported to the state office and eventually a check is mailed to the participant.

Research Methodology

The methodology of the study was primarily quantitative. Chi-square tests and Mann-Whitney U tests were used for statistical comparisons. Structured interviews and focus groups were used to triangulate, expand, and complement statistical findings with the qualitative perspective on the program effectiveness of educators who were involved with its administration. We used Creswell's (1994) guidelines and definitions for a "combined method study."

At this point, little is known about the consequences of using incentives for performance. An earlier study (Ziegler & Ebert, 1999) compared the length of time needed by welfare recipients and voluntary students from 16 Adult Basic Education programs to achieve learning gains and pass the GED test. This study, completed before the initiation of the completion bonus, showed that the former tend to take a longer time than the latter to make progress in adult education. The 1999 study has been replicated in order to determine whether Completion Bonus given by the state welfare office affects the length of time it takes welfare recipients to achieve learning gains and pass the GED test.

Adult education programs that have participated in the 1999 study also shared their data for the bonus-effectiveness study. Two sets of data from these programs representing pre-bonus and post-bonus periods were used for analysis. The following data were collected from participant records: demographics; dates when participants entered adult education programs; dates when they have achieved the sixth and/or the ninth grade level equivalent in reading and math, as measured by a standardized test; and the dates they passed the GED test (if applicable). The data were analyzed using Microsoft Excel and Statistical Package for Social Sciences (SPSS). The data from the post-bonus time period were then compared to the pre-bonus time period to determine if there were any statistical differences in the length of time needed for adult education students to achieve the above-mentioned

learning gains. Additionally, the data were compared to the state administrative data to determine how many of the participants who made learning gains and were eligible for the completion bonus received it.

The qualitative data that the researchers collected increased their understanding of the perceptions that Families First participants and adult education program administrators had of the bonus program and whether they considered the bonus an incentive to improve performance. Four focus groups were conducted with participants. Structured interviews were conducted with program administrators and teachers to clarify findings from the student records and determine their perceptions about the bonus.

Findings

The findings of the study suggest that the initiative has not produced an impact on the rate at which a person learns. Although the bonus may not have proved to be an incentive for people to decrease the amount of time it takes for them to advance a level, it appears to be an incentive for people to stay in the program. The number of program participants who made learning gains increased significantly after the bonus was introduced. From interviews with participants who received a bonus we have learned that, because of the time lapse between the achievement, the notification of the reward, and the reward itself, the participants may not connect their accomplishments and the check they receive. An implication of this investigation may be the importance of selecting appropriate and effective processes for awarding monetary incentives to an adult population who are economically disadvantaged. This is a challenge when multiple public agencies and different layers of bureaucracy have a role in the process.

The issue of intrinsic versus extrinsic motivation has been a hotly debated topic in educational settings. In order to understand more about the ways that incentives influence participation and achievement in adult basic education, the Center for Literacy Studies conducted a review of the literature on motivation and incentives. Researchers who have studied incentive and reward programs report contradictory and inconsistent findings about the role of incentives in developing intrinsic motivation. Cameron and Pierce (1994) examined reward contingencies and found no reason to resist implementing incentive systems. Kohn (1999) claims that people do inferior work when enticed with rewards. Others say that the effectiveness of incentives depends on numerous factors and enumerate specific conditions that must be present for an incentive system to produce desired results.

Broad Implications

Recent research, including that by the Center for Literacy Studies, suggested that important factors to consider in the design and ad-

ministration of reward, incentive, and bonus programs include:

- Building credibility of an incentive program by making it realistic, achievable, and sincere;
- Using positive recognition in conjunction with a monetary incentive (rather than using a monetary incentive alone);
- Demonstrating a clear link between performance outcomes and the bonus;
- Administering rewards that are scaled and weighted based on varying degrees of accomplishment;
- Recognizing individual differences and giving recipients and participants a choice of rewards;
- Recognizing and minimizing bureaucratic organizational practices and processes that frustrate participants and detract from the motivational effectiveness of the reward; and,
- Giving bonuses and rewards as soon as possible after the successful outcome has been achieved.

This research raises interesting questions about how incentives enhance or deter participation, persistence, and performance in adult education: (a) Will the promise of monetary rewards be effective if other variables are not in place, such as high quality instruction? (b) Are adults who have been out of an educational setting for many years be motivated to participate in educational activities when promised an external reward? (c) Does the promise of an incentive influence performance, persistence, or achievement? (d) After adults have successful experiences in an educational setting, does the original promise of an extrinsic reward lessen in importance to the value of the educational experience itself? and, (e) Can external rewards develop intrinsic motivation? These questions about the use of incentives have important implications for the theory and practice of adult education.

References

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