Educational Management: An Application of Research for Educational Outreach Programs

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Abstract

Higher education serves a vital role in the health and stability of our nation-state. As educational outreach programs serve distinct functions within the educational mission of higher education, often addressing identified deficiencies, this paper assesses the state of educational management within outreach programs. To address the structural application of this assessment, this research identifies managerial problems and trends relevant to outreach programs in an effort to identify potential areas of solution. In particular, the analysis utilizes publications, peer reviewed articles, as well as expert information as a means to assess the field of educational management, acknowledge managerial areas of concern, and select prospective sources of solution. The assessment concludes with recommendations for managerial improvement as well as areas for further research and partnership.

Keywords

Educational Outreach Program, Educational Management

Introduction

Complex management environments require the identification and utilization of all available resources in the quest for correction and progression. One such complex environment is that of education delivery. In the face of the complexity of education delivery, the developments of divergent streams of effort are required to meet this deceptively simple aim. Of the numerous streams of effort, education outreach programs seek to address deficiencies, including deficiencies of information, service opportunities, and access. In this discussion, a brief foundation of the importance of public education, with a focus on outreach programs is presented. With this foundation established, the presence of potential managerial problems is identified, as well as potential trends, and prospective sources of solution. Through this discussion, special consideration will be given to seeking a solution that respects the systemic nature of educational delivery as well as the numerous and diverse actors involved in its success.

Importance of Education

The opportunity for education is a necessary human right. As stated by the United Nations Educational, Scientific and Cultural Organization, UNESCO, in regard to the Education For All (EFA) Initiative, "[a]ll young people and adults must be given the opportunity to gain the knowledge and develop the values, attitudes and skills that will enable them to develop their capacities to work, to participate fully in their society, to take control of their own lives and to

continue learning," and further states that, "[a]ll adults have a right to basic education, beginning with literacy, which allows them to engage actively in, and to transform, the world in which they live."[24] In part, education's goal is acquired through the dissemination of the necessary rules required for successful action within society; a vital role illustrated by Johansson, stating that "[a] good education will teach you these rules."[13] As such, the right for an opportunity to education is not simply the responsibility of the individual, but, also must be provided and protected. Further investigation finds that the provision and protection of that right is held by the nation-state within which the individual holds citizenship. As stated by, UNESCO, "[t]he right to education imposes an obligation upon states to ensure that all citizens have opportunities to meet their basic learning needs."[24] Therefore, research has found that the opportunity for education is a basic human right, and that the provision and protection of the right to education is a responsibility held at the highest level within society, the level of nation-state.

Relationship between the U.S. and Education

The responsibility of the nation-state with regard to education has been recognized within the United States of America (U.S.) from its inception to modern day. As illustrated by Ketcham, in a statement to Congress in his first inaugural address draft, the first U.S. President, George Washington states that Congress should utilize their, "best endeavors to improve the education and manners for a people; to accelerate the progress of arts and Sciences; to patronize works of genius; to confer rewards for invention of utility; and to cherish institutions favourable to humanity."[16] The reliance on education was also recognized by another Founding Father, Thomas Jefferson, who stated, "constant attention to the quality of citizenship- grounded in possession of land, education for all, and participation in local government- rested squarely on the need for the people to possess knowledge and virtue if they were to govern well."[15] Furthermore, the value and necessity of education continues to be recognized, as stated by Friedman:

> A stable and democratic society is impossible without a minimum degree of literacy and knowledge on the part of most citizens and without widespread acceptance of some common set of values. Education can contribute to both. In consequence, the gain from the education of a child accrues not only to the child or to his parents but also to other members of the society. The education of my child contributes to your welfare by promoting a stable and democratic society.[7]

The nature of the relationship between education and the U.S. has withstood the rigor of scientific inquiry. As found by Hanushek, "[t]he more educated are more prone to be civically involved, to vote in local and national elections, and to be a better informed and more responsible electorate;" thus, finding that, "[s]ociety as a whole also benefits from education."[11] Milligan et. al. state that, "[i]n addition, our evidence on broader outcomes indicates that education increases citizens' attention to public affairs and to following politics;" consequently, "these results lend support to the notion that education has social externalities through the production of a better polity."[18] Therefore, research finds a, "strong and robust relationship

between education and voting in the United States."[18] As recognized by the U.S. Founders to modern scholars, not only is education a benefit to the individual, but a necessary requirement to the continuation of the United States, as a republic.

The Relationship between the U.S. and Educational Outreach Programs

The United Nations Educational, Scientific and Cultural Organization states, that "[p]rimary education should be free, compulsory and of good quality."[24] The process of reaching this aim within the U.S. has been lengthy and continues. Through this process, efforts to provide education in the U.S. have traversed numerous developments.[9,21] Of the significant educational delivery developments, the formation of educational outreach programs can be found. Furthermore, the accepted importance of education in addressing nation-state concerns can be clearly identified through an assessment of the creation of educational outreach programs and their corresponding legislation. As found by Hexter, "[i]mplicit in the authorizing statutes was the acknowledgment that financial assistance alone would not guarantee access to higher education for disadvantaged youth."[12] As an example, concerning one such educational outreach program, "[t]he set of Special Programs for Students from Disadvantaged Backgrounds-- commonly referred to as the TRIO programs," and "were intended as adjuncts to the substantial financial aid programs created to assist low-income students."[12] Therefore, "[t]he history of TRIO is a fascinating story of unique Federal Government experiments to address the problems of poverty by providing educational opportunities in higher education."[9] Furthermore, to address issues within the society, Gullatt & Jan, state that, "the services provided by pre-collegiate outreach programs aim to counter negative school or community influences (lack of rigorous curriculum, poorly trained teachers, lack of role models) by providing the missing elements that help students aspire to, prepare for, and obtain college enrollment."[10] As found by Hexter, the similarity in aim is reflected through a similarity in educational outreach program sanctioned services:

> Although the individual design varies, the programs generally provide academic counseling, tutoring, and enrichment; information on undergraduate and graduate opportunities and financial aid counseling. The programs' shared rationale is that the cultural and educational deficits of economically disadvantaged youth can be addressed through specific interventions, particularly through the enrichment of academic skills and mentoring, and through access to information that such students typically do not receive from parents or school counselors.[12]

The importance of the role of educational outreach programs in the United States cannot be overstated. Therefore, research suggests that not only can education act as a means by which our society can identify and assesses its deficiencies, but, educational outreach programs have been utilized in the efforts to address such deficiencies within the U.S.; thus, educational outreach programs inhabit the additional and important role to act as explorers for societal correction.

The Aim of Educational Management

As nation-states have necessarily sought to ensure that education is available and provided to all its children, young adults, and continuing learners, the management of this herculean endeavor is of paramount importance. As its prominence has been long recognized, educational management has experienced a long and complex history.[8,23] As found by the United Nations Educational, Scientific and Cultural Organization, the application of this discipline has a complex future as well:

> The education systems of tomorrow, however diversified they may be, will need to be transparent and accountable in how they are governed, managed and financed. The indispensable role of the state in education must be supplemented and supported by bold and comprehensive educational partnerships at all levels of society. Education for All implies the involvement and commitment of all to education.[24]

With this sentiment, educational management has added a subsequent level to its current intricacy. To address this complexity, scholars have investigated methods for successful educational management with respect to numerous management practices.[1,3,5,6,22] As explained by Bush, "[w]hile education can learn from other settings, educational leadership and management has to be centrally concerned with the purpose or aims of education."[4] Thus, although the applications of management techniques are valuable, the importance of educational management illustrates systemic challenges whose solution must be constrained by the aim of educating the U.S. citizenry.

Areas of Concern within Education Management of Educational Outreach Programs

As within the overall educational management environment, management within educational outreach programs is also fraught with challenges and complexities. Issues faced by educational outreach program are similar to other management environments with the addition of those particular to programs within educational delivery. One of the expected issues is that of fiscal pressures. As stated by the Organisation for Economic Co-Operation and Development (OECD), "[t]he expansion of public expenditures in higher education has been associated with demands for enhanced accountability and effectiveness;" as such, these demands have required a more active "managerial approach to the administration of universities and increased pressures for universities to seek revenues beyond those provided by public funding."[19] Of those issues particular to educational outreach programs, academic performance must be held in high regard. As stated by McElroy and Armesto, "[h]igh academic standards are also important facets of education, and a critical aspect of the key issues facing," educational outreach programs including "Upward Bound and other TRIO programs."[17] Further complexity can be found in the organizational structure, in which "crossovers are occurring between academic and management fields of activity, creating mixed roles between the two, including professionals who assist in the contextualisation of institutional activity in complex knowledge environments."[19] This integration can be no more clearly seen than in the requirement for the incorporation of peer-

reviewed research in recent educational outreach program grant competitions. In these grant competitions, including the U.S. Department of Education's TRIO programs, applicants were awarded additional points for the integration, with modification, of peer-reviewed research. The guidance provided by the Department of Education, regarding a the TRIO Student Support Services Program, concerning the two selected Competitive Preference Priorities, in which additional points in the competition were possible, stated, "[t]he Department … may later seek to partner with successful applicants to conduct research and evaluation."[25] Through this guidance, educational outreach programs can see indications of a suggested management focus and trend. Although numerous challenges and complexities can be identified, including fiscal pressures, the importance of academic performance, and the presence of complex organizational structures, these challenges serve as an illustration of the rich and robust environment of educational inquiry and management. In this environment, the issues faced by educational outreach programs require investigation and successful correction as well as necessary integration of academic research as a significant management trend.

The Seven Step Approach to Identifying Educational Outreach Program Solutions: A Procedure for Solution Identification

The areas of concern faced by educational outreach programs can be numerous and daunting in the face of the requirements for program execution. However, the challenging nature and complexity found within the numerous issues faced must not be faced in isolation; instead, a proposal for investigation and potential collaboration across divergent yet related fields is recommended.
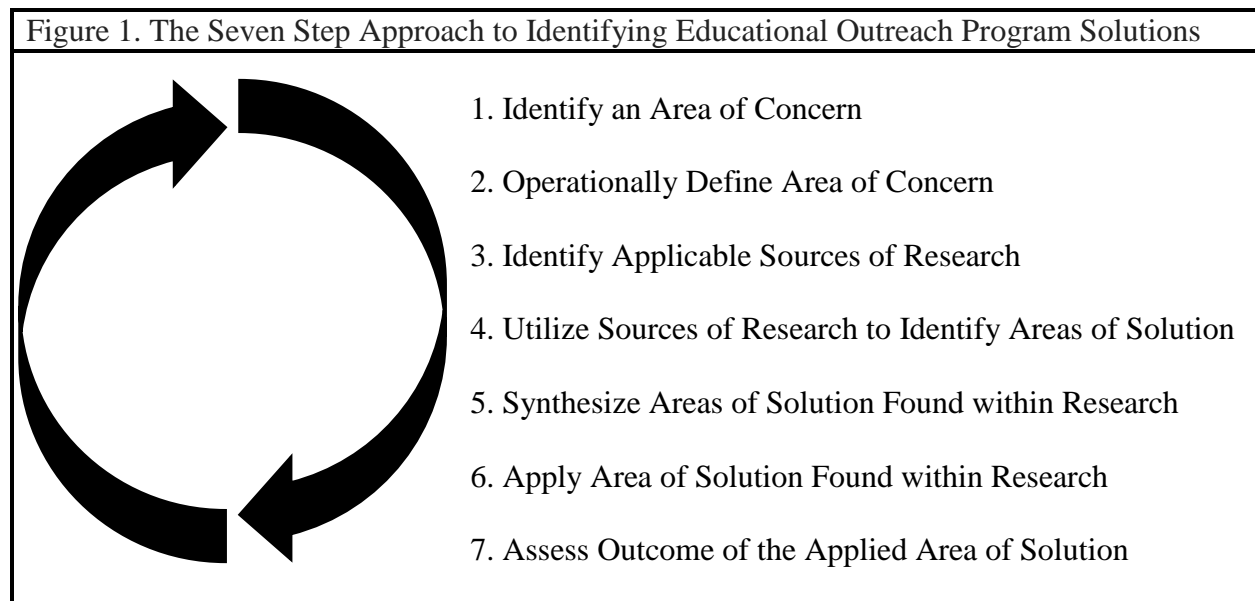
The scholarly and scientific research within the field of educational management provides a fertile environment for investigation. Although this environment is available, the utilization of research when seeking solutions to present areas of concern within educational outreach programs is not immediately utilized. The potential of under-utilization of this resource allows an uncultivated avenue for correction and solution. To this point, the protocol for investigation in a quest for solution is suggested.

With the identification of an area of concern[1] within an educational outreach program, it is suggested that an operational definition of the area of concern be developed. In this process, Ketokivi & Schroeder, referencing the work of Bridgman,[14] indicate, "[o]perational definition

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[1] It should be noted that in the following discussion, the authors have chosen to use the language 'an area of concern,' 'an area of research,' as well as 'an area of solution.' Although cumbersome, it is believed that to direct attention to one single concern, research platform, or solution, would undermine the acknowledgement of the systemic nature of such circumstances, distill complex issues, and narrow the focus of educational outreach personnel to the detriment of the investigation. By ensuring that, at each step of inquiry, educational outreach personnel are reminded to assess 'an area of…,' the potential for successful investigation and application of initiatives is increased.

builds on the premise that the theoretical construct is defined strictly by how it is measured."[14] As such, individuals active in operationally defining critical constructs should focus on the aims by which success or failure can be measured. Once complete, research should be assessed to create a selection of applicable sources; such sources can include document repositories, electronic libraries, or expert resources. With sources of research identified, the developed operational definitions should be utilized to ensure that focus remains on the designated area of concern, and that the scope of the issue is properly addressed. Once collected, research should be synthesized in an effort to identify an area of solution; such synthesis can be produced via individual selection, through group consensus, as the result of one research finding, or the combination of findings. Once the area of solution is applied to the area of concern, the outcome of the applied solution must be assessed for accuracy and efficiency. Although the process can be described in a linear manner, it should be noted that this process is cyclic; thus, allowing the remedy of one area of concern to lead to the next producing a continual process of identification, inquiry, and improvement. The cyclic nature of the proposed process is illustrated in Figure 1.

Figure 1. The Seven Step Approach to Identifying Educational Outreach Program Solutions

1. Identify an Area of Concern

2. Operationally Define Area of Concern

3. Identify Applicable Sources of Research

4. Utilize Sources of Research to Identify Areas of Solution

5. Synthesize Areas of Solution Found within Research

6. Apply Area of Solution Found within Research

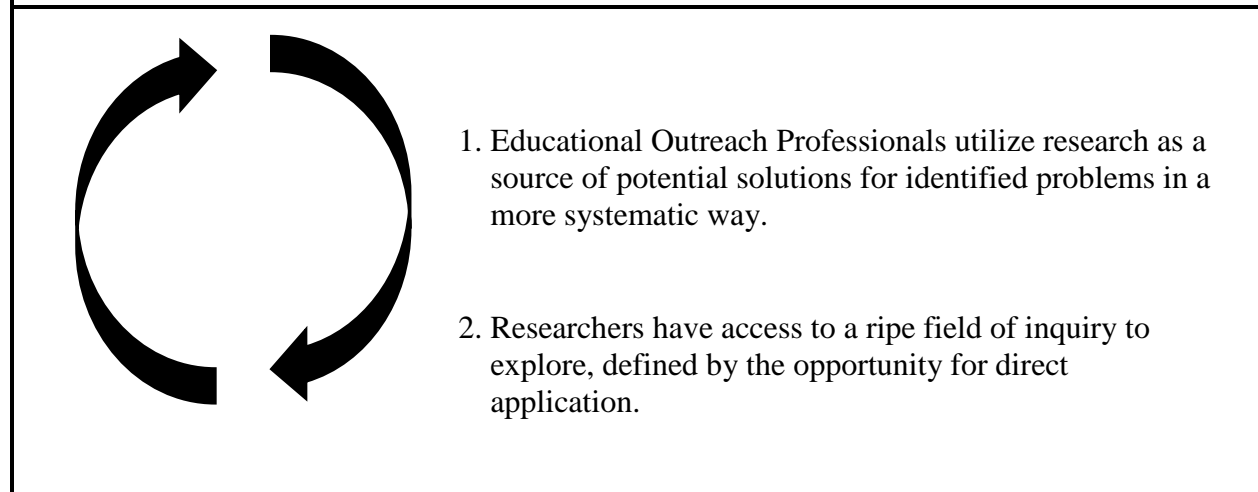7. Assess Outcome of the Applied Area of Solution

Though each step within the process for solution identification is significant, the final step which focuses on ensuring an assessment of the outcome is vital. As found by Poole et. al., "once analyzed, the results should be systematically addressed and incorporated into future … design."[20] As this step has the potential to be easily omitted, Poole et. al., warns that, "[w]ithout this final step, the time and resources invested in obtaining assessment data are wasted and the assessment initiative will be futile."[20]

Lastly, in the face of the complex issues faced by numerous educational outreach programs, educational outreach program professionals are often left with an impression of

isolation when addressing such issues. Through the utilization of the Seven Step Approach to Identifying Educational Outreach Program Solutions, educational outreach program professionals are provided an unconcealed and available resource. Through the increased utilization of this systematic procedure, the potential for collaborative relationships between educational outreach professionals and researchers across numerous fields increases allowing vital and responsive information to be provided to both parties. Thus, the procedure's consequence allows the researcher to be informed of a needed area of inquiry while allowing the educational outreach program professional access to information and experimentation that might otherwise be impossible. The cyclic nature of the potential consequence of the Seven Step Approach to Identifying Educational Outreach Program Solutions is illustrated in Figure 2.

Figure 2. Potential Dynamic Produced by the Seven Step Approach to Identifying Educational Outreach Program Solutions

1. Educational Outreach Professionals utilize research as a source of potential solutions for identified problems in a more systematic way.

2. Researchers have access to a ripe field of inquiry to explore, defined by the opportunity for direct application.

Area for Further Research

Although collaborations between practitioners and researchers have occurred, the U.S. Department of Education's utilization of modified peer- reviewed research in several of its grants programs indicates renewed interest in integrating peer-reviewed research into the daily activities of educational outreach programs. As this integration becomes more commonplace, several fields of further research will have an opportunity for examination. In such inquiries, research will have the occasion to examine the best ways in which collaborative relationships should be organized and the methods by which this organization can achieve the greatest level of effective communication. In addition to the organizational and communicative aspect of research, the widespread use of research in the actualization of educational outreach programs holds numerous opportunities for the investigation of their application in variable situations; thus, allowing the researcher greater insight into the circumstances or variables affecting outcomes. Such information would allow educational outreach professionals the added benefit of tailoring methods of solution to the particular characteristics of the found situation with greater confidence. Through investigations of several related areas, the integration of educational

outreach program efforts with the guidance of current investigative findings provide a wealth of opportunity for further research.

Conclusion

As clearly iterated by the United Nations Educational, Scientific and Cultural Organization, "Education for All is a basic human right at the heart of development", and this vital development, "must be a national and international priority."[24] Although present at all levels, "[t]he heart of EFA [Education For All] activity lies at the country level."[24] The importance of education and its role within the United States, as well as the role of educational outreach programs is critical. The aim of educational management as well as some of the managerial concerns within educational outreach programs is just as critical. The cyclic procedure for addressing areas of concern within educational outreach programs provides a systemic procedure with the compounded benefit of acting as an asset to researchers in associated fields. Through the integration of peer-reviewed research, as a tool for management and solution exploration, identification of prospective sources of solution is increased. In an environment of ever growing fiscal constraints, academic deficiencies, and organizational complexity, educational outreach programs should access any and all available resources. The foundation for the proposed process is clearly stated by Barker:

> The idea is to increase the understanding of one another's problems. The hope is that perhaps several weeks or several months later, the person who knows of a problem outside his field will come across a piece of data or a new idea for a tool. They will remember the other person's problem and tell him about his possible new solution.[2]

Thus, the supposition is held that, "[i]nvolving people and experts together in improving the whole is the way to solve great handfuls of problems as they arise."[26] As such, the Seven Step Approach to Identifying Educational Outreach Program Solutions has been proposed as an educational management tool for improved solution identification.

References

1   Cuban, L. (1988). The Managerial Imperative and the Practice of Leadership in Schools. Albany, N.Y.: University of New York Press.
2   Barker, J. A. (1993). Paradigms: The Business of Discovering the Future. New York: Harper Business.
3   Becket, N., & Brookes, M. (2008). "Quality Management Practice in Higher Education – What Quality Are We Actually Enhancing?." Journal of Hospitality, Leisure, Sport and Tourism Education, 7(1), 40-54.
4   Bush, T. (2007). "Educational Leadership and Management: Theory, Policy and Practice." South African Journal of Education, 27(3). 391-406.
5   Drury, D. W. (1999). Reinventing School-Based Management: A School Board Guide to School-Based Improvement. Alexandria, V.A.: National School Boards Association.

6   Elmore, R. F. (2000). Building a New Structure for School Leadership. Washington, D. C.: Albert Shanker Institute.

7   Friedman, M. (1982). Capitalism and Freedom. Chicago: University of Chicago Press.

8   Grace, G. (1995). School Leadership: Beyond Education Management An Essay in Policy Scholarship. Washington D. C.: Falmer Press.

9   Groutt, J. (2003). "Milestones of TRIO History, Part I. Opportunity Outlook: The Journal of the Council for Opportunity in Education." 1-9.

10   Gullatt, Y., & Jan, W. (2003). "How Do Pre-Collegiate Academic Outreach Programs Impact College-Going Among Underrepresented Students." Pathways to College Network Clearinghouse. i-27.

11   Hanushek, E. A. (2002). Publicly Provided Education. In A.J. Auerbach & M. Feldstein (Eds.), Handbook of Public Economics, 4, (pp. 2045-2141). New York : Elsevier Science.

12   Hexter, H. (1990). A Description of Federal Information and Outreach Programs and Selected State, Institutional and Community Models. Washington D. C.: Advisory Committee on Student Financial Assistance.

13   Johansson, F. (2006). The Medici Effect: What Elephants & Epidemics Can Teach Us About Innovation. Boston, M.A.: Harvard Business School Press.

14   Ketokivi, M. A., & Schroeder, R. G. (2004). "Perceptual Measures of Performance: Fact or Fiction?." Journal of Operations Management, 22(3), 247-264.

15   Ketcham, R. (1987). "Executive Leadership, Citizenship and Good Government." Presidential Studies Quarterly, 17(2), 267-279.

16   Ketcham, R. (1984). Presidents Above Party: The First American Presidency, 1789-1829. Williamsburg, VA: University of North Carolina Press.

17   McElroy, E. J., & Armesto, M. (1998). "TRIO and Upward Bound: History, Programs, and Issues-Past, Present, and Future." Journal of Negro Education, 373-380.

18   Milligan, K., Morettib, E., & Oreopoulos, P. (2004). "Does Education Improve Citizenship? Evidence from the United States and the United Kingdom." Journal of Public Economics, 88, 1667-1695.

19   Organisation for Economic Co-Operation and Development (2007). "Higher Education Management and Policy." Journal of the Programme on Institutional Management in Higher Education. 19(2). 1-155.

20   Poole, S. J. DeGrazia, J. L., & Sullivan, J. F. (2001). "Assessing K-12 Pre-Engineering Outreach Programs." Journal of Engineering Education, 90(1), 43-48.

21   Reese, W. J. (2001). "The Origins of Progressive Education." History of Education Quarterly, 41(1), 1-24.

22   Salih, T. (2008). "Total Quality Management in Education." Zanco Journal, 36, 1-17.

23   Tyack, D. (1974). The One Best System: A History of American Urban Education. Cambridge, MA: Harvard University Press.

24   United Nations Educational, Scientific and Cultural Organization (2000). World Education Forum in Dakar, Senegal, 26-28 April 2000. Paris, France: Author.

25   United States Department of Education (2014). FY 2015 Application For Grants Under the Student Support Services Program. Washington D. C.: Author.

26   Weisbord, M. R. (2012). Productive Workplaces: Dignity, Meaning, and Community in the 21st Century (3rd ed.). San Francisco, C.A.: Jossey-Bass.

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