

# A PRACTICAL GUIDE TO TEACHER EDUCATION EVALUATION

*edited by*

*Jerry B. Ayers*

*Mary F. Berney*

*Kluwer Academic Publishers*

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# **A Practical Guide to Teacher Education Evaluation**

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# **A Practical Guide to Teacher Education Evaluation**

**Contents**

Contributing Authors	ix
Acknowledgments	xiii
<b>1</b> <b>Introduction</b> J. T. Sandefur	 1
<b>2</b> <b>Background for Teacher Education Program Evaluation</b> Jerry B. Ayers and Mary F. Berney	 3
<b>3</b> <b>The Accreditation Plus Model</b> Jerry B. Ayers, William J. Gephart, and Paul A. Clark	 13
<b>4</b> <b>Selection and Evaluation of Knowledge Bases for Teacher Education Programs</b> Roger S. Pankratz	 23
<b>5</b> <b>Quality Controls in Teacher Education Programs</b> William E. Loadman	 43
<b>6</b> <b>Testing for Admissions</b> Lawrence Rudner	 49

<b>7</b>	<b>Evaluating Field-Based Experiences in Teacher Education</b>	<b>69</b>
	Nancy L. Zimpher	
<b>8</b>	<b>Assessing Student Performance Outcomes in Teacher Education Programs</b>	<b>85</b>
	Joyce R. McLarty	
<b>9</b>	<b>Assessment of Faculty in Teacher Education Programs</b>	<b>103</b>
	John A. Centra	
<b>10</b>	<b>Use of Mail Surveys to Collect Information for Program Improvement</b>	<b>117</b>
	Jerry B. Ayers	
<b>11</b>	<b>Follow-Up Evaluation of Teacher Education Programs</b>	<b>131</b>
	James R. Craig	
<b>12</b>	<b>Evaluating the Structure of the Education Unit</b>	<b>151</b>
	Edell M. Hearn	
<b>13</b>	<b>Physical Facilities Evaluation in Teacher Education Programs</b>	<b>169</b>
	Mary F. Berney	
<b>14</b>	<b>Evaluating Financial Resources for Teacher Education Programs</b>	<b>177</b>
	Robert L. Saunders	

<b>15</b>	
<b>Evaluation of Library Resources for a Teacher Education Program</b>	<b>195</b>
Edward D. Garten	
<b>16</b>	
<b>Models and Modeling for Teacher Education Evaluation</b>	<b>211</b>
Mary F. Berney and William J. Gephart	
<b>17</b>	
<b>Implementation of Evaluation Results</b>	<b>219</b>
William L. Rutherford	
<b>18</b>	
<b>Elements of Law as They Relate to Teacher Education Evaluation</b>	<b>237</b>
Joan L. Curcio	
<b>19</b>	
<b>We Can Get There from Here</b>	<b>251</b>
Mary F. Berney and Jerry B. Ayers	
<b>Appendix</b>	<b>255</b>
<b>Author Index</b>	<b>259</b>
<b>Subject Index</b>	<b>263</b>
<b>NCATE Standards Index</b>	<b>269</b>

## INTRODUCTION

**J. T. Sandefur**  
**Western Kentucky University**

Americans' ability to compete in world markets is eroding. The productivity growth of our competitors outdistances our own. The capacity of our economy to provide a high standard of living for all our people is increasingly in doubt. As jobs requiring little skill are automated or go offshore and demand increases for the highly skilled, the pool of educated and skilled people grows smaller and the backwater of the unemployable rises. Large numbers of American children are in limbo--ignorant of the past and unprepared for the future. Many are dropping out--not just out of school--but out of productive society.

These are not my words. They are a direct quote from the Executive Summary of the Carnegie Forum Report on Education and the Economy entitled **A Nation Prepared: Teachers for the 21st Century** (p. 2, 1986). This report was motivated by four purposes:

1. To remind Americans, yet again, of the economic challenges pressing us on all sides;
2. To assert the primacy of education as the foundation of economic growth, equal opportunity and a shared national vision;
3. To reaffirm that the teaching profession is the best hope for establishing new standards of excellence as the hallmark of American education; and
4. To point out that a remarkable window of opportunity lies before us in the next decade to reform education, an opportunity that may not present itself again until well into the next century.

Although the Carnegie Report was published in 1986, 1984 may well be remembered as the year of the "Reports on Education" and the year that initiated

what some are now beginning to call the educational reformation. Following years of increasing public concern about the quality of education of America's youth, the nation was galvanized to action by a series of reports, chief of which was the report entitled **A Nation at Risk: The Imperative for Educational Reform** (1983). That report confirmed the public's conviction that education was in desperate need of reform. The report, which was brief, succinct, and well written, made effective use of emotion-laden words and phrases. For example, the title, "A Nation At Risk." brought even the most complacent to attention. Repeated reference to "the rising tide of mediocrity" and the statement, "If an unfriendly foreign power had attempted to impose on America the mediocre educational performance that exists today, we might well have viewed it as an act of war" (p. 5) brought the public's concern to a fervent pitch. As a result, the report is seen to be the capstone of an educational reform movement and the impetus for states to legislate and mandate all sorts of educational reforms. The result in many states was legislation to test both students and teachers, to increase the length of the school day, to cut out frills and to stress basic skills, to develop career ladders for teachers, to limit athletics, to develop beginning teacher programs, and to initiate or implement dozens of other reforms.

As a result of the emphasis on evaluation by both accreditation agencies and the so-called reform movement, universities preparing teachers have eagerly sought assistance in developing and implementing evaluation programs of their graduates. For years much of that assistance has come from Tennessee Technological University under the able leadership of Dr. Jerry B. Ayers and his staff. The leadership continues with the publication of the book, **A Practical Guide to Teacher Education Evaluation**.

The content of the book is highly appropriate to the needs of universities. For example, the knowledge base of teacher education is a primary concern of institutions preparing teachers. Personnel want to know how it is identified, explicated and implemented. Other primary concerns of teacher education covered include evaluation issues of admissions, field experiences, student performance outcomes, surveys, follow-up programs, faculty and structure of the governance unit. These and other significant topics have been covered by recognized experts in teacher education evaluation.

There can be no doubt but that the book will be warmly received by the teacher education community. The editors and authors should be commended for their contribution to the improvement of teacher education.

## REFERENCES

- Carnegie Forum on Education and the Economy. (1986). **A nation prepared: Teachers for the 21st Century**. New York: Author.
- National Commission of Excellence in Education. (1983). **A nation at risk: The imperative for educational reform**. Washington, DC: U. S. Government Printing Office.



## **BACKGROUND FOR TEACHER EDUCATION PROGRAM EVALUATION**

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The need for improved evaluation of teacher education programs has been well documented over the past two decades. In the past five years, most states have mandated substantial reforms in teacher education programs. These reforms have included:

- o strengthening the general (liberal arts) education for prospective teachers,
- o developing of five year programs leading to initial licensure,
- o developing alternative routes to licensure for liberal arts graduates, and
- o developing and implementing total field base programs operated within a school district.

Recent work by the Southern Regional Education Board indicated that too little program evaluation was implemented to show if these changes in teacher preparation were really making a difference (SREB, 1988). States such as Florida, Virginia, Oklahoma, Louisiana, West Virginia, and Georgia are examining ways to evaluate teacher education. However, there is a dearth of practical methods to accomplish the needed evaluations in a systematic and ongoing manner.

Daughdrill (1988) recently pointed out that assessment and evaluation are doing more for higher education than any other development in recent history. The Carnegie Foundation (1982) emphasized a need for institutions of higher education to "reaffirm and strengthen self regulation." Other national commissions and scholars echoed this stance. Evaluation is a key to the reform process. This book is designed to meet the evaluation needs of institutions of higher education relative to improving programs and the needs of society for mandated accountability.