

## **When Reflection Becomes Routine: The Illusion of Reflection in Teacher Preparation**

The term *reflective educator* has become a slogan “around which teacher educators all over the world have rallied in the name of teacher education reform.”<sup>1</sup>

Over the past fifteen years there has been a tide of reform in American teacher preparation based on making *reflection* or *reflective teaching* central to preservice programs. There have been similar waves throughout Europe, Canada, and Australia.<sup>2</sup> While reflective teacher education holds great potential, the problem is that many educators and programs that advocate reflection do so only in general. They say little about what should be reflected upon or what criteria might be used to evaluate the quality of reflection.<sup>3</sup> The metaphor of reflection has become an umbrella like slogan that is co-opted to endorse anything from “technical effectiveness” to teaching as a social and “moral responsibility.”<sup>4</sup>

Recent studies of teacher preparation programs reveal that the most predominant types of reflective programs *claim* to nurture reflectivity in the Deweyan tradition, but in fact borrow little from Professor Dewey. They “restrict the focus” of reflection and so reduce it to a tool for selection or interpretation of means alone.<sup>5</sup> In separate studies of reflection in teacher education, both Kenneth Zeichner and Jesse Goodman found that the majority of these programs nurtured only the ability to reflect about “which techniques seemed best.”<sup>6</sup>

In these programs, education students were encouraged to reflect about “how to” (the means) do something the best way, but were not asked to apply reflective thought to question the “why” (the ends) of anything. These preservice teachers were excluded “from the process of defining the ends of teaching--the ethical and moral realms of teaching from the teacher's purview.”<sup>7</sup> It was assumed that the ends should be as they are, and so the status quo is implicitly accepted. There was little illumination on, let alone examination of, the relationship between

classroom methodologies (means) and their respective philosophical underpinnings (ends). These programs co-opt the lofty rhetoric of “reflection” and utilize it to bolster the same dominant “technocratic rationality” and teacher subservience that has long dominated American teacher preparation.<sup>8</sup>

The seminal thought of John Dewey and Max van Manen can help clarify the murky and illusion-filled waters of reflection. Both help distinguish “critical reflection” as significantly different from the “routine thought” that is central to the predominant means-centered, technocratic education that has too long dominated the work of teachers, the life of schools, and the curricular focus of teacher preparation programs. It is this “critical reflection” which is essential for teachers as intellectually independent participants in the schools of today and critically-aware change agents helping to form the schools of tomorrow.

### **The Better Way of Thinking**

For John Dewey there are many ways of thinking, but “the better way of thinking . . . is called reflective thinking.”<sup>9</sup> Reflective thinking consists of “turning a subject over in the mind and giving it serious and consecutive consideration.”<sup>10</sup> It is an “excursion from the actual into the possible.”<sup>11</sup> Reflective thought or “reflective action” has particular qualities that set it apart from all other thought and action. It is “active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends.”<sup>12</sup> The Deweyan contraposition to “reflective action” is routine thought or “routine action.” Routine thought or action is that which is “guided by habit, external authority, and circumstance.”<sup>13</sup> For Dewey, routine thought fosters enslavement.<sup>14</sup> In technocratic teacher preparation programs teachers are trusted to reflect only on the *how to* or means of their teaching. They are schooled to follow the authority of curriculum guides, official texts, and administrators for the *what* and never question the *why*. By Dewey's definition these teachers are trained to think and act routinely or unreflectively--to rely on tradition and authority.

For Dewey, reflective thinking is “distinctively intellectual” and is the better way of thinking because it “emancipates us from merely impulsive and merely routine activity.”<sup>15</sup> Only reflective thinking enables us to direct our activities with “foresight” and to “plan according to ends-in-view, or purposes of which we are aware.” Only with it can we act in a truly “deliberate and intentional fashion.” For Dewey, reflection alone enables us to “know what we are about.”<sup>16</sup> This is the type of thought and action Dewey insists educators in a participatory democracy must possess and utilize.

### **Dewey's Qualities of a Reflective Thinker**

Reflective thinking does not just happen. Something must evoke it. Further, an experience that is perplexing is not the only ingredient necessary for reflection. The person experiencing the “forked-road” is the key. Even if one is “evoked” in such a way, he or she may think, but if the person is not “sufficiently critical” about the ideas that occur to him or her, he or she may not think reflectively.<sup>17</sup>

Combining Dewey's process of reflection with his focus on the quality of being “sufficiently critical,” one might then characterize Dewey's concept of reflectivity as *critical reflectivity*. One who is not *critically* reflective, Dewey says, is likely to “jump at a conclusion without weighing the grounds on which it rests; he [she] may take the first 'answer,' or solution that comes to him [her] because of ... impatience to get something settled.”<sup>18</sup> For Dewey, one can think reflectively only when one is “willing to endure suspense and undergo the trouble of searching.” Dewey believes that for many people “both suspense of judgment and intellectual search are disagreeable.” To be a *critically* reflective thinker one must be willing and able “to sustain and protract the state of doubt which is the stimulus to thorough inquiry, so as not to accept an idea or make positive assertion of a belief until justifying reasons have been found.”<sup>19</sup> For Dewey, one's character or attitudes (which are for him not inborn, but are developed) are the essential feature of a truly reflective person.<sup>20</sup> The prerequisite attitudes that should be cultivated are open-mindedness, whole-heartedness, and responsibility.

Open-mindedness is defined by Dewey as “a freedom from prejudice, partisanship, and such other habits as close the mind and make it unwilling to consider new problems and . . . ideas.” It is not, however, “empty-mindedness.” It is, Dewey says, “hospitality” to new facts, ideas, and questions. But it is not the kind of hospitality indicated by a sign that reads, “Come right in; there is nobody at home.”<sup>21</sup> Rather it is an “active desire to listen to more sides than one; to give heed to facts from whatever source they come; to give full attention to alternative possibilities; to recognize the possibility of error even in the beliefs that are dearest to us.”<sup>22</sup>

Dewey says that rather than being critically reflective, we humans routinely keep our eyes and ears shut to prevent ourselves from making a new observation that might challenge a long-held belief.<sup>23</sup> Rather than open-mindedness, “mental closure” tends to be our more common attitudinal state. “The cumulative effect of these forces is to shut in the mind, and to create a withdrawal from new intellectual contacts that are needed for learning.” Yet we do not have to exist this way. For Dewey, “mental closure” can be fought by “cultivating that alert curiosity and spontaneous outreaching for the new which is the essence of the open mind.”<sup>24</sup> In considering this attribute, Goodman furthers Dewey's thought by adding that teachers who are open-minded “examine the rationales that underlie what they may take for granted as right and natural in the schools.”<sup>25</sup> These teachers “realize that the traditional perceptions of education may or may not be valid, and they are willing to question their own views of and reactions to the school culture.”<sup>26</sup> Without this critical or questioning orientation that allows one to perceive the forked road, *critical* reflection cannot take place.

Dewey's second prerequisite attitude necessary for reflection is responsibility. Responsibility, like the first two necessary attitudes, is usually considered a moral trait rather than an intellectual one. But for Dewey, “to be intellectually responsible is to consider the consequences of a projected step, . . . [and to] be willing to adopt these consequences when they follow reasonably from any position already taken.”<sup>27</sup> Intellectually responsible teachers are not only open to ideas and willing to scrutinize those they hold dear, but desire to analyze and evaluate ideas through considering consequences and implications in the short-term and long-

term.<sup>28</sup> Responsible teachers ask why they are doing what they are doing in classrooms. And this is a question that goes beyond immediate practicality. Reflectively responsible teachers constantly consider the educational, psychological, and larger social contexts and implications of classroom life. They hold themselves responsible not only for their students' education, but also implications for society as a whole.<sup>29</sup>

The final attitude (although not hierarchical for Dewey) is whole-heartedness. Whole-heartedness, for Dewey, is “a genuine enthusiasm . . . that operates as an intellectual force” and gives onward impetus to thinking.<sup>30</sup> Goodman notes that Dewey's whole-heartedness refers to a person's internal strength and conviction to be a reflective educator no matter what the personal cost.<sup>31</sup> While many teachers fear the real world consequences of disturbing tradition, making changes, and being “different,” people with whole-heartedness have the courage to overcome this fear or insecurity. This passion and level of conviction and care enables them to follow through with action based on their analysis and evaluation of curricula, schools, education overall, society, and even themselves.<sup>32</sup>

### **Max van Manen's Levels of Reflection**

While the thought of John Dewey is of immense help in clarifying the process and procedure of reflective thinking, as well as characterizing the attitudes necessary for critically reflective individuals, Max van Manen's levels of reflection are crucial for focusing on the object(s) of reflection as a way to clarify the concept of critical reflection.<sup>33</sup> In his three-tiered system, van Manen helps clarify what one means by the term *reflectivity* as he specifies particulars of the activity at each level.

“Technical” reflection is concerned with “means rather than ends.”<sup>34</sup> At this level teachers reflect on the “best choice” of technique or what works to reach given or assumed ends.<sup>35</sup> In technical reflection, “the concern is with efficiency and effectiveness of the means used to attain ends, which themselves remain unexamined.”<sup>36</sup>

In practical reflection the focus is on analyzing the educational rationales for or assumptions of certain practices as well as assessing their implications or consequences. In practical reflection the task is one of “explicating and clarifying the assumptions and predispositions underlying teaching activity and in assessing the adequacy of the educational goals toward which the activity leads.”<sup>37</sup> For van Manen, this process of deliberating on the “worth” of an “educational goal” depends on a “still higher level of reflective rationality.”<sup>38</sup>

In critical reflection, “politico-ethical” concerns enter into the educational discourse. Principles such as “justice, equality, and freedom” are used as criteria in the examination of the worth of educational goals or practice.<sup>39</sup> Teachers then must examine their daily classroom life in light of broader social conditions, forces, and structures as well as the ethical and moral implications of what they do or do not do. “Critical reflection incorporates moral and ethical criteria into discourse about practical action. Here the major concern is with whether educational goals, activities, and experiences lead toward forms of life characterized by justice, equity, caring, and compassion.”<sup>40</sup>

The technical level of van Manen's schema is inconsistent with Dewey's conception of reflection. It instead coincides with “routine action” and the concept of technical rationality explored earlier. Unfortunately the technical level best represents the type of “reflection” being nurtured in traditional teacher preparation programs as well as the proliferating numbers of “reflective practitioner” programs that have come into being over the past fifteen years.<sup>41</sup> Van Manen's level two and especially level three fit well with Dewey's “reflective action” and Dewey's three attitudes. Each involves “bringing to the foreground what is often assumed as background” and questioning what has too long been uncritically assumed.<sup>42</sup> Together, van Manen's levels two and especially three, Dewey's “reflective action,” and his prerequisite attitudes paint a vivid picture of a reflective practitioner that one might better label a *critically reflective* educator.

### **Toward Critically Reflective Teacher Preparation**

Critically reflective teachers are keenly aware that “their everyday reality is only one of many possible alternatives” and that they must carefully analyze “the purposes and ends toward which they are working.”<sup>43</sup> Further, they actively reflect upon their teaching in light of “the educational, social, and political contexts in which their teaching is embedded.”<sup>44</sup> They question assumptions, examine multiple perspectives, and consider the ethical and moral implications of all that they do.<sup>45</sup>

It is not so much the status quo . . . whatever it is at any given time--rather it is “mindless adherence” to it, tacit acceptance of whatever is . . . as what ought to be. . . . Without such critical powers, teachers are mindlessly enslaved to adhere to the status quo. Warranted innovation and change is precluded.<sup>46</sup>

Unless a teacher can reflect on all one does in light of existing social conditions and the ends or purposes toward which one implicitly or explicitly works, one has not truly reflected. Unless one is sufficiently critical, she or he will not see the forked road and no real reflection will occur. “To be an active participant in school renewal requires a critical consciousness of the need for change. Complacency and comfort with the way things are represent major obstacles to improvement.”<sup>47</sup>

Williams, Ellis, and others assert that it is the philosophy of education specifically and the social and humanistic foundations in general which bring the questioning, critical orientation into the education of teachers.<sup>48</sup> The foundations lead one to “think critically and question the realities that others take for granted.”<sup>49</sup> Teachers and their students are “agents present in history, not merely carried by it” and so must acquire the “critical knowledge” necessary to take an intelligently active role.<sup>50</sup> The foundations offer a base for “critical knowledge” and can help teachers examine the “ends” toward which “means” lead. Through the humanistic and social foundations, theory and practice can be utilized together to see that “methodology is in the

service of ends and not an end itself.” Through the language or lens of foundations, preservice teachers are empowered to ask, “Methods for what, for what end?”<sup>51</sup>

### **My Study**

Through a series of interviews I set out to gain some insight into whether or not the social and humanistic foundations in one’s preparation program does have an impact on one’s level of reflectivity as a practicing professional. I chose graduates from two essentially similar liberal arts colleges with teacher preparation programs. The institutions were very similar in size, selectivity, student body composition, mission and purpose, and even location. Their teacher preparation programs, however, were quite distinct. The first institution’s preparation program was a wonderful example of what is most typical in teacher preparation nationwide. It was a program with methods courses and practica experiences at its heart. There was one foundations (social and humanistic) course required. This was an introductory survey course. I’ll refer to this college as “Methods College” or “MC” in future references. The second institution’s program was built around the social and humanistic foundations. Students were required to take many foundations courses such as school and society, philosophy of education, and sociology of education. There were few methods courses and even these were built around the foundational questions. I’ll refer to this college as “Foundations College” or “FC” in future references.

I interviewed graduates of these programs who had been teaching from three to five years. I asked questions about what they did or did not learn in their programs. I asked what of their program was most valuable and least valuable to them in their current (and past) educational settings. I also asked (much later in the interview) about the importance of reflection to them as educators and about how well their program prepared them to reflect. Finally I asked them further questions and gave tasks that would elicit some evidence as to the participant’s professional attitude, orientation, and level of reflectivity (using Dewey and van Manen).

For the sake of brevity, I’ll list below a few of the questions and summarize responses. All items in quotes are exact words of those interviewed.



**In your current or past practice, which elements of your preparation programs have been of most value? Of least value?**

***MC***

*Most Value*

MC graduates spoke of the “practical ideas,” “methods,” and “classroom management” as the most valuable aspects of their program. As one stated, “the how of going about the doing of certain things.”

*Least Value*

There was a striking common theme in what was least valued, or as one person put it, “a waste of time.” In fact all but one participant spoke of some classes that were of no value because they “had nothing to do with the classroom.” These were the theory classes in general, “especially the history of education” course(s). “The theory of this the theory of that doesn’t really help you out there.”

***FC***

*Most Value*

Each participant’s central response, expressed a number of ways, was that his or her program challenged and encouraged him or her to think critically about the “whys” behind what is done in schools and what they think should be done. “One of the most important things I learned to do is to always question the way things are and to (pause) be a reflective practitioner.” Another said that her colleagues sometimes look at her as if she is “from another planet. I feel like I have this wonderful collective consciousness of the history of education and different theories and philosophies and it’s been wonderful in practicing.”

*Least value*

As one stated so well, “nothing was of little value.” None could think of any major aspect of the program that was of least value.

### **How important to you in your educational practice is your ability to reflect?**

#### ***MC***

Half responded that it was “pretty” or “somewhat” important. The other half found no value. As one said, “there’s no time to just sit and think, there’s too much to do.”

#### ***FC***

All of these teachers began their responses with very similar responses that displayed emotively how central reflection is to their teaching. “It’s extremely important to me ....” “I couldn’t separate it from teaching. I reflect all day.” Another said, “It is the most important thing that I do.”

### **About what types of things do you reflect?**

#### ***MC***

These teachers agreed they reflected about two major things:

1. Effectiveness of lessons, strategies, or methods.
2. Concerns with or needs of particular students.

Half also mentioned classroom management.

#### ***FC***

These teachers reflected on

1. What they are doing as educators and why, to what greater purpose now and in the future. Seventy percent of the teachers used the same two words when expressing their ideas; “why” and “purpose.”
2. Their situation or role within the school, district, or schooling overall.

Half also focused their reflection on how to engage their students in the educational process and in reflecting on their own education or their own role as active decision makers within the learning and larger community. This I found especially interesting.

**If there was not a good reason to teach toward a certain district level established objective, would you still teach toward it?**

*MC*

Eighty-three percent said yes.

*FC*

None said yes. Half said emphatically no, they would not. Half said maybe and qualified what factors would be considered.

**Finally all participants were asked to respond to a number of statements about educational issues along a Likert-type scale from strongly agree to strongly disagree.**

*MC*

The responses to these statements (due to space I cannot go into specifics) suggested that the MC graduates were for the most part uncritical and supportive of American schools as they currently are. They also see the role of teacher as the implementor of decisions made by school administrators. For these teachers “how to” is and should be the domain of the teacher. The “what” and the “why” are and should be decided by school boards and administrators.

*FC*

The FC graduates were much more aware of inequities within our American schools. They were also much more critical of our schools as they presently exist. Finally, and I believe most importantly, they saw the role of teacher as a reflective decision maker who must consider not only the “hows,” but more vitally the “whats” and the “whys” that undergird it all. They were also very willing to take personal risks to stand up for and fight for change in their school, district, or schooling overall. Many took on leadership roles through their union or other professional organizations. Many had faced losing their job because of their voice for change. And two had recently changed jobs because

conditions in their past schools were such that they could no longer stay because, as one said, it “ate away at (their) professional soul(s).” Both of these folks resigned their old positions before having a new position in hand.

A thorough analysis of all interview components (many not included here) suggests that Foundations College teachers displayed open-mindedness, responsibility and whole-heartedness. They reflected at van Manen’s critical level. Methods College teachers displayed little to no evidence of Dewey’s reflective prerequisites and reflected largely only at van Manen’s technical level. At least for these teachers, the role (or lackthereof) of foundations in their preservice program was significant.

Reforming teacher education through adherence to means-focused reflection is nothing but the same old routine. While the move to educate teachers as reflective practitioners is essential, reforming teacher preparation to facilitate the development of preservice educators merely as “technically”<sup>52</sup> reflective educators is simply insufficient. In restricting the focus of reflection and reducing it to a tool for selection of means alone, we have merely co-opted the term *reflection* and utilized it to bolster the same old dominant “technocratic rationality” in the guise of reform.<sup>53</sup>

Genuine school reform involves “structural change in systems” which implies “a change in the locus of authority.”<sup>54</sup> But teachers are unlikely to take up such a position of power within this new system unless they are personally empowered.<sup>55</sup> “Empowerment [is] the ability to think and act critically.”<sup>56</sup> Empowered teachers work as “transformative intellectuals” capable of truly educating the “active [and] critical” citizenry necessary for a democratic society.<sup>57</sup> We must emphasize, utilize, and revitalize the foundations in teacher preparation to develop empowered educators who “see that they have power and that the settings of school and classroom are not inescapable reality but are transformable.”<sup>58</sup> We must nurture in our future teachers a “language of critique” and a “language of possibility” and the courage to speak them both.<sup>59</sup> *Reflective* teacher preparation programs have become routine in more ways than one. When they do not

cultivate critical reflectivity, they create a stifling illusion that limits us to a future that is nothing more than our past played over and over again.

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- <sup>1</sup>. Kenneth M. Zeichner, "Conceptions of Reflective Teaching in Contemporary U.S. Teacher Education Program Reforms," *Reflective Teacher Education: Cases and Critiques*, ed. Linda Valli (Albany NY: SUNY Press, 1992): 161.
  - <sup>2</sup>. Sonya T. Collier, "Characteristics of Reflective Thought During the Student Teaching Experience," *Journal of Teacher Education* 50, no. 3 (1999): 173-81; John Halliday, "Technicism, Reflective Practices and Authenticity in Teacher Education," *Teaching and Teacher Education* 14, no. 6 (1998): 597-605.
  - <sup>3</sup>. Mick Markham "Through the Looking Glass: Reflective Teaching Through a Laconian Lens," *Curriculum Inquiry* 29, no. 1 (1999): 55-76.
  - <sup>5</sup>. Zeichner, "Teachers as Reflective Practitioners," 201.
  - <sup>7</sup>. Gore, "Reflecting on Reflective Teaching," *Journal of Teacher Education* 38, no. 2 (1987): 33.
  - <sup>8</sup>. Jesse Goodman, "Reflection and Teacher Education: A Case Study and Theoretical Analysis," *Interchange* 15, no. 3 (1984): 9-26 and Zeichner, "Research on Teacher Thinking," 18.
  - <sup>9</sup>. Zeichner, "Teachers as Reflective Practitioners," 204.
  - <sup>10</sup>. Zeichner, "Teachers as Reflective Practitioners," 201.
  - <sup>11</sup>. John Dewey, *How We Think: A Restatement of the Relation of Reflective Thinking to the Educative Process* (Chicago: Henry Regnery, 1933): 3.
  - <sup>10</sup>. Dewey, *How We Think*, 3
  - <sup>11</sup>. Dewey in *Intelligence in the Modern World: John Dewey's Philosophy*, ed. Joseph Ratner (New York: The Modern Library, Random House, Inc., 1939): 854.
  - <sup>12</sup>. Dewey, *How We Think*, 9.
  - <sup>13</sup>. Dewey in Zeichner, "Educational and Social Commitments in Reflective Teacher Education Programs." (A paper presented at the National Forum of the Association of Independent Liberal Arts Colleges for Teacher Education: Milwaukee, 1990): 58.
  - <sup>14</sup>. Dewey, *How We Think*, 89-90.
  - <sup>15</sup>. Dewey, *How We Think*, 3 and 17.
  - <sup>16</sup>. Dewey, *How We Think*, 17.
  - <sup>17</sup>. Dewey, *How We Think*, 14.
  - <sup>18</sup>. Dewey, *How We Think*, 14.
  - <sup>19</sup>. Dewey, *How We Think*, 14.
  - <sup>20</sup>. Gore, "Reflecting on Reflective Teaching," 33.
  - <sup>21</sup>. Dewey, *How We Think*, 30.

22. Dewey, *How We Think*, 30.
23. Dewey, *How We Think*, 30.
24. Dewey, *How We Think*, 31.
25. Goodman, "Reflection and Teacher Education," 20.
26. Goodman, "Reflection and Teacher Education," 20.
27. Dewey, *How We Think*, 32.
28. Goodman, "Reflection and Teacher Education," 20.
29. Zeichner, "Teachers as Reflective Practitioners and the Democratization of School Reform," 210 and Goodman, "Reflection and Teacher Education," 21.
30. Dewey, *How We Think*, 32.
31. Goodman, "Reflection and Teacher Education," 21.
32. Goodman, "Reflection and Teacher Education," 21; for more recent examples of care in education see the works of Nel Noddings and Maxine Greene.
33. Gore and Zeichner, "Action Research and Reflective Teaching," 122 and S. Noffke and M. Brennan, "The Dimensions of Reflection: A Conceptual and Contextual Analysis" (A paper presented at the Annual Meeting of the American Educational Research Association: New Orleans, 1988): 6.
34. Max van Manen, "Linking Ways of Knowing with Ways of Being Practical," *Curriculum Inquiry* 6 (1977): 226.
35. van Manen, "Linking Ways of Knowing," 226.
36. Gore and Zeichner, "Action Research and Reflective Teaching," 122.
37. Gore and Zeichner, "Action Research and Reflective Teaching," 122.
38. van Manen, "Linking Ways of Knowing," 227.
39. van Manen, "Linking Ways of Knowing," 227.
40. Gore and Zeichner, "Action Research and Reflective Teaching," 122.
41. Linda Valli, *Reflective Teacher Education: Cases and Critiques* (Albany, NY: SUNY Press, 1992): 9; Joseph A. Ellis, "The Perfectibility of Means and the Disregard of Ends," *Journal of Teacher Education* 40, no. 1 (1989): 20.
42. Gore and Zeichner, "Action Research and Reflective Teaching," 133.
43. Carl A. Grant and Kenneth M. Zeichner, "On Becoming a Reflective Teacher." In *Preparing for Reflective Teaching*, ed. Carl A. Grant (Boston: Allyn and Bacon Inc., 1984): 4; see also Zeichner, "Research on Teacher Thinking," 17.
44. Grant and Zeichner, "On Becoming a Reflective Teacher," 4.

45. Vicki Kubler LaBoskey, "Teaching to Teach with Purpose and Passion," *Teaching about Teaching: Purpose, Passion, and Pedagogy in Teaching Education*, ed. John Loughran and Tom Russell (Washington, D.C.: The Falmer Press, 1997): 161.
46. William D. Armaline and Randy L. Hoover, "Field Experience as a Vehicle for Transformation: Ideology, Education, and Reflective Practice," *Journal of Teacher Education* 40, no. 2 (1989): 43.
47. Phyllis J. Edmundson, "A Normative Look at the Curriculum in Teacher Education," *Phi Delta Kappan* 71, no. 9 (1990): 721.
48. Jack E. Williams, "They Train Lions, Don't They?" *Journal of Teacher Education* 33, no. 3 (1982): 33.
49. Williams, "They Train Lions, Don't They?" 33.
50. Joseph A. Ellis, "The Perfectibility of Means and the Disregard of Ends," *Journal of Teacher Education* 40, no. 1 (1989): 18.
51. Ellis, "The Perfectibility of Means and the Disregard of Ends," 18.
52. Max van Manen, "Linking Ways of Knowing with Ways of Being Practical," 226.
53. Zeichner, "Teachers as Reflective Practitioners," 201.
54. Kathleen Bennett deMarrais and Margaret D. LeCompte, *The Way Schools Work: A Sociological Analysis of Education* (White Plains, NY: Longman Publishers USA, 1995): 81.
55. Bennett deMarrais and LeCompte, *The Way Schools Work*, 81.
56. Henry A. Giroux, "Liberal Arts, Teaching, and Critical Literacy: Toward a Definition of Schooling as a Form of Cultural Politics," *Contemporary Curriculum Discourses*, ed. William F. Pinar (Scottsdale, Arizona: Gorsuch Scarisbrick Publishers, 1988): 246-7.
57. Giroux, "Teachers as Transformative Intellectuals," *Social Education* 49, no. 5 (1985): 379.
58. Margaret Yonemura, "Reflections on Teacher Empowerment and Teacher Education," *Harvard Educational Review* 56, no. 4 (1986): 475.
59. Stanley Aronowitz and Henry A. Giroux, *Education Under Siege* (South Hadley, MA: Bergin and Garvey Publishers, 1985): 6-7.