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A philosophical explanation of education today : a reflective essay

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A philosophical explanation of education today : a reflective essay

Abstract

"In one sense it is not so much the capacity for education as the necessity of education that differentiates man from the lower animals" (p. 8). This quote by Bagley (1905) summarizes his beliefs on what the foundation of education is built. Despite many changes in education since Bagley's time, the purpose of education remains constant - to provide the best opportunities for students to achieve their highest attainment and become well-rounded individuals in an ever changing society. It is the necessity of education that makes the duty of public and private education so crucial. It is our job, as administrators, to find a leadership style that will cause true change to happen, and a management style that makes it happen.

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Entitled: A PHILOSOPHICAL EXPLANATION OF EDUCATION TODAY:
A REFLECTIVE ESSAY

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A PHILOSOPHICAL EXAMINATION OF EDUCATION TODAY:
A REFLECTIVE ESSAY

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by
Brant J. Bemus
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“In one sense it is not so much the capacity for education as the necessity of education that differentiates man from the lower animals” (p. 8). This quote by Bagley (1905) summarizes his beliefs on what the foundation of education is built. Despite many changes in education since Bagley's time, the purpose of education remains constant – to provide the best opportunities for students to achieve their highest attainment and become well-rounded individuals in an ever changing society. It is the necessity of education that makes the duty of public and private education so crucial. It is our job, as administrators, to find a leadership style that will cause true change to happen, and a management style that makes it happen

Personal Beliefs / Philosophies

To define what my beliefs on educational leadership are, it is first necessary to outline my personal beliefs on the purpose of education in America today. In our studies we discussed four theories of the purpose of education: social reconstruction, essentialism, progressivism, and perennialism. The first theory, social reconstruction a theory advanced by Theodore Brameld and others, states that the purpose of education is to change society by what is taught in schools (Brameld, 1950). I personally disagree with this theory because I do not see what gives us the power or right as educators to decide how society will function. I agree that we

play a role in determining what kind of society we live in, based on what kind of student we turn out, but there are too many other factors besides the education a student receives that determine how that student will function (or shape) society. Personal life plays a large role in shaping students, and what we teach in school is many times lost because of the conflicting messages our students get at home. If society is to change through students that are educated in schools as social reconstruction claims then we must almost assume responsibility for raising students so that the message is not mixed. That takes the responsibility off parents who, in my opinion, are already in some cases asking us to raise their children. For that reason I do not see social reconstruction as a viable theory of the role of schools in America.

The second theory, essentialism, is based on teaching what is essential to students. Proponents of this theory, including William Chandler Bagley, believe that we should teach fundamental curriculum, such as the 3R's to our student population, who then in turn will be able to perform highly specific tasks based on that foundation (Bagley, 1905). I disagree with this theory also, but for obviously different reasons. How do we know as educators what "essentials" are in the world into which we release our students? A foundation in reading, writing and arithmetic is an admirable goal for today's student, but in an ever-changing world does

that prepare students for the future? Will students, by learning the essentials, be able to function when the essentials change? I do not believe that schools can always take responsibility for deciding what society will need in the future. I can see the ideals behind essentialism, but have trouble seeing it in application.

The third theory, progressivism, deals with the belief put forward by John Dewey and others that schools should gauge what society needs and attempt to teach it (Dewey, 1938). This theory appeals to me on the basis of producing a student that is ready to step into the world as a productive member of society upon graduation, which I see as a goal of education. Vocational training and education, which are becoming a big part of our schools systems today, are products of this line of thinking. I have reservations about completely embracing this theory for some of the same reasons stated earlier. Schools cannot always be asked to "figure out" what society needs and produce students that fit the system. This theory, to me, makes students sound somewhat like finished products in a factory.

Business turns out what the consumer wants, and by following progressivism would not education be doing the same thing? Many people would have no qualms about this line of thinking because many believe that business is what runs America. I feel we, as educators, need

to be careful not to emulate business too closely. In Kowalski and Reitzug's book, Contemporary School Administration (1993), they warn that business is based on the idea of turning out the finest product but at the lowest cost. I do not feel, as an educator, that that is an educational theory to completely embrace. Students, when turned into products, are dehumanized which is counterproductive in education.

The fourth and final theory, perennialism, is advocated by Mortimer Adler and Robert M. Hutchins. It is based on the idea of providing students with as much available knowledge in the world as possible and letting them use that knowledge in real-life situations (Kneller, 1964). In looking at this theory, it seems to be the one with the most potential for developing critical thinking skills, rather than training. If we can reach students on a critical thinking level, then they can deal with whatever the future holds rather than just the specific situations or problems. An argument that is frequently voiced by students today is the question of where they will use the information they are being taught. Perennialism helps answer that question by giving students a foundation of which to build and use. We hope, as educators, that students will take the knowledge being taught and apply the thinking skills developed to whatever situations they may face in life. Unfortunately, with the amount

of emphasis being placed on the social side of schools today and with how much more responsibility teachers are facing for raising students, "the knowledge end" of education at times gets lost.

For that particular reason, the increased responsibility of "parenting" students, I feel that my personal beliefs lie somewhere between progressivism and perennialism. We, as educators are being asked in some cases to provide the only moral compass and social training some students receive. A strong foundation of knowledge through perennialism will serve students well, but also a portion of training through progressivism will help them take that knowledge and adjust in today's world. Schools seem to be aware of this combination, as is evidenced by the growth of graduation requirements and vocational and technological training in public schools.

To be an effective administrator, one must define what role school serves to him/her in society so that the administrator can work towards those goals in his or her own setting. Working towards individual personal beliefs on education is one of the greatest responsibilities of an educational administrator and one of the greatest challenges. Society in general does not always realize the power that a school and the administrators of that school have in the lives of our younger generation.

Knowledge and Skills from Personal Experience

Leader versus Manager

These challenges are complicated by what role the administrator plays. Too often, administrators are forced by situations to concentrate too heavily on one aspect of that management/leadership continuum. The balance between the two is what I feel is the basis for educational leadership today. This struggle between acting as a leader versus as a manager in a school setting is one of the basic components of my educational philosophy.

The struggle between manager (fulfilling the daily needs of a school) and leader (leading a staff to long-lasting, meaningful change over time) is the challenge that administrators face. While all administrators would like to work as leaders we are forced too many times to act as managers. Managing has its place in the principal's job description; in fact, without management there would be chaos. However, the real problem is ensuring the management of the school does not become the principal's full-time assignment. True change comes from leadership, but management is a crucial part of school administration.

Kowalski and Reitzug (1993) defined management as "the process of implementing strategies and controlling resources in an effort to achieve organizational objectives." This definition gets at the heart of the manager/leader issue; management is not exciting but necessary for the good of the school. I feel that many times the manager side of the principalship is downgraded because it seems as if the principal is only doing "what's expected." At times, principals do get caught in a pattern of only working on what is necessary to get through the next day effectively. However, without the manager component of the principalship, how could the school setting function in order to allow for leadership to bring on meaningful change? Marsha Speck comments on this in her book The Principalship: Building a Learning Community, (1999) by stating, "Effective management helps a school achieve its goals, in part by making the school function well enough to allow the leadership role of the principal to emerge" (p. 69).

Management and leadership also at times are joined. What may appear to some as daily management may appear to others as long-lasting leadership. An example would be discipline in some situations. On the surface it is management, keeping order and organization in the school. However when it is examined deeper, the principal may have

gathered information from the faculty on current problems and what their opinions were on the needs of the school in the way of maintaining order. The principal then may make what is the starting point of a discipline policy that reflects the needs and concerns of the faculty - leadership for the future.

This example illustrates the process that Speck (1999) details in her appraisal of the role of principal as leader, "... a principal must be able to appraise the present, anticipate the future, and collaborate with the school's stakeholders to develop a school vision that will yield a learning experience for all members of the learning community" (p. 50).

Principals must take advantage of strong management, by themselves or by others, and move towards true leadership. One must happen before the other is possible and in many ways leadership is a logical extension of management. This is why I feel that the management component of the principalship should not be diminished. It is true that the leadership part of the struggle is the more glamorous. Coyle (1997) in an article on the benefits of teacher leadership comments that, "While management tends to focus on the status quo, leadership must be forward thinking" (p. 236). This statement has an implication that management is less important in

the role of principals than leadership. I feel that the two are part of the same equation: one is not more important, because without one the other cannot occur.

Principals must be strongly grounded in both management and leadership in order to succeed. A principal with weak manager skills will be seen as a dreamer not a doer and his/her staff will not follow. Without followers, true leadership is impossible. On the other hand a manager without leadership skills is seen as stagnant and no true growth will ever take place, as Coyle (1997) commented, just status quo. Once a balance between the two has been established a principal can begin to make significant change occur. The greatest and most difficult skills to balance in educational administration are leadership and management and the ability of an administrator to balance the two is his or her greatest strength or weakness. There are many challenges that administrators must deal with in relation to leadership in the school setting. I see three main leadership questions that challenge principals, and in many ways define their leadership styles.

Shared Decision-Making

The first challenge is determining how much power the principal maintains in relation to the faculty and how that principal empowers the teachers working with him/her. Shared decision-making (SDM), as the

name implies, distributes the decision-making procedure in a school district to include the faculty in a team-oriented approach to decision-making. There are many benefits to such a system. Lontos (1994) in an article on the use of shared decision-making stated that, "SDM has the potential to improve the quality of decisions; increase a decision's acceptance and implementation; strengthen staff morale, commitment, and teamwork; build trust; help staff administrators acquire new skills; and increase school effectiveness" (p. 2). The benefits of such a system, in my opinion, outweigh what problems a principal might have in implementing the concept.

Empowering teachers in decision making can be very difficult. In many ways the concept goes against what many teachers have experienced in past relationships with administrators. The challenge for the principal is to work to break some of the barriers and implement the system despite some reservations. Short (1998) in an article on teacher empowerment states, "You cannot empower teachers and students; you only can create environments and opportunities that lead to and support empowerment" (p. 72). Lontos (1994) points to five main guidelines suggested by experts to make creating that SDM environment a reality.

First, start small and go slowly. As a principal, I cannot begin the first faculty meeting of the year with an announcement that we will be sharing all decisions this year. That communication would create panic and doom the procedure from the onset. The system must be nurtured and adapted over time to fit my situation. The staff must be ready for the changes, no matter how subtle they may appear and over time take ownership.

Second, Lontos states that for SDM to be successful participants must agree on specifics at the onset. In order for the process to be truly collaborative, the principal cannot simply dictate what the system will be. As a group the specifics must be addressed and the voices of the group heard as to how the procedure will work, or ownership of the concept will not take place.

Third, the participants need to be clear about procedures, roles and expectations. The key to SDM is a trusting environment where all work together. While this is true, there still remains a hierarchy in schools that cannot be ignored. Payne and Michailides (1998), in an article on effective leadership and empowerment state, " ...there is a fine line between empowerment and chaos, which can occur when people lose sight of why they are empowered" (p. 44). While shared decision-making allows participants to make decisions, and take responsibility, it does not

state that all roles and procedures are the same. All on a faculty may be involved but in different degrees and in different ways. The key is that all take ownership of their roles.

Fourth, Lontos advocates giving everyone a chance to get involved. Shared decision-making should be specifically that - shared. Some faculty members will not want to be as involved as others, but in that case they will still see that their fellow teachers were involved and feel better about the process. Any decisions by an administrative appointee may be seen as top-down and contradictory to what the process involves. Volunteer and team-based decisions are two ways to get people involved at whatever degree they feel comfortable with. According to Allen and Glickman (1992) in studying changing schools through shared decision-making, "The more accessible the process was to all teachers, the more positive feeling they had for the process" (p. 84-85). If the key to SDM is working together, allowing all to get involved is critical.

Finally, Lontos states that the key to shared decision-making is building trust and support. This is the most important step given and the one that creates the greatest challenge for the educational leader. SDM cannot be pushed onto a group, they must feel that it has worth, and that it truly can work before it has a chance of succeeding. A great deal of

that trust comes from the relationship between the principal and staff. Teachers must feel that they belong to a bigger entity than just their classroom. Goens (1998) in an article on changing leadership in schools stated, "What we must do is develop strong school communities that bond people through a sense of shared purpose" (p. 41). Shared decision-making in education cannot be accomplished without the trust and support of the people involved and fostering this trust and support is one of a principal's greatest challenges.

Collegiality

Gaining the trust and support of the people involved in a learning community is one of the greatest leadership challenges that a principal has in a school setting. Principals are faced with the challenge daily of how to deal on a personal level with those who work with him/her. Principals struggle frequently to find just the right balance of friendly but professional relationships with those under their leadership. As a teacher, I was most comfortable accepting the leadership of a principal I respected and one that I felt I could get along with, which is a difficult combination. I feel that a healthy respect and friendship is a necessity as long as it does not compromise the professional relationship. Unfortunately if that happens, the leadership and also the manager responsibilities suffer.

If an instructional leader is able to bridge the two roles effectively, a true functional learning community can develop. Speck (1999) writes, "Collegiality as a cultural norm is essential if a school wishes to establish a true learning community dedicated to a continuing process of improvement and renewal" (p. 110). If the principal is a top-down manager, this shift in thinking will never take place because the staff will not feel that their opinions matter. Lashway (1998) in an article entitled "Creating a Learning Organization" writes, "Principals and superintendents must see themselves as 'learning leaders' responsible for helping schools develop the capacity to carry out their mission" (p. 5). It is this balance that helps a principal build a community within his/her school that will allow for true change. Lashway goes on to say, "...leaders must view their organizations as learning communities, for faculty as well as students" (p. 5).

The support, however, must be continuous and ongoing. It is for this reason that the relationship between the principal and his/her staff is so crucial. If there is not a good working arrangement built on mutual trust and respect, any change that takes place will be short-lived or seen as the next fad in the system. When the relationship is built on a solid foundation the process of change begins to become institutionalized and permanent.

Blase and Blase (1999) in an article on instructional leadership through the eyes of a teacher summarized, "It is clear from our study that effective instructional leaders work to develop a culture of collaboration, equality, and the lifelong study of teaching and learning through talk, growth, and reflection" (p. 20). In the article the authors suggest five key components for a principal to address in establishing the collegiality needed to transform a school into a learning community. First, talk openly and freely with the teachers about teaching and learning. I feel this echoes my earlier statements about establishing personal / professional relationships that become partnerships rather than boss / subservient type relations.

A second component that is mentioned is providing time for teachers to work as peers collaboratively. Time needs to be established for staff members to meet and share what is going on in and out of their classrooms. If a principal can find time for his/her faculty to work as a team, the message that collaboration and the opinions of the group are important has been sent.

Third, the Blase's mention empowerment, which fits with the information discussed previously. In a school with free, mutual dialogue self-efficacy flows and relationships are strengthened. An effective principal allows this to happen. Principals need to realize that if teachers

are going to invest their time and energy for change, they need to be heard and their views used on substantive issues. The inevitable conclusion is that on some things, the wishes of the group may outweigh the views of the principal's preference. When this happens empowerment is reaffirmed for the faculty (Hoerr, 1996).

The fourth item addressed is professional development. An effective collegial principal will promote professional development. Teachers need to examine what they are doing to improve the education in their classrooms and the best way to do that is to look at other theories that are present and current. Teachers will either find ways to enhance what they are doing or reaffirm what they have done in the past. If that directive for change comes from the principal, teachers will have the courage to take some risks along the way and if that process is embraced, they will look for ways to improve instruction.

Finally, the article points to leadership. A collegial, collaborative leader uses what has been mentioned and leads with those principles as a guide. Respect is a key factor in the principal / teacher relationship. A principal must respect the knowledge and ability of teachers while trying to motivate them to continue to grow and add to the learning community. The ability to do this is what brings respect to an administrator from those around him/her and makes the school an effective working environment.

Vision

The final and most important challenge a principal faces in his/her career is the question of vision. Each leader, academic or otherwise, must have a personal vision of what he/she will work to achieve in the future for their organization. Nanus (Lashway, 1999, p. 7), defines vision this way:

Quite simply, a vision is a realistic, credible, attractive future for your organization. It is your articulation of a destination toward which your organization should aim, a future that in important ways is better, more successful, or more desirable for your organization than is the present.

That definition applies to all types of organizations, including schools. If a principal is sound in his/her vision of how the school should appear he/she is able to share it with the stakeholders of the school and begin creating the learning community discussed earlier. Lashway in his book, Leading with Vision (1999) states four generalizations that can be made about the ideas that make up a vision.

First, visions are about what and how students will learn.

Because it is the core reason of why we have public education, what students learn is the key consideration for any vision. Any vision that fails to take that into consideration cannot be considered working towards the betterment of the organization.

Second, visions are about social justice. Lashway explains that in the American system of educating all children without regard to race, gender, or class, schools have the duty of acting as an agent for societal change. Schools, by educating all children, have the opportunity to make changes that impact the foundation of society. This puts more pressure on educational leaders to form sound decisions because of the long-reaching effects that they may have. Students model what they observe, making the choices of a learning community that much more critical.

The third generalization described by Lashway is that visions are about the kind of professional environment the school will provide. The quality of education is closely tied to the working environment of the educators in the system. It is this generalization that makes the idea of shared decision-making and collegiality that much more critical. Teachers need to feel empowered at school and feel stimulated, supported and encouraged to make important decisions. An effective vision should reflect this.

Finally, visions are about the ways that schools will relate to the outside world. As stated earlier, I feel that the main purpose of American education is to create well-rounded citizens who can deal with the world around them. Too many times educators remain isolated from the communities in which they work.

Despite the incredible power and responsibility that teachers have, many people in society do not see educators or administrators as professionals, or at the very least in the same class as other professionals. I believe that this is for a number of reasons, the first being perceived need. When a person has an accident or suffers a legal problem we rarely question the need for a doctor or lawyer and rarely do we question the professional's ability. This is not always the case in education, which seems to be one profession that the general public thinks they know a great deal about, without ever receiving training. It is also one of the few essentials in life that people question. We do not question medical care to keep us in good physical health, but many will question education or how it is practiced as far as its benefits to the mind. Education has spent the last century trying to convince the general public of the need for schools, and until we do, we never will be seen in the same light as doctors or lawyers.

The second reason for the lack of respect as professionals is the difficulty in measuring the effects of quality education. In the medical or law fields there are immediate, measurable results such as good health or legal stability. In education the finished product may not appear for years. In a factory setting, a worker can see what has been built that day and measure his/her success. In education, we have to hope that lessons,

concepts, and values learned are held onto. The application of information may not come for years, long after students have left the school setting. Consequently, some people may not gauge the importance of the information they learn in public schools until much later and by then, may not give credit where it is due. When a broken bone heals, we know directly who to thank. When we form an idea based on background learned in school, the credit does not always go to education. As Lashway points out, educational vision should address how to find a way to reach more of the people we serve in an effective and meaningful way (Lashway, 1999).

Vision, however, does not come easily in many cases. For true visionary change people must work outside their comfort zones (King, 2000). Principals who are asked to lead and want to move the school towards a common vision are going to have to deal with stakeholders who are afraid of change, will resist change, or refuse to change altogether. The question of stability vs. change provides a challenge to school leaders on a regular basis. True leadership, in my opinion, comes in the form of changing a long accepted practice and moving those whom you lead toward a common vision that will work and benefit them. Educational leaders, in many cases, face opposition because "that's the way it has always been" or "if it isn't broke, don't fix it." This is a line of

thinking that guarantees a school district will fall behind in today's changing world. Our role, as administrators is to be agents for change even if that change may be unpopular to some. Vision implementation is not quick or easy; it takes cooperation and a willingness to listen. We should listen to our faculty and community members for areas of concern and act quickly to address the problem, either making a change or explaining why a change is not beneficial to the school or community.

As can be seen by the examples given, the principal is the key to the formation and implementation of the vision for a learning community, which is an enormous responsibility. The principal does not, however, force others to bend to his or her vision. A school vision should be a communal effort, a part of the learning community, or the idea of shared decision-making is lost. Teachers cannot be expected to work collaboratively toward a vision that is formed by a single individual. Formulating a new school vision or an adapted vision is a task any new principal should undertake. The true conflict comes when the school vision is in conflict with the principal's personal vision. Work needs to be done on both sides to address the problem and come to a compromise that is agreeable to both sides without destroying the trust and support that has been established (Ripley, 1997).

Conclusion

In conclusion, the challenges that face educational administrators today are many. An ever-changing world has created numerous situations which administrators must address. Before entering the profession, I felt a foundation of beliefs must be established, so that as an administrator I have a basic philosophy to fall back on. Working within a learning community is a cornerstone of my beliefs on education. The role of the principal in American education is changing and that change involves the distribution of power and decision-making abilities to those involved in the process. Forming solid working relationships with those involved in the learning community is essential in today's schools. With the loss of dictatorial power, however, comes benefits. As Sergiovanni (1999) stated in an article on refocusing leadership to build communities, "...idea based leadership calls on everyone - teachers, parents, and students - to join the principal in accepting responsibility for what happens in school. As ideas and common commitments are shared so is leadership" (p. 14).

By reflecting on the purpose of education, how educators are seen by society, and what type of leader I strive to be, hopefully I can shape my beliefs and make myself an effective leader and manager.

The fine line that administrators walk between leadership and management is many times based on the job they hold and the priorities they set. The balance they achieve between the two is key to determining their effectiveness.

References

- Allen, L., & Glickman, C. D. (1992). School Improvement: The Elusive Face of Shared Governance. NASSP Bulletin, 76, 542, 80-87.
- Bagley, W.C. (1905). The Educative Process. London : The MacMillan Company.
- Blase, J. & Blase, J. (1999). Effective Educational Leadership Through the Teachers' Eyes. The High School Magazine, 7, 1, 17-20.
- Brameld, T. (1950). Ends and Means in Education: A Midcentury Appraisal. United States of America : Harper & Brothers
- Coyle, M. (1997). Teacher Leadership vs. School Management : Flatten the Hierarchies. The Clearing House, 70, 5, 236 (4).
- Dewey, J. (1938). Experience and Education. New York : The Macmillan Company.
- Goens, G. A. (1998) The John Wayne Model : A Leadership Trap. Principal, 77, 3, 40-42.
- Hoerr, T. R. (1996). Collegiality: A New Way to Define Instructional Leadership. Phi Delta Kappan, 77, 5, 380 (2).
- King, S. (2000). Leading Change: Getting out of the Comfort Zone. The High School Magazine, 7, 6, 32-35.
- Kneller, G. (1964). Introduction to the Philosophy of Education (2nd ed.). New York : John Wiley & Sons, Inc.

Kowalski, T. J., & Reitzug, U. C. (1993). Contemporary School Administration, An Introduction. White Plains, N.Y. : Longman.

Lashway, L. (1998). Creating a Learning Organization. ERIC Digest 121, 1-7.

Lashway, L. (1997). Leading with Vision. Eugene, Oregon : Clearinghouse on Educational Management.

Liontos, L. B. (1994). Shared Decision-Making. ERIC Digest, 87, 1-6.

Payne, L. & Michailides, M. Ten Commandments for the 21st Century. Principal, 78, 2, 43-45.

Ripley, D. (1997). Current Tension in the Principalship: Finding an Appropriate Balance. NASSP Bulletin, 81, 589, 55-65.

Sergiovanni, T. J. (1999). Refocusing leadership to Build Community. The High School Magazine, 7, 1, 11-15.

Short, P. M. (1998) Empowering Leadership. Contemporary Education, 69, 2, 70-72.

Speck, M. (1999). The Principalship, Building a Learning Community. Upper Saddle River, N.J. : Prentice-Hall.