High quality education for all students is promoted nationwide. University teacher educators must deal with reality as they provide instruction for prospective teachers. If schools and teachers are to improve, then college faculty must also improve. This must be a unified effort in which higher education institutions work with existing and new faculty to create an equitable situation. All parties in the educational system must work together to produce a more respectful, humane treatment of people involved in education. The key is to help systems self-organize and transform themselves. This paper examines what recent brain-based research says about professors' self-esteem and discusses how universities can intervene when teachers need better training. It examines influences that change idealistic new faculty members, noting how they relate to prospective teachers and focusing on: utilizing prior teaching experience; the effect of pecking order on college faculty; and economic rewards for college faculty. The paper discusses factors that can influence the societal view of teacher education (historical events, international changes, and national accreditation agencies). Finally, the paper discusses the need for faculty empowerment, emphasizing the need for clear, organized orientation; cleanup of the pecking order; cross-disciplinary research; sharing of faculty members' positive actions; more innovative techniques; an authentic task approach; action research; portfolio development; and technology use. (Contains 34 references.) (SM)
THE POLLUTION AND RECLAMATION
OF THE
NEXT GENERATION OF TEACHER EDUCATORS

Martha Tyler John
Robert Norton
Suzanne Burns

MIDAMERICA NAZARENE UNIVERSITY

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AACTE Annual Meeting
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# THE POLLUTION AND RECLAMATION OF THE NEXT GENERATION OF TEACHER EDUCATORS

Martha Tyler John  
Robert Norton  
Suzanne Burns

## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INTRODUCTION</strong></td>
<td>1</td>
</tr>
<tr>
<td>Contextual Data</td>
<td>2</td>
</tr>
<tr>
<td>The Challenging Future</td>
<td>3</td>
</tr>
<tr>
<td><strong>EFFECTS ON PROFESSOR'S SELF-ESTEEM</strong></td>
<td>3</td>
</tr>
<tr>
<td>Brain-based Research</td>
<td>3</td>
</tr>
<tr>
<td>The University Can Intervene</td>
<td>5</td>
</tr>
<tr>
<td><strong>POLLUTANT FACTORS</strong></td>
<td>6</td>
</tr>
<tr>
<td>Utilizing Prior Teaching Experience</td>
<td>6</td>
</tr>
<tr>
<td>Pecking Order</td>
<td>7</td>
</tr>
<tr>
<td>Economic Rewards</td>
<td>8</td>
</tr>
<tr>
<td><strong>INTERVENING VARIABLES</strong></td>
<td>9</td>
</tr>
<tr>
<td>Historical Perspective</td>
<td>9</td>
</tr>
<tr>
<td>Time Line</td>
<td>9</td>
</tr>
<tr>
<td>View of Scholars Worldwide</td>
<td>10</td>
</tr>
<tr>
<td>NCATE Update</td>
<td>11</td>
</tr>
<tr>
<td><strong>RECLAMATION/FACULTY EMPOWERMENT</strong></td>
<td>11</td>
</tr>
<tr>
<td>Clear, Organized Orientation</td>
<td>12</td>
</tr>
<tr>
<td>Pecking Order Cleanup/Cross-disciplinary Research</td>
<td>12</td>
</tr>
<tr>
<td>Faculty Mirror/ProfNet Experts Survey</td>
<td>13</td>
</tr>
<tr>
<td>More Innovative Techniques</td>
<td>14</td>
</tr>
<tr>
<td>Authentic Task Approach</td>
<td>14</td>
</tr>
<tr>
<td>Action Research</td>
<td>17</td>
</tr>
<tr>
<td>Portfolio Development</td>
<td>19</td>
</tr>
<tr>
<td>Technology</td>
<td>20</td>
</tr>
<tr>
<td>Conclusions</td>
<td>20</td>
</tr>
<tr>
<td><strong>REFERENCES</strong></td>
<td>21</td>
</tr>
<tr>
<td><strong>APPENDIX A</strong></td>
<td>24</td>
</tr>
<tr>
<td><strong>APPENDIX B</strong></td>
<td>26</td>
</tr>
<tr>
<td><strong>APPENDIX C</strong></td>
<td>27</td>
</tr>
</tbody>
</table>
THE POLLUTION AND RECLAMATION
OF THE
NEXT GENERATION OF TEACHER EDUCATORS

Martha Tyler John
Robert Norton
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As educators of our nation's future teachers, we have a challenging responsibility. "...public education is the epicenter of a struggle for the control of the hearts and minds of the next generation" (Nelson, 1998, p. 684). Due to several recent school disasters people who have the responsibility for citizens are becoming more vocal in their demands for safety in our educational institutions. Safe, high quality education for all students at all levels is being promoted nationwide. Teacher educators at the university must deal with reality as they provide instruction for prospective teachers. The preparation of the next generation of teachers must reflect a bold, knowledge based approach to teacher training. "What is now happening is that the world itself is changing, and the lenses through which we have peered are being replaced" (Caine & Caine, 1997, p. 10). It is difficult to predict all the changes that will be made in the lenses. Changing as the world changes may be time-consuming and painful, but given today's technology it surely can be done.

INTRODUCTION

The educational problem is larger than the public schools and the teachers in them. It involves the entire profession of education and includes the preparation of future teachers. In looking at this collective entity, "The commission (Commission of Teaching and America's Future) found a profession that has suffered from decades of neglect. By standards of other professions and other countries, U.S. teacher education has historically been thin, uneven, and poorly financed. Teacher recruitment is distressingly ad hoc, and teacher salaries lag significantly behind those of other professions..." (Darling-Hammond, 1996, p. 193). The commission had a number of recommendations regarding the improvement of the educational system. "Sparked by changes in technology, rapid
information flow, and other factors, every system is in, or moving toward, a state of disequilibrium, where change is constant and outcomes are often unpredictable" (Caine & Caine, 1997, p. 13). We know that learning rarely takes place without some degree of disequilibrium.

**Contextual Data**

It may be of interest to the reader to have some minimal background information about the authors. "Vivid, discerning articulation of the researcher's stance allows the reader to entertain a contrasting view - to move to a different point on the landscape that might shape a different vision" (Lawrence - Lightfoot, & Davis, 1997, p. 50). Thus, at the very least, a summation of the university experiences of the triauthored paper may be helpful.

**AUTHOR'S EXPERIENCE**

<table>
<thead>
<tr>
<th></th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>University experience</td>
<td>63 years</td>
</tr>
<tr>
<td>Public school experience</td>
<td>31 years</td>
</tr>
<tr>
<td>Different universities/colleges</td>
<td>13</td>
</tr>
<tr>
<td>Administrative experience</td>
<td>31 years (full or part time)</td>
</tr>
</tbody>
</table>

This type of contextual information provides "a physical site, but also situates the subject or site in reference to philosophical roots and directions, ideological and historical past, and practical plans for the future" (Lawrence - Lightfoot, & Davis, 1997, p. 70). You can see that the experience of the group is grounded in education, and that they are aware of the historical and practical aspects of education.

The variety of schools in which the authors taught might also be of interest. These ranged from 1) large universities, to 2) small Nazarene colleges, 3) universities and Teacher Training Colleges (TTC's) in Africa, 4) Catholic universities to 5) State universities. In fact, a broad range of sizes and locations are represented in the institutions in which we have taught. We have dealt with many different curricula, and varying philosophical ideas. As a group, we are accustomed to change, and enjoy the variety and challenge it presents.
The Challenging Future

We are living in an era where teachers must become accustomed to dealing with change. The disequilibrium created by "living on the border" (as soldiers have said when stationed on the DMZ in Korea) can create panic or it can help people to sense the opportunities that arise when great change is coming. One of the changes sparked by system changes will undoubtedly deal with teacher preparation. "The commission urges a complete overhaul in the systems of teacher preparation and professional development to ensure that they reflect current knowledge and practice" (Darling-Hammond, 1996, p. 196).

The system is complex, however, and involves at least three levels of teaching and learning. First, the faculty member at the university shows signs of a need for retraining. Secondly, the prospective teachers, and teachers in the classroom whom they have taught stand in need of strong, positive preparation and updating. The third group that must be considered in this rush to overhaul the educational system consists of parents and children. The system involves interaction between the community and the school itself. "We are now finding out that the key is to assist systems to self-organize and transform themselves" (Caine & Caine, 1997, p. 11). But more than a system change may be needed. What effect has the system had on the self esteem of the teacher? Does the Brain-based research done in recent years tell us anything about the feelings of people when they are part of a large unwieldy system?

EFFECTS ON PROFESSOR'S SELF-ESTEEM

Brain-based Research

How do we create systems that can "self-organize and transform themselves" as Caine and Caine (1994) suggest? Furthermore, what can individuals as part of an unwieldy system do to start the change process? Poor professor salaries, inequities in credit given for prior field experience, and the pecking order cited earlier can negatively impact professor empowerment. These factors may add to or increase negative work factors (David Elkind, 1970) such as inferiority, isolationism, mistrust, and self absorption. A self-organizing transformation of teacher education is very challenging when these factors exist. How, for example, can the system build hopefulness, when educators feel they are mistrusted or they
mistrust others? How can we build competence, when messages of inferiority stonewall industry? An examination of brain research may provide helpful information in identifying how the current system might affect professors in teacher education and create a scaffold needed for change.

Sylwester (1996) notes that when our perceived status (how we feel we should be regarded) is significantly different from our actual status (how others view and treat us) it can create low levels of serotonin in the brain. The behavioral effect of low serotonin leads to exaggerated responses; irritability, impulsivity, uncontrollability, recklessness, aggression, and often depression, which serves in turn to reinforce our low status. Healthy environments, where we are viewed positively, fosters high serotonin levels which leads to smooth, confident actions and interactions. It is characterized by calm assurance.

Neurological research on downshifting gives us further insight into how we respond to positive and negative circumstance. Downshifting is a term used to describe feelings of threat or helplessness. The dramatic effect of downshifting can be best seen by an EEG (Electroencephalogram), an imaging system used to determine where brain activity is occurring. When EEG's were used on patients feeling threatened or helpless, it showed that most of the brain activity was occurring in the limbic system (the brain’s emotional center) and brain stem (the control center for flight or fight, our instinctual primitive defense system). In contrast, when the same patients were in a state of low threat or helplessness, the EEG showed far more activity in the neocortex (the thinking, processing part of the brain). One might reason from this that if we have high challenge, low threat environments in which to work we might actually think better! Our brains will respond in a less reactionary way. The 'flight or fight' stance becomes unnecessary. We no longer withdraw because we have nothing to fear. This could lead to better problem solving. Caine and Caine (1994) in their book Making Connections: Teaching and the Human Brain, discuss the idea that creativity and discovery (key elements of problem solving) are best facilitated by autonomy, less pressure and tension, positive emotional tone, and greater persistence of behavior change.

However, should the solution sound simple, it isn’t! There is an old saying in brain research, "The neurons that fire together, wire together!" (Pat Wolfe, 1998) What this

-4-
means is that when people become accustomed to responding in a particular way, these responses can become highly routinized. There may even be emotional issues which supercede an individual or organization seeing the need for change. Frederic Schiffer (1997) in his book Of Two Minds explores in detail the neurological reasons why old habits die hard. Schiffer, a psychiatrist at Harvard Medical School, has been immersed in exploring how the brain’s hemispheres encode and respond to emotional events to different degrees. He developed ways to isolate each hemisphere’s response to emotionally charged events. Therapy then involved going back and forth between the two hemisphere’s reactions and coming to terms with each mind’s account of the same events. Bear and Fideo (1977) found that when there is a discrepancy between how the left and right hemispheres perceive significant events, one side is typically the "tarnisher" (p. 24), the side that puts him/herself down, and the other side is the "polisher", the more positive side. Breaking past negative thinking can mean artfully reckoning these conflicting ways of encoding information. This can be illustrated in one of Schiffer’s interviews with a patient called Evan. As Evan comes to terms with the "tarnisher" and "polisher" sides of his brain the interview is as follows:

Schiffer: What do you think made you blow things out of proportion?

Evan: It was my other side of me. I was seeing things the way I felt as a child. Not maturely.

The challenge for educators trying to facilitate systemic change in teacher education is to identify strategies that will facilitate a low threat, high challenge work environment, create systems of communicating which brings out the "polisher" side of the brain, facilitate working together to solve job-embedded problems, and find ways to build trust, commitment and purpose.

The University Can Intervene

While there is a need for teachers to be better trained, there is also the accompanying requirement that those individuals who serve to educate prospective teachers approach their task in more innovative ways. In reality, many persons coming to teach at the university with a newly earned doctorate have had little practical training in “how to teach’ university students. Several factors contribute to the need for orientation in the
preparation and implementation of the training provided for teacher education faculty. A review of the difficulties encountered by typical faculty members shows that the beginning years of college/university teaching for many faculty members including those in teacher education are not a positive experience. The new faculty member comes into the teaching profession at the university level with high hopes, and this may be gradually changed by circumstances in the environment at the college/university level. What are the influences that change the idealistic, new faculty member over time, and how does this relate to the prospective teachers they are training? Let’s examine a sample of the elements in pollution process.

POLLUTANT FACTORS

What are the influences that change the idealistic, new faculty member, and how does this relate to the prospective teachers they are training?

Utilizing Prior Teaching Experience

Teacher education faculty members often have had teaching experience in the public schools prior to obtaining a doctoral degree in an educational specialty. There are undoubtedly some differences between teaching K - 12 populations and university students. Previous teaching has provided valuable experience in speaking to a group, and in organizing materials for presentation. This experience, while valuable, usually does not "count" toward hiring into the university system at a higher level or rank. In effect, it is not valued in this workplace. In other areas such as business, for example, persons who have run a successful business frequently are contracted at a higher level when they begin teaching at the university. Thus, if the teacher educator has taught for six years in the public schools, s/he will be that much older than new faculty members in other disciplines. They become the "late bloomers" on campus, because the experience they have had is not usually accounted for in the university hiring scheme. In the field of education either prior public or private school teaching experience is desirable, sometimes required, by the school of education at the university if the individual is to obtain a position on the faculty.
Hiring policies and promotional policies are closely related in the university world. So that, when the individual's prior experience in teaching is not utilized to obtain higher rank in the hiring process, it will not (perhaps cannot) be used in the promotion process either. Some of these regulations and/or practices are determined by union relationships as they relate to the university. The person who is hired at the Assistant Professor level will probably require four years to promote to Associate Professor in whatever field s/he has been serving. Other promotions and honors will frequently follow a similar sequence in terms of time.

Pecking Order

Once hired at the university level, teacher educators will gradually become aware of the "pecking order" or level of regard on the campus. It will not take too many years for them to realize that they are at the lower level of that "pecking order." There are many factors that contribute to the level of esteem which is reflected at the university.

Publishing companies, State Departments of Education, and funding sources seek to produce "Teacher-Proof" materials. While this may have been done with the best of intentions, it did not help the teacher educator to retain a high level of respect (Nelson, 1998). Spring (1998) says, "The other reality facing teachers now is the low status of their profession compared with other professions" (p.42). This low status in the United States may reduce the opportunity for Education faculty to: (1) serve on important committees, (2) access the resources of research assistants, (3) have secretarial help, (4) and utilize media resources. All of these are important in the publications area which is crucial to promotion and the respect of the university community.

Another factor may be involved in determining the "pecking order". The fact is that all people have attended school, and therefore many individuals feel that they understand teaching. There is a vast difference between being taught, and teaching others as a professional educator. Of course, there are differences between being a business major at university and a person keeping his/her own checkbook. People seem to accept this difference more readily than they do the differences in the teaching field.
The low "pecking order" may also be related to the level or reimbursement received in the real world of the public school K - 12 system. The pay levels have been increasing gradually, but the level still can not be compared to that of many other professions.

**Economic Rewards**

There is a high correlation between rank/level at the university and economic rewards. "When one considers the number of years of training needed to find this specialization, the gap in salary between educational specialists and other professionals is out of proportion to the differences in their training" (Spring, 1998, p. 42). There is little difference in the cost of an undergraduate degree at a specific university from one major to another. There are costs for lab. fees for science majors, and other fees for music majors, etc. "However, teachers in the U.S. must go into substantial debt to become prepared for a field that in most states pays less than any other occupation requiring a college degree" (Darling-Hammond, 1996, p. 195). One need only examine the salary levels of comparison in the Chronicle of Higher Education to see that this is well documented. Two factors, (1) hiring and (2) promotion, both previously mentioned, often lead to reduced economic rewards for the Education faculty member. This may contribute further to a diminished self-concept. It should not; we should not be a materialistic people. The influence of the surroundings do affect us, however. In the academic world, our value to others is often based on time, and our use of it. We are paid less than accountants, business men, perhaps even garbage collectors, and others. We are frequently paid less than others who've gone through equivalent years of schooling. For those caught in this divisive contest, it is difficult to maintain a proper sense of values.

What are the long range effects of lower income? It may limit access to new learning experiences that the instructor can afford. If a person makes a low wage, it will be difficult to take trips to other countries for studying different cultures, or attend national or international conferences where s/he might update or increase learning. Learning about scientific experimentation, conducting authentic historical research, and making the acquaintance of important professional persons in the U.S. or other countries may be difficult also. "Too many American universities still treat their Schools of Education as
"cash cows" whose revenues are spent on the training of doctors, lawyers, accountants, and almost any students other than prospective teachers themselves" (Darling-Hammond, 1996, p. 195).

Economic rewards are more than just a materialistic bent. They provide for a more extensive professional experience now and in the future. If one looks at the economic returns of each profession over the long term, the Education professor retires in the same manner that a Computer professor does, and has to live on the results of full-time labor at the university in the same manner. The difference in life styles then may provide quite a range of possibilities.

INTERVENING VARIABLES

There are several factors that have had an influence on the societal view of teacher education. These were not designed to have an impact on teacher training nor the professional educators at the university level, but factors such as historical events, world wide changes, and national accreditation agencies may have changed the dependent variable (teacher educators) somewhat anyway.

Historical Perspective

Whenever one searches for change or improvement, it is good to examine the past. Caine and Caine (1997) tell us that, "Multiple calls for change have occurred over the past 20 years, and we have elegant descriptions of what we need to change" (p.5). It is our belief that many related changes have occurred for far longer than 20 years. Many of these changes did not relate directly to teachers and teacher training, but may have had an impact on these areas none the less. Perhaps there was the beginning wind of change years ago that are blowing stronger now. What related events have occurred that might be influential in the college/university teacher training arena?

Time Line

(Change in the Wind)

(1954) Brown vs. The Board of Education in Topeka.
Finding - "separate but equal" doctrine was struck down. Discrimination in schools would no longer be allowed.
(1957) Sputnik was launched.
The launching of the Russian space capsule provided strong motivation for the improvement of the science programs in our schools nationwide.

(1964) Civil Rights Act.
Added power to the Brown vs. the Board of Education, and enforce the right of students to attend school regardless of race.

Aims to prevent abusive treatment of all children.

(1975) 94-142 Education for All Handicapped Children Act (EAHCA).
Provides for appropriate public education to all children.

Stressed needed improvements in our schools.

Emphasized the positive changes that have already been made, and the additional plans for improvement in place.

(1992) Individuals with Disabilities Education Act (IDEA).
Developed tighter specifications for educational services to children with disabilities or who are additionally challenged.

All of the laws, procedures and studies noted here, and other important events speak of rights and freedoms related to the education of children. However, the implications for teachers and other citizens is implied. There is the sense that race, additionally challenging circumstances, and other individual differences cannot be considered as a legitimate reason for denying education to pupils, and by inference they suggest the need for quality teachers at all levels. Other factors have also been influencing the teacher role in the United States.

View of Scholars Worldwide
In addition to these specific laws and reports, another factor may have helped broaden our view of the treatment of teachers. World-wide travel has increased exponentially in the past fifty (50) years due to the fact that airplane travel became available to Mr. and Mrs. Average Citizen. Programs like Fulbright Scholarships, Peace Corps, and U.S. A.I.D. programs have helped people to experience a more international view. Many people have seen the way in which other countries treat their scholars. The general global
impression of scholars and teachers is one of considerable respect. Students stand when the instructor enters the room, and consider getting an education a privilege. People who have an extensive education are honored.

In addition to 1) travel abroad and the much 2) more liberal exchange of scholars that have taken place, there is yet another happening in the world that may have lent added velocity to the winds that were blowing for quality education and for freedom. Many countries that have been dominated by colonial powers on several continents began to gain the right to govern themselves especially in the 1960's and 1970's. Sometimes this was done peacefully, and at other times through violent struggle. Again, these efforts shouted, "People should be free! Individuals matter!" These feeling may have been influential in encouraging people to examine the need for improvement in our schools, reshaping education programs, and taking a close look at those educators who are primarily responsible for the education of teachers in preparation.

NCATE Update

The National Council for Accrediting Teacher Education (NCATE) updated the standards that responsible committees felt were important, and the Council then began to carefully monitor teacher education programs. States then followed suite and reviewed their standards and up-graded them. What had once been a routine visit to a campus became a rigorous, in depth examination of program content and process. Standards are a safety net. They can never create an exceptional teacher, but they can and do require a minimum performance base for assessment.

The emphasis on cross-cultural education has been strongly supported by NCATE. Recently, (1997) a sub-committee has provided an evaluation and suggestions for further, more direct emphasis on technology. The need for additional training and applications for prospective teachers is clear, and many facets of the applications being used throughout the United States are given in the report.

RECLAMATION/FACULTY EMPOWERMENT

Teacher education must change! In Breaking the Circle of One (1997), Mullen gives
her account of learning to teach at the university level. The idea that instructional methodology used at the university level has some differences from public school instruction should be obvious. She discusses her frustration at not receiving specialized training for the task of teaching at the university level.

Clear, Organized Orientation

It is therefore recommended that specialized instruction be given to all new faculty members including those who have had previous teaching experience. There are differences in program requirements, in syllabus forms, in requirements for promotion, and in advisement programs from one university to another. Costa and Garonston (1998) emphasize that, "Nearly all relationship difficulties are rooted in conflicting or ambiguous expectations surrounding roles and goals" (p. 42). It would be wise to cover the goals of the university and the specific procedures expected of each new faculty member at the beginning orientation. Providing careful orientation for new persons does not in any way imply diminution of their ability; rather a familiarization of the operational strategies used at a particular institution. Suggesting a range of successful teaching strategies so that the new instructor can choose from alternatives may be helpful at this beginning orientation time.

Pecking Order Cleanup/Cross-Disciplinary Research

Cleaning up the pollution of the "pecking order" may be a bit more difficult. The Dean or the Academic Vice-President might establish cross-disciplinary content research groups to produce data on a favorite topic at the university level. For example:

1) What type of faculty evaluations are of most value for students to fill out?
2) Is peer evaluation useful for all disciplines?
3) How can advisement programs be changed to best meet the needs of students?

There are many topics of general interest to faculty, but a cross-disciplinary grouping with instructions and deadlines would be useful in getting faculty acquainted, and in developing respect for one another. If research time could be funded (say 1 credit hour of work time for 1 meeting a week during the semester), this would provide additional motivation.
Faculty Mirror/ProfNet Experts Survey

Sharing the positive things each faculty member does can be beneficial. A "Faculty Mirror" which outlines the specialty of each faculty member can be developed using a one or two page survey. This works effectively if categories are suggested such as: 1) research specialty, 2) presentation preferences, 3) publications & book interests, and committee preferences. In fact, the Academic Dean at MidAmerica sent a ProfNet Survey form to each faculty member which is designed to collect data similar to the categories suggested here. He also included courses taught, and dissertation topic. This data, when collected would be provided "by the Internet to provide journalists and authors convenient access to expert sources." (Moore, 1/18/1999). Each faculty member should be given an opportunity to fill out the survey, and then, the important information can be shared electronically with other members of the faculty. The way the data will be shared should be made clear to all faculty members when the survey form is passed out. This type of information can be used to select guest lecturers from within an institution, or to establish cross-disciplinary research teams.

The procedure mentioned has been utilized, and was successful in building some bridges between different departments. It has the potential to build a more positive self-concept for those who share their expertise. Providing for special times where there can be an exchange of ideas with those who share similar skills also engenders respect.

Once the initial data collection is completed, arrangements for additional exchange of instruction and for consultancies can be more actively pursued by campus administrators. This will attract additional, highly motivated people to exchange ideas, and increase the interaction with those professors in the teacher education program.

Community relationships can be developed by administrators who will have a better base for recommending specific faculty members to those asking for assistance. People frequently call in, and request special information or tell the academic dean or department chairperson about a problem that they requires special skills. The "Faculty Mirror" can be accessed, and the administrator can then provide at least a beginning reference for the inquirer.
More Innovative Techniques

The effects of low salary might be mitigated by providing newer, exciting methods that teacher educators could use. In other words, reduce the emphasis on economics, and increase emphasis on a positive self-concept by generating new areas of learning. "Schools of Education must provide school systems with prospective teachers who can help students function in our new society, and that means that the teachers themselves must gain new skills and new knowledge" (Wise, 1996, p. 191). This does not mean that the sole function of the university is to provide methods of instruction. "Classroom management skills and instructional methods are important, but they are just part of what's required of a classroom teacher. Just as important is who you are" (Segall & Wilson, 1998, p. 316). The intelligence, the ethical behavior of the teacher, and the caring heart of the teacher must also be engaged.

Authentic Task Approach

A difficult task in overhauling the system is tackling a vision or goal for improvement. Many Teacher Education Programs are full of vision (where they want to go). Organizations are inundated with tasks. But how do we blend the two together? As McGonagill and Associates cite Black Elk, "A vision without a task is only a dream. A task without vision is mere drudgery. A vision with a task can change the world." (1996, p.20)

With this in mind, a schema for blending task and vision takes shape. Donahue, Dunne and Phlegar state, "The Authentic Task Approach is an innovative professional learning design that provides participants with a focus on getting real work accomplished, learning more about what needs to be done in the process, and how to do it." (1997, p.1)

The Authentic Task Approach is comprised of eight essential elements which emphasizes "learning, reflecting, and doing". First is clarification of the task. Here is where faculty congregate to examine their vision and identify a task which will help accomplish it. Critical to this step is ensuring the task is important or authentic in the eyes of the people who will engage in it. While this may seem fundamental, it is easy to recall times when we have engaged in a task which seemed important to only a few stakeholders.

The second element is to identify criteria for success. It is unfortunate when...
educators employ new ideas and then judge them "...by a happiness quotient and their off-the-cuff assessment regarding its usefulness." (Dennis Sparks, 1997, p.1) Here is where the process and the product are outlined. Furthermore, professors are asked to 'articulate so that we can duplicate'. Without benchmarks for success, it is difficult to know when we have arrived at our destination, and perhaps equally important, how we will get there.

Thirdly, identify relevant resources. What experts, expertise, experiences, background, materials and time will be needed to complete the professional development task? Weighing carefully these elements and resourcing the task is paramount to its successful completion. Inadequate support in developing understandings, training, time, study, reflection, and experimentation can lead to feelings of defeat. According to Delta Sierra Professional Development Consortium (1996), defeat often leaves one feeling inferior, and inferiority often keeps us from being industrious and feeling competent.

Using data to make decisions and track your work is the fourth element to the Authentic Task Approach. What information do you need to consider to complete your task. How will student data inform your decision-making? How will you document your progress? What artifacts will you keep? A well-rounded approach in data collection can be a rich source toward continued improvement. In other words, good data sources help us refine the process as we go along, and improve it once it is complete.

A final step in successfully completing tasks is to develop an implementation plan. This is where timelines for specific steps are outlined as well as who is responsible for what. Specific resources and when they will be needed for each action step is also calculated. Plans for data collection and assessing that data is also important.

There are several process elements which should be accounted for before, during and after a task. One process element is establishing group ground rules. Ground rules include setting norms for group meetings, cooperation, how decisions will be made, and delegation procedures. Common understandings about each person's role and function in the group helps facilitate an atmosphere of respect and accountability.

Taking time to reflect is another important process. What methods of reflection and assessment will best fit the overall task and individual action steps along the way? Costa
and Garmston (1994) in their book Cognitive Coaching emphasize the idea that inner thought drives behavior. Getting to the root of people's thinking is the key that unlocks change. Colleagial partner discussions such as the critical friend model used in Action Research can be very effective here. This is when one or more colleagues take a short period of time to just ask questions of one person. No commentary is allowed, only questioning. This helps facilitate and probe complex thinking going on during the change process. Another powerful tool is journaling. According to Norton's Notes (Lancaster & Meade, 1998), an Interact simulation, learning involves a three-pronged cycle. First is the idea of important understandings. This is where participants in the change process are asked to give an Initial Response where they outline and or map out important concepts and share them with each other. Secondly, we periodically self-examine our attitudes through journaling, a Reflective Response. Here we list, react, annotate and dialogue about how we are feeling about the process. This gives us valuable information about how we can improve, what additional resourcing we may need, etc. Thirdly, we may journal in an Assimulative Response where we can utilize illustrative examples, stories, and videos to share the skills we have acquired through the process. Reflection is an invaluable data source throughout the task.

Finally, a serious consideration for any task is contracting a facilitator role. Who will facilitate? Will different people facilitate better for the different action steps identified? Would it be better to have an outside party facilitate reflection oriented meetings to create an even playing field? Answering these questions ahead of time can help in creating clear understandings about roles and goals and prevent hurt feelings during times of difficulty.

Using the Authentic Task Approach as a guide for change assists in clarifying vision, creating meaningful tasks, and keeping a positive work environment as the tasks are worked on and completed. However, it should be noted that the completion of a task does not ensure that the vision is attained. Collecting data to track work and measuring results often leads to a cycle of improvement. As Peter Senge states, "Vision creating is a process, not an event. Twenty to forty percent of your time should be spent on getting people to continually reflect on and articulate what it is they're trying to create." (1995, p. 21).
Action Research

Schools of Education typically encourage "hard-core" (formal) research quite often related to generation of data used to identify "best practices" in education such as how schools can achieve more efficient student learning. They encourage professors to publish, conduct inservice, offer coursework, and design and manage degree programs. The university also educates cadre pools of 'neophyte teachers' who, hopefully, will bring change to the schools. Such practices have been perpetuated by the assumptions of the public, the university, and to a lesser extent, by the schools, that the universities are gatekeepers of knowledge and can provide solutions to education's problems.

Increasingly, however; schools of education are being driven by professional organizations who impose visionary standards; by schools who are beginning to seek elsewhere for help; and by legislatures who control the purse strings. The university is being squeezed into a different mold; one requiring pragmatic collaborative action rather than slow response to findings of formal research. Individuals, or schools of education who feel pushed, inadequate, and question their place within the educational heirarchy are quite likely to find themselves clinging more tightly to things that have worked in the past. Increased resistance to change will heighten their feelings of anxiety, inadequacy, and threat, producing cycles of low production.

Action research, one means of bringing vision and task together, is to the authentic task concept described earlier as the fingers are to the hand. The authentic task approach provides a foundation for action research an effective strategy for engaging educators in the change process. Action research is conducted by people who want to do something to improve their own situations and not simply to satisfy administrators, or publishers (Sagor, 1992, p. 7). It differs from the scientific problem-solving process in that action planning and execution follow the research report.

Sagor (1992, p. 10) outlines the action research procedure as a five step process:

1. Problem Formulation
2. Data Collection
3. Data Analysis
4. Reporting of Results
To Formulate the Problem, Sagor (1992, p. 12) suggests that a supportive colleague be asked to interview the researcher. During the interview process the interviewer asks questions without evaluative comment. The questions serve to clarify the researcher's focus on the problem. The researcher, in turn, interviews the supportive colleague to get ideas for what might be the cause of the problem and gain insights leading to the best solution. Such REFLECTIVE INTERVIEWING enables researchers to get in touch with core issues that matter most. Other collaborative colleagues may assist through ANALYTIC DISCOURSE, an interviewing process helping with further elucidation of the problem. Absolute confidentiality is required in order to maintain good will among the colleagues. GRAPHIC REPRESENTATION helps the researcher visualize the various facets of the problem such as variables and relational order. Post-it notes, flow charts, webbing, and fishbone cause and effect diagrams (Caro-Bruce & Cohn, 1998, p. 32) are examples of GRAPHIC REPRESENTATION whose purpose is to help the researcher get a creative handle on the problem solution.

Data Collection of various types is suggested including keeping logs, diaries, and journals; examining photographs, videos, shadowing students, making check-lists, giving rating scales, using rubrics, interviews, surveys and tests. Attention should be given to data's generalizability, validity and reliability. Sufficient variety and volume of data should be gathered so that its weight is convincing to the skeptic.

Data is Analyzed by formal or informal means, reported and followed by specific Action for remedying the problem.

Kemmis (1982, p. 11) suggests another model of the action research process. The Plan, Act, Observe, and Reflect Model (see appendix B) through which continuous cycles of change are generated, thus keeping motivation of the researcher high.
Scenario: Professors of the classes Children's Literature, Language Arts, and Reading have just received student evaluations for the semester. Student comments that the courses overlapped were common. Some said that two of the courses were a waste of money because they were so repetitious.

The professors decided, through the process of Action Research, to initiate course modifications. Although at first the problem seemed apparent, its analysis using the following steps helped to spur action:

1. Map out the problem (See Appendix B)
2. Focus on a limb of the map, perhaps drawing or 'Post-it-Noting' an action sequence related to the limb.
3. Adopt a schedule for implementation.
4. Evaluate, making additional changes if necessary.
5. Repeat the process of course examination the next semester.

Portfolio Development

A portfolio tells a story. For many years artists, actors and actresses, architects and others have developed collections of their work so that they could share it with others. The portfolios could be used to provide examples of their best work. More recently the portfolio has been used in teacher education. It is "...an organized collection of documents, letters, papers and pictures that laud your personal and professional achievements in a compact, concrete way" (Cook & Kessler, 1994, p. 15). When students are required to develop a portfolio, they begin to see themselves in a much more professional manner. The idea of journaling is useful for students and faculty alike. As portfolios are developed, the faculty member can examine the journal for the feelings and creative abilities of each student. It is also useful for faculty members to provide students with some generic ideas so that they can develop a more complete story of their life. For an example of the categories that might be considered see Appendix C called Teaching Portfolio.

Using a detailed outline, faculty and students can develop beautiful, informative portfolios. Those who have developed such portfolios can teach others from other departments, and disciplines how to make portfolios. These can then be electronically shared either on CD or through videos of the content. Business folks, Communications
majors, and others have shown interest in this. Sharing in this way develops a more positive feeling toward education in the faculty and student body, and certainly by inference more respect for the education faculty members.

**Technology**

Presentations utilizing the latest in computer technology such as "Power Point" can be practiced at the university level. Teachers chose their profession, at least partly, because they love to learn. Allowing them to advance in their field, and become "the envied kid on the block" is a status much to be desired. Give professors technical assistants for helping prepare advanced technical presentations. Provide special training in media such as making CD's with the students they are training. This will increase their prestige on the campus generally.

**Conclusions**

There is need for improvement in education, and the emphasis being placed on this entire area is being shown at the national and state levels. If the schools and teachers are to change, then the faculty at the colleges and universities must improve. This is not a task that can be accomplished by any one person on his/her own. No, it must be a unified effort in which the institutions of higher learning work together with their existing faculty. The new faculty employed by the university must be dealt with in fairness. There is great hope for the future of teacher education, if all parties in the system that is called "education" work together to produce a more respectful, humane treatment of the people involved in the educative process.
REFERENCES


APPENDIX A

Semantic Portraiture

I. Choose a word from the group below that describes your emotional state in relation to your work in teacher preparation:

Joyous
Helpless
Frustrated
Competent
Intelligent
Motivated
Content
Hopeful
Angry

II Draw a picture of yourself in this mood. (Are you surprised to find that your face looks remarkably like 😊,😊,😢, with perhaps a bit of whimsy, cynicism or bleakness added to fit the situation?)

III "X" the following situations that contribute to the mood identified in II. Mark a check by those problems not contributing to your mood.

1. Media use in class is made too complicated.
2. Lecture hall assignments are too far away.
3. Programs are not compatible with stated outcomes.
4. Content is poorly articulated between courses.
5. Teaching materials are difficult to procure.
6. Administrative roadblocks inhibit productivity.
7. There is too little administrative support.
8. Economic support (pay) is not commensurate with time spent on-the-job.
9. Duplicate work is required for different offices.
10. Excessive paperwork is required.
11. Evaluative standards frequently change.
12. My ideas seem unimportant to others.
13. Other.

IV. Select a word or words from the list below that best describe/s your dissatisfaction. Beside the word, write the number of the "X'ed" practices from III that seem to contribute most to your 😞 feelings.

Guilt
Self doubt
Lack of Initiative
Feelings of Incompetence
Other

Role Confusion
Isolation
Selfishness
Despair
V Write the numbers of checked circumstances from III beside the word that best describes your feelings of 😊.

VI Write one suggestion for your program that would change your 😞 to 😊. Please do not write ("Fire the Dean!")
APPENDIX B

I. After Course Evaluations:

Objectives Examined

Problem: Articulation of Courses is Needed

Class syllabi are compared.

Content discussion for each Course.

Examine nearby school systems' curricular content. Interview school officials and teachers. Use them as collaboratives.

What new ideas, teacher behaviors, and activities can be included in the course to make it more functional?

II. After Ensuing Semesters:

Compare course evaluations with preceding semester evaluations.

Interview students.

Compare tardy/absenteeism records.

Keep track of questions asked by students, do interaction analysis.

Compare test scores; compare grades from past semesters.

Compare student work quality

III. Change Cycles:

As the researchers see new problems occurring within the courses, go back through I and II as necessary.
APPENDIX C

Teaching Portfolio

Table of Contents

I. Personal Information
   A. Birthday - when/where born
   Family
   B. Schools attended (with locations)
      Elementary
      Secondary School
      College/university
   C. Honors & Awards (documented)
   D. National Teacher Exam results

II. Professional Background
   A. Subject major
      Minor emphasis/Interest
   B. Experience
      Field experiences
      Student teaching
      Student teaching evaluations & recommendations
         Supervisor's
         Cooperating teacher's
      State Certification document (copy)
      Recommendations/References
      Other than credential files

III. Special Skills
   A. Teaching Unit
   B. Lesson plans (a few very good ones)
   C. Test (one you have created)
   D. Videotape of best lesson
   E. Learning activity packet

IV. Recreational Activities
   A. Sports
      Newspaper clipping
   B. Artistic works
      Music
      Writing
      Art
   C. Home Projects
D. Pictures
   Learning Centers
   Bulletin Boards
   Pupils from student teaching

IV. Goals & Objectives
A. Immediate
   Professional
   Personal
B. Long Range
Title: THE POLLUTION AND RECLAMATION OF THE NEXT GENERATION OF TEACHER EDUCATORS

Author(s): Martha Tyler John, Robert Norton, Suzanne Burns

Corporate Source: MidAmerica Nazarene University

Publication Date: Feb. 25, 1999

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