ABSTRACT

          This paper documents the journey of a researcher into the
teacher effectiveness movement and efforts to find missing links to show the
correlations between teacher behavior and student learning. The paper also
considers how the forces within education tend to consume embryonic ideas in
teacher education, rather than nurture them in an effort to protect
ideological or disciplinary territory. A look at the teacher effectiveness
movement and the "fossil record" of mid-century teacher effectiveness studies
leads to some lessons for educators. Educators should: (1) be careful
handling initial research findings; (2) recognize that research findings
related to teacher effectiveness can be used for specialized teaching styles
and to build a continuum of teaching styles for all disciplines; (3)
understand that education programs already have in place the teachers and
system to nurture and develop new ideas to prepare educators; and (4)
prioritize the initial target of the new teacher to provide an anchor for
beginning teachers. An attachment outlines stages of teacher development.
(Contains 34 references.) (SLD)

Missing Links: A Serendipitous Journey into Teaching Styles

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Paul Worfel
Indiana University
Bloomington, Indiana

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As a neophyte doctoral student bent on looking for ways of improving teacher education, a coursework assignment lead me to read an article in the Encyclopedia of Educational Research on Teaching Effectiveness by Good & McCaslin (1992). I was confronted, actually taken aback by the fact that the article pointed to empirical research generally known as "process-product" research that provided strong correlation between teacher behavior and student learning. This research, during the sixties and early seventies, coalesced into what would be known as the "Teacher Effectiveness Movement." In other words, research was showing that specific teacher behaviors could be distinguished and correlated to specific positive learning gains in students. Teacher Effectiveness is in the field's discourse vocabulary but it is used metaphorically much like we may use "dinosaur" to describe outmoded technology. I couldn't help but wonder why such strong correlative evidence was not the driving force for current decisions made in the field of preparing teachers. The Good & McCaslin (1992) article provided some well thought through criticisms of the movement but I couldn't help feeling that there were missing links to the "extinction" of "Teaching Effectiveness." There are two primary purposes of this paper. First I will document my serendipitous journey into the Teacher Effectiveness movement and efforts to find missing links. Secondly, I will consider how the forces within education tend to consume embryonic ideas rather than nurture them, in an effort to protect ones ideological or disciplinary territory.

Finding the right rocks to dig under

Like any paleontologist or archeologist looking for specific answers to a problem one doesn't just go out and randomly start digging; one has to start in the library. This library work

is generally known as the literature review. The Good & McCaslin (1992) article provided a good starting point but as I moved into the area of effective teaching, and in turn the concept of teaching styles, I was confronted by an avalanche of conflicting, complementing, overlapping, non-directional concepts and definitions. For example, in their literature review of a recent paper presented at the Annual Women in Educational Leadership Conference, Lacey, Saleh, & Gorman (1998) share several definitions of teaching style from different authors: "identifiable set of classroom behaviors," "teacher's personal behaviors," " based on teachers' own needs – professional goals personal convictions," "mode of expression," "implementation of philosophy." (p. 4) All of these were expressions of teaching style developed to facilitate research on the subject. In order to clarify their own research Lacey et. al. operationally defined teaching style as "teachers' inclusion and sensitivity preferences." (p. 3). While this paper did an admirable job of examining "the relationship between teaching style and gender" it did not provide the direction I was searching for. It does provides an example of the problem encountered in examining this issue.

Fortunately I found a map in "A Review of the Research into Teaching Styles/Behaviors' Impact on Students' Cognitive Outcomes and Bloom's Taxonomy" by Wade C. Smith, Jr. (1997). In this document Smith provides a fairly comprehensive historiography of research starting in the 1890's and leading to present day. In his documentation Smith identifies three primary periods of research activity.

1. 1890-1940:[1] The research was "descriptive in nature… studies were conducted to ascertain the characteristics of the effective teacher." Smith characterizes this period as "Personality Traits and Effective Teaching".

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[1] These dates are my own summary of the dates of research provided in the article and not to be construed as dates provided by the original author of the article.

2. 1950 – 1980: "The investigations were identifiable by a number of key correlational studies with the central question of, "Is there a correlation or association between certain teacher behaviors and students' cognitive or affective learning outcomes?" This stage Smith identifies as "Teaching Methodologies and Effective Teaching."

3. 1990-present: This series of investigations are also correlation studies – however, they are contrasted with the second series in that: "The teacher is viewed as an integrated whole educator interacting with the students in his/her classes and his/her interpersonal communication teaching style is seen as instrumental in effecting the student's cognitive and affective learning outcomes." Smith identifies this stage as "Mastery-Deployment of Key Teaching Competencies." (pgs. 4-6)

Even though "X" was not marking the spot, the Smith (1997) paper did provide a context from which I could better understand the life cycle (birth-development-evolution-death) of the mid-century Teacher Effectiveness movement (MCTE) I focused on the fossil record of the MCTE first of all because there seemed to be a clear life cycle evident. Secondly, the MCTE had more properties in common with the 3rd phase of teacher effectiveness than the first. The length of the lifeline also allows one to track the positive and negative forces affecting the movement over a long period of time. The current teacher effectiveness studies, while showing much potential, are in their primary stage and it is too early to determine what their ramifications will be for teacher education.

In summary, the mid-century correlation research provided several important advances in understanding teacher-learner relationships:

- We can identify behaviors associated with quality teaching as assessed by student response.

- Researchers verified that effective teachers used multiple behaviors in the course of everyday teaching in order to meet a multiple number of learning demands.

- The identified behaviors could be coalesced into behavior clusters and presented in a unified teacher education model. These models were presented in a linear framework (for example "The Spectrum of Teaching Styles" (Mosston, 1972)) or in a non-linear "modal" framework (Bennett, 1976).

In Search of the Lost World

While it can be justly argued that the teacher effectiveness movement is not dead but alive and well, I would argue that yes, it is alive but it tends to be isolated to specific regions and does not have an overall effect on the development of teacher education programs. It is to this issue that the next section will be devoted.

There were and are a number of positive effects currently evident in teacher education as a result of the MCTE movement. As previously mentioned, behaviors have been identified and have been incorporated into the common language of appropriate pedagogy. Terms such as proximity, pacing, teaching to mastery (to name only a few) have provided teachers benchmarks from which to assess their own teaching. These lists of effective teaching behaviors have been incorporated into coursework for pre-service teachers and found in popular "survival" books for first year teachers such as The First Days of School by Wong (1998).

The behavior clusters have been developed into sophisticated curricular methods designed to be used in the context of course work for pre-service teachers. For example: Instruction: A Models Approach (Gunter, Estes, and Schwab, 1990) is a non-linear behavior cluster (teaching style) approach. It is based on determining learning objectives, then using a particular teaching style to accomplish that objective. Mosston and Ashworth (1992) provide an

updated version of the original book <u>Teaching: From Command to Discovery</u> (Mosston, 1972) which articulates a linear group of teaching styles based on decisions made by the teacher and or learner.

Finally, many of the current clinically based teaching methods such as microteaching, minicourses, or protocols, which are being offered as an addendum to, or an alternative to, field experience, were developed to teach pre-service teachers what had been learned from the research of the period. For example, Metcalf (1994) points out that, "Microteaching was developed in the early 1960s …to promote teachers' use of 18 specific and discrete behaviors thought to contribute to teaching." (p. 12). All of these inroads of teacher effectiveness have had a positive impact on teacher preparation programs. However, as will now be discussed, these inroads for the most part have been contained at best and in some cases just eliminated.

Isolation and Extinction

In spite of evidence demonstrating the existence and/or influence of the MCTE, for the most part its power of influence has been contained or eliminated. This has occurred in the three areas cited; the research itself, teaching styles (behavior clusters) and laboratory or clinical practices. This section offers a possible explanation of the process of isolation and extinction.

First, just as the infant ideas of the effective teacher movement were emerging, they were set upon by the positivistic predatory processes. In other words, the research itself was brought into question, which is a very important natural control device of quantitative research to determine validity and reliability. The process entails investigating the research design, methods, and results and in many cases replicating the research itself to find flaws or

inconsistencies within the original body of research. The original article referred to in this paper (Good & McCaslin, 1992) pointed to four areas of concern:

1. The research differentiated important aspects of effective and ineffective teaching but failed to address more of the subtle differences between the most outstanding teachers and those who are competent but less outstanding.

2. The studies relied on standardized tests focusing on mastery of relatively isolated bits of knowledge and skills without assessing students' understanding of networks of related information or their ability to use this information to think creatively or critically, to solve problems, or to make decisions.

3. When criterion-relevant measures were used they tended to emphasize distal measures (e.g., end of unit) rather than the "everydayness" of learning.

4. The research resulted in an emphasis on quantity rather than quality of instruction and did not give much attention to teaching for understanding and higher order applications.

   (p. 1382)

The critical examination left many teacher educators interested but perhaps rather hesitant with the findings. A good example of this kind of reaction is a "Synthesis of Selected Research on Teacher Effects" (Cruickshank, 1976). The article provides some very encouraging assertions with regard to improving reading and math but ends in a very cautionary manner by stating, "Maybe teaching is so complex that we can only talk about effective teachers of a certain task in a certain setting. Should we try to find the combinations of behaviors that are task and setting specific?" (p. 60) This would be a daunting task at best and impossible at worst in the minds of most of those responsible for preparing future educators.

Where there were no natural controls of critical examination, the teacher effectiveness research began to reproduce and multiply. Even a superficial review of "process-product" research, from 1965 to 1975, will reveal a plethora of titles (Powell, Beard, 1984). The results of this uncontrolled reproduction came in the forms of extremely large lists of specific teaching behaviors and the resultant learner response. The lists were developed into teacher assessment tools used to determine teacher competency and turned on the very people they were designed to improve. Rather than reexamining the assessment tool and perhaps improving it, it was considered a threat and intellectually encouraged out of existence (Hansen, 1976; Scheck, 1978).

Behavior clusters or teaching style models and frameworks have had a different fate. It is an interesting exercise to compare methods texts from the middle seventies with contemporary texts. Sampling two disciplines, math and science, provides a good example of this fate (Andersen, Koutnik, 1972; Hodson, 1998; Baur, George, 1976; Cruikshank, Sheffield, 1988). The texts written during the mid-seventies provide the pre-service teacher with a variety of teaching styles which are focused on various learning objectives. In the '90s the learning objectives have remained but are dealt with far fewer teaching strategies linked primarily with a constructivist learning bias versus the variety suggested in the mid-seventies.

At this juncture without specific causal evidence I can only speculate on the reasons for change between the mid-seventies and contemporary approaches. Two reasons seem to be worth considering: the territorialism of particular academic disciplines and conflicting ideological camps.

Since effective teaching research and behavior cluster models provide a strong argument for a particular style to effectively deal with a particular outcome, methods courses initially adopted a variety of strategies as suggested by the models. However, over time, different

strategies were dropped as part of the presentation. In a sense an evolutionary process of clearing out the less successful strategies in favor of those that favored a particular discipline occurred. Cruickshank (1976) provides one rationale for this in "Synthesis of Selected Research on Teacher Effects". He makes the argument that not all teacher behaviors were found to be effective for all subject areas, thus justifying specialized methods courses for each discipline.

The negative effect of this type of evolutionary process is that lines of demarcation tend to be drawn between disciplines showing no relative overlap between them. The end result is intellectual isolationism between disciplines that carries over into the developing attitudes of pre-service teachers. They do not see teaching as an entity unto itself. They see teaching of science different than teaching English. They see teaching of physical education as different from teaching a foreign language. The result is an elimination of non-linear and linear teaching style models built on clusters of effective teaching methods. For example, examine the fate of the Mosston (1972) model, known as the Spectrum of Teaching Styles. Unfortunately, Mosston made two critical mistakes. First of all, he boldly made assertions best summarized in "Toward a Unified Theory of Teaching" (Mosston & Ashworth, 1985).

> The Spectrum transcends cultural boundaries and individual idiosyncrasies since it is based on the human capacity to make decisions. The structure of the Spectrum is universal. The use of the individual styles varies with personal preferences and cultural conditions. And the use of decision making as the universal principle of deliberate teaching helps in the analysis of various programs and models. It also suggests that no teaching act, model, or educational game can be identified as being "outside" the Spectrum. (pg. 34)

The second mistake made by Mosston (1972) was to use examples from different content areas, such as math, science and physical education to illustrate the various ways the model may

be appropriate for different learning objectives. This generalist approach was promoted throughout the original and subsequent additions. Possibly the greatest problem that flew in the face of all known specialist camps was the potential alignment of physical education with an academic discipline. How could there be a pedagogical model that could appropriately teach both an overhand serve in volleyball and at the same time provide an understanding of the adolescent relationships evident in Romeo and Juliet? It just didn't make sense. The result of these two mistakes has been virtual academic indifference and isolation of the model to physical education departments at universities throughout the country and the world.

Finally, the MCTE movement seems to be alive and well in the clinical models of instruction being used within education schools. For example Mcintryre's (1991) study (as cited in Metcalf, 1994) reported that "microteaching is reportedly used in 91% of teacher education programs making it second only to field experiences (98%). (pg. 12) Research has validated this means of preparing pre-service educators for the field. However, even in clinical and laboratory models given life by the MCTE movement fundamental changes are taking place. For example Metcalf (1994) concludes in his meta-analytical review,

> ...sadly, renewed interest in providing "anchored" instruction for teacher education students overlooks or rejects earlier methods of laboratory experience on the grounds that they are not effective or are no longer appropriate for contemporary outcomes, such as development of reflective or analytical ability...
> (pg. 27)

In other words a widely used preparation technique for pre-service educators is either being eliminated or compromised past the point of recognition.

In addition to the negative forces affecting each of the areas considered, I believe there is a larger force at work. For example, the aforementioned review of contemporary methods texts doesn't support a clean evolutionary line of development showing distinct teaching styles for

distinct disciplines. The review tends to support the influence of conflicting ideological camps What is seen, as previously mentioned, is an emphasis on developing teaching strategies which encourage in class construction of knowledge. This constructivist approach seems to be almost universal in the current teaching strategy discourse. This is why you will rarely find components such as direct teaching in most contemporary syllabi. It is considered antithetical to constructivist learning theory and therefore not an appropriate teaching strategy to be learned by pre-service teachers. The difficulty with conflicting ideological positions is that they tend to mutually exclude one another rather than learn from one another. Survival of the fittest or the majority becomes the determining factor rather than co-existence in education departments. Cruickshank (1996, 131) ranks "conflicting ideologies" as one of the "dozen critical impediments to reform in teacher preparation."

Rather than proposing an either-or rationale for the demise of teaching style models, I would suggest the combination of both disciplinary territorialism and protective ideology. Both of these forces have been responsible for the dissection of teacher effectiveness. This wholesale dismemberment of original teacher effectiveness models is problematic for pre-service educators. They see a heart here, a hand there, and an ear over there. The means of unifying these components into a usable framework have been lost in the process. One thing I remember about my experience in high school biology is that at the end of the dissection process it was not possible to put the frog back together. The frog remained dead.

In spite of being able to reasonably trace the evolutionary process of the MCTE movement that ended, (if not in extinction at least isolation), I felt there was still something missing in my search for understanding.

The missing link

In the midst of frustration over the incompleteness of my search, a colleague reporting on a completely different issue provided the clue for the link; the stages of teacher development. The colleague, in the context of his presentation on the ethnography First-year teacher: A Case Study, (Bullough, 1989) mentioned the concept of different stages that teachers go through in learning their profession. Having been in education for nineteen years I was very aware that teachers, including myself, go through developmental stages but have never recognized that there was a particular taxonomy. I found the initial citation for Stages of Teaching to be found in Kevin Ryan's (1986) book, The Induction of New Teachers. On digging deeper I became aware that Ryan had made slight adaptations to a theory posited by Fuller and Brown (1975) in a book edited by Ryan in 1975, right in the midst of the mid-century teacher effectiveness movement. This developmental theory clarified further by Runyon, Sparks, and Sagehorn, (2000) presents a model of three specific stages teachers go through: Survival (Establishing Structures)[2], Mastery (Developing the Science of Teaching), and Impact (Developing the Art of Teaching). This research and resultant theory was imbedded in the teacher effectiveness movement. Why hadn't this been unearthed in my initial investigation? Is the claim that it is imbedded with teacher effectiveness valid? How would this new insight inform the overall study of mid-century teacher effectiveness?

A reading of the Fuller & Brown (1975) text reveals why stages were so imbedded and not really acknowledged as part of the mid-century teacher effectiveness movement. First of all, to say that the Fuller & Brown article is in itself a result of the trademark process-product research would be presumptuous. Except for one reference to an article on teacher effectiveness the article is based primarily on research completed by Fuller (1974), the year before. The only

reasonable argument for the stage theory to be part of the movement is based on association. As previously mentioned it was written in the midst of the effectiveness movement. Also, the edited volume in which it resides (Ryan, 1975) provides positional evidence within the "Editor's Preface". It states,

> Limitations on space and expense force choices...we have chosen to emphasize larger organizing principles which help shed light upon the activities of the field. This is particularly true of the first five chapters....In the second chapter, "Becoming a Teacher," Frances Fuller and Oliver Brown provide a summary of research and theory on a perspective that is often overlooked: the perspective of the person becoming a teacher....The literature is awash with new words and combinations of words such as "confluent education," "performance- or competency-based teacher education," "mini-course," "micro-teaching," "module,"...five chapters are devoted to current developments that very much affect the current context of teacher education and should have a growing impact in the future. (pg. x-xi)

Ryan not only recognizes the obscurity of the stages of teacher development but in a sense predicts its further fate to remain imbedded by sharing that the "literature is awash with new words." In the midst of such a deluge it is easy to recognize how the concept of teacher development, which was no process-product research, was once more buried under layers of exciting new material. The problem is that the concept should have been then, as it should be now, an organizing force for the research in teacher preparation. This was recognized by Cruickshank (1976) when he shared, "Unfortunately, for the most part, investigators (those conducting Teacher Effectiveness research) did not indicate how or why independent variables

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[2] AA Copy of the Stages of tTeacher Development may be found in Appendix A.

were chosen. This is not surprising when it is considered that at present we still lack rich theoretical bases to assist us in selection of meaningful variables and guide our research efforts." (p. 58) I recognize that Cruickshank was referring to a theoretical basis with the process-product research itself. I would argue that the organizing principles need to come from outside the process, from that of a theory of teacher development.

It is difficult to determine why a strong understanding of how teachers develop didn't have more influence on the mid-century research and the various school of education thrusts that followed. Since positivistic ferver during this time ruled supreme, did a theory that emerged from observation rather than correlation seem rooted in "soft science" and lacking in the strength of validity and reliability? Or conversely, did a grounded theory in teacher development present itself as too structuralist therefore evoking a reaction of post-structuralist to define it out of existence? Determining the reason for the lack of recognition of this theory is of less importance than determining how its acceptance may have informed and affected the development and outcomes of the MCTE movement.

I would argue that having a grounded theory of teacher development would have provided a target for the teacher effectiveness research. Recognizing that most pre-service teachers go through a survival stage demands that teacher education programs prepare them for that stage. (A quick review of the Stages of Teacher development will make my point faster than the text that will follow.[3])

Teacher education programs have prepared reasonably well for the Mastery and Impact Level. While these levels are and should be a definite focus of teacher education programs we are leaving many teachers unprepared to meet the first stage. In a sense we are using the first stage in a pseudo-evolutionary tactic to weed out the weak so that only the fittest remain in the

field. Take for instance the report from Public Agenda, "Different Drummers" (Farkas, Johnson, & Duffett, 1997) which surveyed "teacher educators including deans, chairpersons, and faculty members from colleges and universities…"(pg. 37). Being life-long learners and constantly updating their skills ranked as the number one (84%) quality that professors wanted to impart to their prospective teachers. Maintaining discipline and order in the classroom, (a definite and primary issue in the "Survival Stage") was ranked number four (37%) as absolutely essential. This feeling and indeed specific pedagogical thrust was clarified even more with the following survey result:

> About 6 in 10 education professors (61%) believe that when a public school teacher faces a disruptive class, he or she has probably failed to make lessons engaging enough to capture the students' attention. "Effective motivation that turns kids on to learning is a positive way of dealing with discipline." Said a Los Angeles professor, "and I think you need to do that instead of just controlling them." A Chicago professor said much the same thing: "We teach students how to become active learners. And I think that relates to the discipline problem…When you have students engaged and not just vessels to receive information, you tend to have fewer discipline problems." (pg. 10)

While I fully agree with this assertion in principle, my teaching experience does not fully agree. This is illustrated in First-Year Teacher (Bullough, 1989) where the research subject is reflecting on the first few weeks of teaching.

> I don't know [why I didn't think about it]. I think that I thought that if you planned the curriculum really well, the management just falls into place. I really thought that when I was student teaching, if you are not well planned you

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[3] See Appendix A for a complete description and citation of the stages.

are going to have problems. But planning well doesn't solve those problems, you still have [management problems]. (p.25)

Another report from Public Agenda, "A Sense of Calling" (Farkas, Johnson, and Foleno, 2000) is also supportive of this point.

New teachers may enter the field energized and well intentioned and committed to doing good work, yet they must often confront an inevitable, if rude, truth – some of their students will misbehave or be disruptive. And this is another area where teachers wish they could have received better preparation in school: "They don't teach you how to deal with this student over here who won't sit down. They don't teach you the real aspect of teaching," said one teacher about his experience in an education school. (pg. 30)

This report (Farkas et al., 2000) is a refreshing look at new teachers, who have taught less than five years. While it contains accusations against education schools that, "they are not properly preparing students," these accusations center on the lack of preparation for the first stage, "Survival." The positive aspect of the report is that the students do in fact have a clear vision for becoming teachers that are "guides on the sides" rather than "sages on stages." This is not an inborn quality but is a direct and positive result of the teacher education programs and reflects the prominent attitude of professors previously mentioned. The problem is, will they get to the point where their experience matches their vision? Allowing a theory of teacher development to prioritize the needs of the pre-service would have brought more research to bear on this particular stage. Instead research focused on mastery and impact.

The research during this period focused on teachers who were in the mastery or impact stage of their profession. The mid-century researchers were looking for examples of great

teachers, their behaviors and the resultant student accomplishment. Unfortunately the results became problematic once they began to be used to develop lists of "teachers should" statements for pre-service teachers. The research that examined whether or not pre-service teachers gained or could be taught appropriate teacher effective behaviors showed glaring problems in their results. For example, research of field experiences designed to practice effective behaviors was less than encouraging. It was seen to "negatively affect student teachers' attitudes, knowledge, and classroom practice." (Metcalf, 1994, 1) Additionally, Metcalf's study shows that alternative teacher preparation strategies such as clinical experiences have, to varying degrees, positive results in encouraging effective behaviors; (however) there is a much stronger positive result with in-service teachers. Based on an understanding of "Stages of Teacher Development" these results make sense.

These results support the idea that teachers at a survival stage cannot fully exhibit the behaviors exhibited by teachers in the mastery or impact stage. The reason for this inability is that these behaviors are developmentally inappropriate for the pre-service teacher. It is interesting that after years and years of practice and development in authentic situations, baseball players are still provided with minor league training prior to a move to the majors. We are expecting pre-service teachers to jump into the majors when they need to spend some time in the minors. The in-service teachers on the other hand were found to be very capable of investing in and changing to effective teaching behaviors. They had moved past the survival stage.

Unfortunately, when confronted with the needs of the survival stage in both student teaching and the first year the new teacher tends to become disillusioned by their education program saying, "I was never prepared to deal with this." It is at this point that they adopt "teacher survival techniques" from the veterans of service. Evertson () states that a review of the

research in attitudes and behaviors prior to and at the end of such experiences "showed decrements in attitude and teaching behavior…a shift toward conservatism in overall attitudes (p. 99) They do not always recognize that they will, eventually, use the skills and knowledge gleaned from four years of preparation. They are only confronted with the urgency of knowing how to survive at present."

Another important implication from a stage theory has to do with the idea of multiple teaching styles. Cruickshank (1996) says, "Among the factors contributing to the success of teachers at any level is their ability to use a variety of instructional alternatives." (pg. 101) I would add that these instructional strategies need to be framed in such a way that make them readily available for access to the new teacher. Pre-service teachers are exposed to and practice many teaching strategies as a part of their undergraduate preparation. At this point there is no unifying factor (how they fit together) in these strategies. In a crisis or survival mode we tend to revert back to our most familiar behavior not the less familiar and newly experienced. A unified framework for teaching styles would provide an understanding of a continuum of teaching behaviors available to the new teacher. A continuum of teaching styles allows the new teacher to adjust, move, and adapt to the needs of the classroom. A continuum of teaching styles better reflects a developmental model in that the new teacher can develop into the full spectrum of teaching as they mature. Once success is experienced at the "Survival Stage" then the other styles will begin to emerge. This then is a process of natural selection of needed teaching styles versus a survival of the fittest.

What we can learn from the fossil record?

As previously mentioned, Smith (1997) identifies a new species of teacher effectiveness research emerging. This research is very intriguing, focusing on the whole educator, the

interaction of that educator, identifying interpersonal communication styles – and their effect on student learning. One of the leaders of this wave is Theo Wubbels (1995) who is taking on one of the most difficult areas confronting teachers at all stages of teacher development, interpersonal relationships.

The value of looking at the fossil record of the mid-century teacher effectiveness movement can be realized only if we can learn from that loss. Educators need to:

1. Be careful with how initial research findings are handled. Yes, we need checks and balances of the process and findings, but don't let the checks and balances abort the embryo. At the same time don't let the research go undirected. Let it be balanced by articulated needs grounded in a theory of teacher development.

2. Recognize that research findings for teacher effectiveness can be used not only for specialized teaching techniques but generalized into a continuum of teaching styles that may be applicable for all educational disciplines. Education must provide entry - level professionals who can fit in a variety of venues. To be protective of a particular ideological framework and/or theoretical bias and a limited number of teaching strategies that support such a view, is to create graduates who feel confident only in a narrow pedagogical framework. This is not only a disservice to the graduate, but a failure to recognize the needs of the diverse educational system of which the education department is designed to serve.

3. Understand that education programs already have in place the teachers and system to provide nurturance and development of new ideas that will add to our ability to prepare future educators. However, if ideological positioning between groups is the highest political priority we will fail to see that only integration and interaction will provide a

medium for new growth. The result will be that the new teacher effectiveness research is

doomed to the same life and death history of the previous movement.

4. Prioritize the initial target of the new teacher. If educators again bury an understanding

and/or articulation of teacher development it will only result in good intentioned

educational energy aimed randomly in hopes of hitting something. Future teachers need

an anchor, in order to weather the initial storm of the first critical years. Education

departments need to take the responsibility for providing that anchor.

References

Andersen, H. O., Koutnik, P. G. (1972) <u>Toward More Effective Science Instruction in Secondary Education.</u> New York, NY: Macmillan

Baur, G. R., George, L. O. (1976) <u>Helping Children Learn Mathematics: A Competency-Based Laboratory Approach.</u> Menlo Park, CA: Cummings

Bennett, N. (1976) <u>Teaching Styles and Pupil Progress.</u> Cambridge, MS: Harvard Univ. Press

Bullough Jr., R. V. (1989). <u>First-year teacher: A case study.</u> New York: NY: Teachers College Press

Cruikshank, D. E., Sheffield, L. J. (1988) <u>Teaching Mathematics to Elementary School Children: A Foundation for the Future.</u> Columbus, OH Merrill

Cruickshank, D. R. (1976) "Synthesis of Selected Research on Teacher Effects." <u>Journal of Teacher Education 27,</u> (1) 57-60.

Cruickshank, D. R. (1996) <u>Preparing America's Teachers.</u> Bloomington, IN: Phi Delta Kappa

Cruickshank, D. R. (1996) The Modal Teacher Preparation Curriculum. <u>Preparing America's Teachers.</u> (pp. 3-42) Bloomington, IN: Phi Delta Kappa

Farkas, S., Johnson, J., Duffett, A. (1997) <u>Different Drummers: How Teachers of Teachers View Public Education.</u> Report from Public Agenda. New York, NY

Farkas, S., Johnson, J., Foleno, T. (2000) <u>A Sense of Calling: Who Teaches Who and Why.</u> Report from Public Agenda. New York, NY

Fuller, F., Brown, O. (1975). Becoming a teacher. In K. Ryan (Ed.)<u>Teacher Education. Part II. The 74th Yearbook of the National Society for the Study of Education.</u> Chicago, IL: Univ. of Chicago (pp. 25-52)

Fuller, F. (1974) <u>The Experience of Teacher Education: An Empirical Review and Conceptualization.</u> Research and Development Center for Teacher Education. Austin, TX: Univ. of Texas

Good, T., and McCaslin, M. M. "Teaching Effectiveness." In <u>Encyclopedia of Educational Research, 6th ed.,</u> edited by M. Alkin. New York, NY: Macmillan, 1992 (pp. 1373-1388)

Gunter, M. A., Estes, T. H., Schwab, J. H. (1990) <u>Instruction: A Models Approach.</u> Needham Heights, MA: Allyn and Bacon

Hansen, B. (1976) Teacher Evaluation is Immoral. Community College Review. 4 (3) 4-7

Hodson, D. (1998) Teaching and Learning Science: Towards a Personalized Approach. Philadelphia, PA: Open University Press

Lacey, C. H., Saleh, A., Gorman, R. (1998) Teaching Nine to Five: A Study of the Teaching Styles of Male and Female Professors. Paper presented at the Women in Educational Leadership Annual Conference. Lincoln, NB. (ERIC Document Reproduction Service No. ED 442 334)

Metcalf, K. K. (1994) Laboratory Experiences in Teacher Education: A Meta-Analytic Review of Research. Bloomington, IN: School of Education

McIntyre, J. (1991) The utilization of laboratory experiences in undergraduate teacher education programs. Paper presented at the annual meeting of the Association of Teacher Educators, New Orleans.

Mosston, M. (1972) Teaching: From Command to Discovery. Belmont, CA: Wadsworth

Mosston, M, Ashworth, S. (1985). Toward a unified theory of teaching. Educational Leadership. 42. 31-34

Mosston, M, Ashworth, S. (1992) The Spectrum of Teaching Styles. New York, NY: Macmillan

Runyon, C. K, Sparks, R., Sagehorn, A. H. (2000) A Journey of Change: Redefining and Assessing a Multifaceted Teacher Training Program. Pittsburg State University, KS (ERIC Document Reproduction Service No. ED 446 052)

Ryan, K. (1986) The induction of new teachers. Bloomington, IN: Phi Delta Kappa

Farkas, S., Johnson, J., Duffett, A. (1997) Different Drummers: How Teachers of Teachers View Public Education. Report from Public Agenda. New York, NY

Farkas, S., Johnson, J., Foleno, T. (2000) A Sense of Calling: Who Teaches Who and Why. Report from Public Agenda. New York, NY

Fuller, F., Brown, O. (1975). Becoming a teacher. In K. Ryan (Ed.)Teacher Education. Part II. The 74th Yearbook of the National Society for the Study of Education. Chicago, IL: Univ. of Chicago (pp. 25-52)

Fuller, F. (1974) The Experience of Teacher Education: An Empirical Review and Conceptualization. Research and Development Center for Teacher Education. Austin, TX: Univ. of Texas

Ryan, K. (Ed.) (1975) Teacher Education. Part II. The 74th Yearbook of the National
Society for the Study of Education. Chicago, IL: Univ. of Chicago (pp.ix – xiii)

Powell, M., Beard, J. W. (1984) Teacher Effectiveness: An annotated bibliography and
guide to research. New York, NY: Garland

Scheck, D. C. (1978) The Use and Abuse of Student Evaluations of Teaching
Effectiveness in Higher Education. College Student Journal (Monograph) 12 (3) 1-13

Smith, W. C. Jr. (1997) A Review of the Research into Teaching Styles/Behaviors Impact
on Students' Cognitive Outcomes and Bloom's Taxonomy. Paper presented at the
Annual Meeting of the SERA. Austin, TX (ERIC Document Reproduction Service No.
ED 408 310)

Wong, H. K., Wong, R. T., (1998) The First Days of School: How to Be an Effective
Teacher. Mountain View, CA: Harry K. Wong Pub.

Wubbels, T., Tartwijk, J., Brekelmans, M. (1995) An Interpersonal Perspective on
Teacher Behavior in the Classroom. Paper presented at the European Conference on
Educational Research (ECER) Bath, England TX (ERIC Document Reproduction Service
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Appendix A

Stages of Teacher Development

Survival
- Acquiring supplies and establishing room layout
- Knowing school policies, norms and culture
- Building collegial staff relationships
- Establishing classroom procedures and routines
- Setting rules and reinforcing them to gain respect of students
- Expanding subject matter knowledge (school curriculum)
- Lesson planning for high time on task
- Coping with evaluation, other's opinion, and fear of failure
- Knowing parents and opening lines of communication

Mastery
- Using various models of teaching correctly
- Acquisition of innovative techniques, activities, and ideas
- Asking classroom questions effectively and providing review and practice
- Providing timely assignment feedback and furnishing justification for grades
- Clear direction giving, illustration, and transitions so classroom activities move smoothly
- Identifying learning styles, characteristics, and needs of class
- Providing sponge activities to keep students busy
- Managing time pressures

Impact
- Being novel, vivid, and varied in teaching strategies
- Achieving equity in monitoring, questioning and feedback
- Showing high expectations for every student and motivating all students to succeed
- Striving to meet the individual academic, emotional and social needs of students
- Developing consistency in enthusiasm, fairness and humorous disposition
- Being a role model that shows empathy, warmth, and respect to each student

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