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ABSTRACT

This study examined cognitive style data from preservice elementary education students at four universities, discussing how cognitive style affects the choice of teaching as a career. A total of 219 preservice elementary teachers from six classes completed the Paragon Learning Style Inventory, which obtains measures of the four Jungian/Myers-Briggs dimensions (introversion-extroversion, intuitive-sensate, thinking-feeling, and judging-perceiving). The results indicated that the students' scores all looked alike, with each class having about the same proportion of each type. The pattern fit the predicted pattern for educators. Comparisons of these data with data on practicing teachers indicated that they had essentially identical patterns, so individuals going into teaching were by cognitive style essentially the same as those currently teaching. This suggests that within the dimension of learning and cognitive style, the teaching personality is not learned but is in fact recruited. Preservice teachers were more extroverted than introverted; more concrete-minded sensates than abstract-thinking intuitives; more of the harmony-seeking feeling type than the logic-needing thinking type; and much more structured, sequentially thinking judges than spontaneous, flexible thinking perceivers. (Contains 18 references.) (SM)

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Who Gets into Teaching?

Cognitive Style as a Variable in Predicting Teaching as a Career Choice

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Who Gets into Teaching?

Cognitive Style as a Variable in Predicting Teaching as a Career Choice

Why do those of us who teach choose teaching as a career? Are we a more altruistic group? Are we born with certain skills that would lend themselves to the work of teaching? Is it that we have likely been encouraged by life events or significant others? For most of us, all of these factors contributed to why we chose teaching, and regarding the teaching profession, these factors may also help explain a great deal about who gets in and who remains.

This study examines cognitive style data from pre-service elementary education students at four universities, and aides in the understanding of one important variable in the process of explaining who we are as teachers and why we chose to teach. I contend that it is important to examine the characteristics of those of us who ultimately chooses education as a career, for the simple reason that understanding the complexion of who teaches provides insight into why schools are as they are. We often take for granted the way schools function, and accept the common characterization of what it is to “teach.” I would propose that it is necessary to reexamine the institution of “school” for two critical reasons. First, all indications suggest that the job of teaching is becoming increasingly complex (Hargreaves, 1993). Second, despite living in an the era of the “restructured school,” we are seeing schools change very little. The responsibility for this seems to lay primarily with teachers.

We know from research into cognitive styles that teachers as a whole have some distinguishing characteristics (Briggs-Myers, 1980; 1992; Glickman, 1985; Lawrence, 1987; Shindler, 1998). For example, compared to the general population, we tend to be more practical-minded, linear, and feeling-based (Lorentz, 1977). It has been suggested that these traits are learned, and that teachers become acculturated to the “ways of school” as a result of being immersed over time within the school culture (Mitchell, Ortiz & Mitchell, 1987). Is this indeed the case? Or are certain personalities attracted to teaching for some reason? In other words, are the orientations teachers use to approach their work a result of nature or nurture?

James Hillman (1998) offers a useful explanation for why any of us take on the orientation to our life and work that we do. He suggests that we have come into the world with a destiny and a personality that he terms the “soul’s code.” He uses the analogy of the acorn that has within it the material necessary to grow into a unique yet complete oak tree. In support of this assertion he recounts the story from Alexander Neubauer’s *Nature’s Thumbprint* of two identical twins separated at birth

Identical twin men, now 30 years old, were raised by different parents in separate countries. Both twins kept their lives neat to the point of pathology. Their clothes were preened, they kept their appointments precisely on time, and they regularly scrubbed their hands to a raw red. When the first was asked to explain why he is so fastidious, he answered that his mother had raised him to be so. Her house was perfectly ordered and she insisted he keep his things in their proper places. Living in such an ordered environment, “how else could he turn out?” The other twin, just as much a perfectionist, explained his own behavior this way: “The reason is quite simple: I’m reacting to my mother, who was an absolute slob.”

The story of these twins reminds me of the explanations I get from students when I ask them why they want to become teachers. Some of them say they had a good experience in schools and had teachers who made a real difference in their lives and as a result want to do the same for others. Just as many suggest that their reason is that they had a terrible experience in school, and want to help ensure that the next set of students does not have to go through what they did. Most students regardless of their view believe that they are destined to teach. As was the case with Neubauer’s twins, these students seem to have interpreted their very different experiences with the same conclusion. I can not help but wonder if they would have been attracted to teaching no matter their experience.

But if those of us who ultimately end up teaching are destined to teach, how can we explain why we approach teaching as differently as we do? We see in our buildings beginning teachers who break the mold of the beginning teacher, as well as experienced teachers who contradict every myth of what experienced teachers are supposed to be like. In my experience, most teachers seem to maintain a fairly consistent orientation throughout their careers. Some teachers are easily satisfied from early on, while others are still looking

to improve twenty years into their careers. Some teachers are always breaking the rules and flirting with heresy, while others work easily within the system and did from the beginning. Some teachers are popular with students, no matter what their age or the subject they teach, while others of all ages do not attribute any significance to popularity.

Examining Cognitive Style Data

I have had the opportunity of teaching senior undergraduate elementary education majors at four different universities. As part of my orientation to teaching and learning in my courses, I have given each group a learning/cognitive styles inventory, *the Paragon Learning Style Inventory*. This instrument obtains measures of the four Jungian/Myers-Briggs dimensions, introversion-extroversion, intuitive-sensate, thinking-feeling, and judging-perceiving. I find it very useful in understanding the ways my students' will approach various tasks and how to best present concepts. And my students immediately see that if they are to be effective, aware, and impartial, they need an understanding of how they will think and approach tasks differently from most of their students.

A secondary byproduct of administering this inventory is that I have now collected profiles of six different groups of undergraduates (N=219). After collecting the scores of the first few groups, I began to see a pattern. I found that essentially they all looked alike. Each class had about the same proportion of each particular type. Further, the pattern fit the predicted pattern for educators (Briggs-Myers, 1992). I continued to see this pattern in classes at each university. Figure A displays the high correlational relationships among the various groups of methods students when the proportions of each of the 16 possible cognitive styles was correlated for each pair of groups.

Figure A: Pearson Correlation Coefficients Comparing Percentage of each of the 16 Cognitive Styles within the Six Pre-Service Teacher Samples .

Sample	1	2	3	4	5
1 (N=31)	---	---	---	---	---
2 (N=65)	.80	---	---	---	---
3 (N=35)	.71	.69	---	---	---
4 (N=24)	.65	.41	.50	---	---
5 (N=29)	.54	.60	.70	.31	---
6 (N=37)	.72	.62	.78	.79	.52

The high correlation coefficients between the six groups illustrate that they were similar in pattern. While each group represented different geographical region and a random selection process in being assigned to their courses and/or sections, the pattern was the same for each. Further, when combined into one sample, the pre-teacher sample taken from the six methods groups had a nearly identical pattern to that of the predicted elementary teacher sample (Briggs-Myers, 1992). This strong correlation can be seen in the high Pearson r between the pre-teacher group and the teacher sample ($r=.92$), contrasted with the relatively low correlation between the pre-teacher group and the patterns found in the general population ($r=.32$) in Figure B.

Figure B: Pearson Correlation Coefficients Comparing Cognitive Style Patterns Among Pre-service, Elementary Teachers, and General Population Samples.

Sample	Pre-teachers	Teachers	General Population
Pre-teachers	---	.92	.32
Teachers	.92	---	.29

Given the correlation showing that practicing teacher and the pre-service teacher samples had essentially identical patterns, it would appear that those who go into teaching are by cognitive style essentially the same as those who are currently teaching.

It could be inferred from these data that within the dimension of learning and cognitive style, the “teaching personality” is not learned, but is in fact recruited. The data clearly demonstrate that those who enter teaching are not a random sample of the population. Samples of teachers look very different from groups of artists or engineers (Briggs-Myers, 1992). So, if in fact there is a “teacher personality” or a fundamental character to our schools, it may come in great part from the personalities of those who enlist to teach. Plus, given these findings, an argument suggesting that prolonged exposure to the culture of school cultivates a “teacher personality” appears less defensible.

The Cognitive Style of Teachers

Schools are often characterized as static and institutional. Teachers are often characterized as being warm and people-centered, yet orderly and practical-minded. These data indicate that the pre-service sample showed these tendencies toward these traits without ever having taught a day. When examining the pre-teacher data within each dimension of type, the following was found. The pre-teachers were more *extroverted* (@60%) as opposed to *introverted*. They were more likely to be concrete-minded *sensates* (@60%) as opposed to abstract-thinking *intuitives*. They were substantially more likely to be of the harmony-seeking *feeling* type (@77%) than the logic-needing *thinking* type. And, they were much more likely to be structured, sequentially thinking *judgers* (@74%) than the more spontaneous, flexible thinking *perceivers*.

These qualities often characterize schools themselves. The pre-service teacher data patterns suggest that if in fact schools take on the traits of the *sensate*, *feeler*, and *judger*, this environment may have more to do with the cognitive styles of those entering the field than any necessity of how schools need to be. It could even be inferred that, in large part, personnel in schools define the character of the school rather than the school shaping the personnel into a particular character.

Keirsey and Bates (1984) found that examining two area combinations within the four Jungian dimensions provided a useful four “temperament” comparison. When the pre-teacher sample was divided into these four temperament types, SJ, SP, NT, and NF, a very significant disparity of proportion is evident. A full half of the pre-teacher group scored sensate-judger (SJ), whereas this type represents only about 30% of the general population. Only 9% scored as sensate-perceivers (SP’s) compared to an estimate of 33% of the general population being of that type. This substantial disparity creates schools that are by nature much friendlier to some types than others. Figure C below illustrates the comparison of pre-teacher types to those of teachers and the general population.

Figure C: Comparison of Temperament Types of Prospective Teachers, Practicing Teachers, and Theoretical General Population Samples.

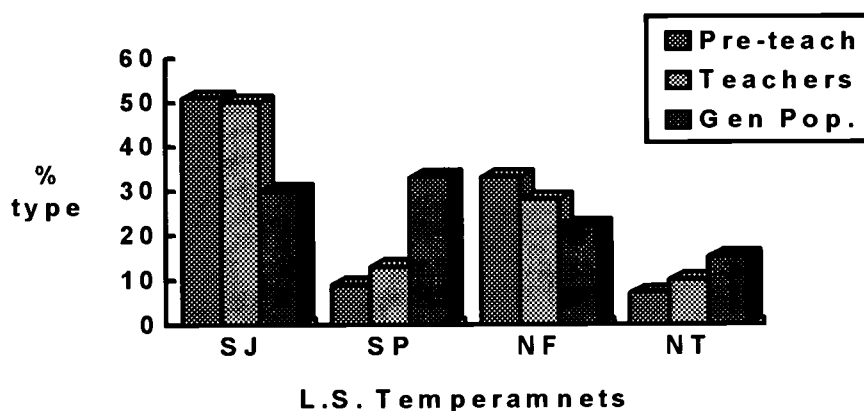
Temperament Type	Practicing Elementary Teachers¹	Pre-Service Elementary Teachers²	General Population³
SJ	50%	51%	30%
SP	13%	9%	33%
NF	27%	33%	22%
NT	10%	7%	15%

¹ Taken from MBTI data banks (N=804)

² Taken from Paragon Learning Style Inventory administration to 6 pre-service teacher groups (N=219)

³ Compiled from MBTI data bank (N>20,000) and Paragon LSI general sample bank (N=843).

Figure D: Bar Graph Comparison of Temperament Types among Pre-Teacher, Elementary Teacher, and General Population Samples.



What Does This Mean?

One of the reasons why teacher learning style patterns are not explored is that the implications of doing so are potentially disquieting. What are we supposed to do about who chooses to teach? I propose no answer to that question. But these findings do have a number of implications for school practice.

First, an awareness by teachers of how cognitive style manifests itself in the classroom seems necessary. These data reinforce the notion that certain cognitive processing types are not reflected in the teaching force. Therefore, students of those types are not being taught by teachers like them. Yet, we also know that students like, learn more from, and are given better grades by teachers like them (Lawrence, 1987; Lamphere, 1985; Mossman, 1980). The sensate-perceiving (SP) students achieve at lower levels and dropout in far higher percentages than any other type (Briggs-Myers, 1980; Kroeger & Thuesen, 1988; Mossman, 1980). The fact that there are very few SP teachers could be a contributing factor in our lack of success with these students. Likewise the intuitive-thinkers (NTs) make up only 7% of the pre-teachers surveyed. The NT can be very academic or can be very rebellious if put in an environment that does not allow for his or her questioning nature (Lawrence, 1987; Shindler, 1994). In too many cases the SP's energy and the NT's creativity is stifled in the typical school culture defined by SJs. It may

be that an education in how cognitive style differences affect student learning could mitigate much of this underachievement and inequity.

Second, restructuring activities need to be conducted with consideration given to learning style types. Morphord (1991) found that most of those in schools who enjoyed restructuring and the process of school change were intuitive types, especially NTs. In contrast SJs most often express a discomfort with change and prefer to keep things the way they are (Shindler, 1998). This difference in perception seems to be unnecessary. All types have a great deal to offer the process of governing a school, and all types are capable of seeing the value of collaborative change. Yet without an understanding of the basic learning and cognitive style difference that produce differing orientations to change, schools are destined to reproduce this internal battle between “change lovers” and “change resisters” that results in stifled growth and little reform.

Third, the cognitive style of a teacher significantly affects the choices he or she makes (Briggs-Myers, 1992), and those choices affect what is taught and how it is taught. These instructional choices ultimately cultivate an “epistemology” in the classroom where the nature of knowledge and learning is defined (Apple, 1991). Many critical theorist and reconstructionists criticize our educational institutions for cultivating an ethic of neutrality and consensus that breeds non-critical conformity. They call for schools to better educate for political awareness and social justice. This task may be problematic given the complexion of those who enter teaching. Over half of the pre-service teachers (54%) scored as both feelers and judgers (FJs). Typically this combination is manifest by the tendency to hold groups together, show loyalty and devotion to causes, yet to seek harmony to the point of avoiding all conflict and situations that threaten to divide. The classroom manifestation from the prevalence of this cognitive tendency is often a world view characterized by rationality, consensus and harmony. While this orientation functions well when building a cohesive classroom, it may come at the cost of students prepared for real-world conflict.

While our teacher preparation methods are continuously changing, those who we are preparing appear in many respects to be much like their predecessors. It is well supported that as teachers we have certain characteristics. It could be inferred from the previous data that the answer to “who gets into teaching?” is, “teachers.” In our efforts to reform and improve schools we need to take into consideration who “we teachers” are and why we are attracted to teaching. Before we can change schools we need to understand them. And before we can understand schools we must understand teachers.

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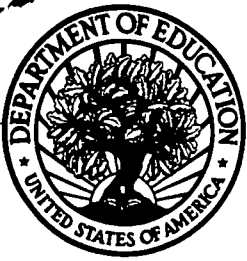
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