

## **An Ethnographic Exploration of Preservice Teacher & Faculty Resistance to Constructivist Pedagogy**

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### **Abstract**

This is a survey and ethnography of the instructional relationship between instructors and college students. Students were asked which instructional strategies they encountered most often and how effective were these strategies for them. Survey results were consistent in the six instructional strategies students encountered most frequently: (1) Lecture from notes with no audio visual, (2) lecture combined with classroom activity, (3) discussion, (4) constructivist/student-centered, (5) project-based, and (6) cooperative learning. How students ranked these strategies in terms of personal effectiveness is far less consistent, yet, lecture-no-audio-visual emerged as an ineffective means of instruction for the students. Students loved or hated constructivism/student-centered strategies with an even split in rankings of most effective and least effective. Most students claimed they want student-centered approaches. However, ethnographic notes revealed these students have little understanding of the responsibilities inherent in self-directed learning. Interviews with instructors revealed that they lecture out of “fear” that student-centered methods would not allow them to “cover” the content.

This ethnography explores conditions, expectations, and schemas that impact student and faculty resistance to constructivist pedagogy. The three-year study was conducted between two public college campuses in upstate New York. The work also documents the preservice teachers’ journey toward accepting more student-centered and constructivist approaches to learning. The analysis is based on field-notes, student and faculty interviews, video-taped class discussions and a survey on students’ perceptions of effective instructional strategies.

## **General Vision of Higher Education Instruction**

Senge and his colleagues (2000) in *Schools that Learn: A Fifth Discipline Fieldbook for Educators, Parents, and Everyone who cares about Education* describe modern schools as clinging to the paradigm of transmission of knowledge through teacher-directed instruction and artificial authority. This tradition of the academe holds strong despite a steady call for reform dating back to 1650s (Comenius Foundation). There has been some movement in early childhood education towards student-centered learning goals, particularly in the disciplines of math and science (Watkins, et al, 2002). However, that shift has not significantly affected instruction in the upper-grades and appears to be infrequent in college instruction (Barr & Tagg, 1995; Fear, et. al, 2003). Barr and Tagg (1995) found in colleges they studied that instruction was delivered with little emphasis on learning outcomes or mastery of content.

This study explores an exception to observations of higher education as primarily teacher-directed. It is an ethnographic look into an education community committed to constructivist education—at least in theory. This division of education's conceptual framework (2003) clearly states its position regarding the role of constructivist pedagogy:

“Constructivism is a theory of knowledge and learning (Fosnot, 1996) that provides the basic framework for professional education programs at ....”

However, when we lift the veil of rhetoric and take a close look at what is really happening in the classroom, and in the student-teacher interactions, there appears to be significant resistance to a constructivist approach on the part of students and much of the faculty. A problem arises when faculty attempt to deliver instruction in a student-centered model using constructivist instructional strategies. Adults seeking to be elementary school teachers who have primarily experienced traditional instruction view this as the norm and the constructivist approach as radical and often “wrong” or “crazy.” It is particularly difficult when the vision of what constitutes effective teaching for preservice teachers and many faculty, their “ghost” model if you will, is informed by 16+ years of teacher-centered instruction that emphasized memorization of content.

## **Context of the Study**

Upon moving to NYS the author discovered that the exciting, award-winning lessons for mid-western preservice teachers were met with scorn and disrespect by NYS students despite the demographic similarity between the two student

populations. The classic ethnographic question, “what’s going on here?” had to be asked.

The study was conducted across two campuses. One campus is a four-year state college in a rural setting and the other is a two-year community college in an urban setting. The institutions have a joint program for teacher education where students attend community college for two years then transfer to the four-year college to finish their teacher preparation program. This type of arrangement is typically referred to as a 2+2 program. The four-year institution has a rigorous selection criteria for admittance, in contrast with the two year institution that has an open-enrollment policy. The author works in both settings for the four-year institution.

## **Participants**

### *The 2+2 participants*

Participants from the 2+2 joint elementary education teacher preparation program include 115 students, 7 faculty, and 1 staff member. Over half the students in the program have some sort of direct in-school experiences such as, substitute teaching, school bus driving or classroom aide. Several faculty are adjunct instructors teaching for both the community college and 4-year college. Two instructors are teachers in local school districts. Two additional full time faculty travel from main campus weekly to teach in this program. The majority of the 2+2 program instructors teach 1-2 content areas. The author is responsible for 6 content areas resulting in significant contact time with the cohort of students.

### *Main campus participants*

The data was collected from 114 students enrolled in the four-year teacher preparation program on main campus. The majority of these students are traditional, meaning they attended college directly following high school and have limited work experience in school settings. Data was also collected from faculty members in the following departments: Educational psychology, elementary education, secondary education, philosophy and biology.

## **Procedures**

Traditional field observation techniques of ethnography were used, such as field notes, collection of artifacts, and interviews with informants (Fetterman, 1990). Both formal and informal interviews were conducted throughout the study. Other qualitative methodologies, i.e. a survey on teaching strategy effectiveness from the student’s perspective (Chryst, Fitzgerald, Gardeski, Achen-Brown, & Miller, 2006) also contribute to the holistic picture an ethnographer attempts to portray.

Each data set was examined to find consistent themes as well as trends in thinking and behavior patterns. The analysis of themes relied heavily on Sepstrup's (1993) tenets for content analysis and Glaser's *Grounded Theory* (1995). The examination of the data sets followed five steps: (a) like responses were grouped; (b) assumptions regarding meaning of the grouping were derived; (c) general themes/assumptions were verified against existing literature; (d) definition of category membership were established; and (e) original data sets were regrouped using category membership definitions. Participants were given the opportunity throughout the project to review the analysis and offer commentary and critique (Fetterman, 1990).

### *Data sources and collection*

The on-going ethnographic data is derived from a wide variety of sources: (1) the author's reflective writings on teaching and learning, (2) students' reflective writings on teaching and learning, (3) student comments on course evaluation forms and video taped course discussions, (4) peer evaluation letters, (5) observations of colleagues instruction, (6) notes from faculty department, division and curriculum meetings, and (7) interviews with students and faculty.

Interview data. Both formal and informal interview data was collected from three sources: (1) the primary faculty in the 2+2 program; (2) the faculty and administrators in elementary education and educational psychology programs on main campus; and (3) from students on both campus. The author initially engaged co-workers in conversations about the "nature and contextual factors" of the NYS student in an attempt to better understand the students' adverse reaction to instructional strategies that had been praised and publicly rewarded in the previous work setting. These conversations evolved into more formal curriculum planning meetings among the primary education faculty for the 2+2 program to better align assignments and share instructional strategies. The author and program coordinator engage in weekly conversations about best practice and how to promote student-centered instructional strategies among the pre-service and practicing teachers. The author also engaged an adjunct faculty, who has taught on both sides of the program, in many conversations about NYS schools systems and the role of constructivist theory in curriculum development and instruction.

Student survey data. In 2005, students in the 2 + 2 program participated in a survey asking them to identify instructional strategies encountered most often in their college courses. The students ranked the identified strategies according to effectiveness. The strategy of lecture and lecture with audio/visual was encountered "most frequently" and was ranked "least effective" (Chryst, et. al, 2006). A presentation of this study to faculty and students in a college wide

symposium in 2005 provoked interesting conversations with faculty and visceral reactions from students. Faculty wanted to know why students felt lecture was ineffective while students wanted to know why faculty kept using an ineffective instructional strategy.

Other data sources. Students' "feelings" and thoughts about constructivist pedagogy bubble up in various course assignments and activities. For example, student presentations revert to familiar lecture format under the guise of "professionalism" despite having constructivist instruction modeled for them and explicit directions to be creative and constructivist in their approach to the presentations. When asked to select an article on constructivist education, 1/3 of the students typically pick articles that argue against the use of constructivist approaches. After watching a documentary film depicting a year in a constructivist teacher's classroom, one student blurts out, "Yeah, but that's not realistic. That can't happen here."

## **Results**

Three themes have emerged from the variety of data sets: (1) Schemas for learning/teaching based on an idealized teacher (a ghost teacher) from the student's K-12 school experience have a direct effect on their present day perceptions of what constitutes effective teaching and learning; (2) Fear is a driving force in the lives of the students and the faculty when it comes to learning and teaching and; (3) Students' resistance to constructivist pedagogy lessens and in many cases evaporates over eight semesters, while faculty attitudes seem entrenched.

### *Theme One: The "Ghost Teacher"*

What seemed like exciting learning opportunities to the "new" professor were met with disrespect and scorn by many NYS students. The new professor engaged coworkers in lengthy conversations exploring NYS students' deep and abiding resistance to "learning." It was not clear until work on another project that the visions of "learning" for this professor and the students were at cross-purposes. The professor's constructivist message that learning is a process and not a product in most cases went unheeded. The students listen instead to their individual *Ghost Teacher*-- the idealized vision of Mrs. X, the teacher they want to be "just like." The following excerpt from one teacher candidate's reflection on a constructivist approach was a typical reaction.

"When I chose to return to college in 2002 my views of education were fairly nostalgic. I wanted to become a teacher like those I remembered so well from my youth.... My first exposure to

constructivism came as a junior in the ... Elementary Education program. At first I was very skeptical of this approach because it was undermining everything I had seen modeled by my former teachers. I could not believe that someone would even dare attack the education practices that I revered so highly. I thought she was crazy!"

Students see this *Ghost Teacher* as the supreme authority on what it means to teach and to learn—discounting any evidence or attempts to alter their vision. These students cling to the schema they have constructed based on information from their “ghost” that learning is the acquisition of knowledge, and just as they see their *ghost teacher* giving them this gift of knowledge, they too want to give this gift to their students.

Other faculty who have worked in the NY school system for many years have struggled less with the cohorts, as most of them engage the students in the more familiar format of lecture followed by activity or discussion. One adjunct faculty member, who professes to be a constructivist, used the entire 2+2 printing budget for 2004-2005 in one day making transparencies of her lecture notes. She commented to the author, “Well, they get tired of just listening to me talk.” Her solution to student disengagement was to show her “talking points” on the overhead. There was evidence that this same professor engaged the teacher candidates in many student-centered activities. For example, there were student generated lesson plans posted in the classroom. However, students were given a step-by-step hand-out on writing lesson plans. Activities labeled constructivist, were laced with the idea that there is one pathway to follow.

The resistance and struggle with constructivist pedagogy occurs when the cohort is asked to explore and process information as a way to learn. An illustration of this is a lesson the “new hire” uses called “chairness.” The lesson illustrates for the adult learner that we all construct knowledge based on our own experience. This lesson, which is also about lesson plan writing, begins with an introduction to constructivist theory. Six students are given a large piece of poster paper and a black marker. They are asked to go into the hallway and draw a chair. The only other direction given is to spread out so no one else can see his or her chair. Meanwhile in the classroom, the professor draws a specific chair for the remaining students. Her chair is an over-stuffed armchair with a tufted back. She explains to the students that this is her “grading” chair—a chair in which she spends a great deal of time! When the “chair” artists return to class they hang their poster next to the one the professor has drawn. The professor then asks the students, “What were the directions?” students respond, “To draw a chair.” The professor then asks, “Then why are all seven chairs different?” The discussion about previous

experience, recent experience, prior knowledge, influence of art appreciation class, etc. ensues. The conversation is guided by the professor so the students can come to the conclusion that we all construct meaning based on our own life experience and that this will be different for each individual. Students are then asked to write a lesson plan on a topic of their choice that clearly incorporates this “fact.” Some students in this exercise feel angry because they weren’t given “proper” instructions to draw the “right” chair. Because their chair does not match the instructor’s chair or any of the other chairs they feel as if they have failed. This emotional reaction shuts them off from the objective of the lesson as they construct a schema that this professor does not respect students like their *ghost teacher ALWAYS did*.

The student reaction to this “guide on the side” approach verses the “sage on the stage” approach is mixed. Several student evaluation forms contained conflicting comments within the same form such as, “I really like having choice in my assignments” and “Dr. \_\_\_\_ did not teach us anything—we taught ourselves.” All the students comment on their appreciation for choice in assignments, which indicates some growth towards autonomy in their learning strategies. However, these students continue to express a need for an authority figure. These preservice teachers want someone to tell them what is important to learn and which steps to follow—just like their favorite teacher—the *Ghost Teacher*--did.

### *Theme Two: The Fear Factor*

A deep fear rules the lives of teacher candidates. With new mandates for accountability, many institutions have raised course GPA requirements for admittance to education programs—the institution in this study requires a 2.8 GPA for admission into the professional program. Students fear they will not make the GPA—even students who come into the program with scores of 3.5 or higher report high levels of anxiety regarding “making the grade”. This fear causes great anxiety when students enter a new program that emphasizes self-regulated learning.

The 2007 cohort volunteered to participate in a focus group for accreditation purposes. These discussions revealed that the teacher candidates held a deep fear of all the “newness” experienced when transferring from one institution to the other -- new college, new professors, new instructional methods, and new standards, as well as the unexpected emphasis on self-regulated learning. As one student remarked:

“One difference is that you all actually expect us to read the books!  
I’ve never even read an entire book cover-to-cover before coming to

this side of the program—it's like what else are they going to expect. It's a little scary.”

This pervasive fear rules the students' social interactions and their ability to build positive, productive learning environments. The program emphasizes group work. However, cohorts often splinter and verbally abuse the weakest members, out of fear that these “weak-links” will drag their grades down. Over the course of the eight semesters of this study there were four major instances of plagiarism, and two major cheating incidences—all behaviors engaged in when the stakes are perceived as too high.

It appears that much of faculty resistance is also fear based. Faculty fear they will not be able to “cover” all the content. As one senior faculty put it, “I don't know how one can cover all the content and be constructivist—there is too much information to deliver.” One faculty member was advised to leave that “constructivist stuff” to the elementary education classes, emphasizing that it did not belong in more rigorous content domains.

Many faculty fear appearing disorganized in the students' eyes, so they choose more lecture/lab instructional strategies versus non-linear constructivist approaches. The evaluation forms seem to support this fear as faculty who lecture from notes are labeled “highly organized” on the forms, while more constructivist faculty are consistently marked as “disorganized.” The teacher candidates seem unable to alter their schemas for what “organized” means--they have a narrow, linear definition. The non-linear constructivist approach, though highly structured in its own way, appears to be unorganized and chaotic to the NYS student who is accustomed to 16+ years of linear teacher-centered instruction.

When faculty choose to veer away from an apparent silent contract between students and faculty—where faculty “give” a set of facts to students who turn around and give that exact set of facts back on exams and essays--student evaluations tend to be lower than department averages. In discussions with faculty who require critical thinking from their students, they uniformly reported being met with hostility and were accused of “not doing their jobs” by students in anonymous student evaluations.

Informal conversations with faculty hired during the timeframe of this study revealed that two non-tenured faculty reported deep anxiety and fear of losing their jobs over negative student evaluations. One faculty remarked, “I wish I could be a two-test teacher—talk, test, talk some more, test and you're done with the semester.” Two others admitted to already exploring work options outside of academia where their passion for educating in creative and constructivist ways may be valued more highly by stakeholders (i.e. foundations, Peace Corps, etc).



*Theme Three: The students are ready-- Faculty are not*

Students who were on the fence about constructivist approaches often return after their first three-week student teaching experience with transformed opinions about what it means to teach and learn. The following student's reflection expresses this transformation:

"I have come to realize that as teachers it is not our responsibility to create miniature models of ourselves by planting our seeds of knowledge within students. It is our duty to nurture the seeds that they already contain within them that they may develop into their own unique being. The constructivist approach to teaching supports this. If we exercise less control and create a more stimulating intellectual environment, then and only then will our students thrive."

Graduate 2007

Several graduates have called, e-mailed or stopped by the office during the first grading period of their new job to report that this "new" professor's voice has replaced the *Ghost Teachers* voice. They report literally hearing the professor's voice as they explore more constructivist, mastery-learning approaches so that they "leave no child behind!" [This has become a catch phrase used by the "new" professor to help students understand that what works for individuals who grow up to be teachers may not be the best choice for reaching/teaching all the students in their class.] A message left on an answering machine illustrates this shift in "authority" for the novice educator:

Dr. \_\_\_\_\_, I just had to tell you that today, all I could hear was you in my head—your voice has taken over. I finally realized what you were saying was right. I'm so sorry my classmates gave you such a hard time. All you wanted from us was to help all the kids-and changing the way we see teaching is the way to do that! Dr. \_\_\_\_\_ I'm leaving no child behind—I wish you could have seen them smile today when we played a spelling game.

Graduate 2005

On the other hand, faculty resistance seems nearly immutable, from the newly hired to the tenured faculty. Faculty having, themselves, been successful in school, in college, in graduate work, and in climbing the academic ladder within the paradigm of didactic, teacher-centered instruction, follow this approach as "the" model for success—with every intention of leaving some students behind. The following are representative of quotes gathered over eight semesters from faculty in various stages of their careers:

“It [Lecture] worked for me, why doesn’t it work for them?”

Assistant Professor of Biology-tenured

“They can’t all get an A. Right? Someone has to be below average.”

Associate Professor, Secondary Education

“I don’t have time for all that poster-making @#%! There’s too much to cram into their heads”

Professor

“Given the varied subject matter and the different students involved, the Council wondered whether the same teaching approach (constructivist & mastery learning) should reasonably be applied to all three areas (education, educational psychology and theater) equally and across the board.”

Division Advisory Council

In the interest of equity, faculty who are staunch advocates for a student-centered, mastery approach based on the tenets of constructivist instructional practices are also immutable. Two of the faculty, one 30+ year veteran and one “new” hire, refuse to bend to consistently harsh teacher-candidate course evaluation comments that request “more direct instruction.” The “new hire” cannot make herself follow the recommendations of more senior faculty to deliver “hybrid” lessons. The recommended “hybrid lesson” is a lecture/direct instruction followed by a “constructivist” activity, in other words the classic lecture and lab format. Though this lecture/lab pedagogy is effective for some, it is not effective at producing desired learning outcomes for all students—some are left behind.

## Conclusion

In the book, *Schools that Learn: A Fifth Discipline Fieldbook for Educators, Parents, and Everyone who cares about Education*, Senge and his colleagues, 2000, make a compelling case that the skills that employers need from the modern work force are not being addressed by our education system. Senge proposes that to continue with economic growth, this nation’s education system has to change and embrace a life-long learning approach based on critical thinking, problem-solving and inventiveness—in essence a constructivist approach.

Late in the course of this study, a quote from Mahatma Gandhi came to the author through e-mail. Gandhi is claimed to have said in discussing the social process of a revolution, “First they ignore you, then they laugh at you, then they fight you, then you win.” This quote provided the perfect frame for the classic ethnographic question--What’s going on here? The answer is that this program is in the later stages of a constructivist revolution, and most of the participants are fighting the change.

This ethnography highlights the complexity of the resistance and the role of previous experience. The first theme is ironic in that as constructivist educators, we are battling our students' previous experience with an iconic individual who is often the inspiration for entering the field. The second theme suggests that we need to acknowledge the reality of the fear factor in the lives of our students and in the instructional choices of the faculty. The third theme illustrated that both learners and faculty tend to be resistant to change in long standing habits of learning and teaching. Habits of learning in more teacher-directed ways are reinforced for the student by a teacher from their past—an authority figure who has become perfect through the lens of hind-sight. Some faculty resist change as they wait for more compelling evidence that changing their instruction will actually improve learning outcomes, while others are more comfortable with their vision of professor as sage.

The third theme, however, gives hope. Many students who have graduated feel a sense of duty to inform the author when they have had a change of heart—they want to share their “new” vision of education. Perhaps there will be a “tipping point” (Gladwell, 2000) where strategies and instructional choices of these converts take hold in a building and spread to a district and so on. Gladwell describes how this tipping point occurred with personal computers, cell phones and social norms. Certainly it can happen with educators.

Changing the “academy” as Senge (2000) and his colleagues point out is a much more daunting task. Changing the faculty requires a paradigm shift. For many faculty there is not enough evidence that the system is dysfunctional. The system fits their world view therefore it need not change.

### **Recommendations**

Theme one discussed the iconic, idealized *Ghost Teacher's* influence on perceptions of what constitutes best practice in teaching. An instructional strategy that has helped to unveil this ghost is having preservice teachers compare their idyllic teacher's behaviors to those of practicing teachers through original research with practicing teachers. When possible, invite the local *Ghosts Teachers* to speak in class on various instruction issues and choices, often hearing the true-life stories of these revered teachers begins the change in perspective and influence.

Theme two revealed the powerful role of fear in the lives of both preservice teachers and faculty. Many constructivist lessons purposefully lead students into states of disequilibrium, which in turn fuels fear in our students. This fear can be reduced by helping students understand the role of disequilibrium in learning, rather than the more typical strategy of memorizing the definition of the word

disequilibrium. Constructivist educators, skilled at developmental issues in K-12, may consider investigating the more subtle developmental processes in adult learners related to difficulties with *change*. A strategy that has proven effective with young adult (and not so young untraditional students) are regular “town meetings” where students are encouraged to express their cares and concerns freely. Another strategy that has greatly reduced fear for the incoming students is the engagement in mentor relationships across the cohorts.

Addressing colleagues’ fear is a far more daunting task, especially for the non-tenured. The primary source of the fear appears to be a lack of confidence that the students will “get” the material if they are not “told” what to know. This fear combines with a sense of lack of time to “construct” meanings for content that in their opinion, could just as easily be delivered via lecture. Constructivist educators have to become investigators of their own efforts, documenting with a rigorous approach the successes and failures. Presenting this “evidence” in national forums is important, however in those venues we are preaching to the choir, so to speak. This author has found that it is far more effective to peek curiosity and reshape understanding of colleagues by presenting at university-wide forums, faculty meetings, and regional conferences as a way to unveil the deep structure of a constructivist approach that may not be evident to a resistant “onlooker.” Another very effective strategy has been to invite resistant faculty to collaborate on research projects that empirically examine constructivist pedagogy.

Theme three discussed that students’ resistance to constructivist pedagogy lessens and in many cases evaporates over eight semesters, while faculty attitudes seem entrenched. A public portfolio of previous student reflections regarding their “change of heart” in respect to constructivist teaching approaches has helped new students better accept their own misgivings and allows them to feel more comfortable with changing their perspective on what constitutes effective instruction. Faculty resistance is best met by becoming involved in the hiring process of new faculty. Another effective means of sharing instructional strategies in a non-judgmental and non-threatening way is to host meetings with faculty teaching the same content to share ideas on projects and instruction. This strategy has at least started the less resistant faculty to examine their instructional choices in new ways. And finally, remember Gandhi’s words, “... they will fight you, then you win.”

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