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Pacing the Curriculum in the Context of School Realities

by Larry Giacomino and Michael Gose

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Note: the authors would like to pay particular tribute to the faculty of Mills High School for their great kindness and help with this study.

Abstract

Our topic became: *pacing the curriculum in the context of school realities*. Our 'study' stemmed from our long conversations about teaching and our observations about the changes we had each made over the years to adjust to the ebb and flow of the school year. (We believe that this is "action research" because it has been all about "making changes and observing their effects"-- but it may be one of the longest running action-research studies in that it has taken us over thirty years to articulate our conclusions.) From those conversations we developed a prototype of factors, conditions, variables, that we personally found tend to influence pacing the curriculum in the day, week, month, term, year. We found that the changes we had both made with regard to pacing the curriculum were almost identical. For a "reality check" on our findings, we then surveyed twenty-four other secondary teachers, teachers with reputations for being strong teachers to see if there was agreement about the importance of the factors we had identified and to see what else they might add to this ongoing conversation. Based on our reflection about our own experiences, and our survey of twenty-four of our peers, we found general support for the idea that the factors we identified have strong external influences on the pacing and the rhythm of the curriculum. While we think there is value for teachers in considering the factors that we identified, we felt that the greater richness of our study came in the written comments by the teachers we surveyed. On the basis of their remarks we found evidence that effective teachers have adapted to these factors to mitigate against their becoming negative factors, and that at least certain teachers have a rich repository of knowledge about the art of pacing the curriculum.

The Problem

"Some teachers never figure it out...for example, they continue to give tests in Friday afternoon classes during football season, then are frustrated on Monday when fourteen football players and cheerleaders have to make up the test."

Larry Giacomino, High School Science Teacher

Larry and I were having an informal discussion about the inevitable rhythms of the school year. We had both started our teaching careers in the late 1960s at Overfelt High School in east San Jose, California. Larry is now teaching at Mills High School in San Mateo, California; and now a teacher educator at Pepperdine University, Malibu, California, I was on sabbatical living in a trailer on his property. That gave us opportunity for countless conversations about teaching. One

of our frequent topics was the adjustments and changes we had had to make as teachers to allow for the inevitable rhythms of the school year. We felt that we had intuitively made the necessary changes, but that we had not articulated those adjustments in a way that I was able to share with the student teachers that I taught, or that he could share with the new teachers that he mentored.

Developing Our Description of the Parameters that Influence Pacing.

Once Larry had said, "some teachers never figure it out," I knew that I wanted us to explore and articulate what it was that we thought we might have figured out. Having identified the 'problem,' we then started discussing and identifying the factors that we found had influenced our day, week, month, term, and year. Our study, then, is 'action research' in the sense that it is our reflection on the changes we had had to make as teachers to successfully pace our curricula in the context of the rhythms of a school year. The important "inaction" quality of the research is that we had a semester's worth of Larry's after school hours to sit on his deck and talk about teaching. Having identified the problem of adjusting our teaching to the rhythms of the school year, we began to identify the specifics that influenced those rhythms, and the kind of strategies that we had employed to respond to those demands.

This is the description that we derived from our analysis of our own changes in response to the demands of the school year:

Parameters of School That Influence Pacing

The Day

- What students have done before they come to class has a tremendous effect on a class period. (Thus an effective teacher must be prepared not merely to set a tone for the class, but to change tone.)
- Teaching is like flying an airplane. The greatest danger is in the take off and landing. (Thus an effective teacher must have methods of assuring an effective beginning and ending to a class period.)

The Week

- There are fairly typical patterns to a full week of school.

Monday is usually the day students are the most sedate (a relative term). They have for the most part slept in later on Saturday and Sunday, so at least for the Monday morning classes, students may not be fully awake. This is often the day that will be the best for the more teacher-centered, formal presentation of subject matter.

Tuesday is often the day students are most likely to make a serious contribution. Students will work independently or in groups better on this day than any other. Effective teachers often plan their most involving academic activity on this day.

Wednesday. Hump Day. This is a good time for seat work. Students will tend to do what they are told but are not likely to have a lot of patience for teacher talk or working with each other.

Thursday. Students are still able to focus their attention on the subject at hand. This is often a good day for testing.

Friday. This is usually the most chaotic day of the week. School activities are most often scheduled on this day and absenteeism is the worst. This is the day that the effective teacher uses the most intrinsically rewarding lesson, the lesson with the most pizzazz, the most stimulating, involving, innovative, interactive.

The Term and Year

--The term and year have inevitable cycles. The year starts with the highest optimism and enthusiasm in September, but gradually wanes until a dramatic drop near December and the Christmas Vacation. Some of the enthusiasm is renewed and regained in January, wanes by Spring Break, vanishes by June 1st.

--Problematic Days. Other times that signal probable problems include all Fridays, days before a vacation, especially extended vacations like Thanksgiving, Christmas, Spring Break; the day before, during, and after report cards; all days after June 1st; "hump days" in the middle of the week, term, year when students hit some temporary wall (that often looks like it will be permanent); days with assemblies, days after tests, minimum days, days of major school events like dances and football games.

--Optimal Days are without such "problems." The day before exams is particularly promising. Optimal days also tend to be relatively early in the week, the semester, the year.

Pacing Practices of Good Teachers

--Effective teachers tend to concentrate their most important, most difficult, most rigorous material into the "optimal days" of teaching.

--Effective teachers tend to use the more enriching classroom activities on the more "problematic days." They especially avoid testing on problematic days.

--Effective teachers open their classes with an activity that helps students settle into the day's class and have something inherently interesting to keep their attention at the end of class if the lesson happens to end early.

--Effective teachers have an intuition about what types of activity their students are prepared to do.

--Effective teachers believe variety is the spice of life and vary:

- the most difficult and least difficult material, the esoteric and commonplace, the rigorous and fun, the teacher vs. student centered activities.
- listening, speaking, writing, reading
- the individual, small group, full class
- the most essential with the enriching
- the various media

Corroborating Our Description Via a Survey of Teachers

Having created this "prototype," we were most anxious to see if other professionals would corroborate our findings as well as what observations they might have about the issue of pacing the curriculum in the context of school realities. We identified twenty-four secondary teachers whom either we, or someone we respected professionally, identified (subjectively) as being particularly successful in the classroom. We wanted to see if they would concur with our observations and to see what other factors they might identify. We simply asked them to read our findings, tell us the extent to which they agreed or disagreed with them, and to note what other factors they might add to our ongoing conversation. The following are the results of that attempt to validate our own experiences and to extend and enrich the conversation on the pacing of the curriculum.

The Results

The twenty-four teachers surveyed responded to the question of whether they strongly disagreed, disagreed, agreed, or strongly agreed with our description. One strongly disagreed, three disagreed, nine agreed, one added the category of really agreed, nine strongly agreed, one had comments but did not indicate relative agreement. We felt that these results lent strong support to our general ideas about the rhythms of school. Their responses offered us even more than we had hoped for. Their comments were such that we more fully realized the complexities (and wisdom) that can be involved in pacing the curriculum.

Beyond the general agreement with our description of "pacing the curriculum in the context of school realities," our sense of the comments from our respondents was a strong appreciation that the subject matter, the teacher, the students, and the students-teacher relationship can be strong forces mitigating the realities we had characterized. With regard to the subject matter there were comments like "The lesson," "the curriculum is the major determinant." "I'm guided more by the order and pace of the curriculum." With regard to the teacher, comments like, "The natural rhythms of the teacher" are more important and that the teacher can "change the atmosphere." With regard to students, that it "depends on the class." That the "teacher-student relationship is more important." Our sense is that all the teachers we surveyed were very aware of the conditions we described, but that they all had individual strategies that mitigated any inevitabilities in those conditions. One teacher "bragged" in his notes, for example, that he had actually given a very successful exam on Halloween, but added that he was also very aware of the risk, and indicated that he thought he was successful because it was a cross current, and because his students certainly had no other test that day.

The teacher who had no response, the three teachers who disagreed, and the one teacher who strongly disagreed, added notes to the questionnaire that actually indicated a level of agreement. In fact even the one person who strongly disagreed overall indicated agreement in his notes with the description of the week and problematic days. The three who disagreed and the one who gave no response all emphasized that their disagreement was based on their belief that the teacher could counter these tendencies, rather than that there weren't such tendencies.

The three who disagreed had these respective observations:

- 1) "Many problem days delineated can be neutralized by a good teacher."
- 2) The second emphasized that the readiness of the class was a stronger variable than the conditions we described.
- 3) "These (characteristics) need to be worked around artfully." He emphasized that the teacher-student relationship was more important.

These observations were certainly not unique to those who indicated disagreement.

The comments of all the respondents often had slight variations on which days were optimal for which kind of lessons. Other events that were mentioned that influenced pacing and rhythm included: block scheduling, the time of day (1st vs. 6th period for example), before and after lunch, school breaks, number of absences, the prom, SAT and AP exams, Field Trips, National and Local News events, and the length of time the teacher has been teaching this particular curriculum.

All in all, we were pleased with the "prototype" we had developed about the school realities. It is only a prototype, a characterization, even a stereotype, but we also received numerous comments that these were realities that were very important to successful teaching, yet which tended to go undiscussed in teacher preparation and inservice programs. While as authors and educators we continue to believe that these realities can be overcome, those teachers who try to ignore them do so at their own peril.

These teachers, who are recognized as being strong teachers already, had consistent advice: "Be prepared to change lessons on a daily basis." They recommended that it is necessary to be "flexible," have "flexibility," "go with the flow," make "adjustments," have the "ability to change," "learn to use these things rather than accept or fight them," to learn "to develop techniques which transcend bad teaching days," that "nothing is inevitable." "These forces can be countered or lessened. They are not absolute conditions to which the teacher must succumb." We could not agree more; but we still observe that "some teachers never figure it out."

We also added a question that asked for the respondents to add any metaphors they had for teaching. We would like to include two that we thought were quite special.

The grandfather clock. "The inner mechanism of a grandfather clock. Different size gears rotating at different speeds, but somehow working together toward the same unified goal."

Making bread. "When making a good dough, there are tolerances for variations in ingredients but virtually everything impacts the outcome. If an unavoidable interruption occurs, you can

keep the dough in the refrigerator (just like a break in a lesson or project) but usually some quality or character is lost. It's best to put essentials together, knead just enough, let rise, shape and bake for presentation and evaluation."

Certainly both these metaphors suggest the type of complexity of classroom teaching that is the overall concern for the complexities of teaching suggested by this study.

Conclusions

Our study is obviously limited by numerous factors. First, no week truly stands alone, so there is not a truly representative week (although the factors included in this description are still part of the teacher's decision making process in each of those different weeks). Second, this study documents what teachers consider. It is not inclusive; it is not prescriptive. This is a mere representation of what some teachers consider. It is not based on any particular model of teaching or curriculum development that justifies it as somehow the best or most preferable. (Our study does, admittedly, value the experience of teachers and the belief that they may have adapted well to inherent constraints within teaching.) Third, our study has taken the position that there may be some generalization that can be made from the particular. Larry and I and the twenty-four surveyed high school teachers are certainly not necessarily representative of the experiences of teachers nationwide. Fourth, the study is admittedly preliminary. It is only a beginning -- a response to the Lundgren and Colliander review of the issue that "there are few theories or theoretical models explaining how curriculum pacing is actually done in the classroom teaching," and that, "as the decisions on the amount of time allocated to various parts in the curriculum constrain both teaching strategies and the actual teaching process, the development of knowledge about curriculum pacing must include both the study of classroom practices and the study of the construction of the frames determining the outer limits of classroom teaching."

Despite the significant limitations of our study, it does tend to confirm Connelly's conclusion that knowledge about pacing is critical for teaching success and it also has the prospects of stimulating any teacher to compare and contrast her experience with this description.

Our professional opinion is that the pacing of the curriculum is incredibly important to success in teaching, whether it is the pacing of the individual lesson, the week, the unit, the semester.

Addendum: Literature Search and Notes on the Design of the Study

We felt that the most straightforward way to present our study was to describe how we became aware of the changes we had made during our teaching careers to accommodate the realities of the school year; how we identified what we had recognized as factors that influence those inevitable rhythms; and how we sought to confirm whether our "findings" were true for other teachers. Academician that I am, I also took responsibility for the literature search and for thinking about the implications of our "methodology." We add those findings for those who may be interested in such issues.

I took responsibility for the literature search to see if anyone else had written about this issue. Surprisingly very little about the issue of pacing has been written. One of the few places the issue evidences itself is in *The International Encyclopedia of Curriculum*. In the section entitled, "Curriculum Pacing," Lundgren and Colliander (1991: 389) define "curriculum pacing" thus:

In contrast, in regular classroom instruction the concept 'curriculum pacing' refers to determining the time needed for a group of students (usually a class) to master a given curriculum or a part of a curriculum in the regular classroom setting. It concerns how the time is allocated for a particular curriculum unit, and how much time is actually required by a class or a group to master the objectives of a curriculum unit.

Lundgren and Colliander (Ibid: 390) go on to say that "In dealing with curriculum pacing, both sides of its Janus face have to be analyzed, that is, how in practice curriculum pacing is carried out and what the determinants of pacing are for a particular group of students within a given curriculum framework." Further, they say, "there is little empirical knowledge about curriculum pacing" (p. 390). That is very surprising in that they find "curriculum pacing is a central issue for curriculum construction...and also for developing strategies for teaching" (p. 391).

Literature Review

As mentioned above, the literature on this issue is scant. The small body of literature reviewed by Lundgren and Colliander (1991: 390) found that the "the majority of studies are rather normative, that is, telling what pacing ought to be." A search of The Education Index through the Fall of 1997 revealed no further studies beyond those reviewed by Lundgren and Colliander on curriculum pacing or the rhythms of teaching. F.M. Connelly's book (1985), *Teachers and Curriculum Planners*, does discuss the issues of "cycles" and "rhythms." Connelly argues that "rhythmic knowledge of teaching" is critical for success. Connelly also says that experienced teachers "know the downtimes will be followed by up times; they know that cyclic disruptions are temporary; they know that the end of a cycle, whether it is day's end, week's end, or year's end, is characterized by special features and that activities will be experienced differently at these times" (p. 168).

Stephen Brookfield's book (1980), *The Skillful Teacher*, discusses "adjusting teaching to the rhythms of learning" Brookfield discusses such topics as "recognizing emotionality" and "fostering challenge." This reflects a continuance of the normative studies, and while germane to principles for pacing, does not specifically concern itself with the rhythms of a particular lesson, week, unit, term.

The Design of the Study

The nature of our study was influenced by a number of antecedents. Lee J. Cronbach (1969) has argued the importance of "disciplined inquiry." He says that "inquiry is not restricted to the 'scientific'" and that "an inquiry generally sets out to answer a rather narrowly defined question. The specific findings of such an inquiry are usually less important than the conceptualizations they generate" (p. 14).

Our study shares Elliot Eisner's (1988: 19) view that, "American educational researchers are beginning to go back to the schools, not to conduct commando raids, but to work with teachers as colleagues in a common quest and through such collaboration to rediscover the qualities, the complexities, and the richness of life in classrooms." Our study also shares the argument of Cochran-Smith and Lytle (p. 2) that we have tended to ignore "the significant contributions that teacher knowledge can make..." With Floden and Klinzing (1990) our study also values research on "teacher thinking." Finally, our study concurs with Eisner (1985: 241) that "objectivity is a function of intersubjective agreement among a community of believers."

With the above considerations for a disciplined inquiry into the neglected area of curriculum pacing our study sought to establish "a" representative description of the elements that influence the pacing experienced teachers are likely to consider in the pacing of a typical week of instruction. For reasons of efficiency and because the inquirers feel themselves to be among "those...who have devoted our efforts to thinking about curricular matters," we began by writing down the patterns we remembered from our own high school teaching experience that seem shared by the countless teachers and student teachers we have observed over the past three decades. Fully recognizing both the value and limits of this personal experience, we then approached twenty-four teachers that we either we knew had reputations for being strong teachers, or whom people we trusted recommended as strong teachers. We asked them to agree or disagree with the representativeness of the description included below. The description itself recognizes that each week in a school year is actually quite different. The rhythms of the school year, for example the influence of such factors as final exams, Christmas Vacation, Spring Vacation, Graduation have a rhythm of their own. Shortened days, assemblies, major co-curricular activities exert a force of their own. Those influences deserve their own study. The emphasis in this study was to try to suggest the pacing and rhythm issues experienced teachers consider in a representative week. The thought is that such knowledge could be particularly helpful to student teachers, new teachers, and struggling teachers as they try to get the most value out of their teaching efforts.

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