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**“Academic Coaching” for Enhanced Learning,
Higher Levels of Student Responsibility,
and Greater Retention**

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Abstract

The relationship between teachers and students has changed. Many writers have put forth hypotheses and ideas about how the current generation of students (Gen-Y; the “Me Generation”) differs from previous generations. Others focus on teaching methods, course strategies, and technological tools that are effective in the new environment. The objective of this research is to investigate the possibility of “academic coaching” for enhanced student responsibility, higher levels of learning, and greater retention. The concept of “academic coaching” refers to a relationship between teachers and students that is proactive, responsive to student learning outcomes, and committed to student success. The teacher/learner relationship becomes less like a formal instructor and more like a coach.

Key Words: academic coaching; effective teaching; generational change; teaching practices.

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Introduction

“Student attitudes, behaviors, and experiences are not static. With each entering class the world events and culture that shape their growth and development differ,” according to Mary Stuart Hunter (2006, p 9). Many writers have put forth hypotheses and ideas about how the current generation of students (Gen-Y; the “Me Generation”) differs from previous generations (eg. Eisner 2004; Pinder-Grover and Groscurth 2009; Taylor 2010). Others focus on teaching methods, course strategies, and technological tools that are effective in the new environment (Barr and Tagg 1995; Michaelson et al. 2004; Weimar 2002).

The objective of this research is to investigate the possibility of “academic coaching” for enhanced student responsibility, higher levels of learning, and greater retention. The concept of “academic coaching” refers to a relationship between teachers and students that is proactive, responsive to student learning outcomes, and committed to student success. The teacher/learner relationship becomes less like a formal instructor and more like a coach.

The need for change in my college teaching became clear when my teaching assignment changed. I had taught a Junior-level intermediate microeconomics course from 1988 to 1994, then was reassigned to the same course in 2008. After the 14-year hiatus, I enthusiastically returned to the course with the same syllabus, assignments, teaching style, and expectations that I had in 1994, only to find that my style no longer fit the learning style and expectations of the students. Following past experience, I assigned lengthy and rigorous weekly assignments. After all, this course is the foundation of applied microeconomics... my

colleagues and I have high expectations about content and level of rigor. Students did the assignments, but without enthusiasm. Many just did enough to earn a passing grade. I gave challenging examinations, hoping that rigor and difficulty would motivate students to learn the material. All but the best students remained uninspired.

Two anecdotes provide evidence of the mismatch between my “old-school” teaching style and modern student expectations, motivation, and achievement. First, hard copies of the weekly assignments were due each Monday before class. After the lecture started, assignments became late, and were marked down ten percent each day. An excellent student arrived in class five minutes late, with her just-printed assignment, and I took off ten percent. The student tried negotiation, both in person and via e-mail, but failed. This student dropped the course, and took it from another professor the next semester. A second story: as we reviewed for the final examination, I asked another outstanding student if she had understood the mathematical models of oligopoly (Cournot, Bertand, and Stackleberg... great stuff!). She replied that she didn’t really intend to try to comprehend the models, she was just going to memorize them and write them down on the final exam to retain her grade of “A.” These two anecdotes are merely two among many: throughout the semester, I realized that my return to intermediate microeconomics had not been a raging success.

The following year went much better. I had heard of “collaborative learning,” but believed it was a “fad,” was “caving in to the students,” and was “watering down the rigorous expectations of intermediate microeconomics.” Given my bad experience in 2008, I altered my syllabus to include weekly collaborative, team-based laboratory assignments to replace the homework assignments. The level of rigor remained the same, and the examinations were

identical in coverage and difficulty. I included oral team exams to better engage students and prepare them for the individual examinations. I altered my expectations about student behavior and policies to bring them more in line with a new generation of students. The result: higher levels of learning, more enthusiasm for the course material, and greater willingness to apply economic principles to the issues that arise in everyday life.

Changing from a traditional instructor with rigid expectations to an “academic coach” provided for large enhancements in the learning environment, and higher levels of learning and retention. Teaching college courses is difficult, dynamic, and challenging: I continue to be unclear as to the exact impacts of the changes on student learning, but I will try to delineate what I have learned in what follows below.

Background and Literature Review

This research is based on college-level teaching experience and in-depth reading on the topics of “Generation Y,” effective instruction, and classroom experiments in academic coaching. The foundation of academic coaching is teachers who take on characteristics, methods, and attitudes of a coach, such as an athletic coach, a “personal trainer,” or life coach. The Association of American Colleges and Universities commissioned a 2002 panel that concluded that, “...change is urgently needed. Even as college attendance is rising, the performance of too many students is faltering.” This sentiment is echoed throughout the higher education community. Some writers have emphasized differences in generations. Mark Taylor (2008) writes, “With all due respect to the student-centered, learning, outcome, and accountability improvement initiatives in pace at most colleges and universities, there remain serious issues in student persistence and completion, meaningful learning, and workplace

readiness at many schools” (p.3.3). Taylor also summarizes a growing literature on Generation NeXt (also called Millennials or Generation Y): “...these uber-consumers tend to feel a sense of entitlement, want to negotiate, and will protest vigorously (or leave) if their expectations of ease and instant response, excellent service, and painless success are not met. Generation NeXt has little evidence that it is not all about them” (p. 3.3). In what follows, we will provide an economic explanation for these claims: more opportunities available to take classes from a wide variety of institutions.

Pinder-Grover and Groscurth (2009) find, “The most striking difference that Millennials bring to the university classroom are their preferences for collaboration, connection, and creating social change...For instructors, this positive orientation toward collaboration is good news, since research has consistently demonstrated that collaboration and group discussion enhance student learning.” Eisner presents three classroom initiatives created to teach Generation Y students: a performance contract, investigative report, and a class game show.

Perry and Kennedy (2009) reports a large and growing number of underprepared college students. They report that peer advising of underprepared students, provision of course-specific skills, and tutoring are all good ways to begin to address the increasing problem. The education literature provides two tested strategies to assist struggling students: “Supplemental Instruction,” and “Self-Regulated Learning.” Supplemental Instruction, according to Blanc, DeBuhr, and Martin (1983), is an academic support system that has used peer advising to teach review sessions to students in challenging courses. Congos and Schoeps (1993) provide empirical evidence that supplemental instruction has produced higher academic performance and greater levels of retention at the University of Missouri—Kansas City.

Glenn (2010a) reports on “Self-Regulated Learning,” a series of steps that encourage students to evaluate how they study and notice when they are going wrong. Zimmerman (1990) defines self regulated learning as including three features: (1) use of self-regulated learning strategies, (2) responsiveness to self-oriented feedback about learning effectiveness, and (3) interdependent motivation processes. Self-regulated students select and use self-regulated learning strategies to achieve desired academic outcomes on the basis of feedback about learning effectiveness and skill. Winne (1995) elaborated on self-regulated learning, and provided evidence of the future importance of self-regulated learning. Glenn (2010a) reports that “Explicitly coaching students to think about their study processes and to monitor their learning can pay large dividends.... The idea is that by providing constant feedback, students can see their own strengths and weaknesses.” The two “golden rules” of Zimmerman’s self-regulated learning are: (1) give students fast, accurate feedback about how they are doing, and (2) make them demonstrate that they actually understand the feedback that has been given (Glenn, 2010a). Institutions that have used self-regulated learning have found that (1) the methods have a much greater impact if they are embedded within the course context, and (2) tutoring and counseling aren’t enough... a more intrusive strategy is needed to build specific skills. The conclusion: “College students of all types, not just obviously struggling students who are assigned to remedial classes, will learn better if they think critically about their own studying” (Glenn, 2010a). Butler and Winne (1995) highlight the importance of feedback on student achievement, and synthesize an elaborated model of self-regulated learning based on both educational and psychological literatures.

Weimar (2002) has written eloquently about the need to change focus: "...the higher education community has finally discovered learning, and we need resources that further cultivate and capitalize on that interest. That we have ignored learning is somewhat difficult to explain. It seems more a case of benign neglect than willful rejection" (p. xi). Collaborative learning, or group work, has shown students ability to learn from and with each other (Qin, Johnson, and Johnson, 1995). Weimar (2002) concluded, "Recently, group work, most often under the collaborative or cooperative learning rubric, has gained considerable popularity and much wider use. But like every other instructional method, good group learning experiences do not happen automatically" (p. 88).

Michaelson et al. (2004) have honed collaborative learning strategies into a more specific framework for teaching "Team-Based Learning." Team-Based learning is a form of small-group learning designed for college classrooms, which included incentive and corrective feedback. The authors claim that groups are transformed into high-performance teams.

An Economic Model of Changes in Higher Education

Many authors have focused on generational differences to explain student changes (Hunter 2006; Taylor 2008). However, great understanding can be gained by focusing on the economic determinants of college student decision making. Specifically, a simple model of the demand for college, and for specific college courses, is derived here to enhance our ability to understand how academic coaching might lead to better outcomes than traditional teaching methods. Economic theory asserts that consumer choices can be determined by changes in prices and income, holding tastes and preferences constant (Stigler and Becker 1977). In this

framework, if higher education is considered to be a purchased good (Q^d), it can be considered to be a function of price (or tuition, $=P$), and income ($=M$), as in equation (1).

$$(1) Q^d = f(P, M, E(R))$$

Since a college degree is not only a consumer good, but also an investment in human capital (Becker 1975), the expected returns ($E(R)$) of the purchase also determine the demand for college. One of the major determinants of the cost of college (P) is technological change, which places downward pressure on the price of college over time, as new methods of information acquisition and dispersal are discovered and adopted. Technological change also increases the quality of many aspects of higher education, including technology use in the classroom, and the use of the internet for a wide variety of academic tasks.

In the United States (USA), income has increased significantly for college students and their families. “In 2005, entering freshmen came from households with a parental median income of \$74,000, sixty percent higher than the national average of \$46,326. This represents a 15 percentage point increase from 1971, when students’ median family income was \$13,100, forty-five percent higher than the national average of \$9,028” (Higher Education Research Institute at UCLA). These large increases in the standard of living lead to more students choosing to go to college, and greater expectations of the quality of their “purchase.” The cost of attending college is also increasing. “For the 2008–09 academic year, annual prices for undergraduate tuition, room, and board were estimated to be \$12,283 at public institutions and \$31,233 at private institutions. Between 1998–99 and 2008–09, prices for undergraduate tuition, room, and board at public institutions rose 32 percent, and prices at private institutions rose 24 percent, after adjustment for inflation” (U.S. Department of Education, 2010).

Although the cost increases are large, they have been more than offset by the expected returns from attending college, so enrollment has increased. “The traditional college-age population rose 14 percent between 1998 and 2008, which was reflected by an increase of 32 percent in college enrollment. Between 1998 and 2008, the number of full-time students increased by 37 percent, compared to a 24 percent increase in part-time students (U.S. Department of Education, 2010). Higher incomes and higher costs have led to greater levels of search for the best college. “In 1967, less than one in five entering college students (19.9 percent) reported applying to four or more colleges, a figure that has nearly tripled to 56.5 percent in 2006” (Higher Education Research Institute at UCLA). Technological change has led to a massive increase in distance education courses. “Of the 600 public, four-year colleges and universities in the United States, 88 percent offered college-level credit-granting distance education courses in 2006-2007” (U.S. Department of Education, 2008). The college experience has changed dramatically, and now includes a much greater number of transfer college credits from other institutions, as well as from distance and evening course programs within the same institution.

With the determinants of the demand for college as a foundation, we can now modify the model, to better understand why academic coaching might provide advantages over traditional pedagogies in the college classroom. The model in equation (1) can be modified to derive the demand for an individual college course, as in equation (2):

$$(2) Q_i^d = f(P_i, P_o, Z_i, Z_o)$$

For an individual course (=i), demand is determined by both (1) the price of the course (P_i), and the price of close substitute courses (“others” = P_o). Large increases in income and advances in

technological change have led to a large set of near-perfect substitutes available for virtually all college courses, at most colleges and universities. Not only is price an important determinant of the demand for an individual course, but course characteristics (Z_i) also influence student enrollment and retention within a given college course. Course characteristics include: time offered, location, class size, and course format, and teacher characteristics, such as quality, level of engagement, and energy. Course and teacher characteristics have become increasingly important determinants as incomes increase and search costs and transfer costs have decreased enormously. Notice that this model provides some economic explanation for Taylor's (2008) student demands for "painless success."

One of the most important economic principles taught in intermediate microeconomics is that of the elasticity of demand. The elasticity of demand is determined by the availability of close substitutes. Changes in income and technology of education have led to a truly large increase in the number of close substitutes available to students selecting courses. Therefore, the elasticity of demand for any given college course has become greater, as students have many new opportunities available to them. This gives students, "the power of choice," resulting in a scramble for teachers to conform to the new reality. Mary Stuart Hunter (2006) concluded that, "The days of the 'let them sink or swim' attitude of faculty and staff toward new students are obsolete. Deliberate and intentional efforts to assimilate new students into the institutional culture and environment are essential if institutions are to expect transitional students to thrive" (p 10).

To summarize, the elasticity of demand for college courses has become more elastic over time, since students have numerous substitutes for each college course. Therefore,

students are less willing to accept any course requirement or teacher characteristic that creates stress or tension, relative to many other courses available. This economic model provides the theoretical foundation behind the idea of academic coaching.

Academic Coaching

Coaching began as an athletic concept, but has evolved into a description of a type of relationship. The International Coach Federation (ICF) provides a definition.

Coaching is an on-going relationship which focuses on clients taking action toward the realization of their vision, goals or desires. Coaching uses a process of inquiry and personal discovery to build the client's level of awareness and responsibility and provides the client with structure, support and feedback. The coaching process helps clients both define and achieve professional and personal goals faster and with more ease than would be possible otherwise.

Academic Coaching, then, can be defined as using a coaching style relationship to enhance student learning. Some firms, and numerous private consultants, offer "academic coaching" services to students for profit. One such company is Inside Track, which has coached over 250,000 students at over 50 campuses. Inside Track has empirical evidence that their programs have increased student achievement, retention rates, and engagement. Other examples include alcohol.edu, and alcohol coaching program, and MAP-works (making achievement possible), which surveys enrolled students, and provides detailed information about students to their teachers and housing assistants. These programs are growing rapidly, and all use coaching-style interventions to assist in the development of enrolled college students, and websites that offer a great deal of information about issues facing college students and how to

assist them. The premise of these for-profit institutions is that some students don't have the necessary skills for adjusting to college life and succeeding academically.

Academic coaching for college instructors starts with this same assumption: that the levels of success and retention are low, and could be improved through appropriate intervention, and changes in teaching style. Retention of students is a common goal for teachers, administrators, and policy makers. Hunter (2006) pointed out, however, that the motivation for enhanced retention varies across groups: "Student-centered faculty and staff embrace sincere desires and altruistic attitudes toward helping students learn and succeed. Institutional leaders understand the very real fiscal cost of student attrition and the equally disturbing public relations consequences of unsuccessful students" (p. 7). Academic coaching provides a strategy to enhance student success, and as a result, retention rates.

The main idea of academic coaching is for the instructor to switch from a dispassionate, disinterested lecturer to an engaged, interested academic coach who is enthusiastic, proactive, and intentional about student success. The most important characteristic of academic coaching is to seek and develop a relationship with students. A coach, or mentor, type of relationship might be more typical at small schools. The more teachers learn and know about their students, the better they are able to meet their educational and academic needs.

Early identification of struggling students provides a way to help those who need it, at the appropriate time. Academic coaches take this role seriously, to intervene with feedback that allows the student to move toward positive outcomes. This idea is based on research results of Self-Regulated Learning (Glenn 2010a; Zimmerman 1990). Academic coaches also provide effective provision of help for students to enhance their learning, and learning

outcomes, recognizing that not all students are equipped with academic, study, and social skills at the college level. Teachers who not only assign homework, labs, exams, projects, and presentations could usefully provide students with how to succeed in these tasks. In the past, course assignments were given, with little or no instruction on how to do them. Today, student success is likely to be enhanced with rubrics, instructions, strategies, and any other information about how a successful assignment is to be completed. We can no longer assume that students know what we are looking for. Similar to this, it is my experience that many students lack basic study skills. This is true even for many successful students. Since many college credits are earned at the high school level, a growing number of students bring “high school level” study habits to college (Perry and Kennedy 2009). Academic coaches could usefully make available more information on academic skills to students. Stanford University’s Undergraduate Academic Life provides students with the opportunity to make an appointment with an academic coach, attend workshops on time management, reading and note-taking, and deal with procrastination. Stanford also posts “study tip resources” to provide useful tactics for students on many aspects of college life, including taking exams, note taking, reading, and time management.

Learning in groups, through collaborative or “team-based” learning, can provide huge benefits to students, through a process of “belonging to a team” (Michaelson, et al. 2004; Weimar 2002). Peer review can provide a great motivation for many students, who may not respond as well to teacher feedback. Peers can also provide useful tutoring, or study sessions, as in the “Supplemental Instruction” paradigm (Blanc et al. 1993; Congos and Schoeps 1993).

Often, student respond well to teacher relationships combined with peer study and review help (Blanc et al. 1993).

Academic coaches can also motivate students with changes in rules, regulations, and course requirements to better meet student expectations and needs. Changing from a rigid, “old-school” professor to one that accommodates student activities has allowed me to relate better with students, and capture more respect than rules and regulations that have not kept up with the increasing demands placed on undergraduate students.

It is crucial to maintain rigor while adopting these new teaching practices. This concept may not seem possible, but the story of Elaine Smokewood provides evidence that it can happen (Young 2010). Smokewood, a 54-year old English professor at Oklahoma City University, is losing her ability to speak due to Lou Gehrig’s disease. She argues that she was surprised to learn that she is now able to teach more effectively:

I became a different kind of teacher than I had ever been—I became a teacher who actively listened. I had in the past often confused listening with waiting for my students to stop talking so that I might resume the very important business of performing. I learned that if I listened carefully, thoughtfully, generously, and nonjudgmentally, my students would delight me with the complexity of their thinking, the depth of their insight, the delicious wickedness of their humor, and with their compassion, their wisdom, and their honesty." Elaine Smokewood (Young, 2010)

Truly, this is also an example of academic coaching: changing teaching styles to become more in tune with students.

Conclusions

Tinto (1999) argues that “student learning is the key to student retention,” and that, “...the involvement of faculty, not just student affairs professionals, is critical to institutional efforts to increase student retention” (p. 1). Academic coaching provides a way for interested

faculty to proactively and deliberately try to form healthy working relationships with students.

A coaching relationship provides important feedback, support, and challenge to students that allows them to thrive in academics and in life.

References

Alcohol.edu <http://www.outsidetheclassroom.com>

Association of American Colleges and Universities. 2002. *Greater Expectations: A New Vision for Learning as a Nation Goes to College*. National Panel Report. Washington, D.C.

Barr, R.B., and J. Tagg. 1995. From Teaching to Learning—A New Paradigm for Undergraduate Education. *Change*, Nov.-Dec. 1995, pp. 13-25.

Becker, Gary S. 1975. *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*, Second Edition. Chicago, Illinois: The University of Chicago Press.

Blanc, R.A., L.E. DeBuhr, D.C. Martin. 1983. Breaking the Attrition Cycle: The Effects of Supplemental Instruction on Undergraduate Performance and Attrition. *Journal of Higher Education*, 54(1):80-90.

Butler, D.L., and Ph.H. Winne. 1995. Feedback and Self-Regulated Learning: A Theoretical Synthesis. *Review of Educational Research*. 65(3):245-281.

Congos, D.H., and N. Schoeps. 1993. Does Supplemental Instruction Really Work and What is it Anyway? *Studies in Higher Education*. 18(2):165-178.

Eisner, S. 2004. Teaching Generation Y College Students: Three Initiatives. *Journal of College Teaching and Learning*, 1 (9), 69-84.

Glenn, David. 2010a. How Students Can Improve by Studying Themselves: Researchers at CUNY's Graduate Center Push 'Self-Regulated Learning.' *The Chronicle of Higher Education*, February 7.

Glenn, David. 2010b. 3 Paths to Better Teaching and When to Stray from Them. *The Chronicle of Higher Education*, August 10.

Higher Education Research Institute at UCLA. *The American Freshman: Forty Year Trends: 1966-2006*. www.heri.ucla.edu

Hunter, Mary Stuart. 2006. Lessons Learned: Achieving Institutional Change in Support of Students in Transition. *New Directions for Student Services*, no. 114, pp 7-15.

Inside Track. www.insidetrack.com

International Coach Federation. www.coachfederation.org

MAP-works. <http://www.map-works.com>

Michaelson, L.K., A.B. Knight, and L.D. Fink. 2004. *Team-Based Learning: A Transformative Use of Small Groups in College Teaching*. Sterling, VA: Stylus.

Perry, David M., and Kathleen E. Kennedy. 2009. Teaching 'Grade 13'. *The Chronicle of Higher Education*, December 13.

Pinder-Grover, T., and C.R. Groscurth. 2009. Principles for Teaching the Millennial Generation: Innovative Practices of U-M Faculty. *CRLT Occasional Papers*. Center for Research on Learning and Teaching, University of Michigan, No. 26.

Qin, Z., D.W. Johnson, and R.T. Johnson. 1995. "Cooperative vs. Competitive Efforts and Problem Solving." *Review of Research* 65(2):129-143.

Stanford University. Undergraduate Academic Life. <http://ual.stanford.edu/>

Stigler, George J., and Gary S. Becker. 1977. De Gustibus Non Est Disputandum. *The American Economic Review*, Vol. 67(2):76-90.

- Taylor, M. 2008. Meet the Students: Finding Common Ground between Student and Institutional Goals. *2008 Higher Learning Commission Collection of Papers. Volume 3: Finding Common Ground: Programs, Strategies, and Structures to Support Student Success*. Chapter 1: Understanding and Supporting all types of Learners 3:3-9.
- Taylor, Mark. 2010. Teaching Generation NeXt: A Pedagogy for Today's Learners. *A Collection of Papers on Self-Study and Institutional Improvement, 26th Edition*. The Higher Learning Commission.
- Tinto, V. 1999. Taking retention seriously: Rethinking the first year of college. *NACADA Journal*, 19, (2), 5-9.
- U.S. Department of Education. 2008. National Center for Education Statistics. Distance Education at Degree-Granting Postsecondary Institutions: 2006-2007 (NCES 2009-044).
- U.S. Department of Education. 2010. Institute of Education Sciences. National Center for Education Statistics. *Digest of Education Statistics, 2009*. Thomas D. Snyder and Sally A. Dillow. April 2010. NCES 2010013.
- Weimar, Maryellen. 2002. *Learner-Centered Teaching*. San Francisco, California: Jossey-Bass.
- Winne, P.H. 1995. Inherent Details in Self-Regulated Learning. *Educational Psychologist*. 30(4):173-187.
- Young, Jeffrey R. 2010. Taught by a Terrible Disease. *The Chronicle of Higher Education*, January 3.
- Zimmerman, B.J. 1990. Self-Regulated Learning and Academic Achievement: An Overview. *Educational Psychologist*. 25(1):3-17.