

STUDENT ATTITUDES TOWARD STUDY SKILLS

Alison M. Wolfe, Elmira College

ABSTRACT

In a world of increasing tools and technology, inside and outside the classroom, do the study skills of postsecondary students align with current pedagogical approaches? And should marketing faculty make changes to address these skills? This paper examines current student attitudes toward effective study skills, using a survey with 352 responses administered during registration. Areas examined include attitudes toward studying, primary study methods, time spent, preferred study and learning styles, and use of technology.

INTRODUCTION

Study skills are critical to academic success, particularly given the independent nature of postsecondary education. At the same time, little attention has been paid to the way students study in the 21st century, in a world that now has more interactive tools and pedagogical approaches than ever before. This paper examines current student attitudes toward study skills, using a survey designed to address issues such as the following:

- What are the study skills and habits of current students?
- How have these skills and habits evolved between high school and college?
- What are the primary resources used by students to study?
- How do students rate current learning styles and pedagogical tools?
- What kinds of technology tools do students prefer to help them study?

Today's higher education institutions are placing an enhanced emphasis on student independent learning. As such, it has become important for those institutions to facilitate independent learning with approaches, tools and techniques for handling that independence. Unfortunately, today's college students are currently dissatisfied with the efforts of higher education in providing them with the study skills needed for academic success (Wall et al, 1991). Harvey & Watt (1993) state that colleges often simply provide a brief initial introduction to study skills, and thereafter fail to provide the necessary and subsequent systematic advice and support. There is a demonstrated connection between poor study skills and increased rates of academic failure, (Biggs, 1987; Meyer, 1992) as well as the effect of study skills training on retention of at risk high school and college students (Polansky et

al, 1993; Castagna & Codd, 1984; Johnston et al, 1975; Stanley et al, 1999).

Generally, study skills are those skills and habits are which are necessary for understanding and retrieving information, and in particular they are the link between comprehension and memorization (Al-Hilawani & Sartawi, 1997). Hoover (1989) has listed specific competencies of study skills including acquiring information, recording information, recording appropriate responses to the presented information, locating the required information, organizing and managing activities efficiently, synthesizing information to create meaningful patterns of responses, and memorizing and retrieving information on demand. Fielden (2004) states that good study habits help the student in critical reflection in skills outcomes such as selecting, analyzing, critiquing, and synthesizing.

The literature is replete with studies and conclusions regarding the benefits of utilizing effective study skills. Al-Hilawani & Sartawi (1997) report that the literature in general reveals that college students with low GPA had inadequate study skills, and further that students who are academically successful use study skills spontaneously and more efficiently than low achieving students. Hoover indicates that good study skills and habits are the tools that assist students during the learning process in order to acquire and retain new information and are essential for students' successful academic performance. Jones, Slate and Kyle (1992) reported that high achieving college students have better study skills than low achieving students in areas of time management, study techniques and attitudes toward learning. DiVesta and Moreno (1993) viewed study skills as a compensation for cognitive limitations in the information processing system and reported that there was a significant correlation between GPA and comprehension monitoring activities, which in turn was an indication that students with high GPA practice self awareness,

purposeful planning and self-adjustment activities more than students with low GPA. More recent work in self-regulated learning examines this process in terms of teachable cognitive skills where students learn to think about the way they learn (Paris and Winograd, 2001).

In order to become effective independent learners in today's changing academic environment, some have suggested that what is important is not so much what students are doing within the classroom but what the students are doing outside of the classroom, particularly in terms of their study methods and study behaviors (Entwistle et al., 1991). While positive study behaviors are important to student achievement, knowledge of the actual study behaviors and techniques utilized is rather limited (Elliot et al., 2002). Scholars do however agree that students typically utilize a variety of studying techniques (Allgood et al., 2000), while the actual techniques utilized are rarely documented (King 1992; Stanley et al., 1999; Van Meter et al., 1994; Wood et al. 1999).

What is often missing in much of this literature is the voice of students themselves regarding effective study habits, particularly given the amount of technological change that has been seen in recent years in postsecondary education. These new technologies are often seen as having the potential to dramatically improve time on task for students and make studying more efficient, and yet students themselves must ultimately weigh in on what tools and approaches have worked for them, or have the potential to do so. Within this context, we have sought to explore student attitudes toward current study habits, their evolution between high school and college, and what these trends mean for marketing education in the future.

METHODOLOGY

A paper survey was administered to students at a liberal arts college on the East Coast during registration for the fall term of 2008, containing 15 questions developed by the author assessing student attitudes toward studying, primary methods of studying, time spent, preferred study and learning styles, and use of technology, together with demographic information. The full survey is listed in Appendix A, and its questions were organized using a mix of response types as follows:

- Demographic questions included year of graduation, full versus part-time status, declared major, gender, and grade point average (GPA) in high school and college.
- One question listed 38 statements about study habits, prompting respondents to agree or disagree relative to their habits in both high school and college. Both positive statements (such as "I take

time to study every day") and negative ones (such as "I have a hard time listening to lectures") were included in this question. Other yes/no questions included whether instructions should provide their notes online, and whether respondents access such notes online.

- A multiple-choice question asked respondents to select their primary source of study information.
- Other quantitative questions asked respondents how many hours they studied per week, how often they used their school's online learning management system per week, the percentage of time they spent reading textbooks and assignments in deciles, and how they would rate each of eight different learning styles using values of poor, average, good, and excellent.
- Two qualitative questions asked students to describe, in their own words, about their preferred style of study and what technology tools help them learn the most.

Results from the survey questions listed above were then coded as quantitative values as specified by respondents, and a content analysis was performed on the two qualitative questions to quantify these responses. This content analysis grouped these responses into seven and six common categories for reporting, respectively, including "Other" and "No response."

The 352 survey responses received had a distribution ranging from 20 to 28 percent of respondents from each undergraduate class, with a 62% to 38% ratio of females to males, similar to the composition of the student body. Academic majors of respondents were skewed toward business (32%), management (16%), and marketing (9%), with other major clusters including psychology, accounting, nursing, and history (7% of respondents each). Key result samples did not vary significantly according to demographic information such as gender, major, or class year. Respondents had a average grade point average (GPA) of 3.4 out of 4.3 in high school and 3.3 out of 4.3 in college, where 4.0 is an A and 4.3 corresponds to the highest possible grade of A+. 90% of these respondents were full-time students.

RESULTS AND DISCUSSION

The results from this survey were tabulated in terms of percentages of multiple-choice responses for most questions, such as percentage of yes or no answers in the list of study skills statements in question 6, or the frequency of learning management usage in question 13, for the survey as shown in Appendix A. In the case of the total study time per week assessed in question 11, these responses were broken into ranges in

two hour increments, showing a median study time of between 9-10 hours per week per student, with responses ranging from zero (for less than 1% of respondents) to over 25 hours per week (for approximately 3% of respondents).

The results of this survey show one very clear overall trend: personal study skills today revolve around comprehension of lecture content, with tools and technology assisting the review of this lecture material being most highly rated by students. Studying also remains an activity that is performed alone or in small groups, and one that remains quite separate from increasing trends toward social networking and online connectivity. Specific conclusions from the survey include the following:

Conclusion 1: Lecture comprehension is the key study skills competency for college students

This survey examined multiple dimensions of study habits and their variation between high school and college, expressed as the relative percentage of “yes” answers for each study skills statement between high school and college. Overwhelmingly, the most commonly accepted statements revolved around comprehension of the lecture material. The top two statements involved taking notes on the lecture in class (90.3%) and listening carefully to explanations in class (85.2%), with the related issue of not liking to read from textbooks ranking in the top 5 with 75% of respondents agreeing. Other highly-ranked issues include studying in a quiet place (80.4%) and managing time (78.4%).

In a similar vein, the least well accepted statements involved listening to lectures but not taking notes (15.3%), not taking notes at all (15.9%), and the related issue of having difficulty determining important points in the lecture (22.4%) being the third least accepted statement. Other low-ranked statements included not being organized (24.4%) and liking to study in groups of three or more (25.3%).

Table 1. Most accepted statements on study habits

In class, generally speaking, I take notes on the lecture.	90.3%
Because I want to remember, I listen carefully to any explanations in class.	85.2%
Usually, I prefer to study in a quiet place.	80.4%
I manage time well to meet school, job, and social/ entertainment needs.	78.4%
Generally speaking, I do not enjoy reading textbooks.	75.0%

Table 2. Least accepted statements on study habits

I listen carefully to a lecture but I do not take notes.	15.3%
I don't bother taking notes on lectures.	15.9%
I have difficulty determining important points in lectures.	22.4%
I waste time because I am not organized.	24.4%
Generally speaking, I prefer to study in groups of three or more.	25.3%

Looking deeper at what study habits change the most between high school and college, reviewing notes from the day before a class (25.9% change) and not waiting until the night before a test to review these notes (-20.1% change) serve as the biggest change, and the only ones exceeding a 20 per cent rate of change.

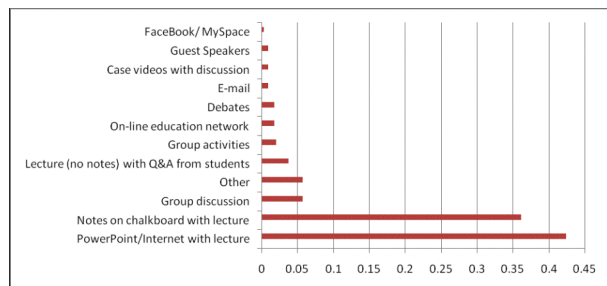
Table 3. Biggest changes in study habits from high school to college

	HS	College	Change
Before class starts, I review yesterday's lecture notes.	12.5%	38.4%	25.9%
I wait until the night before a test to review my lecture notes.	61.9%	41.8%	-20.1%
I take time to study every day.	31.8%	48.9%	17.1%
Generally speaking, I skip over charts, graphs, and tables when I read a chapter.	53.7%	36.9%	-16.8%
Generally speaking, I study only when I have to absolutely have to.	56.8%	40.3%	-16.5%

Conclusion 2: Access to notes is the most important study skills tool for students

One common denominator across many survey questions is a preference for tools that aid in optimizing the process of learning, and particularly lecture comprehension. As shown in Figure 1, the availability of notes in PowerPoint® or other electronic formats is rated as the most important tool by nearly half of students responding (42.3%), with traditional notes on a chalkboard following closely behind with 36.1% of students ranking this highest.

Figure 1. Study skills tools ranked highest by students in a single-choice question



Looking at how students rate each of the learning tools available to them, there was also a clear preference for notes and PowerPoint summaries, with 63.9% and 86.1% respectively rating these tools as good to excellent. This school's on-line learning management system, which serves as a repository for notes as well, followed closely at 62.2% rated good to excellent. Conversely, social networking tools such as Facebook®/MySpace® were rated extremely low, with over 80% of students (82.7%) rating them poor to average, indicating a clear split between tools used for social connectivity and study.

Table 4. Student ratings of study skills tools

	Notes	Power Point®	Social Network, e.g. Angel®	Q&A
Excellent	22.16%	38.92%	15.63%	9.38%
Good	41.76%	47.16%	46.59%	37.22%
Average	31.25%	12.50%	27.84%	33.81%
Poor	4.26%	0.85%	9.09%	19.03%

	E-mail	Social Network Facebook®/MySpace®	Debates	Video
Excellent	8.24%	2.56%	19.60%	16.76%
Good	38.92%	13.64%	41.76%	52.84%
Average	36.36%	30.97%	30.68%	23.86%
Poor	14.77%	51.70%	7.39%	5.40%

Finally, in performing a content analysis of responses to the question "What technology tools most help you learn?" there was also a clear preference for PowerPoint summaries of notes (112 responses, or 31.8% of respondents) as well as the Angel learning management system that frequently serves as an online

repository of lecture notes and course materials (73 responses, 20.7 per cent). Other responses included use of the Internet or their computer (44 and 43 responses respectively) as well as a broad range of other responses ranging from audio and video files to "good old writing on the chalkboard." In related survey questions, over 95 percent of respondents felt that instructors should post their lecture notes online, and make use of these resources when they are available.

Conclusion 3: Most students like to study alone or in small groups – not in online communities

We live in a world that is increasingly tied together with digital social networks, and yet students have a clear preference for studying alone or in small groups. A content analysis of responses to the question "What is your preferred style of studying?" showed that studying alone or reviewing notes was the overwhelming choice of respondents, with 277 responses or 64.5% of respondents. Studying in small groups was a distant second choice with 36 responses or 10.2% of respondents, with other respondents citing study styles ranging from attending lectures to using flashcards.

Taken together, these findings indicate that time and lecture comprehension remain critical issues for students, particularly as they make the transition from high school to college, and that decidedly low-tech tools such as access to lecture notes are much more important than tools such as social networks or communications media. Survey respondents indicated spending a high level of time reviewing textbooks, with nearly half (46.9%) spending over 80 per cent of their time on this, and more than 20 per cent spending over 90 per cent of their time – and yet fully three quarters of respondents agree with the statement "I do not enjoy reading textbooks." Between this and the natural transition in increased study efforts between high school and college, this survey clearly points to a future for marketing education that must continue to optimize students' time and effort to help them become successful.

SUMMARY

Students report being in an environment that has increasing demands on their time and workload as they transition from high school to postsecondary education, and their study habits as shown in this survey reflect a clear desire to make learning as frictionless and time-efficient as possible. As a result, marketing education should increasingly look toward ways to package information, summarize it, and make it available to students electronically outside of the classroom.

Does this also mean that pedagogical techniques must change to address the way students study? At one level, these findings indicate that we must continue to adapt lecture techniques for maximum retention. At another level, they open the door to examining how we teach students to study, and indeed to think: for example, recent efforts in the area of self-directed learning (SRL), a cognitive approach to learning based around metacognition (e.g. awareness of how we think, together with the use of strategies and situated motivation) show promise for teaching students new ways to approach the process of studying itself (Paris and Winograd, 2001). The survey results point to numerous areas for further study including the following:

- Examining the mechanics of effectively summarizing classroom information for optimum retention
- Leveraging online learning management systems to improve their utility as an informational resource, as well as other technology communications tools such on-demand webcasts, podcasts, and document archives.
- Understanding what factors help students learn and retain information better
- Broadening these survey results to other institutions

The trends shown in this survey also make sense within the broader context of a world where there is a greater level of information and more competing demands on people's time, than ever before. In a very real sense, study skills for marketing education serve as a microcosm of the evolving competencies students will require in a changing workforce subsequent to graduation. By helping students to study more effectively, guided by the input of the students themselves, we have the potential to prepare them for greater levels of success in the increasingly information-driven marketing environment of the future.

REFERENCES

- Al-Hilawani, Y. A. and Sartawi, A. A. (1997), "Study Skills and Habits of Female University Students," *College Student Journal*, 31, 537-544.
- Allgood, W.P., Risko, V.J., Alvarez, M.C. and Fairbanks, M.M. (2000), "Factors that Influence Study," in R.F. Flippo and D.C. Caverly (Eds.). *Handbook of College Reading and Study Research*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Biggs, J.B. (1987), *Student Approaches to Learning*. Hawthorn, Victoria: Australian Council for Educational Research.
- Castagna, S.A. and Codd, J.M. (1984), "High School Study Skills: Reasons and Techniques for Counselor Involvement," *The School Counselor*, 32, 37-42.
- Di Vesta, F.J. and Moreno, V. (1993), "Cognitive Control Functions of Study Activities: A Compensation Model," *Contemporary Educational Psychology*, 18(1), 47-65.
- Elliot, L., Foster, S. and Stinson, M. (2002), "Student Study Habits using Notes from Speech-to-Text Support Service." *Council of Exceptional Children*, 69(1), 25-40.
- Entwistle, N.J., Meyer, J.H.F. and Tait, H. (1991), "Student Failure: Disintegrated Patterns of Study Strategies and Perceptions of the Learning Environment," *Higher Education*, 21, 249-261.
- Fielden, K. (2004), *Evaluating Critical Reflection for Postgraduate Students in Computing*. Informing Science and Information Technology Education Joint Conference, 2005, Flagstaff, Arizona, (accessed September 19, 2008), [available at <http://www.informingscience.org/proceedings/InSITE2005/138f36Field.pdf>].
- Harvey, J. and Watt, H. (1993), "Using Learning Technology to Support Student Study Skills", Chapter 6, *Implementing Learning Technology, LTD*, (accessed September 15, 2008), [available at <http://www.icbl.hw.ac.uk/ltdi/implementing-it/support.htm>].
- Hoover, J.J. (1989), "Study skills," in E.A. Polloway, J.R. Patton, J.S. Payne, and R.A. Payne. *Strategies for Teaching Learners with Special Needs* (4th ed.). New York: Macmillan Publishing Company.
- Johnston, J.M., O'Neill, G.W., Walters, W.M. and Rasheed, J.A. (1975), "The Measurement and Analysis of College Student Study Behavior: Tactics for Research," in J. Johnston (Ed.), *Behavior Research and Technology in Higher Education*. Springfield, IL: Charles C. Thomas.
- Jones, C.H., Slate, J.R. and Kyle, A. (1992), "Study Skills of Teacher Education Students," *Teacher Education*, 28(1), 7-15.
- King, A. (1992), "Comparison of Self-Questioning, Summarizing, and Note Taking Review as Strategies

for Learning from Lectures,” American Educational Research Journal, 29, 303-323.

Meyer, J.H.F. (1992), “Study Orchestration: the Manifestation, Interpretation and Consequences of Textualised Approaches to Studying,” Higher Education, 22, 297-316.

Paris, S. G. and Winograd, P. (2001), “The Role of Self-Regulated Learning in Contextual Teaching: Principles and Practices for Teacher Preparation,” U.S. Department of Education Project Preparing Teachers to Use Contextual Teaching and Learning Strategies To Improve Student Success In and Beyond School, (accessed January 14, 2009), [available at <http://www.ciera.org/library/archive/2001-04/0104parwin.htm>.]

Polansky, J., Horan, J.J. and Hanish, C. (1993), “Experimental Construct Validity of the Outcomes of Study Skills Training and Career Counseling as Treatment for the Retention of At-Risk Students,” Journal of Counseling & Development, 71, 488-492.

Stanley, B., Slate, J.R. and Jones, C.H. (1999), “Study behaviors of college preparatory and honors students in the ninth grade,” The High School Journal, 82(3), 165-171.

VanMeter, P., Yokoi, L. and Pressley, M. (1994), “College Students’ Theory of Note-Taking Derived from Their Perceptions of Note-Taking,” Journal of Educational Psychology, 86, 323-338.

Wall, D., Macauley, C., Tait, H., Entwistle, D. and Entwistle, N. (1991), “The Transition from School to Higher Education in Scotland,” University of Edinburgh: Centre for Research on Learning and Instruction.

Wood, E., Willoughby, T., McDermott, C., Motz, M., Kaspar, V. and Ducharme, M.J. (1999), “Developmental differences in study behavior,” Journal of Educational Psychology, 91, 527-536.

APPENDIX A: SURVEY CONTENTS

I. Demographic information

1. What year do you expect to graduate from college?

2. Are you a full-time or part-time student?

3. Have you identified a major? If you answered, “Yes”; what is your major(s)?

4. What is your gender?

5. What is your Grade Point Average (GPA) in high school and in college?

II. Study skills information

6. Answer "yes" or "no" for the following questions, for both high school and college:

a. I have difficulty determining important points in lectures.

b. Before class starts, I review yesterday’s lecture notes.

c. I waste time because I am not organized.

d. I focus entirely on my work when I study.

e. I don’t bother taking notes on lectures.

f. I take time to study every day.

g. In class, generally speaking, I take notes on the lecture

h. In class, generally speaking, I prefer to listen vs. take notes.

i. Usually, I prefer to study in a quiet place.

j. Usually, I listen to music (e.g. iPod) when I study.

k. I often have trouble finding enough time to study.

l. Generally speaking, I rely on my notes vs. read the textbook.

m. Generally speaking, I do not enjoy reading textbooks.

n. I know what time of the day I do my best studying.

o. Generally speaking, I study only when I feel like it.

p. Generally speaking, I study only when I have to absolutely have to.

q. Generally speaking, I skip over charts, graphs, and tables when I read a chapter.

r. Generally speaking, I prefer to study alone.

s. Generally speaking, I prefer to study in groups of two.

t. Generally speaking, I prefer to study in groups of three or more.

u. I prefer working in teams for term projects in my classes.

v. I get very nervous for exams.

w. I put off studying that I should be doing.

x. I seldom read the questions at the end of the chapter before I begin reading the chapter.

y. I wait until the night before a test to review my lecture notes

z. I listen carefully to a lecture but I do not take notes.

aa. If I have any time left, I check over my test to avoid errors.

bb. I take time to review the chapter soon after I read it.

cc. Before starting a test, I plan how much time to use on each section of the test.

dd. If I have any time left, I check over my test to avoid errors.

- ee. Because I want to remember, I listen carefully to any explanations in class.
- ff. I have a hard time listening to lectures.
- gg. I manage time well to meet school, job, and social/entertainment needs.
- hh. Generally speaking, I stay alert and focused during class.
- ii. Generally speaking, I prefer to study with a study partner for exams.
- jj. I can sit and study for long periods of time if needed without becoming tired or distracted.
- kk. I prefer to use media tools to assist my study skills.
- ll. I use social networks to help me study. (e.g. Angel®, Facebook®, MySpace®)

7. What percentage of the time do you read your textbook chapters/reading assignments? (90–100%, 80–89%, 70–79%, 60–69%, 50–59%, Less than 50%)

8. What do you consider to be your primary source for study? Check one of the following:

- a. Instructor writing notes on chalkboard with lecture
- b. Instructor using PowerPoint®/Internet with lecture
- c. Instructors and students in a class using an on-line education network
- d. Lecture (no notes) with Q&A from students
- e. Instructor and students in a class uses email as a teaching /communication tool
- f. Instructor and students using FaceBook® / MySpace® as a communication/learning tool
- g. Debates
- h. Case videos with discussion
- i. Group discussion
- j. Group activities
- k. Guest Speakers
- l. Other

9. Do you think instructors should provide their notes and or PowerPoint® on-line, e.g. Angel®? (Yes, No)

10. If the instructor provides the PowerPoint® and misc. notes and resources on Angel® - do you access/use them? (Yes, No)

11. On average, outside the classroom how many hours do you study in a week?

12. Please rate each of these learning styles (Poor, Average, Good, Excellent)

- a. Instructor writing notes on chalkboard with lecture
- b. Instructor using PowerPoint®/Internet with lecture
- c. Instructors and students in a class using an on-line education network, e.g. Angel
- d. Lecture (no notes) with Q&A from students
- e. Instructor and students in a class uses email as a teaching and communication tool

- f. Instructor and students using FaceBook® and/or MySpace® as a communication and/or learning tool.
- g. Debates
- h. Case videos with discussion

13. How often do you use our school's (e.g. Angel®) educational social network for your classes? (Never, two to four times per month, once a week, two to four times per week, five to six times per week, daily)

14. In your own words, what is your preferred style of studying?

15. In your own words, what technology tools most help you learn?