AC 2012-3521: MANAGING TIME IN ONLINE COURSES: STUDENT PERCEPTIONS

Prof. Susan L. Miertschin, University of Houston (CoT)

Susan L. Miertschin is an Associate Professor teaching in the Computer Information Systems program at the University of Houston. Her teaching interests are in the development of information systems applications and the complementary nature of back-end developer and front-end developer skill sets. Her research interests are program and student assessment, the impact of instructional technology on student learning, and the improvement of e-learning environments and experiences.

Dr. Carole E. Goodson, University of Houston

Carole Goodson is a professor of technology at the University of Houston. As an active member of ASEE, she is a member of the Academy of Fellows, a past Editor of the Journal of Engineering Technology, a past Chair of PIC IV and the ERM Division, and a past Chair of the Gulf Southwest Section of ASEE.

Dr. Barbara L. Stewart, University of Houston

Barbara L. Stewart earned a B.A. from Brigham Young University, a M.S. from Utah State University, and an Ed.D. from Brigham Young University. Her research and curriculum development interests focus on online course development and delivery, along with cognitive, multiple talent, and learning styles theories and their application to educational settings. Stewart's career has included service as a faculty member, Department Chair, and Associate Dean. She is currently a professor of human development and consumer science at the University of Houston. Email: bstewart@uh.edu.

Managing Time in On-line Courses: Student Perceptions

Abstract

Time management is an important life skill and one that is vital to student success in higher education. Time management skills are perceived by some as more essential for success in on-line courses than in traditional face-to-face courses. This exploratory study uses a survey of student perception to discover relationships that may exist between time management skill development and on-line course completion. The study was inspired by student responses to open-ended questions on a prior survey that seemed to imply a positive relationship between on-line course completion and the acquisition of time management skills. This study was undertaken to explore those preliminary findings.

Introduction

Working adults with demanding schedules, parents juggling children's activities and traditional students who often must meet the demands of multiple courses are enrolling in on-line courses in increasing numbers. In fact, research at the University of Houston indicates that although students enroll in on-line courses for a myriad of reasons, time/convenience/access is the number one reported strength of on-line offerings[1]. Students in the study commented:

> *"As a fulltime student who also has a fulltime job, it is essential for me to be able to access course material, lectures, assignments, and get in contact with my classmates on my schedule - which frequently means in the late evenings. This is made possible in online course delivery."*

> *"If we didn't have this option I don't think I would be able to ever graduate and I think this applies to many students who live far from campus, who work full time, have a family and/or children who need care".*

While students are attracted to online courses for the time convenience, other research indicates that the on-line learner's ability to manage time for the course, along with the other time demands in their life, is an important element of on-line course success and on-line course satisfaction[2, 3]. The current research was motivated by evidence from a prior study that suggested that, in some students' minds, on-line enrollment had helped them develop better personal and time management skills[1].

In general, time management is seen as important to student success. Britton and Tesser[4] report that time management practices play a role in educational achievement and found a relationship between time management skills and grade point average. Structural elements of courses complement student time management practices, Traditional face-to-face classes offer temporal structure through regular class meetings, which also enable regular verification of participation (by checking attendance, e.g.), verbal instruction accompanied by indirect body language cues, and regular implicit and explicit feedback. In order to create temporal structure in on-line courses, elements other than face-to-face class meetings must be substituted. The authors of the paper report using electronically enforced due dates, digital course calendars, email reminders,

and on-line to-do lists to provide temporal structure. Some educators purport that the use of technology in education leads to more student learning independence. Learning independence is characterized by self-regulated actions, some of which are tied to time management skill[5]. Is it possible then that on-line courses, with their use of technology and their flexible scheduling, offer a benefit in the form of fostering the development of time management skills in the learners who take them?

In order to better understand student perceptions related to the role of time management in online courses, a survey instrument was used to measure student perceptions of the impact of on-line courses on their time management skills. The survey was administered to 148 students enrolled in four undergraduate courses and one graduate course, including courses in research, supervision, and information technology. The survey was administered on-line using Blackboard and results were analyzed. Using the results of this survey and related literature, this paper addresses the following issues.

1. What are student perceptions of the impact of course delivery format (on-line or face-to-face) on their time management skills?
2. Do students perceive that there are factors of time management that influence their course performance?
3. How do student perceptions of time management in on-line and face-to-face courses vary among factions of the student population?

Analysis of the survey results and implications for on-line delivery of courses are presented.

Background

Books, articles, and stories abound that offer advice to people about how to better manage time in order to achieve personal goals and reduce stress. A search of YouTube.com in 2011, using the search string of "time management", yielded roughly 134,000 video titles (not refereed, but some quite popular). "How-to" advice is frequently in the form of specific techniques or procedures that an individual should apply. Table 1 presents a list of time management techniques taken from a variety of sources.

Table 1 Practical Time Management Techniques from a Variety of Sources

Technique	Source
• Handle each piece of paper only once	(Williams, 2011)[6]
• Break large tasks into smaller tasks because it is easier to tackle a small task • Recognize when an immediate desire conflicts with an ultimate goal	(Nikitina, 2009)[7]
• Spend time thinking and planning your life and work so that you are not always in "crisis" mode	(Cross, 2008)[8]

• Keep a journal of time use to establish a baseline of how time is being used • Coach yourself with questions such as, "What is the best use of my time *now*?"	(Kane, 2007)[9]
• "If you have to eat two frogs, eat the ugliest one first" (your "frog" is your biggest, most important task, uglier means bigger and more important) (p.2)[10] • "If you have to eat a live frog at all, it doesn't pay to sit and look at it for very long" (p. 3)[10]	(Tracy, 2007)[10]
• Time tasks that are repeated in your routine until you can accurately estimate how long they will take • Delegate work – consider that your personal skill sets are not the most appropriate for a particular task	(Morgenstern, 2004)[11]
• Identify goals (needs and wants) • Prioritize goals • Allocate time to goal tasks accordingly	(Therese H. Macan, Shahani, Dipboye, & Phillips, 1990)[12]

Why do people need techniques and advice for managing time? Time is a finite resource. It exists beside other finite resources such as money, energy, and talent. Profit models for varied business and industrial sectors attempt to balance the use of a set of finite resources, often in a mathematical give and take balancing act, so that a profit function can be optimized. For some people, the profit function is the abstract notion of a rich, fulfilling life with accomplishments and achievements balanced by quality of life factors. For students enrolled in higher education, the profit function is successfully completing courses that are part of a degree program while working at a job (for some), playing, and maintaining friendships and family relationships. So a student's time must be managed in order to optimize his or her chance at successfully meeting short and long-term course and program-of-study goals while maintaining quality of life.

Perhaps an abundance of popular material about how to manage time exists because there is scholarly research that shows that time management can be taught and learned. Time management is defined differently in most studies, but most definitions reflect the one provided by Lakein[13], who profiled time management as a process of determining needs, setting goals to achieve those needs, planning the tasks required, and prioritizing them. Claessens, van Eerde, Rutte, and Roe point out that studying time use is purposeless outside the context of goal-directed activity[14]. Research such as that by Woolfolk and Wookfolk[15], Van Eerde[16], Adamson, Covic, and Lincoln[17], Kisa and Ersoy[18], Green and Skinner[19], and Häfner and Stock[20] reinforce the notion that skills that support an effective time management process can be taught and learned. Perhaps, the contemporary emergence of the "life coach" profession indicates that time management is a skill that can also be coaxed into existence[21].

The literature identifies time management factors that emerge from various research efforts. A study by Claessens, van Eerde, Rutte, and Roe[14] identifies three "groupings of behaviors" related to time management. These groupings are time assessment behaviors (self-awareness of time needed and available), planning behaviors (setting goals, planning and grouping tasks, prioritizing), and monitoring behaviors (self-observation of time use against goals, and feedback

loops). A study by Bond and Feather[22] named five factors related to time management. They are sense of purpose, structured routine, orientation to the present, effective organization, and persistence. A third study identified three factors, namely short-range planning, long-range planning, and time attitudes[4]. A fourth body of research identifies four factors. They are setting goals and priorities, techniques of time management (e.g., making lists, setting reminders), personal preference for organization (e.g., preference for an orderly workspace over a disorderly workspace), and perceived control of time[12, 23]. The identification of factors, with overlap of some factors and distinctiveness of others, demonstrate not only the different ways time management has been approached for study by scholars, but also the depth of thinking on the concept.

Students enrolled in higher education have goals to achieve within a finite amount of time. Teaching faculty observe students every semester who seem unable to systematically allocate proper proportions of their ethereal and apparently scarce time resource in order to satisfy the learning requirements of their face-to-face or on-line coursework. It is widely recognized in higher education that some students achieve more academically than others, and there is research that investigates how student achievement relates to their time management skills. Macan, Shahani, Dipboye, and Phillips[23] studied the correlation of time management with both academic performance and stress. Their research found a correlation between time management behaviors and both self-reported GPAs and student life satisfaction. Britton and Tesser[4] found a similar correlation in a separate study. In some learning literature, time management skills are part of a larger concept called "self-regulatory learning behaviors," which are also part of a concept called "self-discipline". Zimmerman defines self-regulatory learning behaviors as "self-generated thoughts, feelings, and actions for attaining academic goals"[24]. Time management skills fall in the category of self-generated actions as described by Zimmerman. A study by George, Dixon, Stansal, Gelb, and Pheri[25] identified time management skills as the highest predictor of student success as measured by GPA. In the same study, time management skills were the second highest predictor of a broader measure of "total success" that included measures of quality of life. The highest specific predictor of total success in the study was having clearly defined goals, which is a technique that is treated as part of time management in much of the literature.

Studies have also been conducted to determine if training students in time management principles, behaviors, and techniques will produce students who are better able to handle the demands of a higher education curriculum. Zimmerman and Schunk[26] explain a large body of research that supports teaching self-regulatory behaviors as a way of enhancing academic achievement.

In the on-line learning literature, self-discipline is often mentioned as important for student success. For example, in a survey conducted by The Sloan Consortium (a consortium of individuals, institutions, and organizations committed to quality in on-line education), approximately two-thirds of academic leaders surveyed mentioned the need for more discipline on the part of on-line students as a critical barrier to success of on-line learning[3]. Success in on-line courses has been studied and linked to students' time management skills. A study by Song, Singleton, Hill and Koh[27] found the students who had experience with on-line courses perceived that time management had an impact on the success of such an experience. Lynch and Dembo[28] identified the attributes of goal orientation and time and study management as predictive of

academic success in on-line and blended learning. Barnard, et al. found that student self-regulatory behaviors had an indirect impact on student perceptions about achievement in on-line courses by influencing them to communicate and collaborate more fully[29]. Michinov, Brunot, Le Bohec, Huhel and Delaval[30] studied a single dimension of time management behavior, procrastination, and found it to be negatively correlated with success in an online course.

Thus, there is both theoretical and experimental research that supports the notion that time management skills are important for academic success, and in particular, for success in on-line courses. The current study represents an initial exploratory effort to determine if on-line course completion helps to develop students' time management skills. This notion is important because self-regulatory techniques, once mastered, are used throughout life to function effectively at work and at home[24]. In society today, work is a central part of a process of "life-long self-construction" that encompasses personal choices related to health, environment, and achieving balance in one's life. The process requires individuals to be self-regulated learners[31]. As online learning grows in popularity, it may come to be viewed as an essential mechanism for training individuals for life success.

Study Procedures and Results

In order to obtain a clearer understanding of how certain instructional components contribute to students' perceptions of quality in on-line course offerings, 148 students were surveyed in April 2011 at the University. Participating students were registered in one of six courses chosen for distribution of the study survey. The courses varied in subject, level and delivery mode as shown in Table 2.

Table 2: Courses Used for Survey Administration

Course	Level	Delivery Mode
Internet Application Development	Lower division (sophomore)	Hybrid
Topics in Computer Information Systems	Upper division (senior)	Traditional lecture
Research Concepts	Upper division (senior)	On-line
Consumer Science	Upper division (junior)	On-line
Evaluation	Graduate	On-line
Visual Merchandising (2)	Upper division (junior)	On-line

In order to complete the survey, students logged on to an on-line learning management system that housed course materials and other course elements. Completion of the survey was voluntary, and all responses were anonymous. Students were told that they were responding to a survey about their experiences with traditional and on-line courses, in general. That is, the survey was not to be used to express an opinion about the course in which the students were currently enrolled. Using this system, responses were downloaded for analysis into a spreadsheet, with each response record identified by a number assigned to the response record by the learning management system's assessment module.

To facilitate the goals of this research, a survey instrument was adapted from a previous study[1]. This survey instrument consisted of 21 items. Items 1 through 8 addressed student demographics including: 1) student classification, 2) number of on-line courses completed by the student, 3) enrollment status (mostly full-time or mostly part-time), 4) gender, 5) age, 6) estimated overall GPA, 7) distance from the student's home to the campus and 8) employment status. The second part of the survey focused on student perception of value of various on-line course features.

The third part of the instrument is the focus of this paper; it addressed issues related to students' time management approach with respect to class participation and planning. It also elicited perception about whether their time management approach was different in on-line courses versus traditional face-to-face courses. Specifically, items addressed deadline problems, study time, general time management, relationship of learning management to student and course format, and perceived difficulty in completing courses.

The analysis was designed to consider the following issues:

1. What are student perceptions of the impact of course delivery format (on-line or face-to-face) on their time management skills?
2. Do students perceive that there are factors of time management that influence their performance?
3. How do student perceptions of time management in online-courses and face-to-face courses vary among factions of the student population?

Ninety percent of the students were classified as at least junior level, and thus, they were experienced students. The students were also experienced with on-line courses; 52% of them had completed at least four on-line courses, and only 16% had zero or one on-line course. The students were otherwise characterized as female (58%), mostly full-time (87%) and under 26 years of age (78%). Most lived in the Houston region (91%), at least 10 miles from campus (59%). Seventy-nine percent of the students were employed, either in a full-time or part-time position.

A review of the data on student perceptions of course deadlines by course format is presented in Table 3 and Figure 1. In order to determine formats that were perceived as presenting problems with deadlines, students were asked to identify the course format (if any) that presented, for them, the most problem with assignment deadlines.

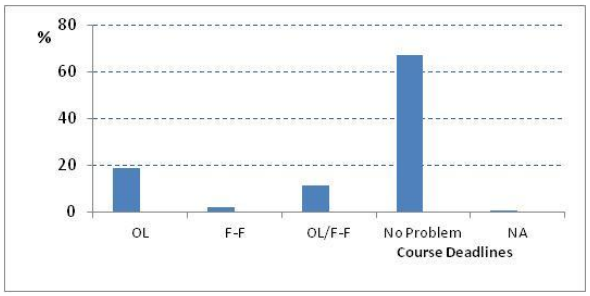
Table 3: Student Perceptions of Course Deadlines by Course Format

Meeting course deadlines is usually a problem for me in:

Delivery Format		%
a.on-line classes	OL	19
b.face-to-face classes	F-F	2
c.both on-line and face-to-face classes	OL/F-F	11
d.Meeting course deadlines is not a problem for me.	No Problem	67
NR	NA	1

(n=148)

Figure 1: Student Perceptions of Course Deadlines by Course Format



(n=148)

The data indicates that for most students, course deadlines are not a problem. However, it also indicates that for some students (20%), on-line courses present more of a challenge with respect to meeting deadlines than do face-to-face courses.

A review of the data on the perceptions of study time by course format is presented in Tables 4 and 5 and corresponding Figures 2 and 3. Specifically, students were asked if they dedicated a specific time to study (Table 4 and Figure 2). They were then queried as to whether they managed time more effectively by various course formats (Table 5 and Figure 3).

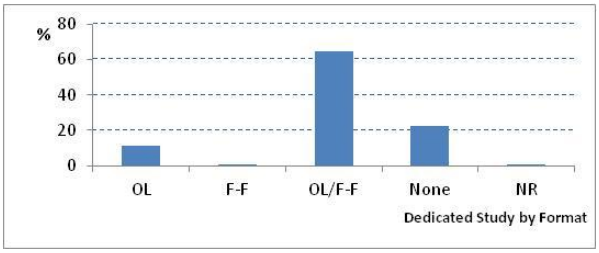
Table 4: Student Perceptions of Dedicated Study Time by Course Format

I dedicate a specific time each week to study for my:

Delivery Format		%
a.on-line classes	OL	11
b.face-to-face classes	F-F	1
c.both on-line and face-to-face classes	OL/F-F	65
d.I do not have dedicated study time blocks.	None	23
NR	NR	1

(n=148)

Figure 2: Student Perceptions of Dedicated Study Time by Course Format



(n=148)

The data indicates that 60% of the students have dedicated study time for any course (on-line or face-to-face). Twenty percent of the students have no dedicated study time for any course (on-line or face-to-face). While 11% of the respondents have a dedicated study time specifically for on-line courses and not face-to-face courses, for only 1% of the respondents is the reverse true. This indicates that for a small population of students, they see a need to structure a specific time for study for an on-line course without seeing this need for a face-to-face course. It is plausible that, through on-line course experiences, these students might see a generalized value of structuring specific time for study, which is an academic time management skill.

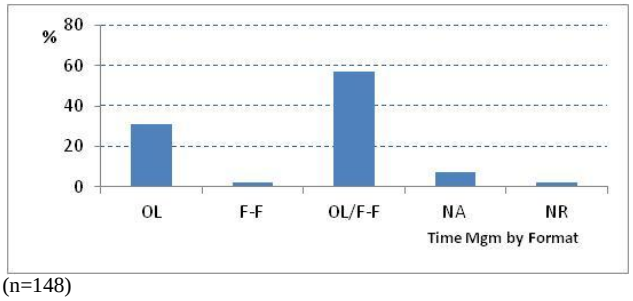
Table 5: Student Perceptions of Time Management's Relation to Success by Class Format

I had to learn to manage my time to succeed in my:

Delivery Format		%
a.on-line classes	OL	31
b.face-to-face classes	F-F	2
c.both on-line and face-to-face classes	OL/F-F	57
d.The statement does not apply to me.	NA	7
NR	NR	2

(n=148)

Figure 3: Student Perceptions of Time Management's Relation to Success by Class Format



(n=148)

The data indicates that almost 60% of the students had to learn to manage time to be successful with any course (on-line or face-to-face). Thirty percent of the students said that they had to learn time management to succeed in on-line courses only, while only 2% of the students said that they had to learn time management to succeed in face-to-face courses only. Thus, it appears that there may be merit to the notion that on-line course experiences are developing some time management behaviors for some of those enrolled.

The concept of feeling "in control" of time has been examined as an outcome of good time management skills[4, 14]. The construct of feeling "in control" of learning is linked to lower levels of academic stress, and lower academic stress has been linked to higher academic performance[32, 33]. Data from the survey question that addressed feeling "in control" is presented in Table 6 and Figure 4.

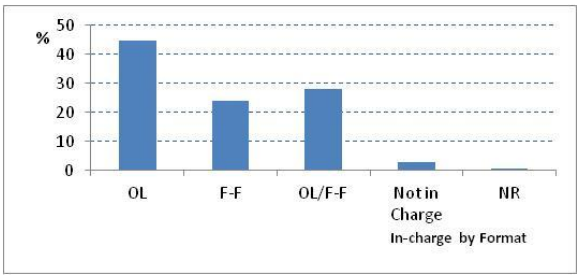
Table 6: Student Perceptions of Learning Management Control by Class Format

I feel more in charge of my learning with my:

Delivery Format		%
a.on-line classes	OL	45
b.face-to-face classes	F-F	24
c.both on-line and face-to-face classes	OL/F-F	28
d.I do not generally feel in charge of my learning.	Not in	3
NR	NR	1

(n=148)

Figure 4: Student Perceptions of Learning Management Control by Class Format



(n=148)

The data indicates that almost 50% of the respondents feel more in control of their learning in on-line courses. Twenty-five percent of respondents felt more in control of their learning in face-to-face courses. Almost 30% of respondents felt in control of their learning regardless of course format.

In reviewing demographic variables, it seems that the number of courses a student had completed in an on-line format had a relationship to their (collective) view of improvement in managing their time, as shown in Table 7.

Table 7: Time Management Improvement and OL Course Completion

No. of OL Courses Completions	*Percent (%) Responding by Course Format: My time management skills have improved from enrolling in courses that are:*			
	OL	F-F	Both	NA
> 5	27	2	12	7
3_4	8	3	10	2
1_2	5	3	6	1
0	5	4	3	1

This table indicates that if a student has completed more than 5 on-line courses then they are more likely to report that their time management has improved from enrolling in the on-line sections. In general, it seems that perception of time management (TM) improves with increases in on-line enrollments. The survey items regarding number of on-line enrollments and what format helped improve TM skills are not presented together, so it is not likely that the students' attention to number of on-line courses completed biased their answer to the item about improvement of TM skills. The survey did not include a question about the number of face-to-face courses completed, but this value might be approximately deduced from the classification level of the student. This data is shown in Table 8.

Table 8: Time Management Improvement and F-F Course Completion

Classification = No. of F-F Courses Completed	*Percent (%) Responding by Course Format: My time management skills have improved from enrolling in courses that are:*			
	OL	F-F	Both	NA
Sr (very many courses)	19	9	4	4
Jr (many courses)	18	14	5	3
So (some courses)	3	3	3	2

Using parallel reasoning, if a student has completed many or very many face-to-face courses the data indicated they are less likely to report that their time management has improved from enrolling in face-to-face courses than they are to report that their time management has improved from enrolling in on-line courses. This seems to suggest that the more experienced students recognize that on-line courses contribute to the development of their time management skills while face-to-face courses do not.

Finally, students were asked to respond to two open ended questions.

Q1 What time management and/or lifelong learning skills have you developed from your experiences with on-line classes?

Q2 What time management and/or lifelong learning skills have you developed from your experiences with face-to-face classes?

The responses were scanned for common themes. Preliminary categories were established and then responses were coded by these categories. After evaluating the responses by categories, the categories were revised and responses were coded by the revised categories. The revised categories include:

- Calendaring: Calendar/Planner/Organizing
- Time Management: Learn time management/Self discipline/Priorities
- (Avoid) Procrastination: Avoid delay in completion of assignments
- Attend Class/On time: Not miss class/Turn in assignments on time
- Deadlines: Observe deadlines & create own deadlines
- Own Pace: Set own pace/ Study on own/Learn using own style
- Time Use: Divide/Use Time/Organize/Set aside/Make own time/In charge/More involved in college experience
- Communication: Instructor/Peers
- Other

The relative frequencies of the student citation of specific time management skills, identified by format, are presented in Table 9.

Table 9: Time Management Improvement and OL Course Completion

TM Skill	Q1/OL	Q2/F-F
Calendaring	17%	4%
Time Management	19%	11%
Procrastination	8%	7%
Attend Class/On Time	0%	24%
Deadlines	10%	4%
Own Pace	15%	0%
Time Use	22%	6%
Communication	3%	25%
Other	7%	18%

In terms of specific skills developed, on-line format was credited more frequently for skills in the areas of calendaring, setting course pace, time use; face-to-face format was credited more frequently for developing skills in the area of communication.

Summary and Discussion

Guided by the undergirding research question, "Do on-line courses, with their use of technology and flexible scheduling, offer benefits that foster the development of time management?," the findings of this preliminary study indicate that there may be some relationships between on-line course experiences and time management skills.

The results, coupled with review of pertinent literature, reflect a generalized perception that time management is important to students' academic success and that while convenience is a major benefit of on-line instruction, the development or enhancement of personal and time management skills is also evident. Specific findings that merit consideration include the following.

- 45% of students felt their on-line courses had improved their time management skills and 13% of students felt their face-to-face courses had improved their time management skills.
- 31% of students felt that both online and face-to-face courses had improved their time management skills.
- 50% of students felt in control of their learning in on-line courses. Twenty-five percent of the students felt in control of their learning in face-to-face courses. Almost 30% of students felt in control of their learning in both course formats.
- If a student was enrolled in more than 5 on-line courses they were more likely to report that their time management skill had improved from on-line courses.
- In general, it seems that perception of time management improvement increased with an increase in on-line enrollments.
- As there is an increase in the number of on-line course enrollments, students are more likely to indicate that on-line courses improve time management skills.
- Time management skills are perceived to improve with the number of on-line courses experienced.

Hence, while the literature reflects support for the value of time management skills in academic success, and specifically for success in on-line courses, this study provides exploratory, experimental support for on-line courses as an aid in the development or enhancement of students' self-regulatory skills, specifically time management. The implication of this finding is that once attained, time management, as a self-regulatory skill, is accessible and useful throughout life as a tool to enable life-long learning, and it is also an essential mechanism for diverse life achievements. It thus behooves the educator to explore ways to more consciously develop related student skills in both formats. For on-line courses, further study is warranted with respect to which online-course elements or structures are valuable to students in enhancing their time management for the enrolled course. A limitation of the reported results is that actual improvement in time management skill was not measured; rather, the students' perception of improvement was measured. Further study with measures of actual time management skills is warranted. Further, longitudinal study regarding the persistence of time management skill acquired could elucidate important relationships about transfer of this necessary life skill to other contexts.

References

1. C.E. Goodson, Miertschin S., Stewart B. “On-line Delivery of Courses: What Components are Important to Students?” *Proceedings of the 2011 ASEE Annual Conference, VanCouver Brittish Columbia: American Society for Engineering Education* 2011.
2. R. Phipps and J. Merisotis. (2000, October 26). *Quality on the Line: Benchmarks for Success in Internet-Based Distance Education*. Available: http://www.ihep.org/Publications/publications-detail.cfm?id=69
3. I. E. Allen and J. Seaman, "Making the grade: Online education in the United States," The Sloan Consortium, Needham, MA2006.
4. B. K. Britton and A. Tesser, "Effects of time-management practices on college grades," *Journal of Educational Psychology,* vol. 83, pp. 405-410, 1991.
5. L. McDowell, "Electronic information resources in undergraduate education: an exploratory study of opportunities for student learning and independence," *British Journal of Educational Technology,* vol. 33, pp. 255-266, 2002.
6. K. Williams. (2011, Tips on effective time management. *Ohio State University Fact Sheet - Small Business Series*. Available: http://ohioline.osu.edu/cd-fact/1006.html
7. A. Nikitina, "3 Powerful Techniques to Beat Procrastination," ed: GoalSettingStudio.com, 2009.
8. D. Cross, "Darryl Cross - Time Management," ed, 2008.
9. L. Kane, "Get more done," *Medical Economics,* vol. 84, pp. 37-38, 2007.
10. B. Tracy, *Eat that frog!: 21 great ways to stop procrastinating and get more done in less time*, 2nd ed. San Fransisco: Berrett-Koehler Publishers, 2007.
11. J. Morgenstern, *Time Management from the Inside Out, Second Edition: The Foolproof System for Taking Control of Your Schedule - and Your Life*. New York: Henry Holt and Company, LLC, 2004.
12. T. H. Macan, "Time management: Test of a process model," *Journal of Applied Psychology,* vol. 79, pp. 381-391, 1994.
13. A. Lakein, *How to Get Control of Your Time and Your Like*. New York: P. H. Wyden, 1973.
14. B. J. C. Claessens, W. Van Eerde, C. G. Rutte, and R. A. Roe, "A review of the time management literature," *Personnel Review,* vol. 36, pp. 255-276, 2007.
15. A. E. Woolfolk and R. L. Woolfolk, "Time management: An experimental investigation," *Journal of School Psychology,* vol. 24, pp. 267-275, 1986.
16. W. Van Eerde, "Procrastination at work and time management training," *Journal of Psychology,* vol. 137, pp. 421-434, 2003.
17. B. J. Adamson, T. Covic, and M. Lincoln, "Teaching time and organizational management skills to first year health science students: does training make a difference?," *Journal of Further & Higher Education,* vol. 28, pp. 261-276, 2004.
18. A. Kisa and K. Ersoy, "The Need for Time Management Training Is Universal: Evidence from Turkey," *Hospital Topics,* vol. 83, pp. 13-19, Winter2005 2005.
19. P. Green and D. Skinner, "Does time management training work? An evaluation," *International Journal of Training & Development,* vol. 9, pp. 124-139, 2005.
20. A. Häfner and A. Stock, "Time Management Training and Perceived Control of Time at Work," *Journal of Psychology,* vol. 144, pp. 429-447, 2010.
21. A. Goldman and S. E. Seckler, "Can Hiring a Coach Enhance Your Practice and Your Life?," *GPSolo,* vol. 28, pp. 16-20, 2011.
22. M. J. Bond and N. T. Feather, "Some correlates of structure and purpose in the use of time," *Journal of Personality and Social Psychology,* vol. 55, pp. 321-329, 1988.
23. T. H. Macan, C. Shahani, R. L. Dipboye, and A. P. Phillips, "College students' time management: Correlations with academic performance and stress," *Journal of Educational Psychology,* vol. 82, pp. 760-768, 1990.
24. B. J. Zimmerman, "Academic studying and the development of personal skill: A self-regulatory perspective," *Educational Psychologist,* vol. 33, p. 73, Spring/Summer98 1998.
25. D. George, S. Dixon, E. Stansal, S. L. Gelb, and T. Pheri, "Time Diary and Questionnaire Assessment of Factors Associated With Academic and Personal Success Among University Undergraduates," *Journal of American College Health,* vol. 56, pp. 706-715, 2008.

26. B. J. Zimmerman and D. H. Schunk. (2001). *Self-regulated Learning and Academic Achievement : Theoretical Perspectives* [Book]. Available: http://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=61001&site=ehost-live
27. L. Song, E. S. Singleton, J. R. Hill, and M. H. Koh, "Improving online learning: Student perceptions of useful and challenging characteristics," *Internet & Higher Education,* vol. 7, p. 59, 2004.
28. R. Lynch and M. Dembo, "The Relationship Between Self-Regulation and Online Learning in a Blended Learning Context," *International Review of Research in Open & Distance Learning,* vol. 5, pp. 1-13, 2004.
29. L. Barnard, V. Paton, and W. Lan, "Online self-regulatory learning behaviors as a mediator in the relationship between online course perceptions with achievement," *International Review of Research in Open & Distance Learning,* vol. 9, pp. 1-11, 2008.
30. N. Michinov, S. Brunot, O. Le Bohec, J. Juhel, and M. Delaval, "Procrastination, participation, and performance in online learning environments," *Computers & Education,* vol. 56, pp. 243-252, 2011.
31. J. Guichard, "Life-long self construction," *International Journal for Educational and Vocational Guidance,* vol. 5, pp. 111-124, 2005.
32. H. Kearns and M. Gardiner, "Is it time well spent? The relationship between time management behaviours, perceived effectiveness and work-related morale and distress in a university context," *Higher Education Research & Development,* vol. 26, pp. 235-247, 2007/06/01 2007.
33. P. Forbus, J. J. Newbold, and S. S. Mehta, "A study of non-traditional and traditional students in terms of their time management behaviors, stress factors, and coping strategies," in *Allied Academies International Conference: Proceedings of the Academy of Educational Leadership (AEL)*, 2010, pp. 67-71.