

Learning While Wearing Work Clothes:  
Scheduling Difficulties and the Older Non-Traditional Student

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My wife and I are both labeled as non-traditional students. We had each made a prior go at college in the 1990's. I work full time, she comes from a blue-collar family; we share the mortgage and kids. We each study sociology, and in the narcissistic tradition of academia, both of us are studying non-traditional students.

But we are not the same. Her research often focuses on a type of non-traditional student known as "straddlers". Straddlers are those who come from a blue-collar background and transition to a white-collar world (Lubrano 2004, p. 3).

That is her group. It is my parent's group.

It is not my group.

While serving as my wife's occasional interviewee and test subject, I could not figure out where I belonged. My parents transitioned from a working-class to a white-collar world, but I do not remember much of it. I may not have received a full helping of "cultural capital", but neither am I clueless. Some of my wife's research described me perfectly; other aspects were more wrong than a newspaper horoscope. The problems and solutions she found – both in the literature and her own research – did not always fit my problems and needs.

I have a place in the non-traditional student cohort, but not as a straddler. I realized classification that fit me was not the same definitions of a "non-traditional" student that my wife was using. With that, I began to guess at the shape of the sub-cohort to which I belong.

*Literature Review*

The study of non-traditional students is a big deal in modern post-secondary education (Belcastro & Purslow 2006, Bean & Metzner 1985). Seventy-five percent of the United States' college undergraduates at the turn of the century were non-traditional students (Belcastro & Purslow 2006).

The specific definition of “non-traditional” seems to vary between researchers, but there are several common characteristics that we can use to define a non-traditional student. A student can be considered non-traditional if they meet any one of the following criteria: (Belcastro & Purslow 2006, Bean & Metzner 1985)

- Responsibility for the care of another, such as a child or elderly relative
- Employed more than 20 hours per week
- Independent of their parents
- Has a delay between high school and college attendance
- Lives off of campus
- Attends part-time
- Is over the age of 25

Being over the age of 25 fully accounts for 45% of the population of non-traditional students (Belcastro & Purslow 2006). That is nearly a third of all undergraduates in the United States (Anderson 2003). This older cohort has grown in importance for post-secondary institutions as the swells of both the Baby Boom and its echo passed. The resulting decrease in younger students has led post-secondary institutions to court older students (Anderson 2003, Crowther et al 1992).

The forces of globalization are changing both the workforce and the student body. To stay competitive in the modern globalized market workers must have advanced training or be retrained as their jobs change. More adults are finding their old skills outsourced and need new talents to find employment. (Rich man, poor man: Globalization and the rise of inequality 2007). It appears that as older students become more important to colleges, college also becomes more important to older students.

The cohort of older students, while made up of a broad age range, more resembles itself than other types of non-traditional students. Unlike first-generation college students or minorities, the parent's attained level of education is a poor indicator of dropout risk (Bean & Metzner 1985). While other types of non-traditional students tend to select post-secondary institutions initially due to quality and prestige, older students strongly select for convenience factors – such as distance from home and price – above other considerations (Tumblin 2002, Munday 1976).

These differences may have a single cause. In both interviews and analysis of dropout data, the differences and problems of older students are because their family lives and concerns are an integral part of their lives, not seen merely a background to their schooling (Hart 2003, Bowl 2001, Kember 1999). Those who view themselves as "students who work" are at lower risk of dropping out than "employees who study" (NCES 2002).

This explains several different aspects of this cohort. For example, age has been successfully used as a predictor of dropout rates (Muse 2003, Bean & Metzner 1985). This suggests that it is an indirect correlation; older students tend to have more obligations outside of university. Similarly, the number of hours a student works can be a poor predictor of dropout risk. The intangible concept of "satisfaction" with their education provides a much stronger

predictive value of their ability to complete a post-secondary degree (Levy 2007). This manifests in the older student's desire for "career relevancy" (Belcastro & Purslow 2006, Tumblin 2002). Due to life obligations, the economic tradeoff between class time and time at home and work must be more explicit to be judged worthwhile.

In interviews, older students frequently cite finances, childcare, and availability of classes as major concerns (Bowl 2001, Kember 1999). But there are both conflicting and equivocal results in the literature regarding class conflicts and availability (Bean & Metzner 1985).

One possible explanation for this unexpected result was seen in a study of online students. The researchers realized that their older students were also part-time students, frequently only enrolled in that one class (Dutton et al 2002). This would lead them to honestly answer that they had few course conflicts for that current quarter.

There are indirect measures of older student's desire for alternative class times and delivery. Given a choice between equivalent lecture and online classes, older students preferentially choose online classes (Dutton et al 2002). In online classes, we find students frequently accessing the site well outside of traditional class times (Daugherty & Funke, 1998).

Because of the inconsistency of definitions of a nontraditional student, it is difficult to systematically compare older students with other types of non-traditional students or their traditional classmates in the current literature. This cohort is different enough from other types of non-traditional students to require separate, distinct study. Further, the literature seems to concentrate on a "disease model", examining after the fact dropout rates instead of researching problems before or during enrollment.

The general purpose of this study is to attempt to rectify these problems while examining the impact of class schedules and availability on older, returning college and university students,

answering the questions “What factors provide the greatest impact on difficulties scheduling classes?” and “What class times and styles do students, particularly older returning students, want?” To do that, this study examines five hypotheses:

H1: The degree of financial support a respondent provides for their family will increase their difficulty in scheduling classes.

H2: Students working full time will experience more difficulty in scheduling classes.

H3: The degree of family care obligations a respondent provides will increase their difficulty in scheduling classes.

H4: Older students will experience more difficulty in scheduling classes.

H5: Older students will be more likely to take evening classes over web classes.

### *Methodology*

The participants were a convenience sample of students taking undergraduate sociology classes in separate sessions (n = 241). These classes were held at a variety of times during the day and evening, and at a variety of levels ranging from introductory sociology to advanced courses. While a pilot study had segregated the sample into daytime and nighttime classes, that was not done with this sample. This group of students ranged in ages from 16 to 51, with a median age of 20 and a modal age of 18. They were predominately unmarried (90.9%, n = 219) and did not support children (91.7%, n = 221). A vast majority did not support an adult relative (97%, n = 230). Just over half of the sample did not rent or own their place of residence (56.4%, n = 136). Half of the sample was within the traditional first four years of college (50.4%, n = 117), and the median number of years in college was 3 years. There was a sizable minority of students in the sample (14.6%, n = 34) who had spent between four and six years in college.

*Participants*

Table 1.0 *Survey Demographics*

Student Marital Status		<i>n</i>	<i>Percentage</i>
Unmarried		219	90.9
Married		17	7.1
Student Self-Identifies as Supporting Children			
		<i>n</i>	<i>Percentage</i>
Does Not Support Children		221	91.7
Supports Children		16	6.6
Student Self-Identifies as Supporting an Adult Relative			
		<i>n</i>	<i>Percentage</i>
Does Not Support an Adult Relative		230	97
Supports an Adult Relative		7	3
Student Self-Identifies as Renting or Owning Residence			
		<i>n</i>	<i>Percentage</i>
Does Not Rent or Own		136	56.4
Rents or Owns		100	41.5
Student Self-Identifies as Having a Degree			
		<i>n</i>	<i>Percentage</i>
Does Not Have a Degree		217	90
Has a Degree		20	8.3
Years in College			
		<i>n</i>	<i>Percentage</i>
0		43	18.4
1 – 4		74	31.7
4.5 – 6		34	14.6
7+		12	5.1
Minimum	0	Maximum	21
Range	21	Mean	2.84
Median	3	Mode	1
Student Age (in years)			
		<i>n</i>	<i>Percentage</i>
< 18		6	2.5
18-21		154	63.9
22-25		56	23.2
26-29		8	3.3
30+		10	4.1
Minimum	16	Maximum	51
Range	21	Mean	21.15
Median	20	Mode	18

Nearly two thirds of the respondents (64.7%,  $n = 156$ ) were female. There were a variety of shifts worked by the respondents. Almost thirty percent did not work ( $n = 71$ ), and over a third (34.9%,  $n = 106$ ) worked shifts other than the traditional “day” shift.

Table 1.1                      *Survey Demographics (continued)*

Gender	<i>n</i>	<i>Percentage</i>
Male	80	33.2
Female	156	64.7

Respondent Shift Worked	<i>n</i>	<i>Percentage</i>
Does not work	71	29.5
Day	45	18.7
Evening	30	12.4
Night	21	8.7
Weekends	3	1.2
Swing/Multiple	52	12.6

#### *Procedure*

A fifty-two question survey was administered to a convenience sample of undergraduate sociology classes at the main campus of a public, four-year university in the Midwestern United States in September and October of 2007. A letter attached to the questionnaire advised students that they were not obligated to participate, and that refusal to participate would not affect their grades. The students were also instructed to not place their name on the survey to ensure their privacy. Students were given the opportunity to contact the researcher for a semi-structured interview; none availed themselves of that opportunity.

#### *Materials*

This survey has an initial section directly inquiring about scheduling classes, asking students to rate their difficulty on a Likert scale. A series of questions to gauge student

exposure to times of class offerings is followed by a series of Likert scale questions designed to evaluate student openness and preferences to different class schedules.

The remaining questions are demographic questions, questions to assess student perceptions of their level of computer confidence and use, and other diagnostic criteria for being a non-traditional student. The survey is shown in Appendix A.

One survey was returned unmarked. All other incomplete or otherwise unusable answers were excluded on an answer-by-answer basis.

### *Results*

Almost half of the respondents had problems scheduling classes because they were not available every term (48.1%, n = 114) or because they filled up too fast (49.2%, n = 117). Less than four percent (3.8%, n = 9) had any problems with scheduling classes due to childcare arrangements. Just over a third of the respondents (34.3%, n = 82) reported having many problems scheduling classes due to their work schedule. Almost two thirds of the respondents (64.3%, n = 153) had difficulty scheduling classes due to other class schedules; a similar number (62.3%, n = 149) reported taking a class simply due to the time it was available. Just over forty percent of the respondents (41.9%, n = 101) agreed that they had a lot of problems getting their classes to fit in their schedule.

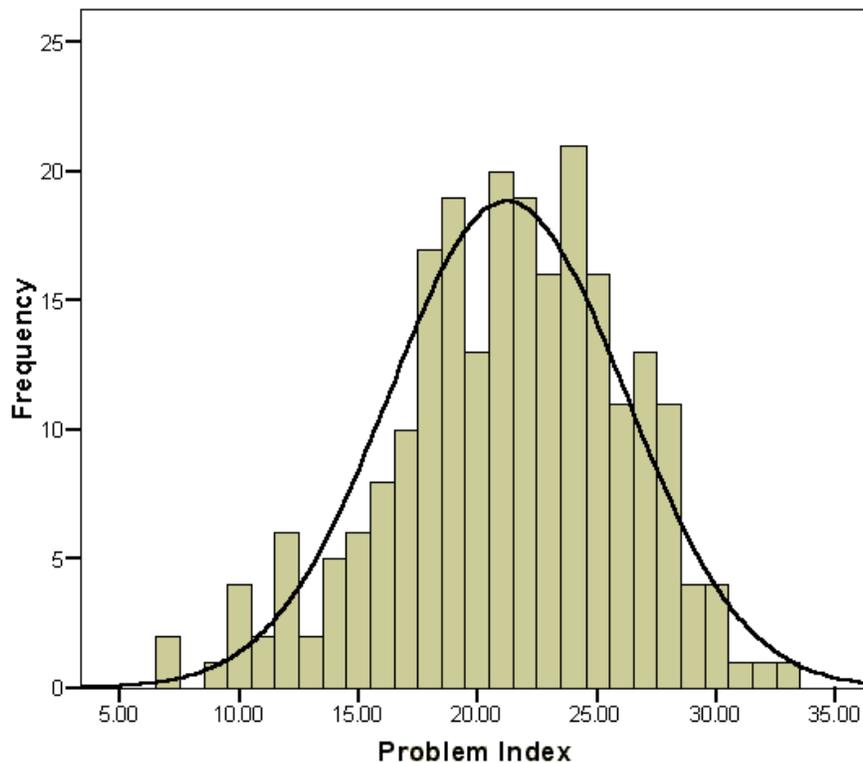
I created an index to triangulate student's difficulties scheduling classes. This index was made by taking the sum of the Likert scale responses – with "strongly agree" weighted most heavily – of the following questions:

1. I have problems taking classes I need because they aren't offered every term.
2. I have problems taking classes I need because they fill up before I can register.
3. I have had problems scheduling classes due to childcare arrangements.

4. I have had problems scheduling classes due to my work schedule.
5. I have had problems scheduling classes due to conflicts with other class schedules.
6. I have a lot of problems getting my classes to fit in my schedule.
7. I have taken a class just because of the time it was available.

This index provided a sense of difficulties in scheduling without parsing the sample into extremely small segments. Eight surveys were excluded for the calculation of this score due to incomplete answers for the calculation. The mean problem scheduling score for this sample was 21.26 with a median score of 22 and standard deviation of 4.93. With this sample the index ranged from 7 to 33; the minimal possible score was seven and the maximal possible score was 35.

*Figure 1 Frequency vs. Problem Index with normal curve*



To compare the relationship between the impact of working and the difficulty in scheduling classes, I looked for a correlation between the Problems Scheduling Index and the respondent’s score on the ordinal scale question “How much financial support do you provide for

your family?” This tests the hypothesis “The degree of financial support a respondent provides for their family will increase their difficulty in scheduling classes”.

A Kendall’s tau-b correlation was calculated examining the relationship between financial support and the Problems Scheduling Index. A weak significant positive correlation was found ( $\tau\text{-b}(229) = 0.238, p = 0.00$ ). Therefore, we reject the null hypothesis that the degree of financial support a respondent provides for their family will not increase their difficulty in scheduling classes.

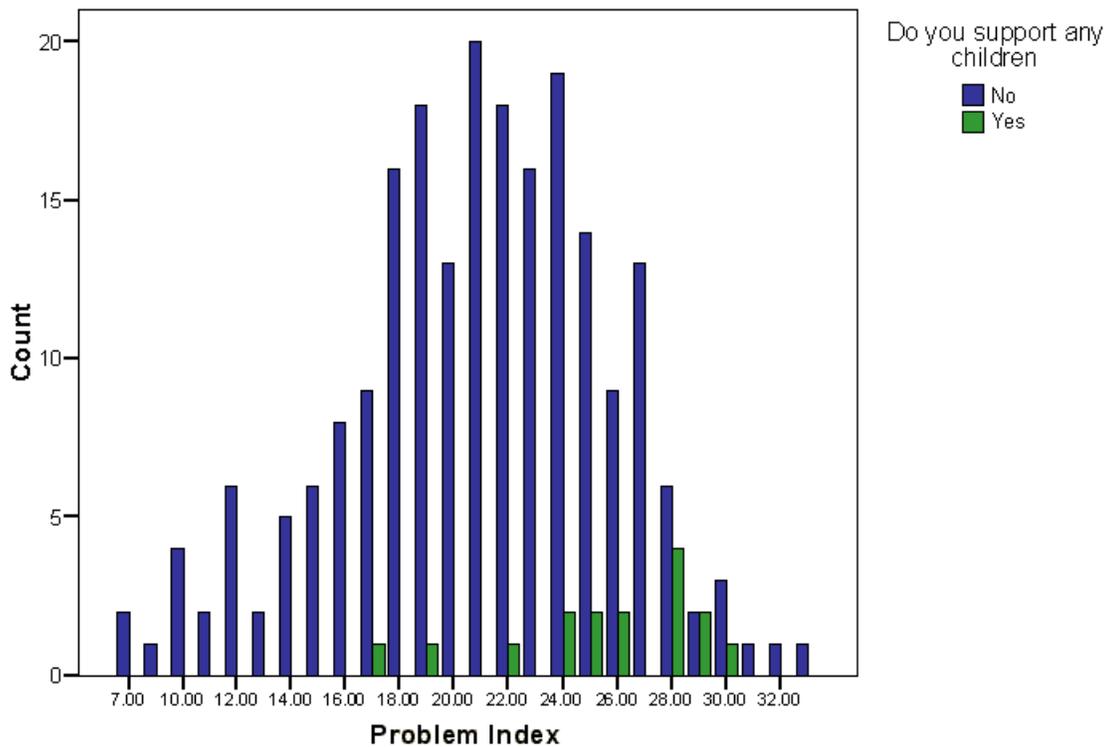
An independent-samples t-test comparing the mean scores of the Problems Scheduling Index for those students who worked more than 36 hours a week (full-time) found a significant difference between the means of the two groups ( $t(225) = 2.92, p = 0.004$ ). The mean Difficulty Index score for those who worked full time was significantly higher ( $m = 23.8, sd = 4.01$ ) than the mean of those who worked less than full-time ( $m = 20.90, sd = 4.97$ ). Therefore, we reject the null hypothesis that working full time has no effect on scheduling classes.

A Kendall’s tau-b correlation was calculated examining the relationship between the number of hours worked per week and the Problems Scheduling Index. A moderately strong positive correlation was found ( $\tau\text{-b}(227) = 0.314, p = 0.000$ ), indicating a significant relationship between the two variables. Students who work more have greater difficulty scheduling classes.

To test the hypothesis “The degree of family care obligations a respondent provides will increase their difficulty in scheduling classes”, three relationships were examined. A Kendall’s tau-b correlation was calculated examining the relationship between the response to “Do you support any children?” and the Problems Scheduling Index. A significant weak positive correlation was found ( $\tau\text{-b}(231) = 0.210, p = 0.001$ ), indicating a significant relationship between the two variables. Students who support children tend to have more difficulties scheduling

classes. A Kendall’s tau-b correlation was calculated examining the relationship between hours of childcare used per week and the Problems Scheduling Index. A weak positive correlation that was significant was found ( $\tau\text{-b}(226) = 0.205, p = 0.003$ ). This indicates that hours of childcare used per week are related to difficulty scheduling classes.

Figure 2 Frequency vs. Problem Index; with and without children



A Kendall’s tau-b correlation was calculated examining the relationship between the response to “Do you support any adult relatives?” and the Problems Scheduling Index. An extremely weak positive correlation that was not significant was found ( $\tau\text{-b}(231) = 0.045, p = 0.463$ ). Therefore, supporting adult relatives is not related to difficulty scheduling classes in this sample.

To test the hypothesis “Older students will experience more difficulty scheduling classes”, a Kendall’s tau-b correlation was calculated examining the relationship between the respondent’s age and the Problems Scheduling Index. A moderately strong positive correlation was found ( $\tau\text{-b}(230) = 0.306, p = 0.000$ ), indicating a significant relationship between the two variables. We reject the null hypothesis, finding that older students tend to have more difficulties scheduling classes.

To examine older student’s likelihood to take classes evening classes over web classes, a Kendall’s tau-b correlation was calculated examining the relationship between the respondent’s age and their reported likelihood to take each type of class. There is a weak, but significant, negative correlation between age and the likelihood of taking daytime classes either two ( $\tau\text{-b}(235) = -0.132, p = 0.016$ ) or three ( $\tau\text{-b}(234) = -0.206, p = 0.000$ ) times a week. There are moderate significant positive correlations between age and the likelihood of taking evening classes either once ( $\tau\text{-b}(235) = 0.264, p = 0.000$ ) or twice ( $\tau\text{-b}(235) = 0.334, p = 0.000$ ) a week. There is a significant weak positive correlation between age and the likelihood of taking a Saturday class ( $\tau\text{-b}(235) = 0.150, p = 0.000$ ). A weak positive correlation that was not significant was found between age and the likelihood to take web classes ( $\tau\text{-b}(235) = 0.100, p = 0.0501$ ). While the last correlation is technically not significant, comparing the tau-b values still provides significant evidence that older students would prefer to take evening or weekend classes than web classes.

Several other significant Kendall tau-b correlations were noted while examining the data. Although these do not directly relate to the hypotheses in question, they are of interest with the larger research question.

To examine the role that prior experience had in determining the likelihood of taking a future web-based class, a Kendall's tau-b correlation was calculated examining the relationship between the respondent's prior experience and their reported likelihood to take a web-based class. There is a moderately strong significant positive correlation the two variables ( $\tau\text{-b}(239) = 0.255, p = 0.000$ ), demonstrating that there is a relationship between the two.

A weak positive correlation was found between likelihood to take a web class and likelihood to take a Saturday class ( $\tau\text{-b}(239) = 0.117, p = 0.032$ ) indicating a significant relationship between the two variables. A similar and somewhat stronger positive correlation was also found between the likelihood to take a web class and likelihood to take an evening class one night a week ( $\tau\text{-b}(239) = 0.199, p = 0.000$ ) indicating a significant relationship between those two variables. A likelihood of taking a Saturday course was found to have a moderately strong positive significant correlation with the likelihood of taking an evening class one time a week ( $\tau\text{-b}(239) = 0.243, p = 0.000$ ), and a slightly weaker but still significant correlation with the likelihood of taking an evening class twice a week ( $\tau\text{-b}(239) = 0.186, p = 0.000$ ).

Further, there were significant negative correlations between the desire to take a daytime class three times a week and the likelihood of taking a Saturday class ( $\tau\text{-b}(238) = -0.192, p = 0.001$ ), a web class, ( $\tau\text{-b}(238) = -0.126, p = 0.022$ ), or an evening class one ( $\tau\text{-b}(238) = -0.206, p = 0.000$ ) or two times a week ( $\tau\text{-b}(238) = -0.252, p = 0.000$ ). Conversely, there was a strong positive correlation between the likelihood of taking a daytime class three times a week and taking a daytime class two times a week ( $\tau\text{-b}(238) = 0.497, p = 0.000$ ).

A significant weak negative correlation was found between the degree of financial support that a respondent provided and their likelihood to take daytime classes three ( $\tau\text{-b}(231) = -0.179, p = 0.002$ ) times a week. The relationship between the degree of financial support

provided and the likelihood of taking daytime classes twice a week was similar, but was not significant ( $\tau\text{-b}(232) = -0.114, p = 0.055$ ). There were significant positive correlations between the degree of financial support that a respondent provided and their desire to take an evening class once ( $\tau\text{-b}(232) = 0.189, p = 0.001$ ) or twice ( $\tau\text{-b}(232) = 0.246, p = 0.000$ ) a week, taking a Saturday class ( $\tau\text{-b}(232) = 0.188, p = 0.002$ ), or taking a web-based class ( $\tau\text{-b}(232) = 0.181, p = 0.001$ ). The more support a student provides for their family, the more likely they are to choose classes offered at times other than traditional daytime classes.

In addition to the Problems Scheduling Index, I created a second index to triangulate the concept of “non-traditionalness”. I derived the index by the following method:

1. One point was added if college was funded by working, the GI Bill, or an employer.
2. One point was subtracted if parents were funding college.
3. One point was added for a "Yes" answer of the dichotomous questions “Have you ever taken a break from college for more than six months?”, “Have you ever attended a community college?”, “Are you married?”, “Do you support any children?”, “Do you support an adult relative?”, and “Do you rent or own your place of residence?”.
4. One point was subtracted for a "Yes" answer for the dichotomous question “Do your parents help support you now?”
5. The raw age minus 18 was added.
6. An average of the hours attempted last term and this term minus 8 was subtracted from the index.

The sixth criterion was to help differentiate part-time students from full-time students; eight credit hours per quarter is the cutoff for part time at the university in question. Twenty-nine surveys were excluded from this derivation due to missing part of the data needed for the calculation. The mean non-traditional score for this sample was 8.8, with a median score of 9 and standard deviation of 9.6. With this sample, the index ranged from  $-10$  to 46.

A Kendall’s tau-b correlation was calculated examining the relationship between the non-traditional index score and each of the questions that composed the Problem Scheduling Index.

There were significant positive relationships between the non-traditional index score and problems scheduling because the classes weren't offered every term ( $\tau$ -b(211) = 0.252,  $p = 0.000$ ), problems with classes filling up ( $\tau$ -b(210) = 0.130,  $p = 0.013$ ), scheduling classes due to childcare ( $\tau$ -b(210) = 0.184,  $p = 0.001$ ), scheduling classes due to work schedules ( $\tau$ -b(211) = 0.166,  $p = 0.001$ ), scheduling classes due to conflicts with other classes ( $\tau$ -b(211) = 0.239,  $p = 0.000$ ), getting classes to fit into their schedule ( $\tau$ -b(211) = 0.176,  $p = 0.001$ ), and likelihood to have taken a class because of the time it was available ( $\tau$ -b(211) = 0.227,  $p = 0.000$ ). Given this, it is unsurprising that there is a moderately strong, significant correlation between the Problem Index and the non-traditional index ( $\tau$ -b(208) = 0.281,  $p = 0.000$ ).

In the pilot study, this index had obscured relationships between scheduling difficulty and more specific data. That was not the case with this larger study.

### *Discussion*

There were several limitations to this study. As a convenience population was employed, the results cannot be generalized to a larger population. When collected, the level, class, or time of collection did not segregate the surveys. While this resulted in a loss of some data, it also prevents researcher bias. There were several respondents who appeared confused by the question "How many hours did you attempt last term", apparently supposing it to refer to hours *employed*, or written-in uncertainty whether "last term" referred to the summer term or the prior school year. If any numeric answer was given, these were treated as valid answers even if they appeared unusual.

This study attempted to correct for several shortcomings of an earlier pilot study. The pilot sample was exclusively drawn from upper-level undergraduate sociology classes. The

literature suggests those particular type of classes surveyed for the pilot study might not be perceived as “career relevant” for non-traditional students pursuing continuing education. This sample was drawn from a mix of upper-level sociology classes and introductory sociology classes that were required as “general education” requirements for a broad array of disciplines. The specifics of this data are contained in Appendix B.

Many students reported problems scheduling their classes for a variety of reasons. While the percentage of students with difficulties varied, all but the childcare-related question had at least a third of the respondents stating that they had problems scheduling classes. In the original pilot study, it was noted that evening students reported fewer problems than the daytime students. Originally, this was interpreted as possibly being due to the shift worked by the respondent or other stealth variables. This study added demographic questions regarding gender and the shift the respondent worked. With the collection of this data – and the greater number of respondents – the data collected in this study seems to suggest a simpler solution.

These results upheld these hypotheses:

- The degree of financial support a respondent provides for their family will increase their difficulty scheduling classes
- Working full time increases the difficulty in scheduling classes.
- The more hours a student works increases their difficulty scheduling classes.
- Older students have more difficulty scheduling classes.

Two hypotheses were partially upheld:

- Students who support children have a more difficult time scheduling classes, but supporting an adult relative seems to have no relationship with difficulty scheduling classes.

- Older students are significantly more likely to take evening classes, but we cannot be conclusive in relationship with web classes due to the lack of significance.

The last appears to be explained by the relationship between prior experience taking web classes and the respondent's willingness to take future web classes ( $\tau$ -b = 0.255,  $p$  = 0.000). The obvious implication for universities wishing to implement web-based learning is to ensure that all students have an early, mandatory experience with the practice so that it is perceived as a viable option. The other relationships, secondary to the original hypotheses, suggest both a rationale for the rest of these findings and the conflict in findings seen in the literature.

There were significant – and exclusive – relationships found between the likelihood to take “traditional” class times and the likelihood to take “non-traditional” class times. That is, those who desire daytime classes tend to not desire evening, web, and weekend classes and vice versa. This strongly suggests that there are two pools of respondents: One set who prefers to take classes during the daytime, and another set that is more likely to take classes in the evening, weekends, or on the web.

The relationship between the degree of financial support provided by the respondent and their class preference indicates that respondents who are bear more of the support for their families are those who desire classes in the evenings, weekends, and on the web. This correlation is similar to the relationship seen with age and desired class time. When the non-traditional index was created in the pilot study, it obscured those individual relationships instead of reflecting them. That had unexpectedly suggested that difficulties in scheduling classes for non-traditional students were individual in nature, rather than falling along a continuum. That is not the case in this sample, suggesting that the pilot study's result was a statistical artifact. Here,

the non-traditional index's relationship with the various problems in scheduling suggests that non-traditional students have a more difficult time across the board.

The greatest reported difficulties for both non-traditional students (as measured by the index) and the respondent population as a whole were not, as expected, with work or childcare arrangements. In both cases, the strongest correlations were with classes not being available every term, conflicts with other classes, and simply taking classes because they were available.

This is explained by the new hypothesis that there are two distinct markets for class schedules. Both non-traditional and traditional students are working to fit university classes and schedules into their already existing lives. It implies that the working student population has internalized the idea that they are "employees who study" instead of "students that work". It suggests that their work and child care schedules are seen as an immutable fact of life, implying that any resulting conflict is perceived as only between the classes offered at the university.

This concept also further explains the differing results in the literature. Post-secondary institutions that duplicated daytime offerings at non-traditional class times would find students with far fewer difficulties, regardless of employer attitudes or work schedules.

Because this study's sample was drawn from a convenience sample at a public four-year university, we must presume that the students represented in this study are the most successful in making class schedules work around the rest of their lives. Students who cannot make their desired classes fit around existing work schedules may simply leave university as a result. For this reason, the scheduling problems reported here are almost certainly less than those among the population of persons who would *desire* to be students.

*Future Research*

Conducting a comparable study at a branch campus of this university, a local community college that specifically targets non-traditional students, a local private four-year university, and a random sample of the population may further validate the findings of this study. Conducting sequential studies with the same population while class offerings change could also provide more focused insight into the difficulties facing older non-traditional students.

As presented, the implications for post-secondary institutions are clear. To ensure universal accessibility, the *full requirements* for degree programs must be available during both traditional daytime hours and through non-traditional times and methods. That would increase demands on faculty, but may be alleviated by an increased acceptance and reliance on web and distance learning. Since this study indicates that prior experience with web classes is a good predictor for the likelihood of taking future web classes, it is important that institutions ensure that all students have an early positive experience with web-based education. This could be achieved through an online orientation seminar or other similar offering.

These changes may be uncomfortable for both students and faculty. However, students prefer classes at odd times and taught in unfamiliar ways to classes they cannot attend. If motivated students find themselves unable to further their education, both students and colleges will find themselves the poorer for it.

## References

- Anderson, Eugene L. (2003). Changing U.S. demographics and American higher education. *New Directions in Higher Education*, 121, 3-13.
- Bean, John P., & Metzner, Barbara S. (1985). A conceptual model of nontraditional undergraduate student attrition. *Review of Educational Research*, 55, 485-540.
- Belcastro, Amy, & Purslow, Vicki T. (2006). An integrative framework: meeting the needs of the new-traditional student. *Meeting of the Association of American Colleges and Universities* Chicago, IL.
- Bowl, Marion (2001). Experiencing the barriers: non-traditional students entering higher education. *Research Papers in Education*, 16, 141-160.
- Crowther, Tim, Lykins, Dewey, & Spohn, Karen (1992). Report of the Appalachian Access and Success Project to the Ohio Board of Regents. Athens/Portsmouth: Institute for Local Government Administration and Rural Development. Retrieved April 9, 2007, from [http://www.oache.org/A-Srept\\_IV.pdf](http://www.oache.org/A-Srept_IV.pdf).
- Daugherty, Martha, & Funke, Barbara L. (1998). University Faculty and Student Perceptions of Web-Based Instruction. *Journal of Distance Education*, 13, Retrieved April 9, 2007, from <http://cade.athabascau.ca/vol13.1/daugherty.html>.
- Dutton, John, Dutton, Marilyn, & Perry, Jo (2002). How do online students differ from lecture students?. *Journal of Asynchronous Learning Networks*, 6, 1-13.
- Hart, N. K. (2003). Best Practices in Providing Nontraditional Students With Both Academic and Financial Support. *New Directions for Higher Education*, 2003(121), 99 - 106.
- Kember, D. (1999). Integrating Part-time Study with Family, Work and Social Obligations. *Studies in Higher Education*, 24, 109-124. Retrieved December 2, 2007, from EBSCOHost database.
- Levy, Y. (2007). Comparing dropouts and persistence in e-learning courses. *Computers & Education*, 48(2), 185-204.
- Lubrano, A. (2004). *Limbo: blue-collar roots, white-collar dreams*. Hoboken, NJ: Wiley.
- Munday, Leo A. (1976). College access for nontraditional students. *The Journal of Higher Education*, 47, 681-699.
- Muse, H. E. (2003). The Web-based community college student: An examination of factors that lead to success and risk. *The Internet and Higher Education*, 6, 241-261. Retrieved December 19, 2007, from EJC database.

National Center for Education Statistics. (2002). *The persistence of employees who pursue college study* (NCES 2002118).

Rich man, poor man: Globalization and the rise of inequality. (2007, Jan 18). *The Economist*, Retrieved Jan 27, 2007, from [http://www.economist.com/opinion/displaystory.cfm?story\\_id=8554819](http://www.economist.com/opinion/displaystory.cfm?story_id=8554819).

Tumblin, R. (2002). The College Choice Process Of Non-traditional Students (Master's thesis, University of Toledo, 2002). *OhioLINK Electronic Theses and Dissertations Center*, Retrieved Dec 10, 2007, from [http://www.ohiolink.edu/etd/view.cgi?acc\\_num=toledo1095951941](http://www.ohiolink.edu/etd/view.cgi?acc_num=toledo1095951941).

APPENDIX A

Dear Student,

I invite your participation in this survey and optional interview about class schedules and their impact on students from all walks of life.

Your participation in this survey is completely voluntary. Please do not put your name on this survey in order to insure your privacy. If you would like to volunteer to participate in a personal interview to further discuss your feelings about the material discussed in this survey, the survey administrator has a form and envelopes for your use. Please send your request to be contacted in an envelope in order to protect your confidentiality.

You are free to terminate your participation at any time during the process. Participation or refusal to participate will not affect your grade or your confidentiality. If you decline to participate, simply return the blank form, or notify the survey administrator. This survey should take between 10 and 15 minutes to complete.

Additionally, if you have any questions or comments about this survey, or would like to request an interview personally, please contact me by email at [saus.4@wright.edu](mailto:saus.4@wright.edu).

Thank you for your time and consideration in this endeavor,

Sincerely,  
Steven Saus

These questions reflect your experiences at this college. In this survey:

**DAYTIME** classes begin anytime from 8am to 4pm on weekdays.

**EVENING** classes begin anytime from from 4:05pm to 9:30pm on weekdays.

Please circle the response category that you most strongly agree with.

I have problems taking classes I need because they aren't offered every term.

Strongly disagree    disagree                      neither agree or  
disagree                      agree                      strongly agree

I have problems taking classes I need because they fill up before I can register.

Strongly disagree    disagree                      neither agree or  
disagree                      agree                      strongly agree

I have had problems scheduling classes due to childcare arrangements.

Strongly disagree    disagree                      neither agree or  
disagree                      agree                      strongly agree

I have had problems scheduling classes due to my work schedule.

Strongly disagree    disagree                      neither agree or  
disagree                      agree                      strongly agree

I have had problems scheduling classes due to conflicts with other class schedules.

Strongly disagree    disagree                      neither agree or  
disagree                      agree                      strongly agree

I have a lot of problems getting my classes to fit in my schedule.

Strongly disagree    disagree                      neither agree or  
disagree                      agree                      strongly agree

I have taken a class just because of the time it was available.

Strongly disagree    disagree                      neither agree or  
disagree                      agree                      strongly agree

I can always schedule my required classes for my major.

Strongly disagree    disagree                      neither agree or  
disagree                      agree                      strongly agree

I can always get into the classes I need before they fill up.

Strongly disagree    disagree                      neither agree or  
disagree                      agree                      strongly agree

I can easily schedule classes around the rest of my life.

Strongly disagree    disagree                      neither agree or  
disagree                      agree                      strongly agree

**DAYTIME** classes begin anytime from 8am to 4pm on weekdays.  
**EVENING** classes begin anytime from from 4:05pm to 9:30pm on weekdays.  
**SATURDAY** classes are offered from 9am to 12:30pm on Saturdays

Please circle the appropriate response.

- |                                       |     |    |
|---------------------------------------|-----|----|
| Have you ever taken a DAYTIME class?  | Yes | No |
| Have you ever taken an EVENING class? | Yes | No |
| Have you ever taken a SATURDAY class? | Yes | No |
| Have you ever taken a WEB class?      | Yes | No |

Please circle the response category that you most strongly agree with.

- |  |               |          |                            |        |             |
|--|---------------|----------|----------------------------|--------|-------------|
| How likely would you be to take a DAYTIME class meeting <i>three</i> times a week? | very unlikely | unlikely | neither likely or unlikely | likely | very likely |
| How likely would you be to take a DAYTIME class meeting <i>two</i> times a week?   | very unlikely | unlikely | neither likely or unlikely | likely | very likely |
| How likely would you be to take an EVENING class meeting <i>two</i> times a week?  | very unlikely | unlikely | neither likely or unlikely | likely | very likely |
| How likely would you be to take an EVENING class meeting <i>one</i> time a week?   | very unlikely | unlikely | neither likely or unlikely | likely | very likely |
| How likely would you be to take a SATURDAY class meeting <i>one</i> time a week?   | very unlikely | unlikely | neither likely or unlikely | likely | very likely |
| How likely would you be to take a WEB class?                                       | very unlikely | unlikely | neither likely or unlikely | likely | very likely |

If you could choose, which one of the following options would you prefer for a required class?

- |                        |                       |
|------------------------|-----------------------|
| DAYTIME, 3 days a week | EVENING, 1 day a week |
| DAYTIME, 2 days a week | SATURDAY              |
| EVENING, 2 days a week | WEB                   |

How are you paying for college (check all that apply)?

- Parents
- Working
- Scholarship
- Grants
- Loans
- GI Bill
- Other government assistance
- Employer
- ROTC
- Other (please specify): \_\_\_\_\_

Please write your answer in the blanks provided.

How many hours a week do you work in a paying job? \_\_\_\_\_

How many hours a week do you use childcare services? \_\_\_\_\_

Your ideal class would meet how many times a week (put 0 for web classes)? \_\_\_\_\_

Your ideal class would meet for how many hours each time (put 0 for web classes)? \_\_\_\_\_

Your ideal class would meet at what time? (put 0 for web classes)? \_\_\_\_\_

Please circle the response category that you most strongly agree with.

How satisfied are you with your college?

very unsatisfied    unsatisfied    neither satisfied or unsatisfied    satisfied    very satisfied

How flexible is your employer with scheduling around your classes?

not applicable    very inflexible    a little flexible    moderately flexible    very flexible

Approximately how much financial support do you provide for your household?

less than 25%    about 25%    about 50%    about 75%    more than 75%

How would you describe your amount of experience with computers and technology?

none    a little    moderate    a lot    extensive

Would your classwork be easier if the class was at a different time?

none    a little    moderate    a lot    very much



## APPENDIX B

## What is your major?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Communication	7	2.9	3.0	3.0
Anthropology	4	1.7	1.7	4.7
Criminal Justice	41	17.0	17.6	22.3
History	3	1.2	1.3	23.6
Political Science	6	2.5	2.6	26.2
English	2	.8	.9	27.0
TESL	3	1.2	1.3	28.3
Engineering	5	2.1	2.1	30.5
Special Education	1	.4	.4	30.9
Organizational Leadership	7	2.9	3.0	33.9
Sociology	19	7.9	8.2	42.1
Marketing	3	1.2	1.3	43.3
Rehabilitation Services	2	.8	.9	44.2
Biology	3	1.2	1.3	45.5
Philosophy	1	.4	.4	45.9
Liberal Studies	7	2.9	3.0	48.9
Psychology	9	3.7	3.9	52.8
Chemistry	3	1.2	1.3	54.1
Education	45	18.7	19.3	73.4
Nursing	16	6.6	6.9	80.3
Music Education	1	.4	.4	80.7
Accounting	1	.4	.4	81.1
Business	9	3.7	3.9	85.0
Undecided	12	5.0	5.2	90.1
Engineering Physics	1	.4	.4	90.6
Acting	1	.4	.4	91.0
Athletic Training	1	.4	.4	91.4
Finance	1	.4	.4	91.8
Industrial Engineering	1	.4	.4	92.3
Computer Science	1	.4	.4	92.7
Economics	1	.4	.4	93.1
Women's Studies	2	.8	.9	94.0
Social Work	2	.8	.9	94.8
HR Management	1	.4	.4	95.3
Interpreting	2	.8	.9	96.1
Art History	1	.4	.4	96.6
Integrated Language Arts	1	.4	.4	97.0
Motion Picture Production	2	.8	.9	97.9
International Studies	1	.4	.4	98.3
Multiple Majors	4	1.7	1.7	100.0
Total	233	96.7	100.0	