

A NEW WAY TO LOOK AT ALUMNI WEB SURVEY DATA

By Peter B. Wylie, with John Sammis

I have known Ray Satterthwaite since 1999. At the time he was working at McGill University in Montreal. He had called me about an article I'd written for CASE CURRENTS in May of that year. It was about data mining. We've been friends and colleagues ever since.

Anyway, Ray has a web survey company that does a lot of work for secondary schools and universities. He and I have talked for years about some of the methodological problems with all web surveys. Ray is keenly interested in trying to find ways around these problems, especially non-response. Right now John Sammis and I are working with him on a technique to estimate how non-responders might have filled out a survey. We're excited about the technique but feel it's too soon to roll it out for general scrutiny. When we do, it'll be controversial. That's okay; controversy can lead to new and better ideas.

In this piece we want to use some of Ray's data from a recent web survey to show several things you can do with one of your own web surveys if ... if you're willing to put some gentle pressure on both your IT folks and the vendor who performs your survey(s).

Why go to the extra trouble of doing what we're suggesting? Simply put, we think it's smart to match up survey data with at least some of the plentiful data you have on alums who *respond* to your survey as well as those who don't. Foraging through these data can lead to useful insights. *None* of us in advancement can do too much of this kind of analysis.

Here's a summary of the steps taken to make it possible to write this piece:

1. All alumni who could be reached by email were invited to complete the survey by going to a secure website. The total number of alumni considered for the survey was 204,435.
2. Several reminders were sent out over the course of several weeks to alums who had not completed the survey.
3. Once the survey was closed, 6,281 usable survey forms were stored so that each respondent could be matched by a unique ID number to other data stored by the school for that ID number.

4. A file was provided (via Ray) to John Sammis who matched up an overall measure of alumni engagement derived from the survey with a long list of fields such as:
 - Total lifetime giving
 - Giving over the last five fiscal years
 - Current member of the alumni association (yes/no)
 - Marital status
 - Mobile phone listed (yes/no)
 - Zip code
 - Number of degrees
 - Undergrad major

5. Sammis/Wylie began analyzing some of these data.

Let's jump right in. Take a peek at Table 1. At first glance, it looks kind of busy. But once you've had a chance to study it, we think some interesting stuff will emerge.

Table 1: Frequency Breakdown of 204,435 Alumni by Class Year and Level of Engagement

DECILE GROUPS	BEFORE 1981	1981-1993	1994-2005	2006-2014
Non Responders	52,360	48,532	52,100	51,143
1	166	131	139	193
2	155	144	146	183
3	132	144	152	199
4	148	144	146	191
5	127	132	152	217
6	123	112	172	221
7	113	129	142	244

8	105	130	120	273
9	106	119	135	268
10	96	90	119	323

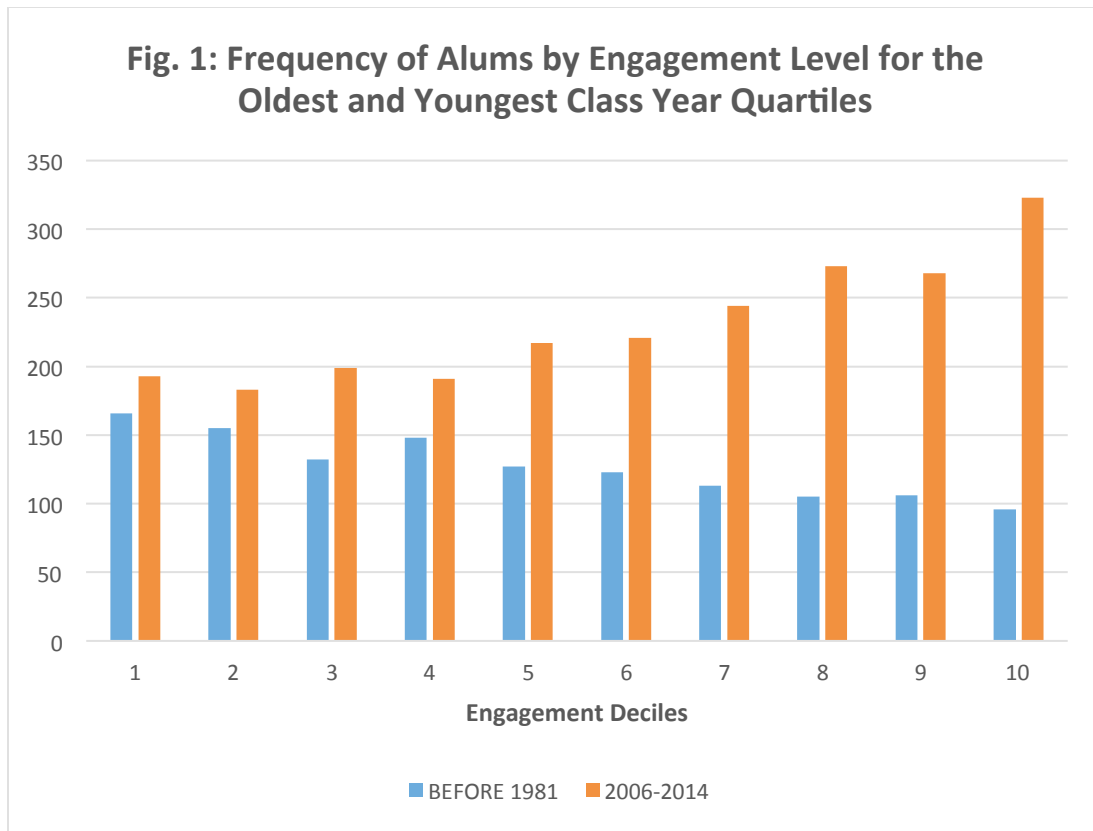
For example, look below at this replica of Table 1. Focus on the numbers in the green font. They show the number of non-responders for each of the class year quartiles. What we're seeing here is pretty clear. Most of the 204,435 alums who might have responded to the survey did *not* respond. Regardless of how long they've been out of school.

DECILE GROUPS	BEFORE 1981	1981-1993	1994-2005	2006-2014
Non Responders	51,089	47,257	50,677	49,131
1	166	131	139	193
2	155	144	146	183
3	132	144	152	199
4	148	144	146	191
5	127	132	152	217
6	123	112	172	221
7	113	129	142	244
8	105	130	120	273
9	106	119	135	268
10	96	90	119	323

Now let's look at the responders. In particular, let's focus on the responders from the oldest class year quartile and the youngest class year quartile. These alums are now in the green font in another replica of Table 1.

DECILE GROUPS	BEFORE 1981	1981-1993	1994-2005	2006-2014
Non Responders	51,089	47,257	50,677	49,131
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There's something interesting going on here, but it's a little tough to see it in the table. It's easier to see in Figure 1. Notice that the number of young alums increases as the engagement deciles increase. Just the opposite occurs with the oldest alums. That is, the younger alums are saying they are more engaged than the older alums.



Let's shift gears. Let's look at a different kind of problem that Ray's data has allowed us to bite into: The relationship between what alums *say* about their alma maters and what they *give* to their alma maters.

"Ah ... hasn't somebody already looked at that?" you might be asking. Well, sort of. The trouble is that studies reporting the relationship between alumni giving and attitudes are almost all based on survey data. That is, the giving variables in these studies are an alum's answers to questions about what, how much, how often, etc. the person has given to the school.

Call us crazy, but we're not real comfortable with basing someone's giving on what they *say* they've given. It's sort of like the weight people put on their driver's licenses. No offense, but we'll stick with what the scale says.

Our clowning around aside, check out Kevin MacDonell's piece from November 2010: "Survey says ... beware, beware!"¹ Kevin says, "Frankly, if I asked survey takers how many children they have, I wouldn't trust the answers."

¹ <https://cooldata.wordpress.com/2010/11/18/survey-says-beware-beware/>

In the rest of the piece we'll lay out a series of tables and graphs that show the relationship between the engagement deciles and:

- Recency of giving
- Frequency of giving
- Magnitude of giving
- Current membership in the school's alumni association

You'll see a lot of detail in these tables and charts. Take as much or as little time looking through them as you'd like. All along the way we'll provide our sense of what we see going on in this material.

If all the detail seems a bit much, you might want to step back and just ask yourself a general question: *Is this the kind of analysis we should be doing with our own survey data, regardless of whether we do it ourselves or have our vendors do it for us?*

Recency of Giving

There are lots of ways to operationally define recency of giving. Here we've defined it as whether or not an alum has given anything at all in the last five fiscal years.

Because Table 2 is the first of a series of tables with similar formats, we'll go through it in more detail than the rest of the tables to make sure we're being clear.

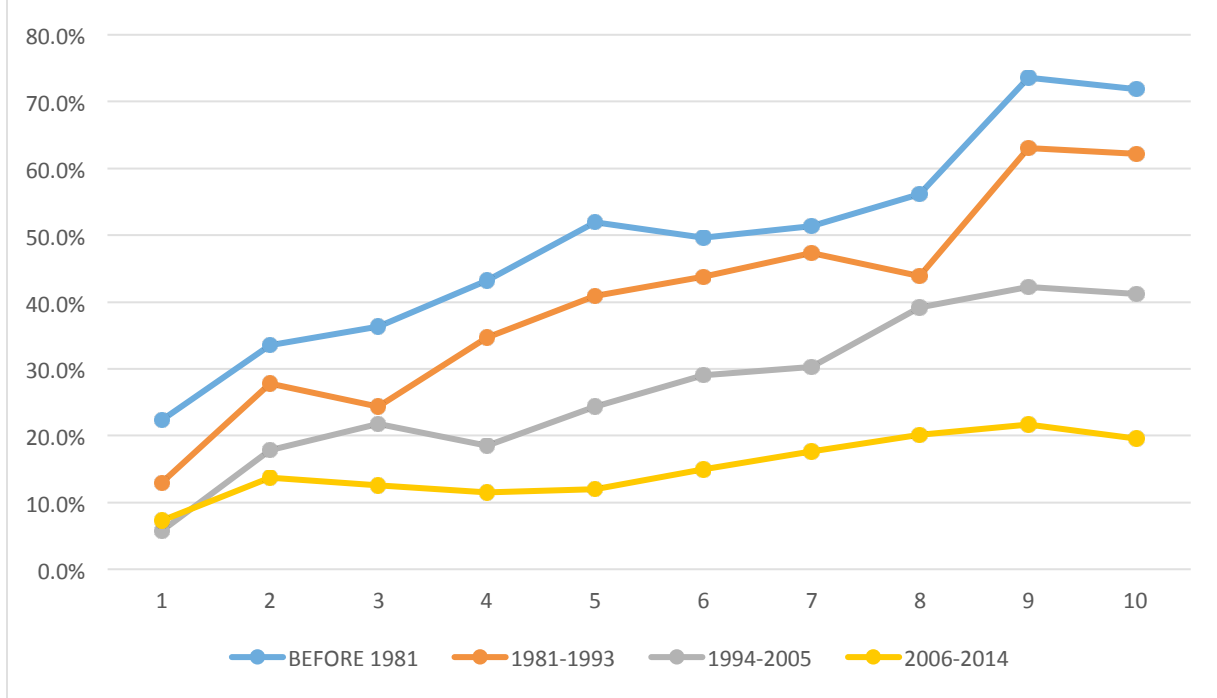
Notice that all the cell entries in the table are percentages. For example, if you look in the cell for non-responders who graduated before 1981, you'll see that 17.5% of them gave anything at all in the last five fiscal years. Alums who landed in the third decile and graduated between 2006 and 2014? 12.6% of them gave anything at all during this same period. One more: Alums who landed in the tenth decile and graduated before 1981? 71.9% of them gave anything at all during this same period.

Notice that Figure 2 shows the same information as you see in the table, except the non-responders are not shown. (We left them out because we decided including them would make the chart too busy.)

Table 2: Percentage of Alums Who Have Given Anything at All in the Last Five Fiscal Years by Class Year Quartile and by Engagement Level

DECILE GROUPS	BEFORE 1981	1981-1993	1994-2005	2006-2014
Non Responders	17.5%	14.6%	9.9%	8.1%
1	22.3%	13.0%	5.8%	7.3%
2	33.5%	27.8%	17.8%	13.7%
3	36.4%	24.3%	21.7%	12.6%
4	43.2%	34.7%	18.5%	11.5%
5	52.0%	40.9%	24.3%	12.0%
6	49.6%	43.8%	29.1%	14.9%
7	51.3%	47.3%	30.3%	17.6%
8	56.2%	43.8%	39.2%	20.1%
9	73.6%	63.0%	42.2%	21.6%
10	71.9%	62.2%	41.2%	19.5%

Fig. 2: Percentage of Alums Who Have Given Anything at All in the Last Five Fiscal Years by Class Year Quartile and by Engagement Level



A couple things stand out for us in these data:

Survey responders are better recent givers than are non-responders. We're not surprised by this. Whenever we've been able to look at the giving rates of alums who've responded to a survey versus those who haven't, the responders (on average) come out ahead. This phenomenon is particularly pronounced for alums who graduated before 1981. In this group even the alums in the lowest decile (people whose survey responses say they're not engaged) have a higher rate of recent giving than non-responders: 22.3% versus 17.5%.

There is clearly a positive relationship between engagement and recency of giving, except for the young alums. It's easier to see this relationship in Figure 2 than in Table 2. The blue and red and gray lines (representing the oldest three quartiles of alums) go up pretty smoothly. This is far less the case for the youngest alums represented by the yellow line. In plain English we might say: What the youngest alums tell us in the survey about their engagement corresponds far less closely to their recent giving than it does for their older counterparts.

Frequency of Giving

We've defined frequency of giving as the number of gifts an alum has made over the last five fiscal years.

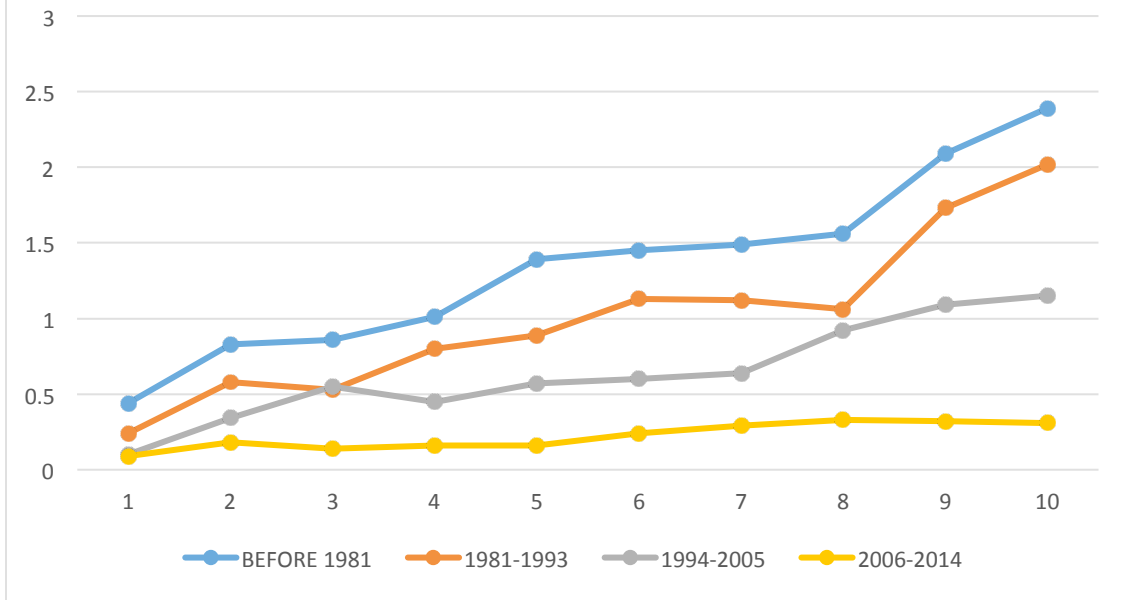
The cell entries in Table 3 are not percentages like we saw in Table 2. They are means (arithmetic averages). So if you look in the cell for non-responders who graduated before 1981, you'll see that the mean number of gifts over the last five years for an alum is .40. That might be a little confusing. How can someone make four tenths of a gift? Maybe an easier way of looking at these numbers is to think of them in terms of 100 alums. Four tenths of a gift for one alum is the same as 40 gifts for 100 alums. Now look at the cell entry for alums who graduated before 1981 for the tenth engagement decile. It's 2.39. So applying the same logic, this is the same as 239 gifts for 100 alums. A *big* difference.

Notice that Figure 3 shows the same information as you see in the table. Again, the non-responders are not shown.

Table 3: Mean (Average) Number of Years of Alumni Giving Over the Last Five Fiscal Years by Class Year Quartile and by Engagement Level

DECILE GROUPS	BEFORE 1981	1981-1993	1994-2005	2006-2014
Non Responders	0.40	0.30	0.18	0.12
1	0.44	0.24	0.10	0.09
2	0.83	0.58	0.34	0.18
3	0.86	0.53	0.55	0.14
4	1.01	0.80	0.45	0.16
5	1.39	0.89	0.57	0.16
6	1.45	1.13	0.60	0.24
7	1.49	1.12	0.64	0.29
8	1.56	1.06	0.92	0.33
9	2.09	1.73	1.09	0.32
10	2.39	2.02	1.15	0.31

Fig.3: Mean (Average) Number of Years of Alumni Giving Over the Last Five Fiscal Years by Class Year Quartile and by Engagement Level



Since the patterns for frequency of giving are quite similar to what we saw with recency of giving, let's move on to magnitude of giving.

Magnitude of Giving

For magnitude of giving we chose to compute the median lifetime giving for each cell in Table 4.

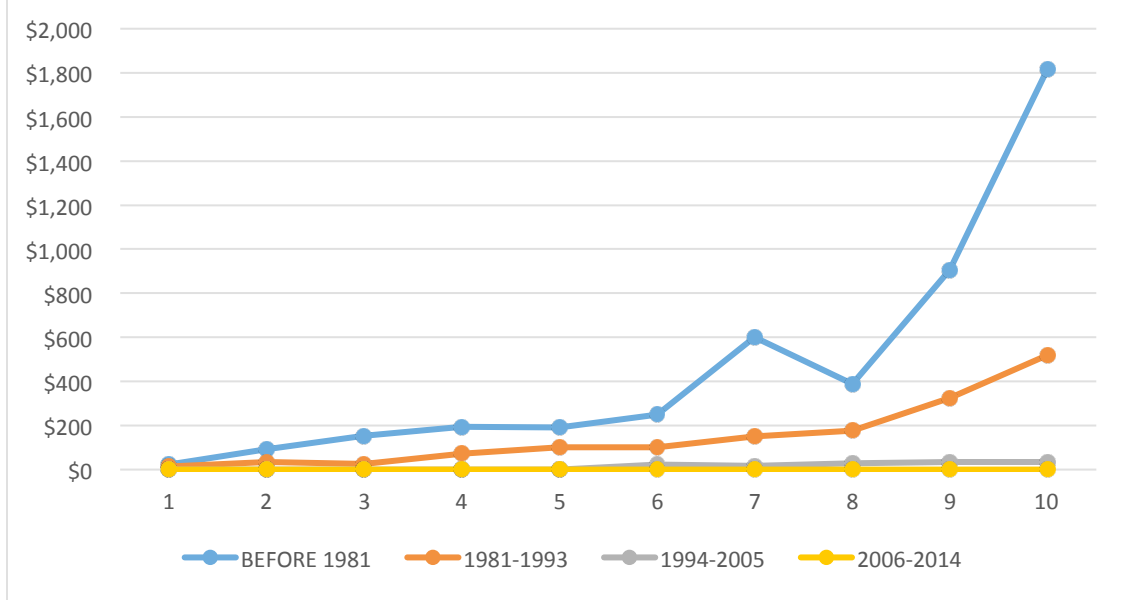
We think the numbers in this table and in the corresponding chart are impressive. More about that in a moment. Now let's just be sure we're clear on what the numbers mean. For example:

- The median for non-responding alums who graduated before 1981 is \$5. That means that half of these alums have given five dollars or less lifetime. The other half have given five dollars or more lifetime.
- The median for alums in the tenth engagement decile who graduated before 1981 is \$1,818. That means that half of these alums have given \$1,818 or less lifetime. The other half have given \$1,818 or more lifetime.
- Any cell that contains a median of \$0 means that over half of the alums in that cell have given nothing at all lifetime.

Table 4: Median Alumni Lifetime Giving by Class Year Quartile and by Engagement Level

DECILE GROUPS	BEFORE 1981	1981-1993	1994-2005	2006-2014
Non Responders	\$5	\$0	\$0	\$0
1	\$23	\$13	\$0	\$0
2	\$93	\$34	\$0	\$0
3	\$153	\$25	\$0	\$0
4	\$195	\$73	\$0	\$0
5	\$190	\$100	\$0	\$0
6	\$250	\$100	\$23	\$0
7	\$600	\$150	\$17	\$0
8	\$388	\$178	\$30	\$0
9	\$906	\$325	\$35	\$0
10	\$1,818	\$518	\$35	\$0

Fig. 4: Median Alumni Lifetime Giving by Class Year Quartile and by Engagement Level



As we said earlier, we're impressed with what we see in Table 4 and Figure 4. How come? Look at those older alums, the ones who graduated before 1981. Focus on the ones who didn't respond? The ones whose median lifetime giving is five bucks? Well, that's just ... choose any pejorative adjective you like. Now look at how the median steadily rises (with one exception) as expressed engagement increases. Finally, look at the alums in that group who say they are most engaged. Those guys and gals have really put their money where their mouths are. Wow!

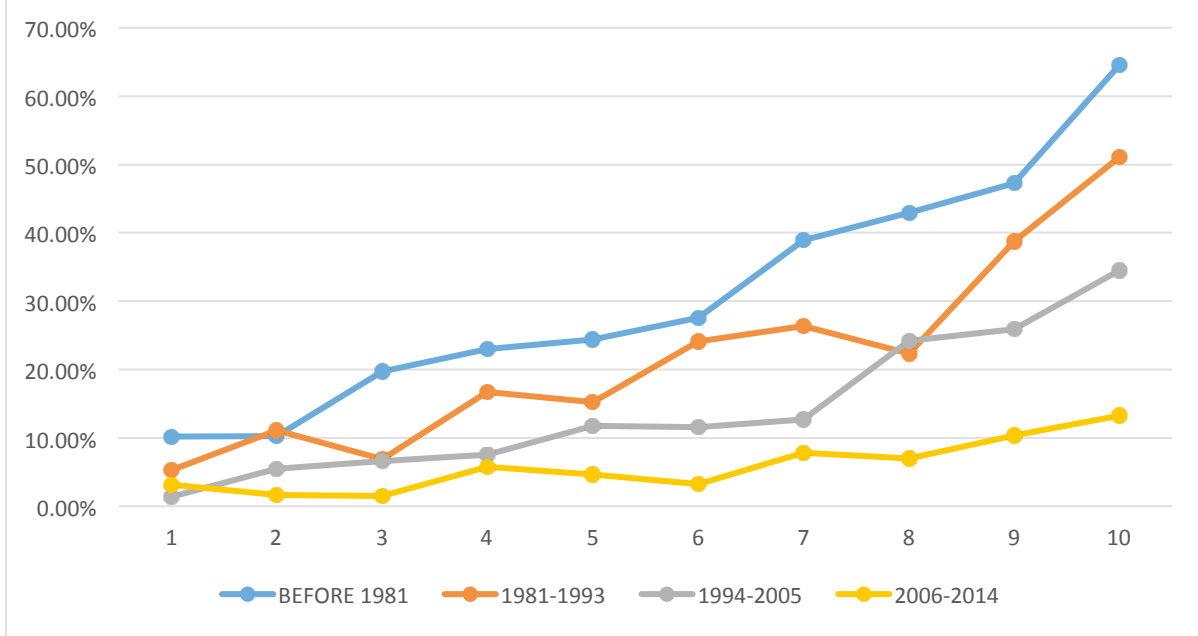
Current Membership in the School’s Alumni Association

The numbers in the cells of Table 5 indicate the percentage of alums who are currently dues paying members of the school’s alumni association. (We won’t bore you with, once again, explaining how to interpret the table and the graph.)

Table 5: Percentage of Alums Who Are Current Members of the Alumni Association by Class Year Quartile and by Engagement Level

DECILE GROUPS	BEFORE 1981	1981-1993	1994-2005	2006-2014
Non Responders	29.4%	20.3%	10.4%	7.3%
1	10.2%	5.3%	1.4%	3.1%
2	10.3%	11.1%	5.5%	1.6%
3	19.7%	6.9%	6.6%	1.5%
4	23.0%	16.7%	7.5%	5.8%
5	24.4%	15.2%	11.8%	4.6%
6	27.6%	24.1%	11.6%	3.2%
7	38.9%	26.4%	12.7%	7.8%
8	42.9%	22.3%	24.2%	7.0%
9	47.2%	38.7%	25.9%	10.4%
10	64.6%	51.1%	34.5%	13.3%

Fig. 5: Percentage of Alums Who Are Current Members of the Alumni Association by Class Year Quartile and by Engagement Level



Much of what we see in Table 5 and Figure 5 is similar to the patterns we saw when we looked at the three different types of giving (recency, frequency, and magnitude). However, a couple of things caught our eye:

Except for the youngest class year quartile, there is quite a pronounced difference between alums in the top engagement decile and everybody else. This is particularly true for the oldest class year quartile. Look at the percentage of alums who are current members of the association in the tenth decile: 64.6%. That's way more than the percentage for any other cell in the table. These are the same folks whose lifetime giving dwarfed everybody else's. These people say they're very engaged; what they give in raw dollars and pay in dues makes us *really* want to believe them.

Overall Comments

What we've done here is show you a smidgeon of the analysis that could have been done with the survey data from one school that has been matched with data from that school's alumni database. We hope you've found this interesting.

But the big reason we showed you this analysis is because of a strongly held belief. A belief that neither alumni survey vendors nor their higher education clients are doing the kind of data matching that makes this kind of analysis possible.

And what are some of the consequences of this lack of analysis? Here are just a couple that come to mind:

- Vendors can convince clients that a relatively small group of responders is not much different from a very large group of non-responders, when that is patently not the case. These two groups can differ hugely with respect to a host of important variables like giving, time out of school, gender, living location, association membership and on and on the list can go.
- Clients don't have the opportunity to hone in on certain groups of responders who express a high degree of engagement in a survey and back that expression up with strong giving and volunteer involvement. Take the group of responding alums who graduated before 1981 and whose median lifetime giving is over \$1,800. There are only 90 of these folks. Wouldn't it be great to ask each of these alums for permission to interview them in person or over the phone on why they are so engaged with the school? Many of them would decline the chance to be interviewed. But many would agree. Just imagine the stories they could tell. We'd be hanging on every word.

To be continued ...