One College's Journey Into the Unconscious Mind of its Prospective Students:

How a New Research Methodology is Helping Us Recruit

by Jennifer Kretchmar and Ashley Memory

Introduction

How well do we know the students we serve? Do we understand their dreams? Do we know the many ways in which they hope to make a difference in the world? Do we imagine their lives outside the classroom? As admission counselors we're attracted to this profession for a variety of good-intentioned reasons—because we want to help people, because we believe in the value of learning, because we want to make a difference—but we're so often busy talking about ourselves and our institutions that we lose sight of our raison d'être, the students. When we do ask students to tell us about themselves, mainly via our applications, we give them little opportunity to share information that falls outside the framework we've already provided.

Some might ask why we need or want to know our prospective students better than we already do. Although as educators we often discourage comparisons between admission and business, there is some undeniable sense in which students are the *customers* we serve. And in order to serve them well, we must know them first. How can we talk about what our universities offer if we don't first understand what it is our students want? How can the stories we share help students imagine their futures with us if they can't relate to our characters or plot? How can we convince them our university will prepare them for life if we don't understand the lives they imagine for themselves?

How then can we get to know our students better? Unfortunately, the tools that have been available to us in the past have been limited and, in some cases, ineffective. If you've administered surveys, then it's likely you are familiar with frustratingly low response rates. If you've conducted focus groups, then you've probably wondered how any single member of the group is influenced by the others in the room. Is student A less likely to share her opinion if it runs counter to the opinion of student B? Is this group of students even representative of the prospect pool as a whole? Apart from the obvious challenges with surveys and focus groups, it's possible that these methods are flawed in a more fundamental way. They are, after all, based on the assumption that students are able to tell us—through the spoken or written word—what they think and feel.

It seems counterintuitive to suggest that students can't tell us how they think or feel. We tend to assume that the motivations for our behavior—whether choosing a school, buying a car or pursuing a particular career—are readily available to us, waiting to be articulated. But a great deal of new multi-disciplinary research—in psychology, cognition, neuroscience, linguistics, and anthropology—is suggesting otherwise. In fact, some researchers believe that "about 95 percent of thought, emotion, and learning occur in the unconscious mind—that is, without our awareness" (Zaltman 2003). Or put another way, "most of what we know we don't know we know" (p. 47). Traditional research methods, which rely on verbal self-report, are therefore tapping into a very limited portion of students' self-knowledge.

The purpose of this article is twofold: a) to introduce a new way of thinking about what people know and how they communicate it; and b) to present the findings of a study conducted at the University of North Carolina at Chapel Hill to get to know prospective students better. If the way our minds work is fundamentally different than we have previously assumed—we think in images rather than words, for example, or we're far less rational and far more emotional than we'd like to admit—then we need to rely on different methods to tap into this knowledge. We chose to utilize a patented research methodology developed by Penn State professor Jerry Olson and Harvard business professor Gerald Zaltman for the purposes of this study. The techniques used by their firm, Olson Zaltman Associates, are described in detail here, although other approaches are available.

Theoretical Background

Many of us have probably already been introduced to new ideas about thinking and decision-making. The popular success of Malcolm

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Gladwell's book *Blink*—in which he argues that much of our thinking occurs unconsciously and in split seconds of time—suggests that these ideas are becoming more mainstream. And yet, Zaltman (2003) argues that this new way of thinking about how we think is nothing less than a paradigm shift. Indeed, psychologists and neuroscientists are asking us to abandon beliefs about ourselves that have been sustained for centuries—the belief that our memories are perfect representations of the past, for example, or that we communicate mostly with words. The following section will summarize what Zaltman (2003) has identified as some of the core revolutionary ideas about how people, and customers, think.

Our Emotions Influence our Decisions

When we write survey questions asking students to tell us why they chose to attend school A instead of school B, we're operating from the assumption that students make decisions deliberately—by weighing the pros and cons of particular characteristics of each school, for example, or predicting the probability of certain outcomes (e.g., entrance to medical school) based on the information they have at hand. While reason does play a role in decision-making, research suggests emotion plays an equal, if not greater, role (Zaltman 2003). Indeed, our emotional system, which evolved before our ability to think rationally, often times acts first. It's not difficult to imagine that emotions such as pride, belongingness, fear, wonder, and hope, impact a student's decision about where he wants to spend the next four years of his life.

Our Memories are Imperfect

Most of us assume our memories are accurate. That is, when we remember an event from our past, we believe our memory of that event is an *exact* representation of the way things actually occurred. It turns out that memories are anything but—instead, they're imperfect, malleable, easily influenced by mood, and often reconstructed over time (Zaltman 2003). When a student describes her experience visiting our campus—whether the visit occurred a week, a month, or a year ago—it's likely that what she remembers will depend on how and when we ask, what interactions she's had with the university since, and what environment she finds herself in when we ask her to remember.

We Think in Images, Not Words

Because language plays such a prominent role in our lives, we tend to believe it is synonymous with thinking. Research demonstrates, however, that our thoughts precede words, and not vice versa, and that thought often takes the form of what neuroscientists refer to as images (Zaltman 2003). The neural activity that leads to these images, which we experience as conscious thought, can be stimulated and expressed in a variety of ways—by touch, sound, sight, smell, emotion, and language. The sights and smells of a model dorm room, for example, may stimulate neural activity that produces a picture in a student's mind of sharing a room with a slovenly roommate at summer camp. This image may produce a negative emotion, or an interior dialog with oneself, ("I don't know if I'm going to like living in a dorm") all of which may or may not reach our level of awareness. In sum, Turner (2000) describes thinking as "blurs of images, many of which don't penetrate our consciousness" (as cited in Zaltman 2003).

We Communicate Nonverbally

Just as thought is nonverbal, a great deal of our communication with one another occurs nonverbally as well. In fact, up to 80 percent of the messages and meanings we convey to one another are expressed in nonverbal ways—through gestures, body posture, intonation, distance, eye contact, and pupil dilation (Zaltman 2003). As a result, the meaning of what we say—the actual words spoken—might not match the meaning of how we say it. If we conduct focus groups and rely on transcripts alone, as opposed to video or audio recordings, for example, we might miss out on valuable information communicated in nonverbal ways. And if we evaluate ourselves only in terms of the information we provide to prospective students—and not the way in which we deliver it—we may be falling short in ways we don't recognize.

We Make Decisions Unconsciously

What differentiates humans from other animals is our aptitude for self-reflection and self-awareness—our high-order consciousness. It may be especially surprising to learn then that most of our thinking, even decision-making, occurs in the unconscious mind. Zaltman (2003) estimates that "95 percent of think-

ing takes place in our unconscious minds—that wonderful, if messy stew of memories, emotions, thoughts, and other cognitive processes we're not aware of or that we can't articulate." Indeed, research demonstrates that the areas of the brain that involve choice are activated before we become aware that we've made a choice (Zaltman 2003). It is findings such as this that led George Lowenstein, Carnegie-Mellon professor of psychology, to conclude "rather than actually guiding or controlling behavior, consciousness seems mainly to make sense of behavior after it is executed" (as cited in Zaltman 2003). All of which may lead one to wonder—if students themselves don't even know why they chose one school over another, how are admission professionals to understand?

Methodology

Fortunately, a variety of new methods have been developed in an attempt to access our unconscious mind, one of which is called metaphor elicitation. Metaphors, or the representation of one thing in terms of another, are central to human thought. So central, in fact, that some researchers estimate we use up to six metaphors a minute (Zaltman 2003). Because metaphors extend the boundaries of literal language, they can often reveal hidden meanings, or thoughts that might otherwise be overlooked. According to Zaltman (2003), there are three levels of metaphors—surface, thematic and deep metaphors. The surface and thematic metaphors exist at a conscious level, and are more likely to be influenced by the nuances of language or culture. Deep metaphors, however, are universal, unconscious and instinctual, and they influence the information we notice, how we process it, and what we do as a result. Metaphors also appear to have a neurological foundation, and often reflect our embodied experience, or more specifically, our sensory and motors systems. "Can you lend a *hand*?" for example, is a request for assistance, while "I *see* what you mean" is an indication of understanding.

In any given investigation, approximately 15-20 people are selected for a sample; although the sample size is small, results can be generalized to larger populations because the technique is designed to tap universal themes (Zaltman 2003). Zaltman has shown, for example, that interviews with 20 people uncover the same deep metaphors as interviews with 100 people. After the sample is selected, interviewees are asked to select six to eight pictures that represent their thoughts and feelings about a particular topic. One week later they participate in a series of one-on-one interviews, often lasting up to three hours. The interviewers are trained to probe, rather than prompt, the subjects to explain what their pictures mean in relation to the topic at hand. Interviewers also help subjects create a digital collage of all their photos, a process which elicits further meaning as subjects explain what their pictures mean in relation to one another, and as a whole.

Two things emerge from this process—deep metaphors and consensus maps. Within the course of an interview with any one subject, Zaltman and Coulter (1995) estimate that between 21 and 43 ideas, or constructs, are mentioned. Many of these constructs are mentioned by multiple subjects; thus, when evaluating transcripts researchers attempt to uncover themes common across interviews, or what are referred to as the three 'mosts'—"most of the thinking of most of the people of most of the time" (Zaltman & Coulter 1995). Constructs are rarely discussed in isolation, however; rather, participants usually discuss relationships between two ideas. If a prospective student discusses the idea of community in relation to her college experience, for example, she is also likely to mention the idea of student organizations and/or clubs. Constructs, and construct pairs, must be referenced by a specific number of participants in order to be included in the final map. The end result—in addition to the deep metaphors elicited during the interview—is a network of related ideas, or a mental model, of peoples' thoughts and feelings about a particular topic.

The purpose of this study was to better understand how prospective students imagine their ideal college experience. What kind of people do they hope to meet? In what ways do they hope to grow? What kind of learning environment do they seek? Those who agreed to participate were given the following instructions: Please select six to eight pictures that express your thoughts and feelings about your desired college or university experience. One week later these students were interviewed in person at research facilities located throughout North Carolina.

Three criteria were used to select students for participation in the study. All participating students were North Carolina residents. Secondly, all participants were high-achieving students; using information from our prospect student database, we identified students who would likely be admitted should they apply. Finally, all participants were male. Given the gender imbalance of recent incoming classes, both at UNC-Chapel Hill and nationwide, we decided to use this study as an opportunity to focus on male prospective students. The 13 students selected for participation were all rising seniors who would graduate in Spring 2007 and all expressed some interest in applying to UNC-Chapel Hill.

Results

Four metaphors and a consensus map with more than 35 different constructs emerged from the discussions with the male prospective students. In the following section, two of the four metaphors, specifically, the metaphors journey and connection, will be discussed; a small portion of the consensus map will be introduced as well. Images and quotes provided by students are used whenever possible to illustrate the concepts.

Journey

It is perhaps not surprising that one of the metaphors to emerge in interviews with students was the metaphor of journey. Generally, the notion of journey evokes the idea of following a path, finding direction and arriving at a final destination. Students in this study talked about life as a journey, of which college is a part, but they discussed college itself as a journey as well, or a journey within a journey. Students expect to experience change and growth during their four years on campus, and they expect to be different when they graduate than they were as first-year students. Within the larger theme of journey, however, several nuanced meanings emerged—about success, transition, anxiety, realizing potential, and making an impact or contribution.

While students express excitement about the four years ahead of them, they also refer to the college journey with some anxiety; the road they will travel is riddled with unknowns, and they often don't know exactly what to expect. One student brought in a picture of an information center for tourists to express this idea [Image 1]. He explained, "It's supposed to show helpfulness, because I'm not sure exactly what college is going to be like in the first year. So, I'm looking for…guidance." Another expressed his concern about the unknowns in terms of exploration. "I'm afraid of not being able to explore everything I want to explore and actually figuring out what I really want." On the other hand, in the larger journey of life, students recognize college as a safe haven of sorts, a middle ground between life at home with their parents and the 'real world.' One student described college as "the threshold [of the real world]. So you get like a taste of it, but you're not in it yet. You can understand it and get used to it so you're not thrown into it."

Even if students talk about the journey ahead of them with some trepidation, they describe it more so in terms of personal growth, realizing their potential, making a contribution, and achieving goals. Thus, even as they are focused on the next four years of their lives, they are thinking about life after college as well. With regard to realizing his potential while in college, one student explained, "I want to constantly be advancing. In education I want to constantly be trying new things…and have more abilities. I want to know more…the day I graduate from college [than I did before]." Another described his approach to learning as "not sitting around and taking things as they come, like thinking about them and questioning them. It lets me feel like I'm doing something with my life and I'm living it to the full potential." Students often used images of athletes to communicate these ideas [Image 2].

But what kind of potential and success do they hope to realize? Importantly, success for students means much more than simply getting a job. In addition to employment, students express a desire for fulfilling family and social lives; they believe the relationships they develop in college will evolve into lifelong friendships, networks and/or marriage. In addition, they hope to make a profound difference in society, and believe college will give them tools to change the world. One student described an image of the world painted on clasped hands this way: "We have the power to change the world. A lot of people don't understand that. When it comes to going to a college I want to go to a college with people that feel the same as me, that we can change the world, that we have the world in our hands [Image 3]."

Connection

The image of clasped hands introduces a second metaphor as well—the notion of connection, not only to other people, but to one's self too. In general, connection is about making attachments, links and associations; it is about being a part of something larger than oneself—in other words, not feeling isolated. For students in particular, connections to other students and faculty, to the school and surrounding community, and to the larger world, are especially important. At the same time, connection is about self; students want to become more self-aware and more in touch with their beliefs.

Students spoke about connection to self largely in terms of self-growth. One student, whose collage is shown in Image 4, explained, "The face, which is in the forefront, is important to me because at this point the face is somewhat indistinct and hopefully through the college career it can become more focused on a specific interest or a specific career." Another student said, "You try to figure and decide for yourself

what you think about certain things. And just become your own individual." Finally, one student used the image of a caterpillar turning into a butterfly to describe his own growth. "I feel like I'm the little caterpillar now and then I'll go into college and I'll come out as the person I'll be for pretty much the rest of my life."

Importantly, students believe that their own personal growth—connection to self—will come from the connections they make with other students, both socially and academically. They are seeking students who are diverse, tolerant of others' views and differences, and willing to engage in debate in healthy and productive ways. For the young men in this study, choosing the right college depends on the other students attending that institution as much, if not more, than faculty and courses. One student explained, "I want to go to a diverse college so it will help me learn to accept different people's feelings and ideas. People of all ethnicities, religions, male and female" [in reference to Image 5]. Another echoes this sentiment when he said, "I don't want to be the only one who has a different opinion from everyone else. That would make it hard to have any kind of conversation." Another compared his future fellow students to the best and brightest from his high school. "I feel that once in college I will meet people who will be able to change the world. [That relates to] the people in the upper right corner [of my collage] that are actually members of my AP US History class, all who I believe will end up doing great things in their life, who are very talented people and possess the skill and talents to be leaders of tomorrow" [image not shown]. One student compared his ideal classmates to athletes. "I want the students at college to be athletic; meaning I want them to be able to persevere, push themselves to do something they want to do…be able to endure struggle." Finally, another spoke of healthy competition. "I want the university to have good competition with all of the students eager to learn and figure out problems and work against each other to better each other."

Of course, connecting to self and other students are not the only connections students seek in college. They also want to be able to relate to professors, to experience a sense of school spirit and camaraderie, to feel a part of the surrounding community, and to explore the larger world. More specifically, prospective students want to be challenged by their professors, and asked to stretch their minds. "I want my college to have top notch professors who know what they're talking about because that'll help you learn better…They're good teachers, they're eager to help you learn…" Outside the classroom, students want the school atmosphere to be comfortable and safe, yet energetic and vital. One student explained, "I wouldn't want college life to be in between classes, just hanging out in dorms every day. I want the students to be active." Another described the excitement he felt during a campus visit. "Everything is geared toward the school and it's just nice to be a part of something like that. You seem like you

belong somewhere." While students want to feel a sense of belongingness on campus, they also want to explore the local community and world; connections outside the university and opportunities to learn about different cultures through study abroad are important facets to the college experience. "This is a spider web. I want it to be the university. I want [the university] to have connections and also be outreaching into the community so you can get internships, community service through school, jobs." Another explained his ideal collage [Image 6] this way: "We have the shape of a country which is South America and that represents studying abroad and helping to understand and learn about other cultures."

Consensus Map

Consensus maps, in addition to reinforcing the meanings conveyed by the deep metaphors, represent visually the most common reoccurring themes mentioned by prospective students during the interviews. Consensus maps are also designed to give us the opportunity to ask difficult questions: how would we like the map to change? What connections do we want to reinforce? Remove? Create? How might we rate each construct relative to other universities? Figure 1 shows a portion of our consensus map clustered around the idea of personal growth.
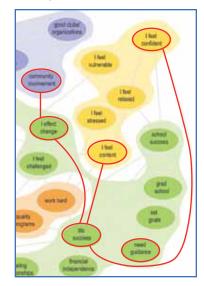
Figure 1. Consensus Map – Personal Growth

As the consensus map in Figure 1 indicates—more specifically, the part of the map showing the close link between the two constructs personal growth and academic knowledge—students come to college with traditional notions of what it means to learn. Books, facts, lectures, and late-night studying are all ideas that are closely associated with what students think of as 'academic knowledge.' What is not shown in the map above, however, are the direct links between the idea of personal growth and a student's introduction to different experiences and people. Tolerant and open-minded students, opportunities to study in foreign countries, exposure to diverse ideas and people, and participation in learning experiences outside the traditional classroom setting were all mentioned by prospective students as essential ingredients in their growth and development as individuals. One student summarized it this way: "I'd like the students and faculty to have different backgrounds, but also diversity in thought… if you're immersed in one way of thinking, I found that I almost lost myself a little bit."

Figure 2 shows a second section of the consensus map featuring constructs clustered around the notion of 'life success.' The map demonstrates visually the myriad of ways in which students define success. While some prospective students think of success in terms of financial independence and jobs, others also define it in terms of life-long relationships with people, setting and achieving meaningful goals, effecting change in the world, and finding peace and contentment in their own lives. One student explained life success as "feel[ing] like you are living by your principles" while another said "being successful would mean me being happy with my life." Others talked about becoming world-class leaders, achieving recognition in their chosen field and giving back to their community.

Figure 2. Consensus Map – Life Success

Conclusions/Implications

The purpose of this study was not simply to gather information about students and their expectations of college. We also wanted to *use* this information to reevaluate our own efforts and better serve prospective students and their families in the future. The following are just a few examples of changes to our strategy, communications and programming that we implemented as a result of the findings of this study.

The study had the most immediate and direct impact on our messaging and publications in particular, but also in the way we talked with students and their families in one-on-one settings, and during larger information sessions. While it's likely we had indirectly referred to students' journeys in past publications, for example, we had never done so with quite as much intention and deliberateness, nor had we ever placed as much emphasis on the journey *after* college as we had on the journey *during* college. We also acknowledged the different kinds of life goals—making a difference rather than simply earning a paycheck—students told us they hope to achieve over the course of their journey. The following excerpts are taken from a publication we subsequently sent to high school juniors.

"[Carolina students] want more than a degree. They want their four years to be a journey—a life-changing experience that will help them to learn, to think, and ultimately, to grow into the person they want to become."

"Are you more interested in making a mark than getting a grade? Are you more concerned about building a life than finding a job? If you want to be part of a university where you are challenged daily to learn, to think, and to grow, we invite you to learn more about us. Visit our beautiful campus. Talk with our students and professors. Once you're here, you'll see for yourself just how Carolina could start you on the journey of a lifetime."

"The journey begins the moment our students arrive at Carolina. Here they are surrounded by people who encourage, challenge and celebrate them. Here they can take risks, meet new people, and develop new ways of seeing and engaging with the world. They do these things not because they're following other people's rules, and not because they're looking to get ahead. They know that these things are part of a journey toward a meaningful life."

We also shifted some of the emphasis of our campus visit toward life after college. Rather than simply talking about admission criteria, and the opportunities available to students at Carolina, we began spending some time talking about what prospective students might expect once they had a degree in hand. Thus, statistics on employment, entrance to medical and professional school and career paths that are particularly appealing to Carolina graduates became a regular part of our communication. We now tell visitors, for example, that Carolina ranks seventh nationally in the number of students entering the Peace Corp, and sixth nationally in the number of students entering Teach for America.

In addition to crafting our own messages, and introducing relevant statistics, we also began incorporating quotes from current students that reflect one or more of the constructs from the consensus map and/or one or more of the key metaphors. The student quotes below demonstrate the notion of connection—to self, to other students and to the wider world.

"Last summer, I interned at the Olympics in Beijing. It's difficult to capture in words how important that experience was to my self-development and how much more aware of the world I am now. Because of this experience, I'm closer to becoming the person I've always wanted to be—a world citizen who is able to help others."

"The pace of student activity is so rapid and there are so many shared public spaces and interconnected smaller communities that Carolina feels like a small campus. Walking from the Student Union, through

the Pit and up Polk Place, it's impossible not to be interrupted by three or four impromptu conversations with familiar faces."

Changes to messaging and publications were not the only ways the results of the study were incorporated into our daily practice; we also made changes to our recruitment strategy and the organization of some key programs. We made a deliberate effort, for example, to facilitate experiences rather than simply share information. Knowing that prospective students desire connections with other students, we resolved to do less talking ourselves, and increased the number of opportunities we give current students to tell their own stories. We also began providing more opportunities for visitors to interact directly with students and faculty in specific academic departments.
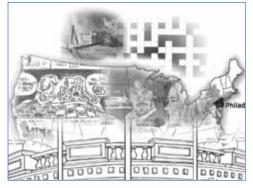
Limitations

No single study tells us everything we need to know, and no single methodology can answer all our research questions. Thus this approach, like others, has its limitations as well. First, the methodology does not easily lend itself to replicability. As a patented methodology, only those trained and licensed in the technique can repeat similar analyses. Thus, conducting studies to track changes over time, or to examine differences among different populations of students, would be costly and time-consuming.

Secondly, Zaltman (2003) suggests that traditional qualitative and quantitative techniques may be more appropriate than metaphor elicitation in certain circumstances, such as when little has changed among a consumer group or in the competitive environment, or when an organization already has a significant amount of information about how they are perceived in the marketplace. On the one hand, someone could argue that little has changed in higher education over the last few decades, especially in terms of what students hope to gain from their collegiate experience. And at Carolina specifically, we already have a substantial amount of information about how we are perceived as an institution. Yet, others could make an equally viable argument that a great deal has changed—with respect to the shifting demographics of the student population, rising costs and the impact of technology. Carolina would be foolish, one might suggest, not to reassess its standing in such a different landscape.

Ultimately, the question of whether metaphor elicitation was the best methodology for the purposes of getting to know prospective students will probably remain an open one. What is less debatable, however, is the newfound knowledge that much of our decision-making takes place on a subconscious level. If admission professionals truly want to better understand human motivation and thought, we should continue to embrace innovative techniques such as metaphor elicitation in the future.

Samples of students' final collages (not referred to in text)

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