ASPIRATION, INSPIRATION AND PERSPIRATION

Allen E. Leybourne
The University of Southern Mississippi

Abstract

Human activities, other than biological ones, occur primarily as a result of the conscious and unconscious, moment by moment, actions within our minds. In order to guide those actions, some internalized model, guiding the ricocheting of ideas and emotions in the brain would appear to be useful. An approach to developing such a model, based upon the concepts embodied in the title is developed. New faculty seeking tenure and ultimately promotion through the academic ranks can adopt this approach for guidance throughout their academic career. Successfully negotiating the academic ladder may be visualized as the attainment of a well-organized sequence of specific goals/aspirations. At times, one is inclined to spend significant time and energy on issues which in retrospect may be deemed to have been unnecessary; however, it is shown that careful delineation of aspirations provides focus and even helps to identify seemingly side issues that may actually merit attention. It is taken for granted that before a model becomes internalized (becomes part of the automatic reflective processes) it must first exist in a form that can be consciously adopted, hence the need for a framework leading to an effective externalized model. It is shown that even though all of us proceed through a process of more or less continuous adoption of aspirations, this process needs guidance.

Aspiration, inspiration, and perspiration in combination may be used to construct a framework upon which the externalized model is based. Discussion of the interaction of aspiration, inspiration, and perspiration easily justifies the conclusions presented. The concepts are illustrated through numerous examples, some taken from personal experiences of the author.

I. Introduction

Upon entering the academic environment, new faculty members are conceptually introduced to the burdensome challenges of tenure and promotion, if not to their reality. Picking just the first of these, from the employees point of view, tenure may be variously viewed as a very long probationary period, a penitence that must be endured, as a challenge that must be met, a clearing of the bar so-to-speak, or even as simply a management tool designed to extract the greatest output from the employee for the least input. In truth, tenure encompasses all of these.

In any case, tenure requirements must be met prior to being selected as a more or less permanent employee-- a very serious consideration indeed! But, why should such a process exist in the first place? Of the many occupations than an individual might pick to earn a living on this planet, a university teaching position has some very unique characteristics. Of these, the personal freedom to pursue almost any academic direction of the individual’s own choosing is
probably the most unique. With this freedom comes the associated burden and responsibility of actually accomplishing at least a reasonable level of performance and expertise in the chosen specialty. The hope of the academic administration is that those who have survived the tenure process will have developed good habits that will serve them throughout the remainder of their academic career (their personal internalized model.) The concepts presented herein can be utilized by new faculty and their mentors to further hone that model.

II. Aspirations

When starting a new position, for financial reasons alone, most individuals are naturally interested in successfully securing that position even if it does not fulfill their personal interest and goals--their aspirations. Upon entering an academic career it may be impossible to articulate one’s aspirations beyond simply securing the position. Such a limited motivation is unlikely to result in successfully obtaining tenure and future promotions. Would it not be better to enjoy the process for its own sake?

Ford \(^1\), in his book, Motivation Through the Work Itself, describes industry’s concern over high rates of employee turnover that occurred during the post World War II economic boom. During this period, employees had many job choices; they simply would no longer continue positions wherein work was nonfulfilling. In an intensive well-organized trial at American Telephone and Telegraph, many things were tried to make employees feel better about their jobs, many of which the reader might guess. Among these were: reduced hours and longer vacations, increased wages, better benefit packages, profit sharing and better training, communications, planning and job participation. These efforts met with limited or even questionable success. A survey was conducted to determine what factors affected job satisfaction. The factors found included: accomplishments of the employee, true (not contrived) recognition for accomplishments, increased responsibility resulting from achievements, opportunity to grow in knowledge and task competence and the chance for advancement.

What environment can compete with that of a university to provide opportunities to pick and choose the direction that will enable significant accomplishments, recognition, etc.? I can think of none. However, if one is to excel, he must become immersed into such an arena, one which provides that fulfillment and personal satisfaction. Unfortunately, in contrast to the corporate study just mentioned, faculty rarely have anyone that will actually task them with other than their teaching responsibilities. Thus, one must somehow provide themselves continuous motivation to ensure that their accomplishments are adequate for personal fulfillment.

Most individuals will recognize that people have varied attributes, desires, limitations and capabilities; but this does not guarantee that they are fully aware of their own. New faculty may believe that they already understand themselves and have well-developed aspirations! Clearly, much soul searching activity will have already occurred while choosing a degree area and relevant work experience before entering their current niche in academia. However, the view that their current aspirations are optimal to drive their future activities may be unrealistic! Through dialogue with one’s tenure and promotion committee, an excellent reality check is to validate that its perceptions are compatible with one’s own.

The initial choice to become a teacher might have been motivated by a desire to teach. If so, you will have much company. Nonetheless, as a new faculty member, there are still myriad choices.
In the last century, technology has grown at such a rapid pace that few individuals can excel broadly even in their chosen field. For example, note the obvious specialization that exists in the professional practices of medicine and health. The day of the Renaissance man is probably over forever, or at least until a major catastrophe returns civilization back to the stone age. With this recognition one can expect to excel in only a few disciplines of any field. How does this relate to the process of tenure?

My apology for the repetition, but let us refocus. Referring to the title of this paper, one aspiration that all the faculty share is to become successful in the tenure and promotion process of the university. But this is too broad to provide the necessary continuous motivation. Therefore, one is well advised to develop aspirations centered around manageable goals.

Let us examine a few typical aspirations, for example:

1. Develop a series of new courses.
2. Write a textbook in a particular area of expertise.
3. Become a renowned teacher of a particular subject.
4. Achieve an understanding and competency at the cutting edge of some technology.
5. Become a well rounded individual, knowledgeable in a broad area of topics.
6. Conduct research in a specified area.

Clearly some of the aspirations above are mutually supportive, whereas others may initially be incompatible. By carefully choosing activities which support our long term goals, fulfillment probability is increased. The actual road-map that must be followed is complex. In fact, if goals are too lofty, they can become self defeating. One is reminded of the anecdote that led to the phrase – If at first you don’t succeed, try and try again. This is attributed by some to the observation of a spider trying to construct its web. The author has always wondered what would have happened the next day if the spider attempted to bake a lemon meringue pie.

Webster’s New World dictionary defines aspiration as, in biology as a breathing out and socially as a strong ambition, as for honor. This close historical association where, biologically aspiration is necessary for life, with its derivative meaning provides an interesting clue to our own existence. We must aspire to be alive and to become fulfilled, to have a sense of well being. In view of the observation that some goals that might be adopted are not realistically achievable, is there some middle ground that might provide a beneficial result? One reasonable view is that in the short term, some realistic subset of the longer range aspirations might be achievable. This observation leads to the guiding principle that it is necessary to carefully examine the current environment in order to take advantage of opportunities that will ultimately lead to the attainment of the far horizon result, even though at the time, it may seem to be incompatible with the attainment of the shorter term aspirations. This is most important in the realm of the acquisition of greater knowledge and skills. Copernicus, one of our best-known astronomers
would never have met with the successes for which he is renowned if he had not had the skills to build the state-of-the-art telescopes of his time.

In summary, it is believed that a carefully delineated and articulated series of aspirations are required to direct, guide, and motivate the activities of the new faculty member. Without such a model, there is a high probability that much effort will be undirected and wasteful. How can anyone make the requisite effort toward goals that are poorly defined? In what other way can the automatic responses in their inner self become timely and appropriate? It is the process of carefully defining our aspirations in specific, detailed, and measurable ways that enables us to maintain progress. From time to time it, is necessary to determine if we are proceeding successfully toward the accomplishment of the intermediate objectives necessary to achieve the longer range goals. As an engineer who has often been involved with long term construction projects, this set of goals and aspirations can be viewed as a type of personal “PERT Chart” subject to frequent review providing feedback and guidance.

The attainment of tenure must be accomplished in a finite/limited time, similar to the contractual time frame of most construction projects having a fixed time horizon. In that short time, without a definitive plan, it is unlikely that much would be achieved upon which personal satisfaction can be derived, much less which could support the attainment of tenure. Many faculty have had experience with graduate students who have completed all of the graduate course work, but who have made little, if any, progress toward completing their graduate thesis/dissertation. What causes this failure? By now it should be fairly obvious. Should new faculty fall into the same pit?

III. Inspiration

Here we start with Webster’s New World dictionary definition for inspiration as, in biology as a breathing in and also as any stimulus to creative thought or action, as in an inspired idea, action, etc.. It is interesting, how closely this derived meaning meshes with that of aspiration. Biologically, the act of breathing is necessary to sustain and nurture life, as in the phrase breath of life. In our professional life, what better metaphor can be chosen than aspiration-inspiration to breathe life into our perhaps otherwise mundane endeavors.

We commonly think of inspiration as the occurrence of creative thought rather than the process leading up to it. However, it is easy to visualize that one inspired thought taking place in a single instant could possibly require a man's entire lifetime to demonstrate its efficacy. Where does one go to obtain inspirations? If we anticipate having a major inspired idea or action, perhaps we must first experience many small inspired ideas. This hardly occurs just because we wish it to. We must immerse ourselves into an environment that provides sufficient intellectual input to stimulate our mental processes – the creation of a mental infrastructure. The “Eureka” experience of Archimedes as he discovered the principle of buoyancy provides an example. According to the anecdote, he was obviously immersed in his work. Would he have made his observation if the question had not already been in his mind?

Two of the author’s experiences may also serve to illustrate why it is necessary to become deeply involved before an inspired idea occurs. In the first case, as a polymer pilot plant engineer processing fiber grade polyester which is processed as a melt at temperatures approaching its
thermal decomposition temperature, the problem of how to avoid thermal decomposition near the pipe walls was ever-present in my mind. Near the walls, flow is very slow leading to thermal decomposition. To this end, much literature had been studied, including the fluid flow and pressure characteristics of polymer extruders. Walking across the company parking lot one day against the grain of the angle parked cars, it occurred to me that I was walking the shortest path. By analogy, realization that flow streamlines would occur along the least pressure route led to the design of an in-line mixer whose characteristic would cause the flow streamlines to alternate between the wall and the bulk interior of the polymer flow. The idea occurred in a twinkle of time, but would not have occurred without the prior experiences.

In the second case, a data processing problem, Navy research teams with which the author had worked had recorded field data utilizing a recording system that had been developed as part of a research project (not actually intended for a production environment). The equipment development team had long since been deactivated, and very little was known about the actual recording format. In spite of that, it was desired to extract the data. Many trials were made to determine the recording format. At the time, I had been an instructor in among other things, digital logic. That background led to an informed guess as to what options were possible. It was finally realized that the data were recorded in the middle bits in 2’s complement form rather than being either low order or high order adjusted. Without the proper background, it is unlikely that the format would have been discovered.

None of the examples just presented are particularly profound, but should suffice to demonstrate that inspirations don’t simply come from thin air. To learn what we need may require us to learn much of what we may not seem to need. The way that ideas are connected in the mind is difficult to describe, none-the-less, inspired concepts will occur, but not in an intellectual vacuum.

IV. Perspiration

Candidly, this word was chosen because of its ring when used with the other words in the title. The reader may have already suspected this, however, the analogy continues. Perspiration results biologically in humans to enable them to keep cool when work is being done. Few aspirations will be realized without an adequate work ethic. There is an old Indian saying that in order to dig a well, you must at least dig in one place for a while. Enough said? But even here, a little reflection is useful. If the well is being dug in a quick sand area, an obvious source of water, it first becomes necessary to shore up the sides of the well. Simply digging in one place for a long time would be fruitless.

Gellerman \(^2\) concludes that, “. . . There is an underlying order to human behavior on the job. People do constantly seek to serve their own best interests. But because they do not share a common belief in what is possible or valuable for them in this life, they define their best interests in an enormous variety of ways.” He further argues that, “. . . A man’s idea of his own best interests will be strongly influenced by whether he feels that he has much power over the events that affect him and on which rewards he regards as worthwhile.” All work is not created equal, even if your university is an equal opportunity employer. Phrases such as: “I’m working myself to death”, “My spouse thinks I’m a workaholic” and “I never have enough time to publish my research,” are often heard. Do you say them? Sure you do! If your automatic behavior is guided as Gellerman suggests, particularly as you perspire in your self-imposed Hell,
perhaps close examination of work habits will reveal that much time is wasted because you have not carefully reviewed your own value reward system. An obvious example of an activity to examine is the Internet. The Internet providers are great students of human nature, providing many forms of instant gratification. Are you using it for real gain or because of its seductive character?

Obviously, to achieve our aspirations, we must make the requisite effort. Unfortunately, time and energy to make the requisite effort are limited commodities. If one buys into the concept that efforts actually made are as Gellerman suggests, then we must somehow develop a take charge attitude of our own value system. It is suggested that this is far from automatic. It takes the same careful analysis as does the choice of appropriate aspirations. If our value system is allowed to be too far from one’s conscious thoughts, inefficient/unproductive habits will utilize a disproportionate amount of time. Curiously, we can nearly always spot this when it occurs in our associates. Why not place our own observations at a distance where we can be more objective?

V. Summary

A model showing the interaction between aspirations, inspirations, and perspiration (work) has been presented as a tool to guide the activities of new and other faculty throughout their academic careers. As one proceeds through life, those aspirations adopted earlier may require modification, e.g., a student may decide to major in music, then engineering, then accounting, and finally decide to become a physician. This represents a set of serial changes in the conscious expression of aspirations. In the end, the goal to become a physician may have been achieved, but would it not have been achieved sooner if defined earlier? In the pursuit of knowledge and the furtherance of technology, inspiration is one of the keys to progress. Inspiration may be viewed as the spontaneous occurrence of ideas that occur as a result of intensive involvement in our areas of choice. This involvement requires a significant commitment and work, wherein the immediate payback may be far from obvious. Therefore, a conscious review of aspirations (goals) and the individuals reward/value system is needed to ensure that the work undertaken is appropriate and done efficiently. A by-product of the model described, if used effectively, is that our life’s work can become its own greatest reward – through the conscious process of personal enrichment. As most university tenure processes have a fixed time limit, we are reminded that this reflective process may not only be necessary, but critical.

References


ALLEN E. LEYBOURNE, III

Allen E. Leybourne, a registered Professional Engineer, is a Professor in the School of Engineering Technology at the University of Southern Mississippi (USM) where he has served as coordinator for the Computer Engineering
Technology, Mechanical Engineering Technology, Industrial Engineering Technology and Manufacturing Technology programs. He has the B.S. and PhD. degrees from the University of Florida and an M.S. degree from the Pennsylvania State University, all in Chemical Engineering. After serving nearly 20 years in various aspects of polyester yarn and polymer manufacturing he joined USM where he has taught for the last 15 years. He is also actively affiliated with the Naval Research Laboratory at the John C. Stennis Space Center, MS where he is involved with underwater acoustics research.