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## What are the Characteristics of a Scholar?

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### 1 INTRODUCTION

Whenever a university environment a promotion or a tenure decision comes up, the committee must decide if the applicant is qualified. One of the defining characteristics that are evaluated in this context is the question about scholarly activities. The committee has to answer the question: is the applicant a good scholar? But what are the characteristics of a good scholar? Is it the number of publications? Or is it the number of references to the publications? Can we define tangible measures, or are the intangibles as important – or even more important – when we make a decision if someone is a good scholar or not? Is popularity a measure?

When I was confronted with this question I decided to apply what I learned during my scholarly activities: I started with a literature review. The result, however, was disappointing. Only very few papers existed, and they were not of good help as they remained on the very general level when it came to defining characteristics. So I decided to ask friends, colleagues, and students for their input. Using web-based survey tools, I created a questionnaire that I submitted to my teaching- and research partners world-wide. More than 50 answers came back. While my question for the characteristics of a scholar was not answered unambiguously, the survey showed some clear trends that I want to share.

This is by far not an academic effort conducted with the necessary rigor. Way more research is

needed to understand better what we think about scholars and their defining characteristics, but this is a start; not more, not less!

### 2 DEMOGRAPHICS

The first result to report is who answered the call for opinions? In the questionnaire, I asked the partners to characterize themselves regarding which category they belong to, giving the following options:

- Faculty
  - Full Professor
  - Associate Professor
  - Assistant Professor
- Other University Personal
  - Research Staff
  - Students
- Industry
  - Research and Development
  - Other Industry
- Other

Not surprisingly, most answers came from faculty and other university personnel. The following graphic gives the detailed distribution.

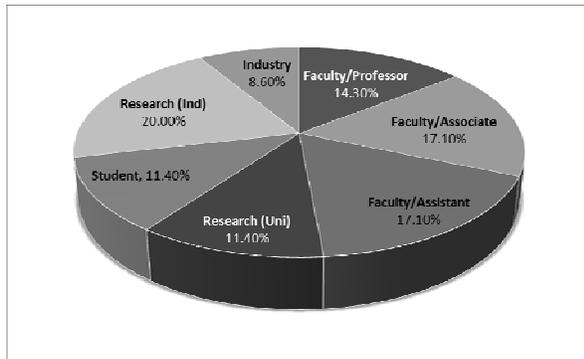


Figure 1: Professions

I received the majority of answers from colleagues working in the United States and Canada, but I also received answers from Europe, Arabia, Australia, China, South Korea, and South America. The distribution is shown in the next graphic.

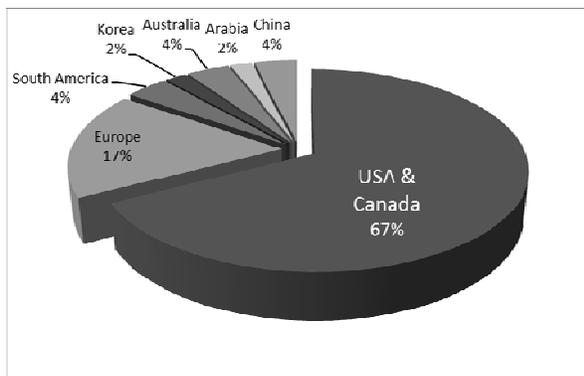


Figure 2: Countries

Finally, 72% were male, 23% were female, and 5% did not answer this question.

It should be pointed out that I had no control if these answers regarding the demographical data are correct. It is possible that people purposefully or accidentally placed themselves into wrong categories, but I assume that I received honest and correct answers. I also assume that everybody only filled out the questionnaire once and nobody tried to push his or her views by submitting duplicates. In a more professional study, this needs to be taken into consideration.

### 3 RESULTS

The important part of the questionnaire was divided into three parts.

#### 3.1 Characteristics of a Scholar

In the first part, I started with the following explanation:

Scholarship itself is a very complicated topic, as there are no general accepted definitions. The history of science and engineering has identified many qualities and characteristics of great scholars, and I am quite sure that no person embodies them all, so how do we judge scholarship? How do we decide if the contribution of someone distinguishing him sufficiently to recognize him as a scholar that shall represent the university to the inside and the outside as a scholar? Colleges of the University of the Free State in South Africa came up with the most including definition I am aware of. In their short essay of 2006, they identify 10 characteristics. I added two more I fought being important. How do you rate the importance of these characteristics? Here are the 12 characteristics with definitions:

**Definition** – a scholar has a sharp focus that delimits the area of inquiry in which he (or she) works ... this development of a long-term research identity is crucially dependent on sharp definition.

**Disposition** – a scholar is marked by what could be called academic poise; a skepticism about knowledge claims, self-criticism and doubt.

**Immersion** – a scholar is intimately familiar with and knowledgeable about both the classical and most recent literatures in the area of inquiry.

**Authority** – a scholar is articulate about her area of inquiry and can speak with authority and clarity about what it is she researches, why and with what hypotheses.

**Persistence** – a scholar shows resoluteness in seeking deep explanations for events, persistence despite repeated cul-de-sacs in the course of investigation.

**Passion** – a scholar is passionate, and seen to be passionate, about what he studies.

**Connection** – a scholar is well-networked with and among the leading international scholars in his field of interest.

**Recognition** – a scholar is easily recognized among her peers as a bright, up-and-coming researcher, and increasingly called on to participate in various research and writing activities and program/session chair responsibilities as a result of the promising quality of her work.

**Productivity** – a scholar is highly productive through published and presented research, in the right forums. This means a high degree of selectivity is applied in making decisions as to where to appear and with what kinds of research reports.

**Competitiveness** – a scholar constantly seeks opportunities in which to compete for the best research grants, the prominent scholarly awards and all other kinds of competitive events that both recognize and support outstanding work.

**Ethics** – a scholar follows strong professional ethics and rooted in honesty about the own work, accepting constructive criticism, treating others with respect, and not gaining personal advantage out of serving positions.

**Loyalty** – a scholar supports his university or organization. He actively engages in the development of new ideas, supports local events by ensuring the academic level of quality, and mentors colleagues to build something new and meaningful.

For all these 12 characteristics I asked if this is something absolutely necessary for a scholar, if this is something optional or nice to have, but not really essential, or if this is something not necessary at all. I also allowed checking undecided as an option for the case that the person answering the questionnaire had no strong opinion on certain characteristics, but this option was hardly utilized by those answering the question.

Table 1 summarizes the results. I ordered the characteristics in order of their importance for the group of people that voice and opinion.

Interestingly enough, *Ethics* and *Immersion* are identified as most important characteristics in the group, and both of them are hard to capture with hard metrics, such as publication numbers, references, or indexes used in the community. Disposition, Authority, Persistence, and Passion

	Essential	Optional	Not needed	Undecided
<b>Ethics</b>	94%	6%	0%	0%
<b>Immersion</b>	92%	6%	0%	2%
<b>Disposition</b>	86%	11%	2%	0%
<b>Authority</b>	86%	11%	2%	0%
<b>Persistence</b>	83%	11%	6%	0%
<b>Passion</b>	80%	17%	3%	0%
<b>Productivity</b>	57%	34%	9%	0%
<b>Definition</b>	50%	41%	3%	6%
<b>Recognition</b>	37%	51%	9%	3%
<b>Loyalty</b>	37%	49%	14%	0%
<b>Connection</b>	34%	63%	3%	0%
<b>Competitiveness</b>	15%	67%	18%	0%

Table 1: Characteristics

follow, separated by a significant gap from the next set of characteristics. The in tenure and promotion committees often used metrics for *Productivity* and *Competitiveness* – like publications, presentations, h-index, and others – are only in the midfield or even at the end of the enumeration that emerged from the questionnaire.

### 3.2 Additional Essential and Optional Characteristics

In the second part, the questionnaire provided the option to add in free text additional essential and optional characteristics for scholars that were not enumerated in the first part. Only 18 listed additional essential characteristics; and only 12 added optional or nice to have characteristics. Several answers were dealing with the same ideas. The following enumeration presents a summary of these answers in condensed form. Again, a more thorough research is needed to provide a better basis, but the trends presented here may already be useful.

Interesting enough, the additional characteristics were often cross-listed as essential and optional, so they are only captured here once.

**Mentorship** – a scholar mentors other members of the community, in particular students and junior faculty, to introduce them to the field of expertise represented by him.

**Contribution** – a scholar has significant or very high contributions in his field. The significance contribution in academia is often reflected as sound theory/proof that has been widely cited and recognized. The significance contribution in application/industry can be reflected as mature standards, approaches, or tools. In some outstanding cases, a scholar can even combine contributions both in theory and applications.

**Integrity** – a scholar shows scrupulous regard for truth, clear distinctions between fact and opinion, and rejection of pressure to spin research in any way favored by authority or funder.

**Tenacity** – a scholar demonstrates the ability to continue in the face of set-backs, delays, criticism and rejection.

**Service to mankind** – a scholar must put humanity as the main objective of each inquiry.

Any research directed against mankind needs to be rejected.

**Open-mindedness** – a scholar is willing and able to understand a range of views and to accommodate them as appropriate in his own thinking. This includes in particular being receptive to ideas of other researchers (and giving these researchers the proper credit as well).

**Vision** – a scholar has a personal driving search for improving human knowledge. This requires a discerning mind with the willingness to pursue issues that are not necessarily in line with – or even acceptable to – the current views of the particular scientific community of interest.

**Insight** – a scholar advances the field of study with an understanding of past work and present efforts to forge new direction. Creativity and innovation are necessary for this, as they allow seeing new structures that other experts overlooked.

**Order** – a scholar seeks to create order out of chaos and succeeds. This includes the capacity to endure disorder without forcing order until there is sufficient evidence to support it.

Some terms that could easily be justified as characteristics of scholars were often used in the explanation, such as intelligence, innovation, creativity, perseverance, and many more.

In additional comments, the scholarly work of professors was directly connected with the creation, application, integration, and dissemination of knowledge. Although that the role of teachers and scholars was clearly distinguished it was observed that good scholars are often also good teachers that are able to fuel the passion for their field with students and junior faculty.

It was also observed that some scholars are innovative by creating new connections between known elements in the body of knowledge in a

way not done before while others discover new elements of the body of knowledge. While the former type is more evolutionary in scientific progress and learns from others, the second type is more radical and revolutionary and tries to find completely new ways. These types are not mutual exclusive but can complement each other.

Although the survey conducted in support of this analysis is too small and has not been conducted with the necessary scientific rigor to justify deriving route-changing new insights it seems that at least in this small subset of colleagues and friends the definition of a scholar is significantly broader than what can be derived from publication and reference numbers. I hope that this effort may be taken up by another organization to become the basis of a more thorough investigation within the realm of an academic thesis.

### **ABOUT THE AUTHOR**

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