



You should be teaching intelligence!



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ABSTRACT

In this brief paper, I attempt to convince you that you should be teaching a course on human intelligence. First, I review some of the reasons that it is important to teach a course on intelligence and argue that every psychology and education department should be teaching such a course on a regular basis. Second, I discuss my own history of beginning to teach such a course and how that course is currently taught. I also give some suggestions about how to get the course introduced into your department's regular course offerings. Finally, I discuss how you and the field of intelligence research will profit if you teach a course on intelligence.

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1. Introduction

If you are reading this, you should be teaching a course in human intelligence. There are numerous reasons it is important for you who know about intelligence to teach what you know about intelligence. Let me list a few of those reasons.

1.1. Few intelligence courses are being taught

Recently, I was told by a publisher that, based on a search of U.S. psychology and education course listings, only five courses were being taught on human intelligence (not including courses that teach how to give tests). Compare this to personality courses where nearly every department in the U.S. teaches at least one course on personality. People will never learn about intelligence if they are not taught. Nor will the best students enter our field if they never hear about it.

It makes no sense to allow people to be ignorant of our field. Intelligence is the most reliable and most valid of any social sciences variable. It has given rise to a multi-billion dollar testing industry. Millions of group-administered tests are given annually for job selection, military entrance and placement, and educational admission, to name only a few of the uses. Intelligence tests are used around the world as a

reliable and valid clinical tool in psychology and education. Theory about intelligence is more fully developed and more mathematically sophisticated than for almost any other psychological construct. More is known about the underlying cognitive, genetic, and brain processes for intelligence than for any other complex psychological construct. And yet, according to at least one publisher, there are only five courses about intelligence being taught in the U.S. It would appear that we are keeping our light under a bushel when it is the social sciences' foremost accomplishment.

1.2. Those who should know about intelligence do not know

It is amazing to me that we fail to present the crowning achievement of a social science research to an audience eager to hear about it. Students need to know about intelligence if for no other reason than as an example of the power of social science research. But there are many other reasons they should know about it.

For undergraduates, knowing about human intelligence will be helpful to them no matter what their future career choice. For students going into medicine or law, an understanding of the broad range of human ability will be helpful in dealing with patients and clients. In teaching intelligence, I have been amazed at the frequency with which high ability students believe that everyone is like them. They are often shocked when told about the full range of ability and even more shocked when they encounter it in the real world.

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More specific information about intelligence will also be useful. Recent research on cognitive epidemiology may make those going into medicine more sensitive to differences among people when prescribing interventions. In the US, lawyers concerned with capital cases need to know about intelligence since those with intellectual disability are exempt from the death penalty. Lawyers should also be aware of the wide range of ability their clients have. For students in education, understanding human intelligence, how it is measured, and what those measures mean are fundamental to their future careers and for understanding the close relationship between education and intelligence. For anyone going into business, the large literature on employment is important to know.

For all undergraduate students, the many debates about unresolved issues will sharpen their critical judgment skills in weighing evidence and coming to their own conclusions about scientific issues. At the very least, most undergraduates, not many years hence, will be presented with test results for their own children, sometimes by a poorly trained teacher or guidance professional who has little idea what the scores mean. For their children's sake, it will be important for them to understand what those scores mean and how they should be interpreted.

For graduate students in psychology and education, it is incomprehensible to me that they are sent forth to practice either clinical psychology or education knowing as little about intelligence as they do. Very often they have had only a single course that teaches them how to administer tests with very little instruction on what intelligence is or what scores on a test actually mean. To me, this is equivalent to training surgeons as technicians with no knowledge of anatomy or physiology.

1.3. Much of what people know about intelligence is wrong because they learned it from the popular press

A serious problem for the field of human intelligence is that what people do know about intelligence is often wrong. If not outright wrong, it is often distorted through the lens of the popular press. Not surprisingly, reporters tend to favor controversy because it is likely to attract more readers. The stories about human intelligence that get reported tend to be about things that have been historically controversial like ethnic and sex differences. Even at their most extreme, sex and ethnic differences probably account for a small part of intelligence differences among humans. Another popular topic in the press is schemes to raise intelligence. This research is often reported before a successful study or two have been fully substantiated. They are often over sold to the public and disconfirming research is seldom reported in the popular press. Still another popular area of reporting is fraud, misuse, or bias in tests giving the impression that tests are never reliable or valid.

These issues that get the most press attention are controversial because they go to the heart of some of the fundamental assumptions of core social structures. Carson (2007) has traced these philosophical developments going back at least to the enlightenment. Rational thinkers were beginning to have doubts about hereditary monarchies. Democracies seemed the obvious alternative. The question was who should replace hereditary monarchs?

The obvious answer was to select the most able. The question was, could that be anyone? The common sense Scottish philosophers along with others suggested alternatives. One alternative was that the most able would be those who were taught the most because people were identical at birth. Another was that the most able would be those endowed by nature with the most ability and who had learned the most, at least partly because of their initial endowment. Because research on intelligence bears directly on this issue, we should not be surprised that it is controversial as it has been for at least four centuries. We, as researchers, should be aware that what we learn about intelligence bears on these important issues and can ultimately resolve at least the empirical foundations. It is not surprising that people who have implicitly adopted one of the philosophical positions as the foundation of their world view about how we should be governed take issue with empirical results that they feel shake that foundation. Fundamental scientific results that challenge some people's philosophical outlooks have been and probably always will be controversial.

These are just some of the reasons for teaching a course on human intelligence. Undoubtedly, you can think of many more. But these reasons are sufficient to justify anyone who knows about intelligence research to teach what they know.

2. How I began teaching an intelligence course

I am an accidental teacher of intelligence. Though I had been interested in intelligence much of my life, I had been teaching courses largely about intellectual disability. I also taught an introductory psychology course that enrolled between 100 and 250 students. One semester, I entered the lecture hall to find the usual 18 to 20 year old students with one exception. In the front row was someone I judged to be 12 or 13 years old. I initially assumed that it was a sibling of one of the enrolled students. When I called the roll, I found out that this was an enrolled student named Brian (not his real name). I was somewhat concerned that someone so young could keep pace with the class. On investigation, I discovered that Brian was a math prodigy enrolled as a math major. I also later learned that he had been one of the highest scorers in the Study of Mathematically Precocious Youth.

I was right to be fearful about how Brian would do in the course but not in the way I had anticipated. From the first lectures on I found by his questions that Brian, in addition to probably being the smartest person in the room, was the most informed student in the room and had done a substantial amount of reading in psychology on his own. He would ask questions that would be more typical of a graduate student and I would attempt to answer his questions often going well beyond the introductory level information. Both Brian and I enjoyed these intellectual excursions but the rest of the class was less enthusiastic. As the class progressed, when Brian would raise his hand, I could hear an audible groan from the other students. Since the information I covered in answering Brian's questions was probably not going to be on the test, many students regarded it as a nuisance.

After one class in which Brian had a lot of questions and the rest of the class was particularly abusive, I took Brian aside. I told him that he was well advanced over most students in the

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