Technical Affairs

By Mike Aamodt, Associate Editor

Coding Education Levels: Degrees or Years?

It is common to consider applicants' and incumbents' educational backgrounds when making a variety of human resource decisions. For example,

- In hiring, education levels are considered when screening applicants or conducting validity studies.

- In recruitment, it is common to consider education when negotiating starting salaries.

- In compensation, the education requirements of a job are often given a heavy weight as a compensable factor.

- In OFCCP compliance, incumbent education levels are often considered when running regression analyses trying to explain sex or race differences in salaries.

In making such HR decisions, the difficult first step is determining how to categorize levels of education. That is, how do we rate or rank an applicant with an associate's degree versus an applicant with 72 college credits but no formal degree? There appear to be two approaches to doing this: Years of education and degrees.

As shown in Table 1, in the *years of education approach,* individuals are assigned points on the basis of the number of years of education they have obtained. Such an approach gives credit for attending college even though the individual may not have actually obtained a degree. Notice that people with GEDs or who did not graduate high school would be assigned the number of years of formal schooling they completed (ranging from 0 to 11). As shown in Table 1, the *degree approach* ignores any education that has not resulted in a terminal degree.

Which approach is best? The answer would depend on your reason for considering education in the first place. The years of education approach is best if you are interested in tapping an individual's amount of formal training or combined learning. The degree approach is best if you are interested in tapping a level of accomplishment.

Common Coding Difficulties

Certifications

An educational aspect that is difficult to code is such certifications as a Certified Public Accountant (CPA), the Professional in Human Resources (PHR) from SHRM, and the Certified Professional from IPMA-HR. If one were to use the *years of education approach*, certifications would not receive credit because formal classroom training is not involved.

	Table 1. Comparison of ratings given by two approaches for categorizing education levels		
Years	**Education**	**Years of Education Approach**	**Degree Approach**
0-11	No high school diploma	0-11	0
0-11	GED	0-11	1
12	High school diploma	12	1
13	0-30 college credits	13	1
13	Career certificate/Diploma	13	2
13	Licensed Practical Nurse (LPN)	13	2
14	31-60 college credits	14	1
14	Associate's degree	14	3
14	Registered Nurse (RN)	14	3
15	61-90 college credits	15	1
16	91-120 college credits	16	1
16	Bachelor's degree	16	4
17	Certified public accountant	16	5
18	Master's degree	18	6
19	Ed.S., Master's + LPC, Law degree	19	7
21	Doctorate	21	8

Using the *degree approach*, certifications are difficult to quantify because they must be considered in light of a person's college education. That is, would a person with a bachelor's degree and the IPMA-CP certification get a score of 5 but a person with a master's degree and the IPMA-CP certification get a score of 7?

When conducting salary equity analyses, the certification problem is usually handled by treating certifications as a separate variable from education and scoring them with a simple yes (1) or no (0) system. However, some certifications are more valued than others and a simple yes or no system would not account for such value differences.

GEDs

There is considerable debate about whether a GED should be considered the equivalent of a high school diploma. For those of you involved with law enforcement selection, you have probably noticed that your police chief has a strong opinion on the topic! Though the common belief is probably that a GED is not as desirable as a high school diploma, there is surprisingly little research on the topic. In a 2003 *ACN* Technical Affairs Column, I summarized the research comparing people with GEDs and high school graduates and concluded that, based on limited research, people with GEDs do not perform as well on the job as high school graduates. Thus, from a coding perspective, it may not be a good idea to put GEDs and high school diplomas on the same level.

College Credits

Many people have taken college courses beyond high school yet have not actually received a college certificate or degree. As discussed previously, a *years of education approach* would assign credit for these courses, but a *degree approach* would not. What might also be considered is whether an individual is making progress toward a degree and how recently the credits were received. That is, there may be a difference between a person with 39 college credits who dropped out of college and a person with 39 credits who is working toward a degree one course at a time. Though the actual level of accumulated education is the same, there may well be differences in motivation or conscientiousness. Or, the difference in the two people could be something as simple as health conditions or family obligations that indicate nothing about their motivation or personality.

Multiple Degrees

Using the *years of education approach*, people earning two bachelor's degrees or two separate master's degrees would receive more credit than people earning one degree. In the *degree approach*, multiple bachelor's degrees would receive the same credit as one degree. Again, I have not seen any research looking at whether people with multiple bachelor's or master's degrees are different (e.g., talent, motivation, personality) than people with one degree.

When the Degree was Earned

Though this is not a factor I ever thought of considering, a police chief I encountered looked at when a college degree was earned. His thinking was that a degree earned the "traditional" way when an individual is 21 or 22 is more impressive than a degree earned later in life. He had all sorts of interesting hypotheses about what degrees in later life meant in terms of motivation and character, most of which did not make much sense to me. However, to my knowledge, there is no research that addresses this issue (personally, I would put more value on a degree earned by a working adult but I'm not really sure my rationale is any better than the police chief's rationale).

Does the Coding Approach Matter?

Does the coding approach really matter? It probably depends on how the educational information is to be used. To briefly explore this issue, I took an old dataset and used both a *years of education approach* and a *degree approach* to code education. I then correlated education with supervisor ratings of police officer performance and performance of cadets in the police academy. As shown in Table 2, the *years of education approach* yields slightly higher (but not significantly so) validities than the *degree approach*. However, in a proprietary data set I have for production workers, the *degree approach* had higher validities than the *years of education approach*.

Table 2. Correlations between education and academy grades and supervisor ratings				
	Academy Grades		**Supervisor Ratings**	
Approach	**N**	**r**	**N**	**r**
Years of education approach	1,369	.22	894	.14
Degree approach		.17		.10

Clearly, more research is needed to determine if one approach is better than another. If any readers have education data and can separate education into years of education versus degree, e-mail me your results and I will include them in the next Technical Affairs column. Or, if you have some thoughts on the topic, I would be happy to include them as well.

HR HUMOR

These puns almost don't deserve to be called humor, but here they are anyway!

- I got a job at a zoo feeding giraffes but I was fired because I wasn't up to it.
- I found being an electrician interesting but the work was shocking.
- I wanted to be a barber but I just couldn't cut it.
- I worked as an accountant but had to quit because the work was too taxing.
- I studied a long time to become a doctor but I didn't have any patience.
- I once worked as a lumberjack but I just couldn't hack it, so they gave me the axe.
- I tried to work in a shoe factory but my boss was too much of a heel.
- I became a professional fisherman but discovered that I couldn't live on my net income.
- I applied for a job as a chef – figured it would add a little spice to my life – but I just didn't have the thyme.

- I tried to be a tailor but I just wasn't suited for it. Mainly because it was a sew-sew job.
- After many years of trying to find steady work I finally got a job as a historian until I realized there was no future in it.
- I got a job in a gym but they said I wasn't fit for the job.
- I quit my job as a plumber because the work was too draining.
- I loved my job installing windows but my boss was such a pane.
- I quit my job as a personnel analyst because I felt I was always being tested.
- I quit my job as an affirmative action officer because everything was black and white to my boss.—ACN

IPMA-HR Developing Generic First-Line Supervisory Exam for the Public Sector

The International Public Management Association for Human Resources (IPMA-HR) is currently in the process of developing a generic first-line supervisory exam for the public sector. This multiple-choice exam will assess supervisory-based competencies needed for effective performance as an entry-level supervisor across various public sector departments; the **public safety field will be excluded** from this study.

The first phase of development will be the completion of Job Analysis Questionnaires (JAQ) by first-line supervisors in spring 2005. First-line supervisors are considered the first line of management and are responsible for the direct supervision of a group of personnel (two or more) and have been on the job a minimum of 6 months. The JAQ will require first line supervisors to rate critical job tasks carried out by first-line supervisors and the knowledge, skills and abilities (KSAs) needed to complete those tasks.

The second phase of development will include a Subject Matter Expert (SME) review of the actual exam questions, which will take place in summer 2005. This review will be completed by a group of both first-and second-line supervisors. Each SME will be asked to complete an evaluation form with questions about the clarity of each question, the importance of the knowledge assessed by each question and the appropriateness for its inclusion on the exam.

As a thank you for participating, IPMA-HR is offering a discount on any participating agencies first test order of the Generic First Line Supervisory exam.

For additional information, please contact **Kathleen Pierce** at (703) 549-7100 or email **kpierce@ipma-hr.org**.