

WHAT RETURN ON THEIR INVESTMENT CAN OAKLAND STUDENTS EXPECT?

by Sherman Folland

Payscale Inc., a Seattle startup in 2000, makes its money by selling job information to educated, employed workers. Its customers want to know: What are people like me making? And where can I get a better job? Payscale says it collects detailed personal data from the millions of these customers, including salary, individual characteristics, where they went to college, and more. As a sideline the company estimates the Return on Investment (ROI) for the BA degree for students at each of several hundred colleges and universities. My column sheds light on the quality of the Payscale numbers as well as on the Return that students can expect at various Michigan public universities, with a sample of the nation's elite colleges for comparison. Be ready for some surprises.

Table 1 reports the ROI for these universities. The ROI data give Payscale's calculations of "Average Annual Return on Investment" for the BA for instate students, first with no financial aid, then secondly with financial aid. The "Return" part measures the excess of earnings over and above what the high school graduate earns over a 30 year career. Payscale then

¹ Since some colleges discount more heavily than others, the column with financial aid offers the more reliable values.

Table 1. Payscale Estimates of ROI for Students in Michigan Public Universities

		ROI instate			
	ROI	w/Fin.	2011-12	ACT>24	ACT>30
University Name	instate	Aid	Tuition	%	%
U of Michigan	8.1	10.9	100,600	95	54
Mich Tech	8.2	10.3	108,200	77	21
Mich State U	7.5	9.5	93,780	72	13
Wayne State U	7.1	8.9	94,150	37	7
Ferris State	6.6	8.4	98,180	33	5
Western Michigan	6.8	8.3	95,480	32	3
Oakland University	6.9	8.2	94,660	37	6
Saginaw Valley	6.8	8.2	81,620	29	5
Lake Superior State	6.2	8	90,420	34	4
Eastern Michigan	6.3	7.8	91,390	26	2
Central Michigan	5.3	6.9	96,440	36	4
Northern Michigan	4.9	6.4	85,680	34	4
Grand Valley	4.9	6.3	90,270	51	7
U Mich Flint*	*	*	*	33	5
U Mich Dearborn*	*	*	*	53	8
Harvard	6.9	11	218,200	100	87
Stanford	6.9	10.6	230,100	98	83
Princeton	6.7	10.6	213,200	100	88

Notes: *Not reported by Payscale. "ROI" is the average annual percentage return on investment for the BA as estimated by Payscale 2013. The Return is the expected gain in salary over and above the high school grad for a 30 year career. This gain calculated in present value is divided by the total tuition costs generates the implied percentage gain averaged per year. Financial Aid. Discounts the tuition required for the BA. The ACT data for this year's freshmen class is from Peterson's Guide to Four Year Universities, 2013.

compares the present value of this Return to the total tuition requirement to estimate one's average percent yearly gain.

This Payscale study lacks a full degree of scientific rigor (e.g. no random sampling, no confidence statistics, and no sample sizes listed.), but the results will look plausible to most Michiganders. Michigan's Big Three brand name universities

excel, UMich, MSU, and Wayne State (I'll discuss Michigan Tech momentarily). Note that the ROIs of these colleges support the notion that the advantages of college are huge, necessary for getting ahead. How would you like to get a 10% yield on a Certificate of Deposit?

Note also the huge tuition costs for a BA. Nobel economist, Joseph Stiglitz, warns America of a looming dangerous crisis; college will become available only to the wealthy elite, if it isn't already.

Reconsider Michigan Tech: Why does this small university in Houghton provide the second highest ROI of public universities in Michigan? We all know why. Mich Tech graduates engineers, a high earning field, and the matriculating freshmen exhibit the second highest average ACT scores in the Michigan part of the list. Both features no doubt correlate positively to the students' earnings later in life. We see also high ROI schools tend to exhibit high freshmen ACTs. (see also the ACT data for the elite schools listed). The fact that Payscale omits any consideration of freshman quality in its calculations poses the most glaring flaw in its method. This raises the question: What do these colleges really add to the value of their students' abilities? That is, what is their *value added?*

What Colleges Really Deliver Value Added?

Peer reviewed studies by economists incorporate measures of freshmen quality. Their efforts raise the most potentially shocking question of all: If high school graduates with excellent grades and ACT scores above 30 go to a non-elite university instead of an elite one, would they do just as well in the job market?

One prominently mentioned study is by Stacy Berg Dale and Alan Krueger (2002). The study examined data for a large sample of high school grads who applied to more than one of 30 selected universities. These universities range from the elites—e.g. Yale, Bryn Mawr, and Columbia—with freshmen

average SATs ranging from 1200 to 1350, to the the non-elite schools—e.g. Penn State, Tulane, and Denison–had average freshman SATs closer to 1050. ACT scales are approximately convertible to SATs in this way: (ACT, SAT), (31, 1350), (27, 1200), (23, 1080). High school grades, SATs and average SATs of the high school also got recorded. Thus the authors incorporated data on each student's measurable qualities.

The uniqueness of Dale and Krueger (DK), however, derived from their effort to estimate the "non-measurable" student qualities, e.g. motivation and clarity of purpose. This required a complexity of econometrics, but the essential idea is this: you note two students with the same test data who apply to a college with known acceptance criteria. If one is rejected and the other accepted, you infer that the acceptance committee noticed differences in factors like motivation and clarity of purpose, plus some random error. The role of random error was substantially reduced by averaging over 14,000 students. DK thus acquired estimates of all the measurable student qualities, plus the formerly "non-measurable" qualities. Notice that both sets of these student data items will no doubt contribute to the student's future market wage. Yet, none of them were created by the college entered.

With these items now at hand, DK estimated wage equations that compared the student characteristics with the characteristics of the college the student attended. Student characteristics, brought to day one of their freshman year, contributed significantly to their later market wage, but the average SATs of the college attended did not, it was not even close. DK expressed the assessment of their findings very bluntly by delivering the following quote:

The C student from Princeton earns more than the A student from Podunk not because he has a Princeton degree but merely because he is abler. The golden touch is possessed not by the Ivy League College, but by its students (Hunt, 1963, 56).

What About Oakland U? Two Remaining Questions

Suppose that the estimates in the Table are precisely true and that our students are earning a Return on Investment nearly as good as students at U of M. Would this mean that our graduates are as well educated as Michigan graduates? This is doubtful. Employers do not necessarily hire BAs based on their intellectual attainment. In fact, employers studying a resume may focus on the word "baccalaureate" more than on the name of the university. At most we know that college graduates across Michigan are earning much more than high school graduates.

A darker interpretation of these data is possible, however. Radicals in education theory say that college students learn very little of the material they study anyway. What they learn is primarily the good habits of showing up on time, handing in assignments, taking direction and getting along with others. The diploma is merely proof of this. Like most teachers I don't believe this radical interpretation. But I have seen enough objective evidence of student learning to believe that this may apply to about half of my Freshman and Sophomore students.

The second question: is OU providing the kind of rich intellectual experience that our high quality incoming Freshman need? I doubt this is true on average. The Table states that only 6% of OU Freshmen score 30 or higher on the ACT. This suggests these high scoring students are not likely to find a lot of comparably bright companions at Oakland (though this may differ by major). Is it nevertheless possible that they could find a stimulating environment? Sure. Such students may seek out the more challenging courses, the best teachers and the best quality research experiences. I have got to believe we have many of the needed elements: the Honors College, many faculty who compete at the national level in research, and many teachers who excel. But for these ambitious students, can we serve as a good jumping off place for graduate school? That is

another question. It is such questions that the Dale and Krueger study and those to follow may yet answer.

REFERENCES

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