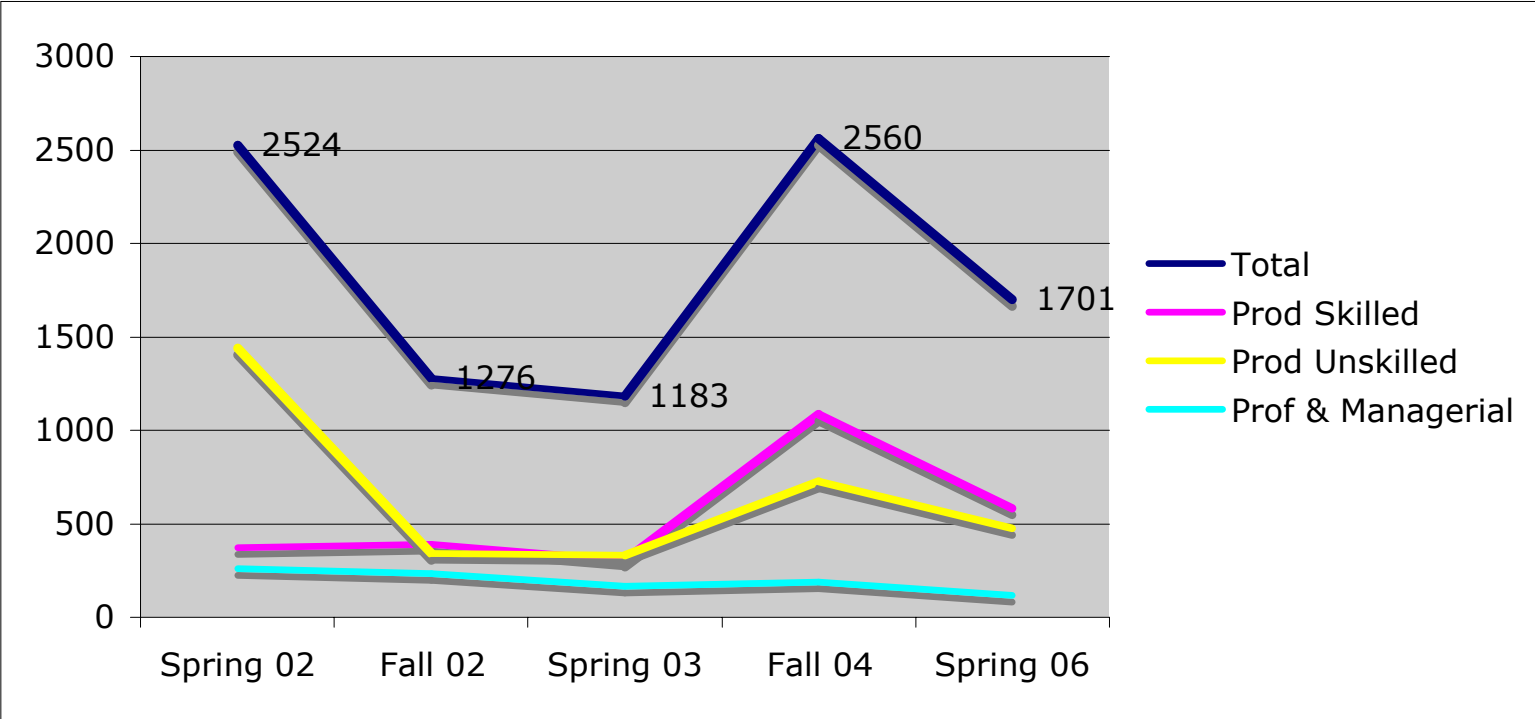


Manufacturing Job Vacancy Survey -- Spring '06

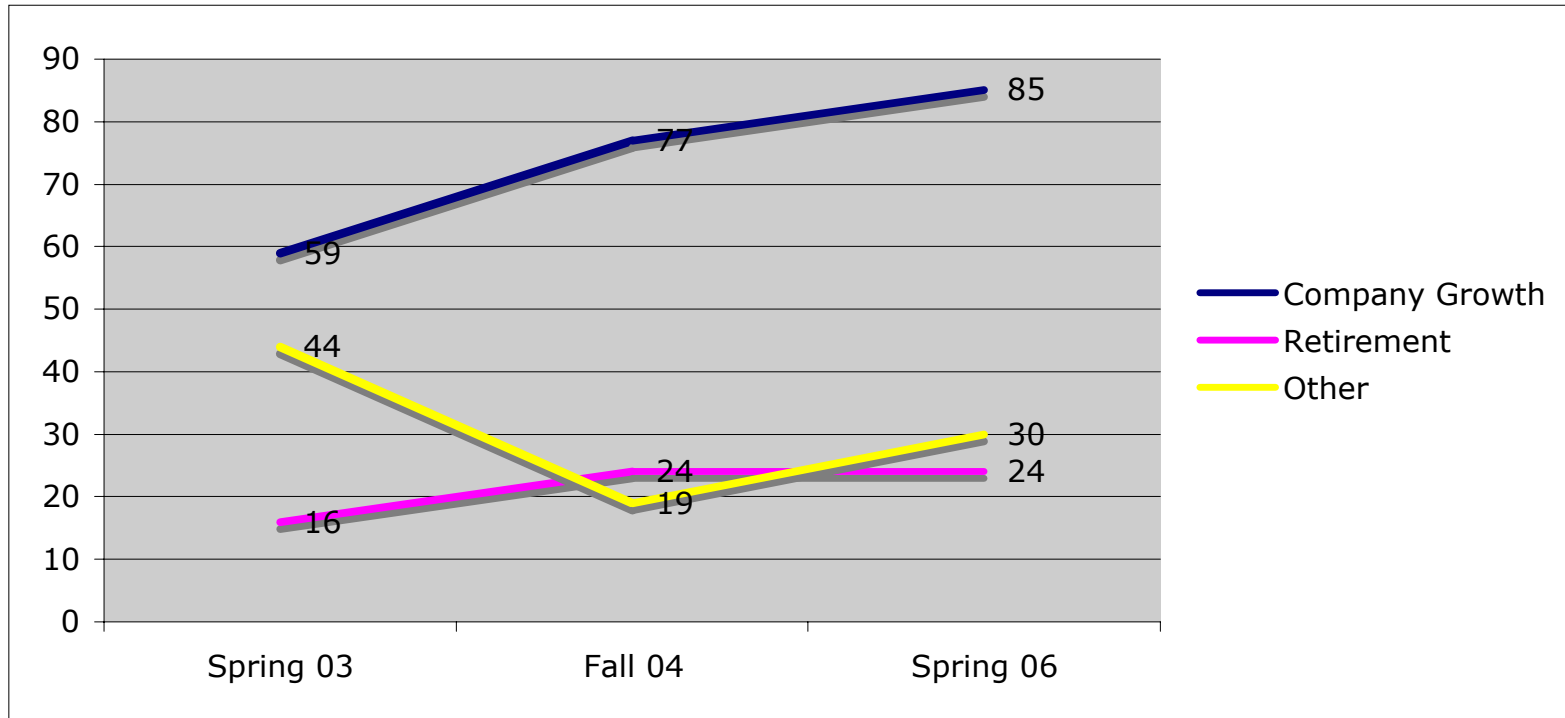
Manufacturing JVS -- General

- Duquesne University's Center for Competitive Workforce Development (CCWD) surveyed 3,663 manufacturing companies in the ten-county region in the Spring 2006
- Firms responding to the survey (by mail, Internet or over the phone) numbered 717
- CCWD estimates that there were a total of 1,701 job vacancies in manufacturing in the region during the Spring of '06

Manufacturing Vacancies Over Time



Reasons Given for Job Vacancies (in percentage points)



Reasons Given for Job Vacancies (in percentage points)

- Note that the “Other” category (among the reasons given for a job vacancy) indicates general turnover -- mostly people quitting a position for various reasons. “Other” is, in short, a measure of the continuous “churning” of the labor market

Detailed Occupational Categories With Most Openings in the Spring '06

- Supervisors of Production Workers -- 43 vacancies; ave. hourly wage \$20.62
- Assemblers and Fabricators -- 109 vacancies; ave. hourly wage \$14.27
- Machine Operators -- 35 vacancies; ave. hourly wage \$8.86
- Machinists, Welders and Related Precision Workers -- 476 vacancies; ave. hourly wage \$15.07
- General Labor -- 296 vacancies; ave. hourly wage \$10.18

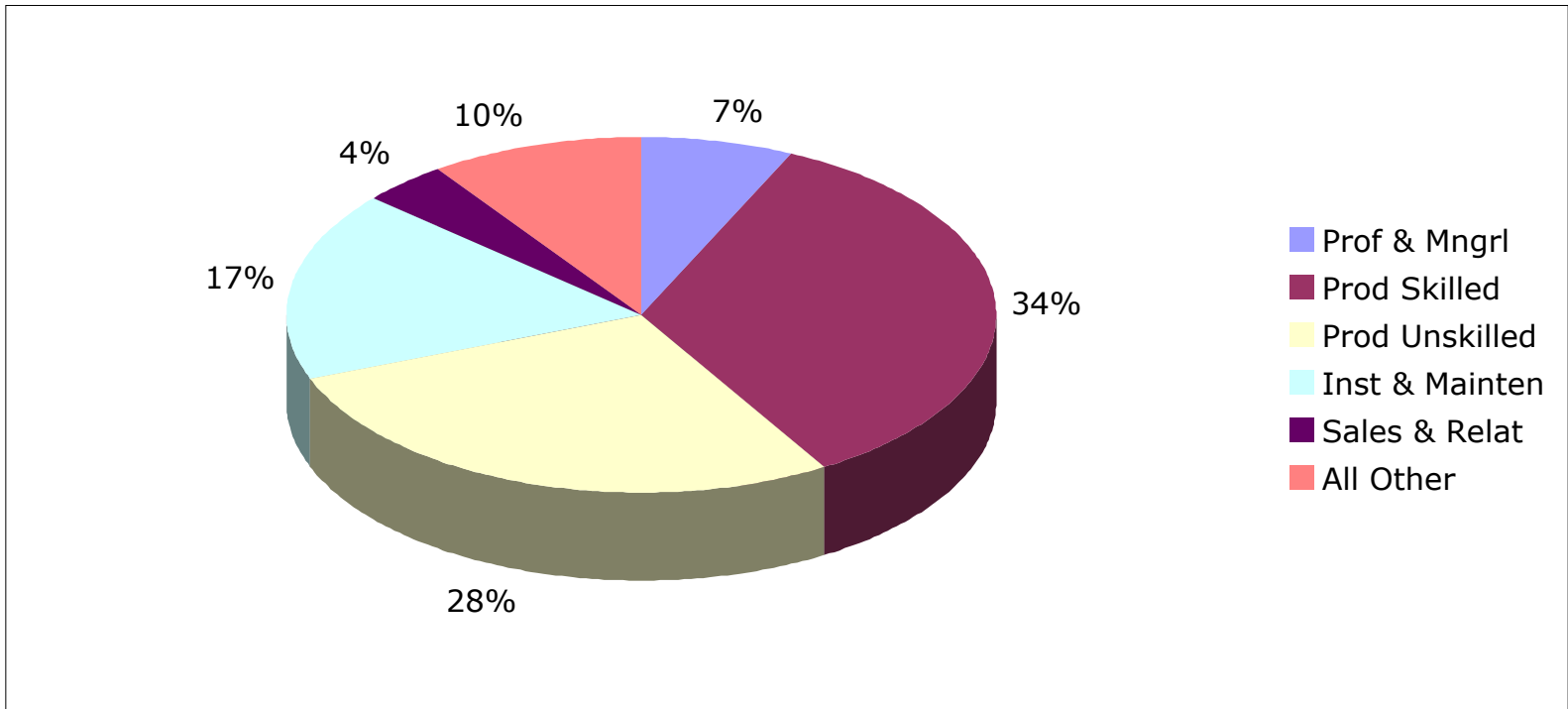
Detailed Occupational Categories With Most Openings in the Spring '06

- Sales Associates -- 25 vacancies; ave. hourly wage \$7.61
- Sales; Territory managers -- 38 vacancies; ave. hourly wage \$5.65. (Note that the bulk of the compensation of these individuals is based on commissions, not on hourly pay.)
- Clerical Workers -- 36 vacancies; ave. hourly wage \$7.24
- Drivers of Trucks, Industrial Vehicles -- 75 vacancies; ave. hourly wage \$9.87
- Warehouse and Yard Workers -- 70 vacancies; ave. hourly wage \$10.07
- Electricians -- 36 vacancies; ave. hourly wage \$13.50

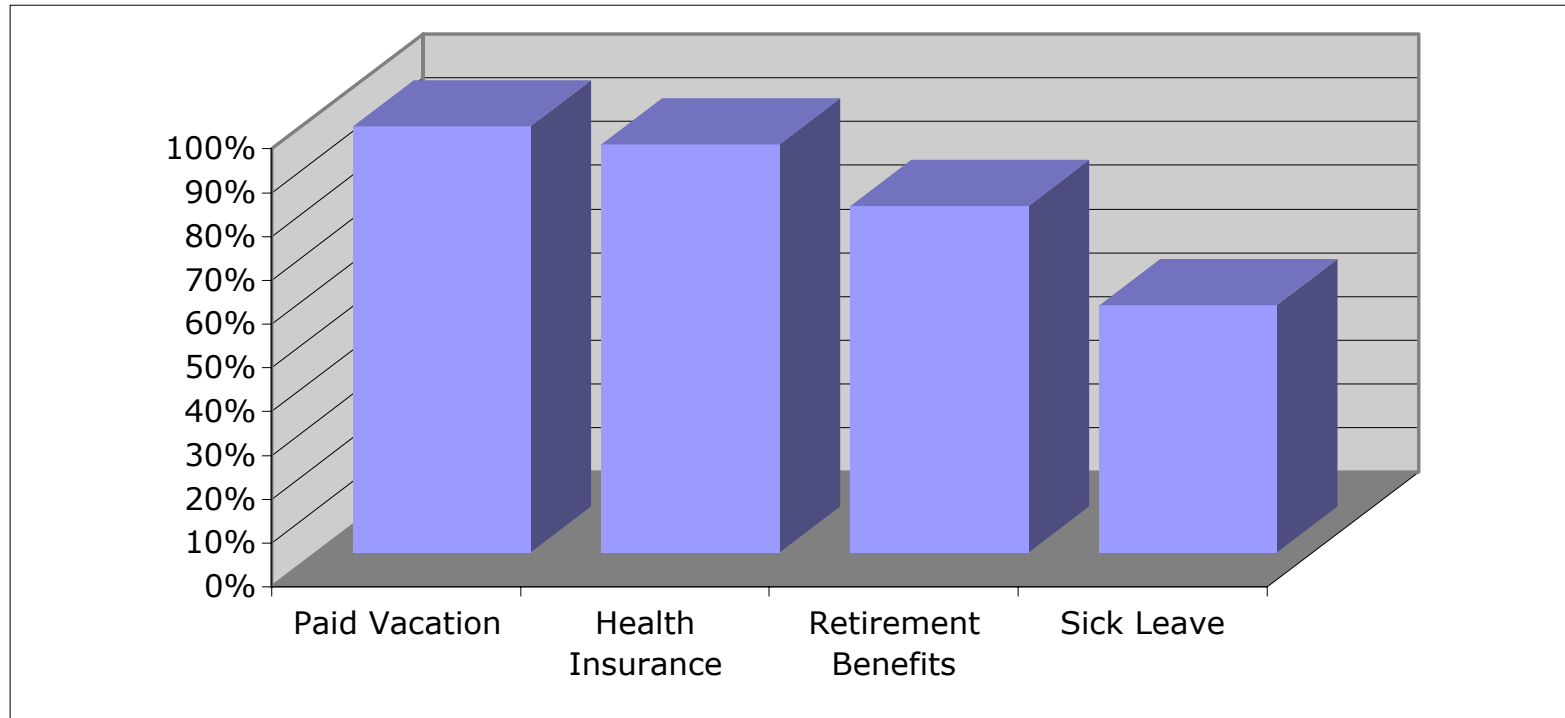
Detailed Occupational Categories With Most Openings in the Spring '06

- Electric Motor Mechanics, Electric Repair Technicians -- 43 vacancies, ave. hourly wage \$15.87
- Installation and Maintenance Workers -- 214 vacancies, ave. hourly wage \$14.86
- Engineers -- 46 vacancies, ave. hourly wage \$25.94
- Engineering Technicians -- 28 vacancies, ave. hourly wage \$17.50

Vacancies by Broad Occupational Category -- Spring '06



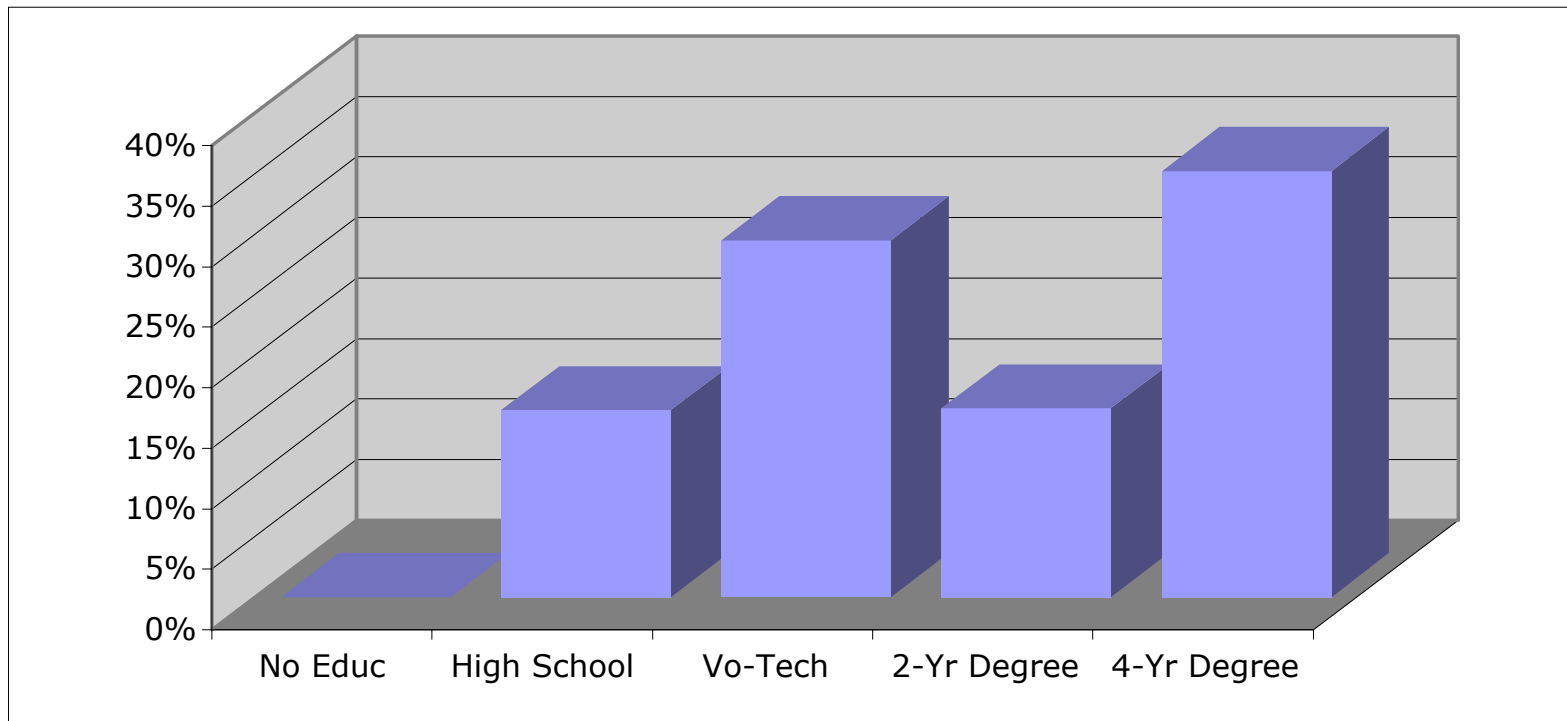
Vacancies by Type of Benefit -- Spring '06



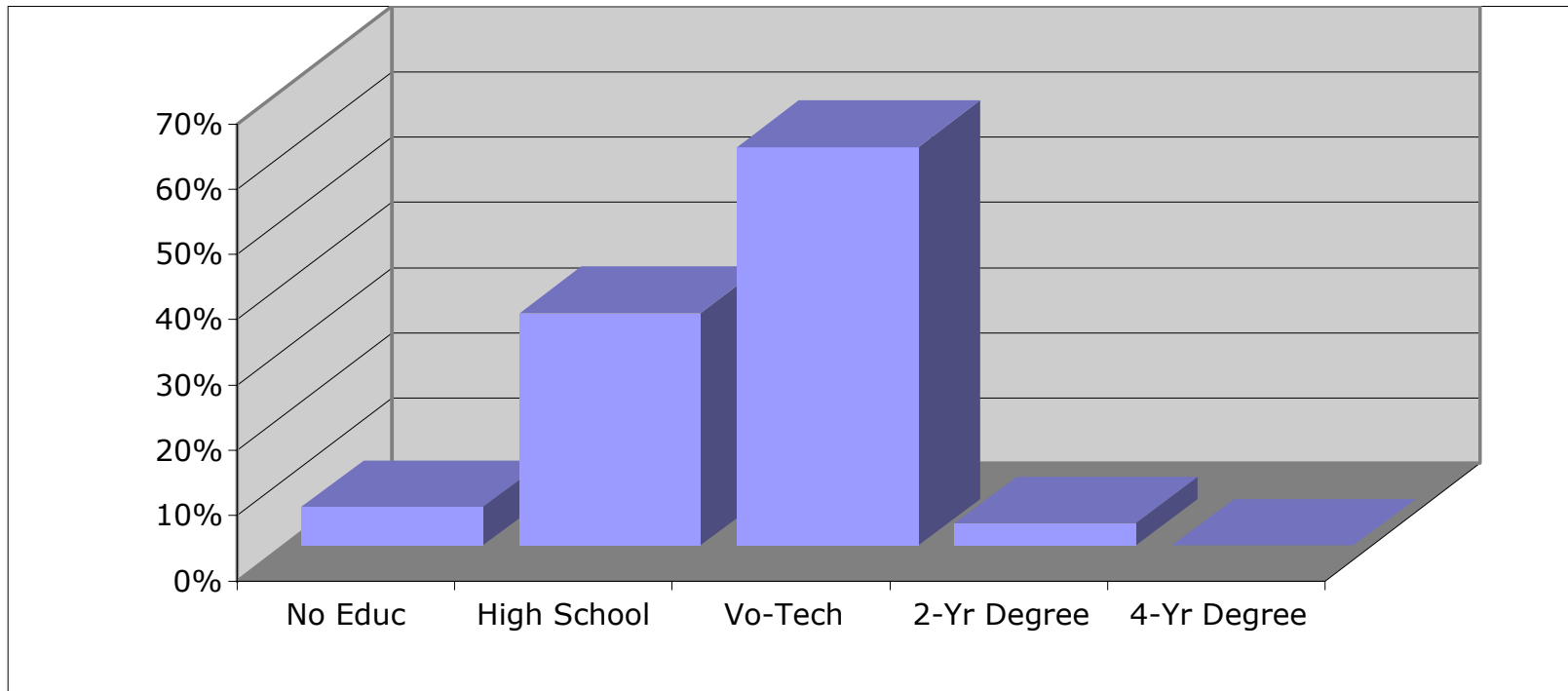
Vacancies by Type of Benefit -- Spring '06

- Note that almost all positions have paid vacations and health insurance
- The occupational category most lacking in benefits -- especially retirement benefits (only 70%) and sick leave (only 42%) -- is Unskilled Production Labor
- Sick leave is the rarest benefit -- only 72% of professional and managerial vacancies offer it, and the percentages are lower for all other categories

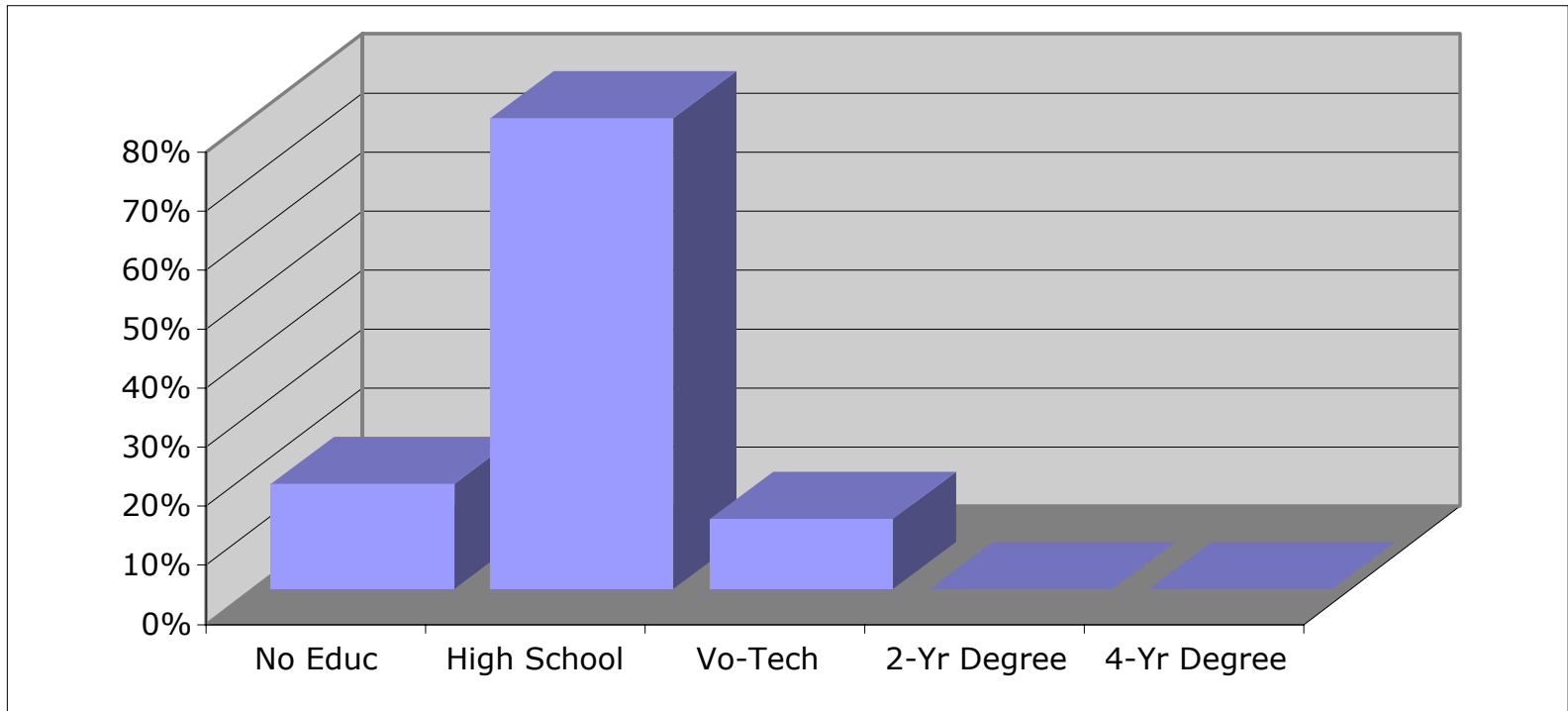
Educational Profile of Occupational Vacancies: Professional & Managerial



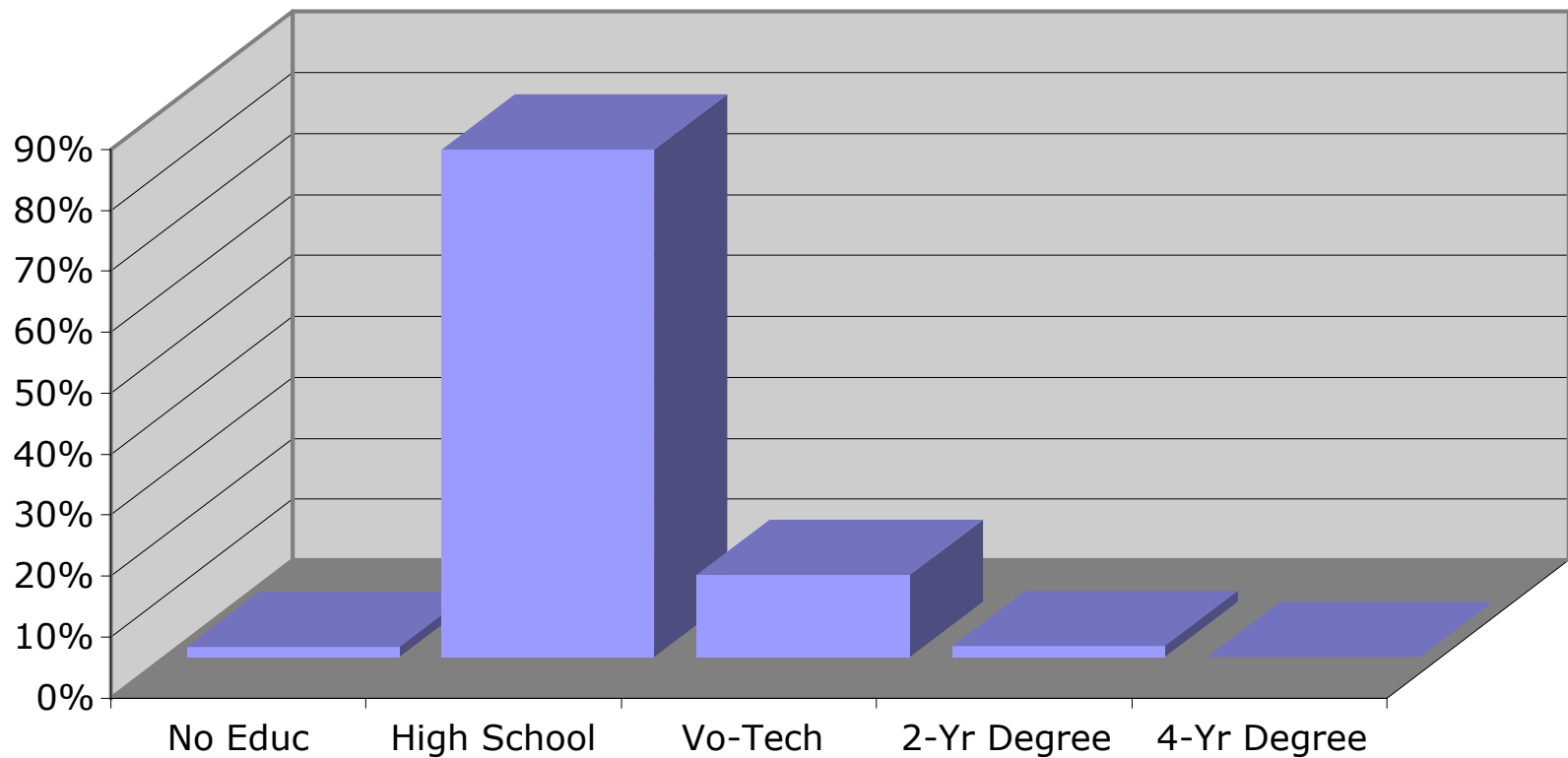
Educational Profile of Occupational Vacancies: Skilled Labor



Educational Profile of Occupational Vacancies: Unskilled Labor



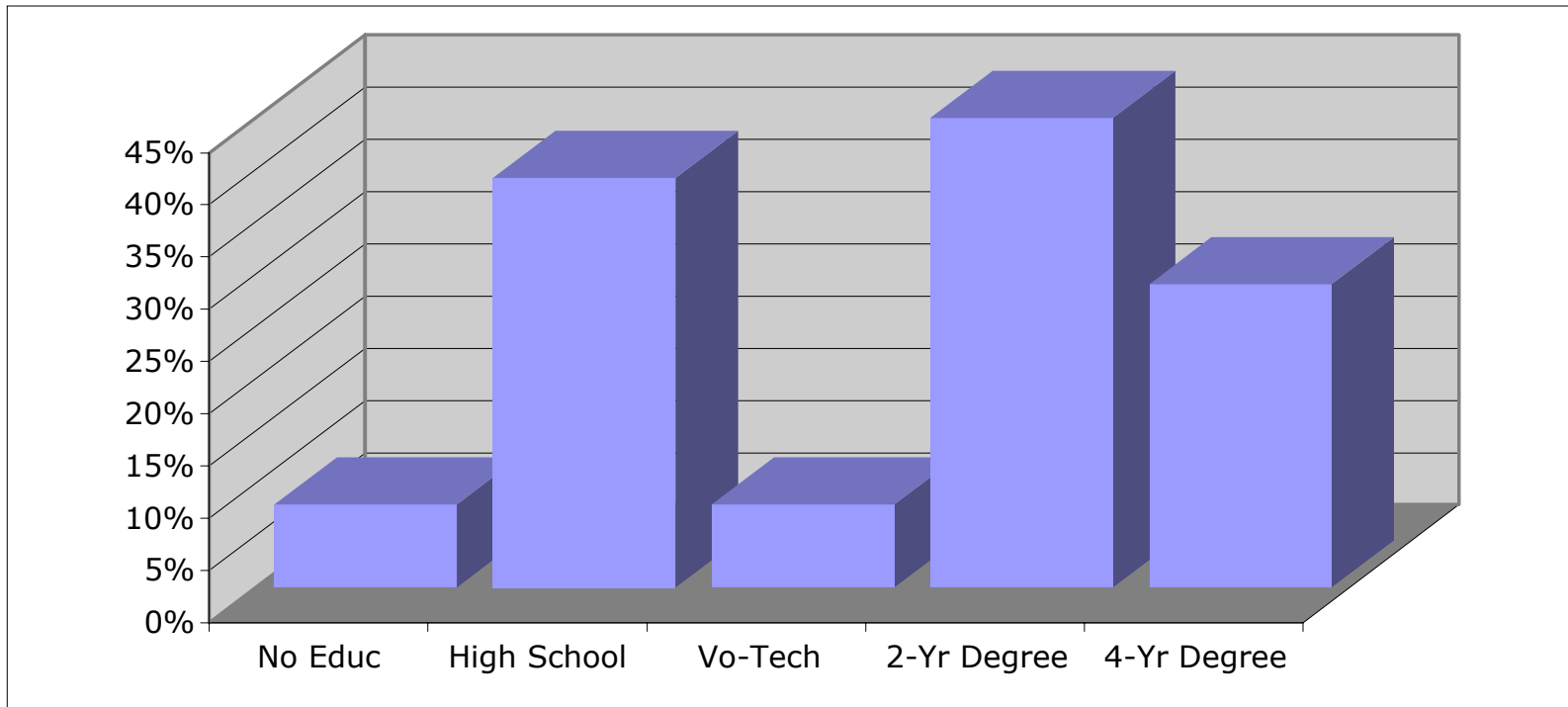
Educational Profile of Occupational Vacancies: Installation and Maintenance



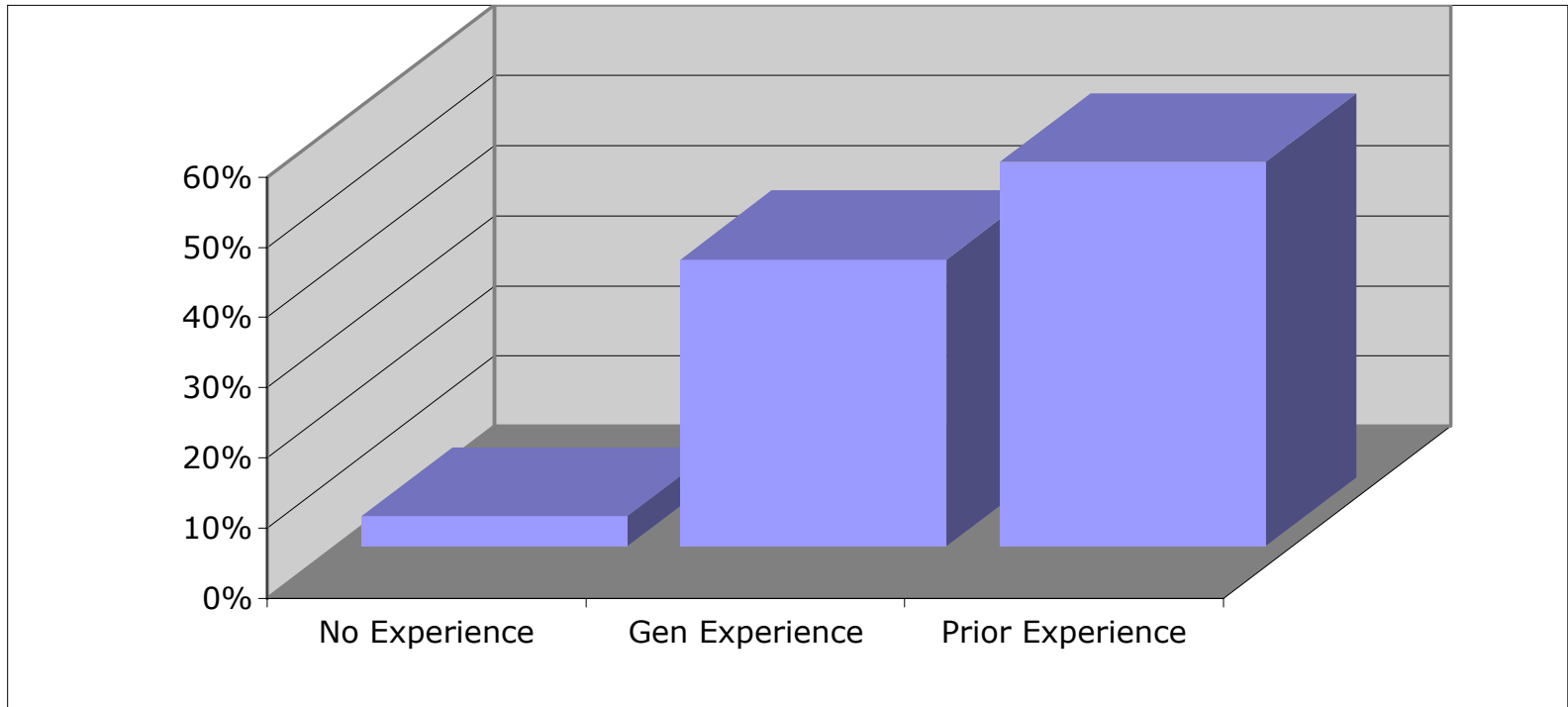
Educational Profile of Occupational Vacancies: Installation and Maintenance

- Note that Installation and Maintenance positions, despite being highly skilled and well paid, are only associated with a High School degree (unlike other skilled positions). This may be due to apprenticeships served in Unions, which are not captured in any category of the survey. Clearly, workers in installation and maintenance learn their sophisticated skills somewhere.

Educational Profile of Occupational Vacancies: Sales and Related



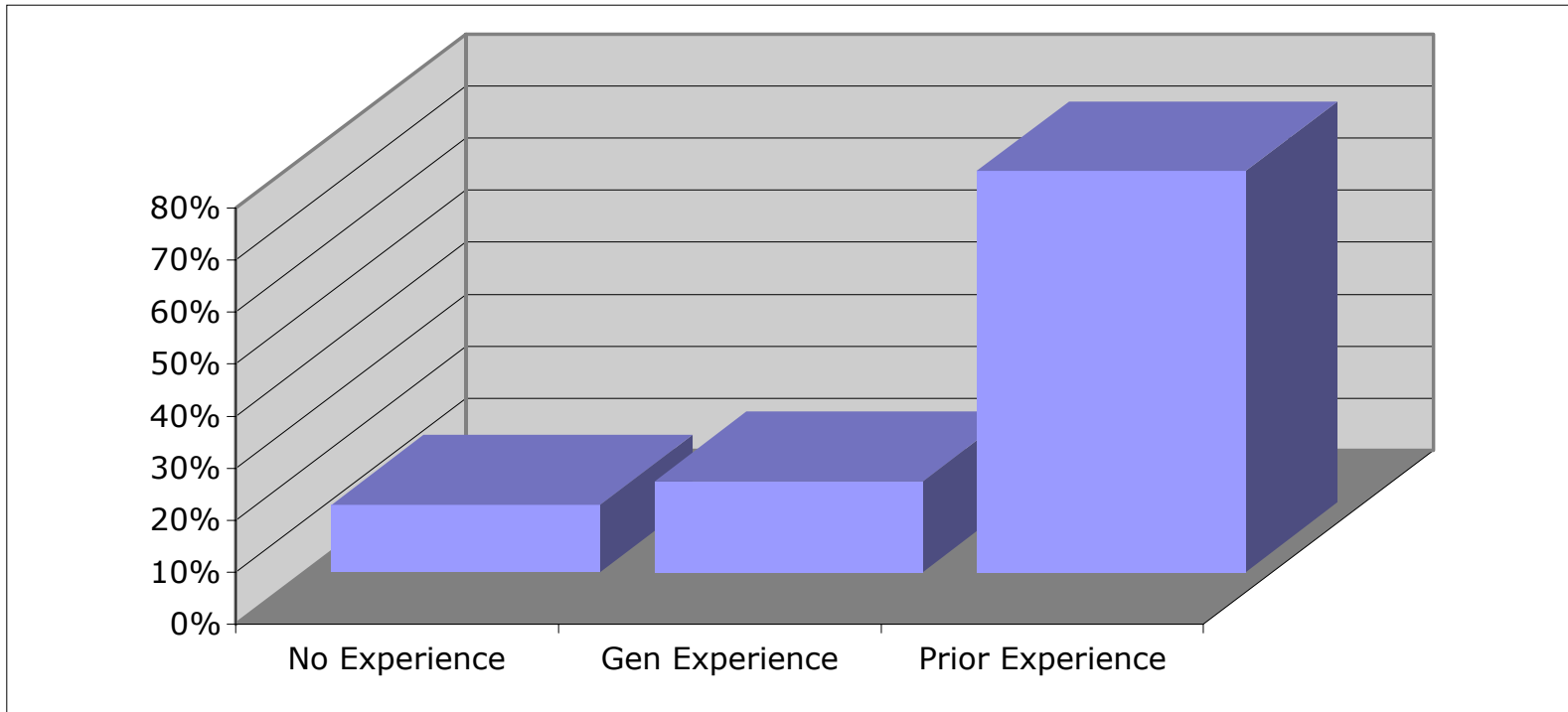
Experience Profile of Occupational Vacancies: Professional & Managerial



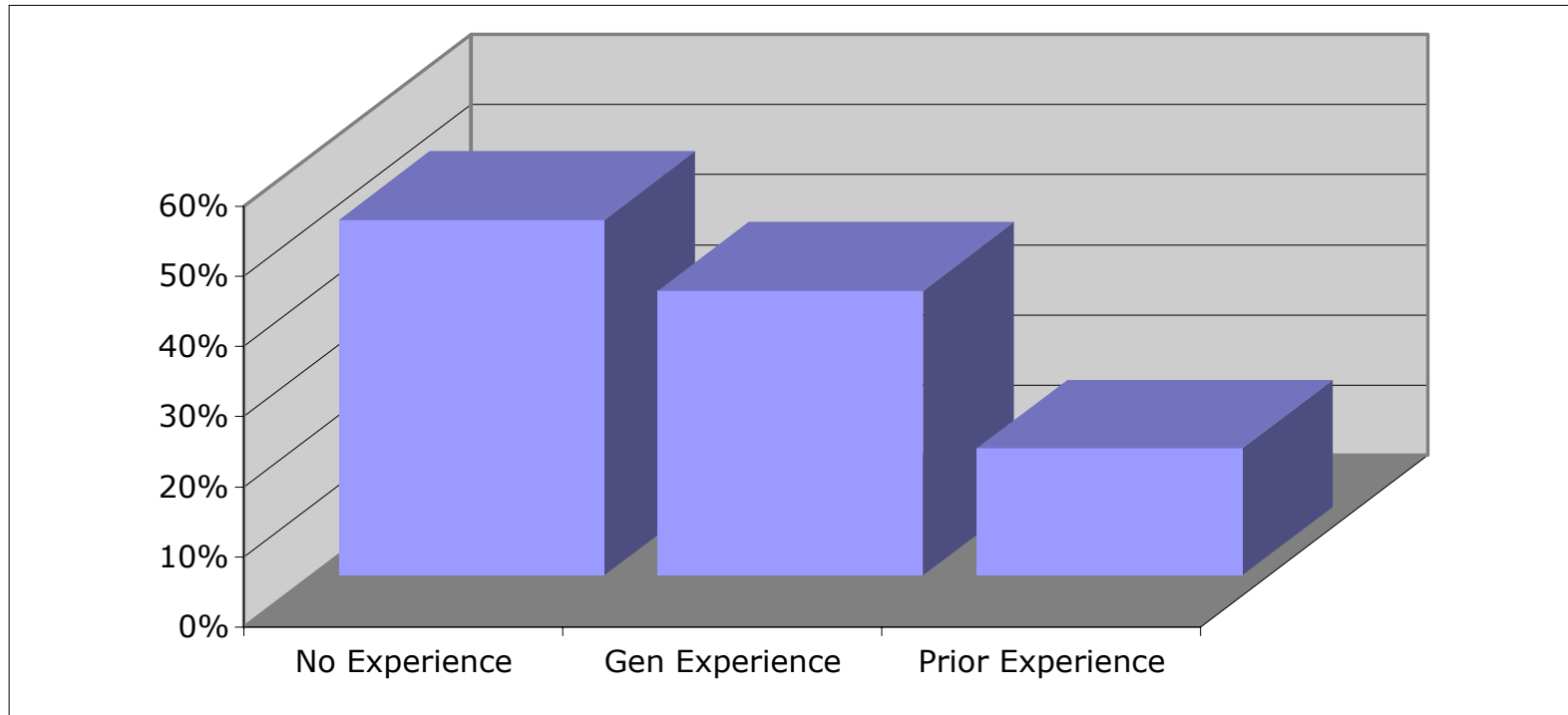
Experience Profile of Occupational Vacancies: Professional & Managerial

- Note that in all slides relating to experience profiles, “General Experience” means that someone has held a job before -- a job of any type. “Prior Experience”, in turn, means someone has held a job of the same type to the one he/she is applying for.

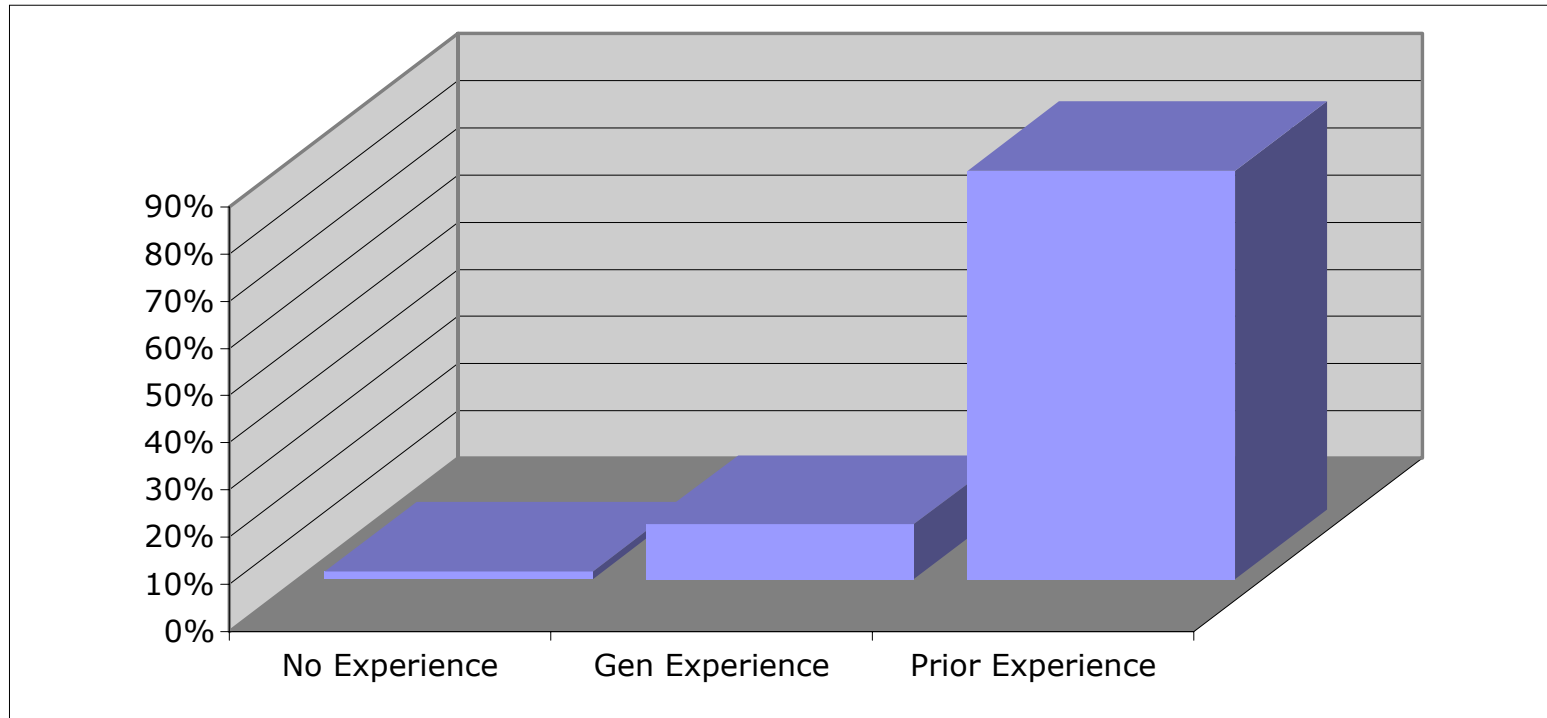
Experience Profile of Occupational Vacancies: Skilled Labor



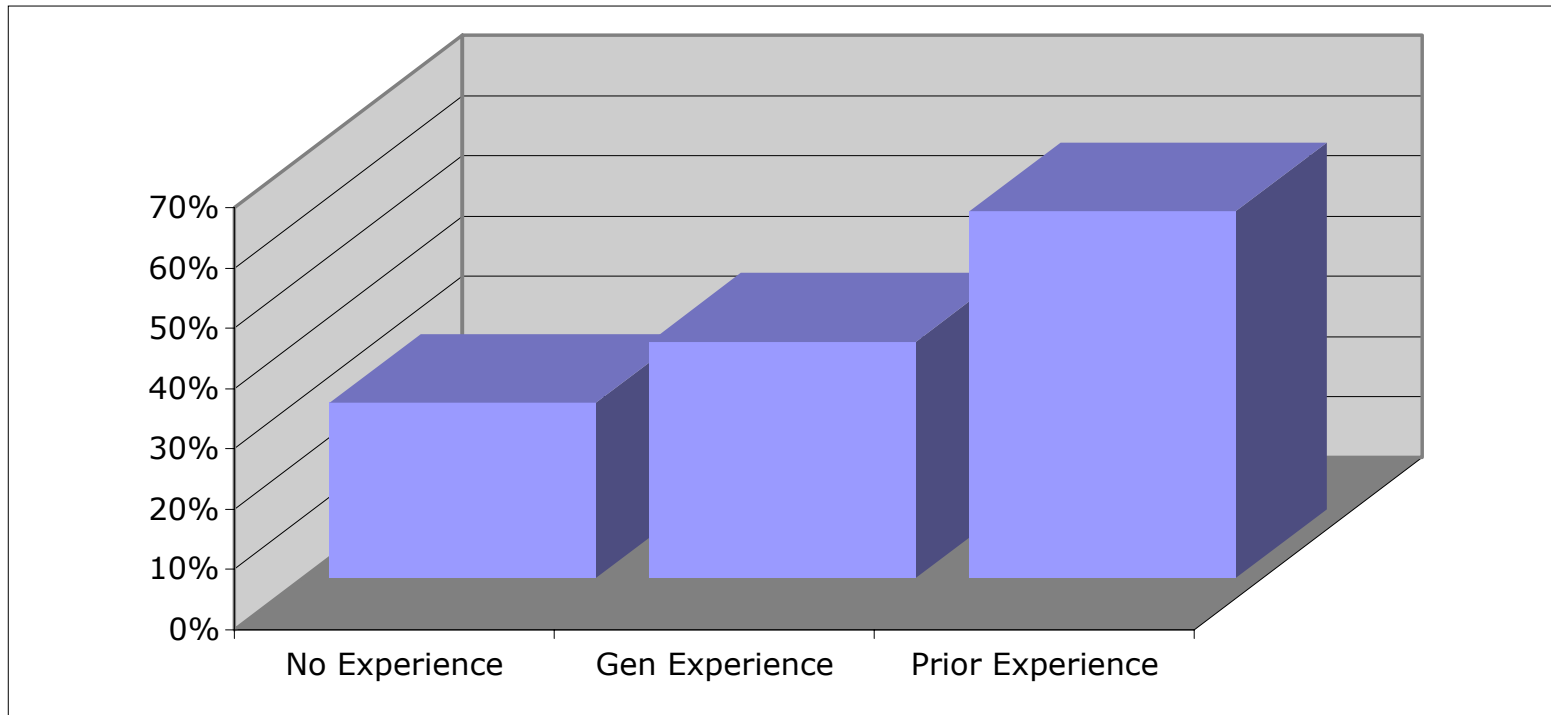
Experience Profile of Occupational Vacancies: Unskilled Labor



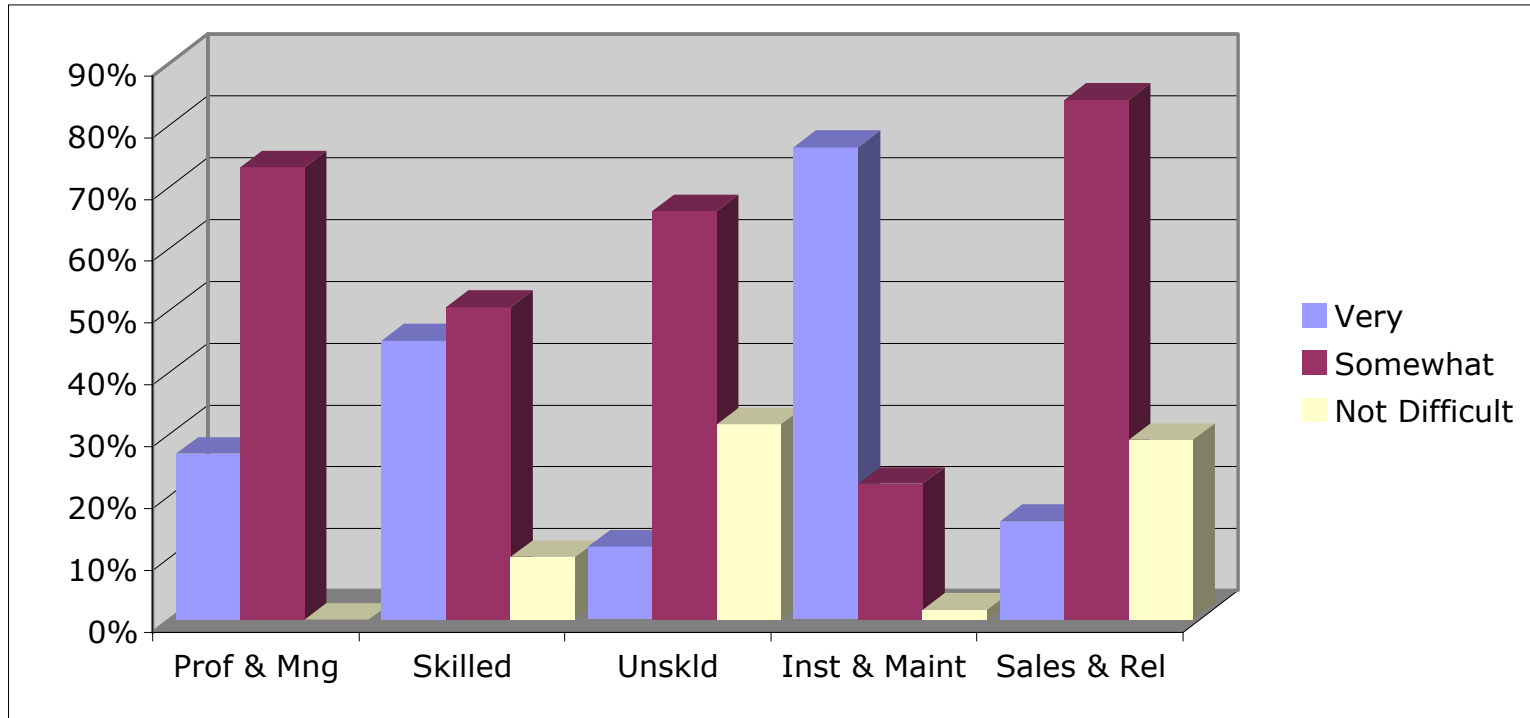
Experience Profile of Occupational Vacancies: Installation and Maintenance



Experience Profile of Occupational Vacancies: Sales and Related



Difficulty of Finding Labor By Occupational Category



How Companies Find Labor By Occupational Category

- Professional and Managerial
 - Newspaper Advertising -- 56%
 - Referrals/Word of Mouth -- 52%
- Skilled Labor
 - Newspaper Advertising -- 77%
 - Referrals/Word of Mouth -- 69%
- Unskilled Labor
 - Newspaper Advertising -- 66%
 - Referrals/Word of Mouth -- 63%

How Companies Find Labor By Occupational Category

- Installation and Maintenance
 - Newspaper Advertising -- 89%
 - Other Means -- 61%
- Sales and Related
 - Referrals/Word of Mouth -- 100%
 - Employment Agency -- 66%

Final Comments

- Note that Installation and Maintenance workers are by far the hardest to find (over 70% of the vacancies are said to be “very difficult” to fill). They are not being educated by vo-techs or community colleges (we speculated that perhaps Unions are “producing” such workers). Companies seem to be going out of their way to find them (look at the importance of “other means” as a way of locating them). Last but not least, they are required to have “prior experience” more than individuals in any other category. It is apparent that we are faced here with a true scarcity of an important category of labor. This represents an opportunity for educational and training institutions, as well as to individuals seeking to enter a promising career within manufacturing.