

Background Paper: Professional and Managers in a New World of Work

Trade unions have traditionally have been organisations for manual employees and industrial workers. However, changes in occupational and industrial structures – in particular a decline of jobs in manual occupations and manufacturing, with a corresponding rise in professional, technical and managerial (P&M), or 'white-collar', work in the service sector – have forced trade unions to challenge the orthodoxy of our traditional models of unionism.

The ferocity of attacks from forces beholden to neo-liberal economic policies, and the inability of trade unions to respond more rapidly to massive technological and demographic changes, have contributed to unions in many developed and industrial countries experiencing a period of declining membership.

As P&M grade work has increased in prevalence in many parts of the world, changing work organisation practices and content have also altered the reality for P&M workers. P&M work is increasingly marked by automation; offshoring, and a growth in temporary and contract work in the private sector. Despite higher education qualifications and greater demand for P&M workers' skills, P&Ms are progressively working under more contingent employment arrangements and in countries other than where they were born. While these changes to professional work have increased profit margins and efficiency savings for employers, many professionals have struggled to earn what they are worth nor attain a healthy work schedule.

Visionary trade unions have recognised that addressing these P&M workforce changes is essential to understanding future occupational opportunity of the group. Consequently, trade union affiliates of UNI Global Union Professionals & Managers' (UNI P&M) group have been actively analysing the question of how to rebuild their strength, and power for working people, in a post-industrial society, by effectively organising non-manual employees. Indeed, there are numerous examples of white-collar unions finding solutions to arrest the decline in trade union membership. In many more instances, P&M unions have successfully reinvented their union identity across a range of sectors and professions by institutionalising attitudes and activities with strategies to meet the needs and aspirations of P&Ms in the 21st century.

Although a number of surveys have studied employment changes for P&Ms, the mapping of these workers across countries, regions and sectors is inconsistent, therefore comparative conclusions are not easy to extrapolate. In this context, UNI Global P&M group has drawn on the work of its affiliates and the Department for Professional Employees at the AFL-CIO, which uses the US Bureau of Labor Statistics' Occupational Employment Statistics (OES) survey to map trends for P&M workers. For instance, the OES reports how, in the US, there was a 13 per cent growth in jobs for P&M workers between May 2004 and May 2013, while the same period saw a 0.6 per cent decline in jobs among non-P&M occupations.

This background paper also draws on UNI Global Union's World Congress report into the New World of Work to reflect on how P&M work has changed in the past decade, in order to make some employment projections for the next 10 years. By looking at how work content and work organisation are also changing, as well reflecting on the demographic changes that are emerging, this analysis provides some helpful ideas to UNI Global P&M group of affiliates on how to collectively negotiate for the most rights and protections, for our P&M workers over the next period.

Yours sincerely,



Ulf Bengtsson
President, UNI Global P&M



Pav Akhtar
Director, UNI Global P&M

Categorising Employment Growth in Professional, Technical and Managerial Jobs

Data from the US Bureau of Labor Statistics' Occupational Employment Statistics (OES) survey examines changes in P&M employment over 10 years from the viewpoint of jobs that are high-growth, mid-growth, and low-growth. The dynamics affecting growth and decline in the major occupation groups is also explored, as is union density within occupation groups.

High Growth Occupation Groups

The OES survey reports strong growth in *business and financial operations*, *computer and mathematical science*, and *healthcare practitioner and technical* occupations. These three groups far outpaced growth in the other seven professional and technical occupation groups.

- ***Business and Financial Operations Occupations***

Business and financial operations occupations experienced rapid growth, nearly 30 per cent between May 2004 and May 2013.[1] Occupations with at-or-above average growth include logisticians, management analysts, financial analysts, personal financial advisors, financial examiners, and tax preparers. With the exception of personal financial advisors, all the high growth occupations saw wage improvements between May 2004 and May 2013 after adjusting for inflation.[2] Occupations tied to real estate and bank lending were still struggling to recover, including appraisers and assessors of real estate, credit analysts, insurance underwriters, and credit counsellors.

Most occupations in business and financial operations had low union density in 2013. The exceptions were purchasing agents, logisticians, appraisers and assessors of real estate, budget analysts, and tax examiners, collectors and revenue agents.[3]

Employment gains in the business and financial services sector were helped by more people looking for financial advice. This included workers reaching retirement age seeking professional financial advice and others trying to find the best way to recover from the financial blow dealt by the recession.[4] Also, as pressure mounts to increase profits, the financial sector has begun to spend some of the capital it sat on during the recession.[5]

- ***Computer and Mathematical Occupations***

Computer and mathematical occupations tell a similar story to that of business and financial occupations: 27 per cent employment growth, little wage growth, and low union density. Employment of software developers specialising in applications increased 51 per cent from May 2004 to May 2013, from 426,000 to 644,000.[6] Computer programmers and information research scientists had employment declines.

Mathematical occupations did well, including operations research analysts and statisticians, which had over 30 per cent growth. Operations research analysts also had the highest union density among computer and mathematics professionals at 8.5 per cent in 2013.

Growth in computer-related jobs was driven by increased global spending on cloud computing which is predicted to reach US\$180 billion in 2015.[8] This shift will hurt computer support specialist and network and computer system administrator jobs, but boost jobs for cloud computing and cyber security specialists. Strong demand for mobile applications and cloud computing will also fuel further employment of software developers.

- ***Healthcare Practitioners and Technical Occupations***

P&Ms employed in the healthcare practitioner and technical occupations grew by 22 per cent from May 2004 to May 2013. In May 2013, there were 40 occupations in healthcare practitioner and technical occupation groups who could be compared to historic employment data. Employment gains were across all occupation types and not concentrated among one specialty. Optometrists, physician assistants, speech-language pathologists, diagnostic medical sonographers, pharmacy technicians, respiratory therapy technicians, veterinary technicians, occupational health and safety specialists, and athletic trainers all had employment gains above 40 per cent.[9]

Unions had strong membership density among dietitians and nutritionists, registered nurses, occupational therapists, speech-language pathologists, emergency medical technicians and paramedics, as well as medical records and health information technicians in 2013.[10] All of these occupations experienced strong growth from May 2004 to May 2013.[11]

Growth in health professions was affected by several factors, including demand to treat an ageing and increasingly sick US population as well as advances in medical technology.[12]

Mid-Growth Occupation Groups

Three occupation groups: *legal; community and social services; and life, physical, and social science* had growth that was above average for the OES survey.

- ***Community and Social Service Occupations***

Growth in community and social service occupations was largely driven by counsellors and healthcare-related workers. According to the OES survey, there was a 13.6 per cent increase in employment between May 2004 and May 2013. Counsellors specialising in substance abuse and behavioural disorders, marriage and family, and mental health had above average growth. Healthcare social workers, health educators, and community health workers combined also had above average growth.[13]

Professionals in community and social service occupations were heavily unionised, about 20 per cent membership in 2013 among counsellors, social workers, and other community and social service specialists.[15] Services provided by counsellors and therapists were increasingly covered by health insurance, leading to greater demand.[16] Employment of health educators and community health workers is expected to grow due to increased funding for efforts to contain healthcare costs.[17]

- ***Legal Occupations***

The OES survey showed that legal occupations experienced moderate growth of 8.7 per cent from May 2004 to May 2013.[19] Union density is generally low among legal

professionals, with occupations averaging between three to six per cent in 2013.[20] Employment of para-legals and other legal assistant jobs is expected to rise as law firms shift duties away from qualified lawyers to lower-paid legal professionals in an effort to cut costs.[21]

- ***Life, Physical, and Social Science Occupations***

Life, physical, and social science professionals had strong employment growth of 18 per cent between May 2004 and May 2013 [22] according to the OES survey. Most life scientists had very strong employment growth, including animal, food, soil and plant scientists; bio-chemists and bio-physicists; microbiologists, zoologists and wildlife biologists; conservation scientists; and medical scientists. The physical sciences had strong growth among astronomers, physicists, atmospheric and space scientists; environmental scientists, and geo-scientists. In the social sciences, economists; anthropologists and archaeologists; geographers; historians; and political scientists all had above average employment gains. Among technicians, biological, geological, petroleum, and forensic science technicians had better than average growth as well as social science research assistants.

In 2013, strong union membership was seen among agricultural food scientists, conservation scientists and foresters, psychologists, urban and regional planners, and agricultural and food science technicians. Union membership among biological scientists and environmental scientists and geo-scientists was strong, but just below 10 per cent density in 2013.[23] An evaluation of 2014 monthly union membership showed 73 per cent of life, physical, and social scientist union members were employed in government; 23 per cent in private for profit; and four per cent were employed with non-profits.[24]

Employment opportunities in life and physical sciences specialties, including medical scientists, bio-chemists, bio-physicists, and microbiologists, are affected by federal funding for the sciences generally. Employment of life, physical, and social science professionals in pharmaceutical manufacturing was down over the last 10 years due to offshoring of research and development.[25] However, there was strong employment growth among companies in the scientific research and development services industry, which includes firms that perform original research.[26]

Low-Growth Occupations

Among the three occupation groups that struggled to increase employment, one occupation group stands out: architecture and engineering which fared worst. Arts and media and education, training, and library occupations also struggled.

- ***Architecture and Engineering Occupations***

The OES survey pegged the growth of architecture and engineering occupations at just 0.3 per cent from May 2004 to May 2013.[27] The picture is not clear cut though. Many engineer occupations grew but there were big declines in drafter and engineer technician jobs.

Nine out of 17 engineering occupations had growth above 11 per cent. The biggest increases were among biomedical engineers with a 130 per cent increase, industrial engineers with 32 per cent increase, mining and geological engineers with 58 per cent increase, and petroleum engineers with 138 per cent increase in employment between May 2004 and May 2013. Aerospace, agriculture, health and safety, and

nuclear engineers had employment declines. Electronics engineers and marine engineers and naval architects were unchanged.

Unions have strong membership among engineers in aerospace (12.1 per cent), environment (23.8 per cent) and technicians (16.1 per cent). Unions also counted 8.6 per cent of civil engineers as members in 2013.[30] Engineering technicians have increased union density while density among drafters dropped in the last 10 years.[31]

Among engineering technicians, offshoring and increased automation of manufacturing led to steep job cuts.[32] Technological changes affected employment of drafters as specialised design software was incorporated into work done by engineers and technicians.[33]

- ***Arts, Design, Entertainment, Sports, and Media Occupations***

Arts and media professionals increased by 10.2 per cent from May 2004 to May 2013 according to the OES survey. While employment in a third of arts and media occupations surged by more than 20 per cent, many saw small gains or losses. Sports-related jobs were up, including coaches (68 per cent) and umpires, referees, or other officials (41 per cent).

Among producers and directors, music directors and composers, interpreters and translators, film and video editors, and audio and video equipment technicians employment growth was very strong, including a 161 per cent increase among music directors and composers, a 93 per cent increase among interpreters and translators, a 67 per cent increase among producers and directors, a 39 per cent increase in film and video editors, and a 41 per cent increase among audio and video equipment technicians.

Professionals working as announcers, broadcast news analysts, editors, and writers and authors had flat or declining employment from May 2004 to May 2013. Many designer occupations also declined, including commercial and industrial designers, floral designers, and interior designers. Employment for several artist occupations also declined, including dancers, choreographers, and musicians and singers.

Unions have strong membership density among musicians, singers, and related workers (17.1 per cent); actors, entertainers and performers, sports and related (25.3 per cent), and broadcast and sound engineering technicians and radio operators (12 per cent).

The decline of the newspaper and publishing industry has led to job cuts among reporters and correspondents, editors, technical writers, photographers, writers and authors.[35]

- ***Education, Training, and Library Occupations***

Education occupations had 6.4 per cent growth according to the OES survey from May 2004 to May 2013. Professionals in museum, library, and support occupations struggled to increase employment with 15,000 jobs lost between May 2004 and May 2013.[36] Analysis shows that State and local governments cut school funding when the recession hit but federal spending filled the gap. Federal spending is once again on the decline resulting in steep job losses.[39] Employment opportunities in most

post-secondary specialties in the next 10 years are expected to go to part-time and adjunct faculty.[40]

Unions have strong membership among all education occupations, including 25.3 per cent of librarians; 17.3 per cent of library technicians; and 31.9 per cent of teacher assistants.

Occupational Employment Projections to 2025

Employment projections are generally strong for P&Ms from 2015 to 2025, with expected growth at 12.8 per cent. Healthcare and education, training, and library occupations are expected to add more than six million jobs of which 2.75 million will be new jobs and 3.5 million jobs will be jobs that replace workers who leave their profession or retire.[41]

In terms of percentage increase in the occupation groups, healthcare practitioners and technical occupations are projected to grow faster than the average for all occupations from 2015 to 2025 (by 21.5 per cent). Computer and mathematical, as well as community and social service occupations are also projected to increase faster than average, 18 per cent and 17 per cent respectively. Business and financial operations (13 per cent); education, training, and library (11 per cent); legal (11 per cent); and life, physical, and social science (10 per cent) occupations are also projected to grow faster than average. Management, arts and media, as well as architecture and engineering occupations are all projected to have below average growth, at around seven per cent each.[42]

- ***Technology Changes P&M Work***

A number of forces, driven by profit-seeking employers and cash-strapped governments, are affecting how and where professional work is performed. Technological advances have led to the automation of some jobs and offshoring of others, but technology can also create jobs for high-skilled workers who engineer, build, and train workers to use new technologies. The privatisation of public services has seen a change in work for public service professionals.

- ***The End of Routine Work?***

Many of the jobs at jeopardy of being replaced by technological advancement involve routine tasks, as opposed to tasks requiring manual labour or 'abstract thought'. Researchers have found a "hollowing out of the middle" and traced the disappearance to "occupations focused on 'routine' tasks – those activities that can be performed by following a well-defined set of procedures." [43] Shedding of middle-skill jobs that involve performance of routine tasks typically occurs during economic downturns.[44]

Loss of middle-skill jobs has led to increased polarisation with more jobs concentrated in low- and high-skilled occupations. Many P&M jobs, including technical, finance, and public safety roles, have been found to require abstract thought and tasks, and service occupations are found to require manual tasks. However, production, transportation, mechanical, mining, machine operators, assemblers, clerical, and retail sales have been found to require routine tasks.[45] For the time being, technology has not been developed that is capable of replacing large numbers of workers who perform abstract and manual tasks, jobs that employ large numbers of high-skilled and low-skilled workers.

Technological changes and automation have affected work performed by P&Ms. For example, drafters and engineer technicians have seen employment decline due to specialised software now being used in the drafting and designing of engineering projects. Employment of camera operators is on the decline due to automatic camera systems. Technicians in media and arts have been affected by technological changes that have reduced the need for skilled professionals.

- ***Offshoring has the Potential to Deplete High-Skill Employment***

While most professional work requires abstract tasks, technology can still lead to P&M work being offshored. Offshoring – the relocation of work to a different country – is not new, and both manufacturing jobs have been offshored for decades. Offshoring of services is a relatively new phenomenon and has been enabled by the low cost of communication and cheap educated labour abroad, as in the case of contact (call) centres.

In 2007, the US Bureau of Labour Statistics (BLS) found that offshoring of high-skilled service-sector jobs was possible in 160 occupations that employed 30 million US workers. Unfortunately, data currently available to UNI Global P&M group is unable to trace how many jobs have already been offshored nor how many high-skilled service jobs that can be offshored are likely to go abroad. P&M jobs susceptible to offshoring include those in computer and mathematics, architecture and engineering; business and financial operations; life, physical, social science, and legal jobs.

The financial feasibility of offshoring is largely dependent on the quality and cost of foreign labour. If wages for foreign engineers and computer professionals increase (by a certain per cent), then companies are likely to lose the financial incentive to offshore work to developing countries. Reports indicate that wages for high-skilled English speakers in developing countries, like India and China are on the rise.[46]

Employment declines in architecture and engineering occupations, especially among drafters and technicians are in part due to offshoring of manufacturing. However, evidence shows that fewer jobs are being sent abroad and some jobs are even being brought back to the US by companies, including General Electric and General Motors – influenced by government subsidies, as well as the need for intellectual property protection, shipping costs, and the need for innovation.[47]

A Changing Professional Workforce

P&Ms are increasingly working on a self-employed, freelance, contract, or temporary basis. The shift in the way professionals work is typically dictated by employers who enjoy the flexibility of a contingent workforce, although some P&M workers do choose to avoid a 'traditional' full-time job in favour of negotiated terms of contingent work. The demographics of the P&M workforce are also changing, with large increases in numbers of women and young professionals.

- ***Contingent Workers***

A standard work arrangement is one in which a person works full-time or part-time for one employer for an indefinite period of time. Contingent workers are employed in non-permanent positions as independent contractors, temporary workers, contract workers, on-call workers, consultants, freelancers, or are self-employed. The absence of specific data on contingent workers is a significant limitation to accurately mapping or analysing the contingent workforce among professionals and managers.

- ***Self-Employment***

In June 2014, there were seven million P&M workers in the US who were self-employed in their main job. Overall, 12.2 per cent of the P&M workforce in the US was self-employed. Another nearly 300,000 professionals reported being self-employed in a second job.[51] Among the P&M groupings, three had a concentration of self-employed workers that was well above the national average: management occupations (22 per cent); legal occupations (18 per cent); and arts and media occupations (27 per cent). All other P&M groups had a concentration of self-employed workers between two and 11 per cent.[52]

The self-employed P&M workforce declined by 2.2 per cent between June 2003 and June 2014. At the same time, the P&M workforce grew by 16.4 per cent. All P&M job groups had a decrease in the concentration of self-employed workers between June 2003 and June 2014 except for the arts and media group – which includes 18 occupations such as designers, athletes, musicians, announcers, news analysts, and photographers – who also had the highest concentration of self-employed workers among P&M occupations in June 2014.[53]

While self-employment did not see big increases across occupation groups, workforce data does not easily capture contingent work. In addition to self-employed workers, temporary and contract workers are also present in the professional workforce, but it is difficult to track as many are paid directly by an employer, but are not necessarily in full-time permanent posts.[56]

- ***Temporary Workers***

Temporary help workers are paid by a temp agency but perform work at an employer's work site. The flexible nature of these working arrangements has meant that many are hired when the economy is expanding, but steep job losses result during economic contraction.[64]

In July 2014, BLS projected that three million workers were employed in the temporary help services industry.[65] The temporary industry grew by 46 per cent between 2009 and 2013, adding 830,000 jobs. This growth accounted for 43 per cent of all job growth in the US from 2009 to 2013.[66] However, the industry is susceptible to sharp downturns, and from 2007 to 2009, employment in temporary help services declined by 780,000 jobs or 30 per cent.[67]

Analysis of employment growth or decline among temporary agencies needs analysis of the whole employment services industry. P&M workers made up 17 per cent (about 561,000 workers) of the employment services industry workforce, while jobs among professionals in the employment services industry rose 26 per cent between 2003 and 2013. The P&M group with the greatest number of workers was healthcare practitioners and technical occupations with 126,620 employed in employment services in 2013.[68] The occupation groups with the largest increases in the employment services industry were business and financial services and computer and mathematical occupations.[69]

- ***Demographic Changes and the Impact of Immigration***

The P&M workforce is increasingly diverse and will become even more so. In June 1994, around 84 per cent of the P&M workforce in the US was made up of non-Hispanic Whites. In June 2014 that was down to 73.3 per cent. Hispanic, African-

Caribbean, and Asian-heritage workers have made big gains in the P&M workforce. Asian-heritage workers increased their density from 3.1 per cent in June 1994 to 7.3 per cent in June 2014. African-Caribbean heritage workers increased from 7.6 per cent to nine per cent and Hispanic workers grew from 4.7 per cent to 8.9 per cent in the same period. Unlike other races and ethnicities, the majority of the Asian professional workforce was not born in the US.[70]

Increases in the Hispanic population arise from births, as opposed to immigration. Among Hispanics in the P&M workforce in June 2014, around 69 per cent were native born. However, rapid increases in the Asian population are the result of immigration. Only 29 per cent of Asians in the professional workforce in June 2014 were born in the US.[73]

In June 1994, naturalised citizens and guest workers were eight per cent of US P&Ms. By June 2014 that had risen to 12.8 per cent. However, naturalised citizens and guest workers in P&M jobs are disproportionately concentrated in computer and mathematics (21 per cent of the workforce); life, physical, and social sciences (19.7 per cent); architecture and engineering (17.8 per cent); as well as healthcare practitioner and technical occupations (13.9 per cent). With the exception of computer and mathematical occupations, the majority of immigrant workers in these occupations were naturalised citizens who have greater bargaining power in the workplace due to their permanent status.[74]

While job opportunities for young people may be limited, millions of new and well-educated young professionals, aged 20-35, are entering the job market every year seeking work in professional or technical occupations. These young workers are vital to the sustainability of the P&M workforce, as well as social and economic productivity.

In recent years, the workforce of young professionals has grown faster than the workforce as a whole. It is easily distinguished from other professionals as more young professionals graduate from university, work in fast-growing occupations, and are more diverse than previous generations. The young professional workforce is majority female due to women securing higher educational attainment than male counterparts. However, this is not reflected in choice of career where job profiles of women professionals remain disproportionately in education and healthcare, while men dominate better paid engineering and computing.

- ***Education Attainment***

The P&M workforce is an increasingly educated workforce. Advanced education is a way for professionals to remain competitive in the job market, but the advanced education comes at a high cost for most.

Between June 1994 and June 2014, the P&M workforce shifted towards higher education attainment. Workers reporting their highest degree earned was a bachelor's degree increased from 34.1 per cent to 36.8 per cent and master's degree holders increased from 14.7 per cent to 19.6 per cent. These jobs in the professional workforce tend to afford more opportunity and stability. The concentration of workers with only a high school diploma or equivalent dropped from 14.2 per cent in June 1994 to 10.8 per cent in June 2014, while those with some college but no degree declined from 16.6 to 12.9 per cent.[75]

Advanced education and training is critical for new entrants to the P&M workforce as well as for those who want to remain competitive in the job market. While the need for advanced education and training rises, so does the cost of that education and training. Some professionals, already in the workforce, obtain full or partial reimbursement from employers for advanced schooling. However, many professionals enter the workforce after taking on a large amount of debt [76] which makes it less likely for an indebted graduate to work in a public interest occupation, such as teaching.[77] Thus, a critical issue for young people is to decide if the money invested in their higher education will reap rewards with a job that will enable them to pay off student loans.

Investment in research, education, infrastructure, and similar sectors is needed to grow the professional workforce. Without this investment, young people who complete their higher education will continue to struggle to enter the professional workforce.

Confronting the Changing Workplace and Workforce

P&M workers must actively work to shape the workplaces of the future, whether it be the traditional workplace, a home office, or temporary employment. The most effective way to improve wages, hours, and working conditions for professionals in a traditional office environment is to join with their colleagues to form a union.

The power of collective action was realised by 5.7 million professionals in the US in 2013. In occupation groups with above average union density, median weekly wages for union members were between 15 and 28 per cent higher than non-union members.[78]

Unions also advocate for legislation important to their members, including offshoring, privatisation, trade, and immigration. In the collective bargaining process, many unions negotiate for employer-provided professional development, but many unions also offer their own professional development programs, and collaborations with leading researchers to synthesise reliable findings on best practice and translate them into a user-friendly format that connects the research to its applications in the real world of work.[79]

Outside of the traditional workplace, a number of unions use a hiring hall model, which connects qualified workers to employers. While hiring halls are typical among construction trades, several unions representing P&M workers also use hiring halls. For example, the UNI Global Union affiliate, International Alliance of Theatrical Stage Employees (IATSE) utilised a hiring hall model for some of its skilled members in live theatre, motion pictures, at trade shows, and concerts among other locations.[80] The International Federation of Professional and Technical Engineers in California operated a hiring hall for P&M workers seeking temporary employment with Pacific Gas & Electric.[81] Without hiring halls, these skilled professionals working on a short-term basis would not have the advantage of a union negotiated contract to ensure good wages, health insurance, and retirement.

In UNI MEI sector, actors have gained significant workplace protections and benefits through collective power and action. The Screen Actors Guild was founded in 1933 in response to the exploitative Hollywood studio system. At the time, some actors were under exclusive contract to studios and others were freelancers, former contract players, and supporting actors; none had many rights or power on the film set.

Forming a union and bargaining with producers won actors better hours and working conditions and later retirement and health benefits.[82]

While some professional unions long ago adopted organising models aimed at contract or temporary labour, there are growing efforts to organise workers in the contingent workforce. For example, the UNI Global Union affiliate, Service Employees International Union (SEIU) is working on innovative ways to organise adjunct professors with a regional organising approach.[83]

Another way many professionals network and keep abreast of changes in their profession is through membership of a professional association. While professional associations may recommend minimum salaries and training, they often do not negotiate wages or benefits for professionals. However, many professional associations hold annual conferences where professionals can network, learn about new research in their field, and further develop their professional skills. Many professional associations have also developed accreditation programs where members receive continuing education credits that establish a record of training.

In the last 10 years, employers have increasingly used short-term contract workers to perform work like website design, research, writing, editing, and software development. Freelancers, self-employed, and temporary professionals working in a non-traditional work setting are finding this work through networking, self-marketing, and websites like freelancer.com, elance.com, and oDesk.com. Wages, in some cases, are driven down by the global nature of the labour supply, which is a point of frustration for some using websites to bid on jobs. In Europe, freelancers are using the power of collective action to legitimise the freelancer marketplace, gain access to government services, and have a voice at the table when policy decisions are made that affect freelancers.[84]

While websites connect professional workers to work, many workers have to find alternative avenues to obtain medical insurance, retirement benefits, professional development, and networking. Some of the sites provide training to workers and are exploring whether to provide insurance, retirement, and other benefits.[85] The Freelancers Union is one way some freelancers and the self-employed can obtain those benefits.[86] The Freelancers Union was created in 1995, to provide needed benefits to its members. The Freelancers Union had grown to 243,000 members by 2014.[87]

Conclusion

Most P&M occupation groups have realised solid employment gains in the last 10 years despite the recession. However, employment gains did not mean wage gains for most professionals in the last 10 years. A number of factors have aided employers in keeping wages flat, including automation, offshoring, and privatisation. But many employers are increasingly altering their relationship with labour by hiring contingent and freelance workers and relying on guest workers, mostly in computer-related occupations.

Many P&M workers are turning to unions and allied organisations to win better wages and working conditions. Unions are actively using traditional and non-traditional organising models to bring professionals in both traditional and non-traditional employment arrangements into the labour movement. Unions will likely continue to adapt their policy and organising agendas to fit the changing professional, technical and managerial workforce.

References

- 1-2, 9, 11, 13, 22, 25-26, 35-36** – Bureau of Labor Statistics, US Dept of Labor, Occupational Employment Statistics (May 2013), <http://www.bls.gov/oes/current/oes130000.htm>
- 3, 10, 15, 20, 23, 30-31** – Hirsch, Barry T. and David A. Macpherson (2014), "Union Membership and Earnings Data Book." The Bureau of National Affairs Inc (2014)
- 4** Henderson, Richard, "Industry employment and output projections to 2025," Monthly Labor Review (December 2013)
- 5** Alvarez & Marsal, "Financial Services Deal Activity Poised for Growth in 2014" (25 February 2014)
- 6, 24, 27, 51-53, 68-70, 73-75** – US Census Bureau, DataFerrett, Current Population Survey, Basic Monthly Microdata, May 2004 and May 2014; Wage data: Bureau of Labor Statistics, US Dept of Labor, Occupational Employment Statistics, May 2003 and 2013; US Bureau of Labor Statistics
- 8** Flood, Gary, "Gartner Tells Outsourcers: Embrace Cloud or Die," Information Week (31 July 2013)
- 12** Bipartisan Policy Center, "What's Driving U.S. Health Care Spending: America's Unsustainable Health Care Cost Growth," September 2012; Henderson, Richard, "Industry employment and output projections to 2022," Monthly Labor Review (December 2013)
- 16** Richards, Emily and Dave Terkanian, "Occupational employment projections to 2022," Monthly Labor Review (December 2013)
- 17, 32-33, 40** – Bureau of Labor Statistics, US Department of Labor, Occupational Outlook Handbook, 2014-15 Edition, Health Educators and Community Health Workers
- 39** Casselman, Ben, "Public Schools Are Hurting More in the Recovery Than in the Recession," FiveThirtyEight, (10 June 2014)
- 41** Bureau of Labor Statistics, US Department of Labor, Occupational Outlook Quarterly, Charting the projections: 2012-25: A special issue. Winter 2013-14
- 43** Jaimovich, Nir and Henry E. Siu, The Trend is the Cycle: Job Polarization and Jobless Recoveries, National Bureau of Economic Research (August 2012)
- 45** Autor, D. H. and D. Dorn (2013). The growth of low skill service jobs and the polarization of the US labor market. American Economic Review, Vol. 103 No. 5.
- 46** "Shape Up," The Economist, Special Report: Outsourcing & offshoring (19 January 2013)
- 47** "The Next Big Thing," The Economist, Special Report: Outsourcing and offshoring. January 19, 2013; Chandra, Shobhana and Victoria Stilwell, "Middle-Wage Employment Moves U.S. Past Fast-Food Jobs: Economy," Bloomberg (31 July 2014)
- 56** Department for Professional Employees, "Professionals in Contingent Workforces" (January 2014)
- 64** Tian Luo, Amar Mann, and Richard Holden, "The expanding role of temporary help services from 1990 to 2008." Monthly Labor Review (August 2010)
- 65** US Bureau of Labor Statistics, Current Employment Statistics, CES Databases, All employees, not seasonally adjusted, Temporary Help Services (November 2013)
- 76** Woo, Jennie J., "Degrees of Debt: Student Loan Repayment of Bachelor's Degree Recipients 1 Year After Graduating: 1994, 2001, 2009," National Center for Education Statistics (1 October 2013)
- 77** Korkki, Phyllis, "The Ripple Effects of Rising Student Debt," New York Times, (24 May 2014)
- 78** Bureau of Labor Statistics, U.S. Department of Labor, Household Data Annual Averages, Tables 42 and 43 (2013)
- 79** Website, "The AFT Professional Development Program for Educators" (11 August 2014)
- 80** See <http://iatse.net/about-iatse>
- 81** Engineers and Scientists of California, IFPTE Website (August 2014), <http://ifpte20.org/pge/esc-at-pge-hiring-hall-opportunitiesapplication/>
- 82** Website, SAG-AFTRA: <http://www.sagaftra.org/history/sag> (22 August 2014)
- 83** Snyder, Susan, "A union push to organise college adjuncts," Inquirer (17 December 2013)
- 84** European Freelancers Movement, <http://freelancers-europe.org/#manifesto>
- 85** Weber, Lauren, "For Digital Temps, A Safety Net Emerges," Wall Street Journal (29 July 2014)
- 86** See www.freelancersunion.org