



taylor'd ERGO TIMES

2017 Ergo conference in Banff

Our team recently travelled to Alberta for our annual ergo conference. We each extended the trip to enjoy the mountain environment, so, in addition to an amazing conference, we were able to hike, climb, shop, and enjoy some festivals and tours. We've included a few photos from our albums, but the conference was so much more than fun! The feedback on our sessions was great! Josie presented on why validation is important in the PDA process. Karen talked about selecting safety footwear with ergonomics in mind. Carrie presented on a panel regarding the new "RCRA" (recommended cumulative rest allowance) method that we've been using for the past year. Below, Karen summarised one of the keynotes that caught her attention, below. Stay tuned to our blog for additional conference highlights!



Improving work design to exceed your goals for productivity, quality, and employee health.

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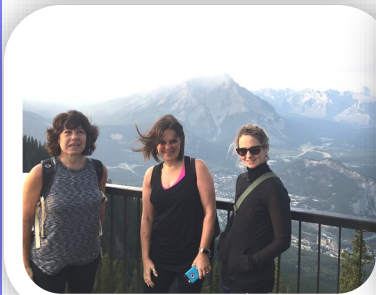
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Sulphur Mtn, summited!



Josie presents



Rooftop "meeting" with Annie



Karen presents

Work Design: Maintaining Momentum on Achieving Decent Jobs for All

Keynote 3: Dr. Sharon Parker, Professor, UWA Business School, ARC Laureate Fellow, Australia

Highlights: Dr. Parker talked about research that looked at the design of work, or jobs. She asked the audience of ergonomists, "Why does poor work continue?" She reported that when people design jobs, they often design work which is too simplified. Designers focus on efficiency, without regard to how the worker will feel in the job. For example, a worker might be asked to only install one small part in an automobile on the assembly line; this worker will be very expert at installing this part, thousands of times each day! However, this style of work design results in the employee's work being more repetitive, less satisfying, and really boring. If the worker's productivity and quality drop off, management typically blames the



worker, instead of looking at the psychosocial nature of the work, responsibilities, and activities.

In a research survey, participants were asked to designate tasks from a list, into several “jobs”. Researchers found that students with minimal work experience tended to design more basic, repetitive jobs. However, those who were experienced (i.e. professional work designers), and who personally had work that they found enriching, tended to design better, more complex and challenging jobs. Dr. Parker pointed out that interesting and inspiring jobs also tended to reduce an employee’s risk of developing Alzheimer’s.

The most effective design process begins early, during the conceptual and planning phases. At these stages, hazards can easily be identified and designed out, and productivity and quality efficiencies can be designed in. Equipment relocation or modifications, or new technology installations are also ideal opportunities for businesses to improve work design and avoid potential hazards.

Dr. Parker’s advice to ergonomists and work designers was, “Focus on work that enhances employee development”, and the result will be happier and healthier workers, with overall increases in productivity and quality. Dr. Parker also directed us to reference the following website, <https://www.safeworkaustralia.gov.au/system/files/documents/1702/good-work-design-handbook.pdf> for a free handout on the ten “Principles of Good Work Design”.

To summarise, **good work design**:

Provides the highest level of protection so far as is reasonably practicable. Eliminating or minimizing hazards at the design phase ensures that these hazards never get introduced into the workplace in the first place. (Note that this is also the company’s legal responsibility under the H&S Act.)

Enhances health and wellbeing. Over the long term, a well-designed job optimizes worker function, improves participation, and allows the worker to maintain or improve his/her physical and mental health.

Enhances business success and productivity. The handout reports that “the healthiest workers have been found to be three times more productive than the least healthy”. Therefore, good work design also makes good business sense. Healthy work encourages workers to suggest innovation, quality and efficiency opportunities.

Addresses physical, biomechanical, cognitive and psychosocial characteristics of work, and matches them with the capabilities of the workers. Understanding and designing work with workers’ skills and physical abilities in mind ultimately prevents deaths, injuries and illnesses and their associated costs.

Considers the business needs, context and work environment. Workplace design should consider the needs of an organisation, including owners, managers, workers, suppliers, and clients. Design solutions won’t always be easy to identify, or available off-the-shelf. Often, the solution must be tailored (or “*Taylor’d*”) to support the organisation’s business and cultural uniqueness, and to ensure profitability and worker engagement.

Is applied along the supply chain, and across the operational lifecycle. Organisations need to work with their suppliers and clients to resolve ergonomics and health & safety concerns. Take, for example, the bin that the employee must pull raw parts out of, or the rack that the final assembly must be loaded into by the same employee. These racks are used by other employees at supplier and customer sites.

Engages decision makers and leaders. Upper management must show commitment and provide adequate resources, both financially and by investing their time. Planning includes allowing someone (like an ergonomist) to assess the risks of existing or potential work, and to provide both short and long term cost-benefit analysis of the recommended controls.

Actively involves the people who do the work, including those in the supply chain and networks. “Workers have

knowledge about their own jobs and often have suggestions on how to solve a specific problem. Discussing design options with them will help promote their ownership of the changes.”

Suppliers and customers should also be consulted as they can provide expertise regarding logistics the impact of the design change on upstream and downstream processes.

Identifies hazards, assess and control risks, and seek continuous improvement. Designing good work requires a systematic risk-management approach that is followed each and every time a new design or

How to get FREE stuff

Ergo speakers

If your *professional association* is looking for a speaker on an “ergo” topic, please contact Carrie. We would be happy to come out to speak with groups of human resources professionals, safety professionals, disability managers, production managers, or engineers! If you are within an hour radius of one of our offices, we’ll come at no charge! (We also offer many seminars and workshops for groups of employees—call for pricing.)



Coffee with Carrie

If you can spare a half hour to chat about your ergo program, Carrie would be happy to meet you for coffee. We’d love to hear about how you’re currently handling MSDs, quality issues related to worker performance, and productivity bottlenecks. If you’re doing great on your own, perhaps we can learn from you. Or, maybe we can help you to improve!



E-news

Get insightful news on ergonomics content every 2-3 weeks, including this newsletter.



Become an on-site ergo client. Our regular ongoing clients get loads more free stuff, including:

- an ergo contest every 3 months, including prizes
- a monthly ergo bulletin to share with workers, as a slide show or on a bulletin board
- access to hundreds of one-page info sheets and puzzles on a huge variety of topics





redesign project occurs. Ongoing monitoring for operator and system feedback, after the change, ensures success.

Learn from experts, evidence, and experience. Collaborating with many individuals (both internally and externally) with unique skills and knowledge, at the design phase ensures that there are no knowledge gaps. For example, the ergonomist can ensure that heights, reaches, weights and forces, fall within ergonomics guidelines. This ensures that the risk of injury will be low.

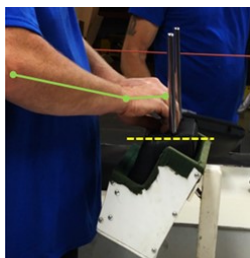
Intern report from Jacob MacCara

Jacob is a graduate of Fanshawe College's Ergonomic Certificate program. He interned with one of our clients, The Woodbridge Group, under Josie's direction. He summarised his experience below.

The internship experience I had at The Woodbridge Group in Blenheim, Ontario was a perfect opportunity for me to apply what I had learned in the classroom at Fanshawe College while enrolled in one of their newest programs, Advanced Ergonomic Studies. The Woodbridge Group in Blenheim is a just-in-time manufacturing facility that supplies foam products (headrests, armrests, ottomans and other foam components) to many leading automotive manufacturers. As an ergonomics intern, I was involved in evaluating a new assembly line that is part of a new program launch at the facility. The jobs at this facility are very hand intensive, and thus I looked at improving hand postures at the workstations.



One of the most forceful tasks at these workstations is the 'closeout' process – closing the bottom of the headrests with plastic clips. The workstations were equipped with fixtures to hold the headrests while the clips were being secured in place. However, the angle at the bottom of the headrests forced the teammates to adopt an extended wrist posture while they were applying force on the clips, using a pinch grip. This non-neutral wrist posture, combined with the force to secure the clips, and the repetitiveness of the job, put the teammates at risk for musculoskeletal disorders which could lead to lost-time injuries. Woodbridge took a proactive approach to dealing with potential ergonomic issues by requesting recommendations before their new assembly line was in full production.



I recommended that adjustable angle closeout fixtures be put into place to allow team mates to maintain a more neutral wrist posture while pinching the clips on the headrests. I conducted trial runs with teammates using angled closeout fixtures and after receiving positive feedback, adjustable angle closeout fixtures were implemented. This cost-effective ergonomic solution not only promotes better wrist postures, but the adjustability allows teammates to adjust the fixtures to the angle they desire, and allows Woodbridge to re-use the fixture for other applications in the future.

I would also like to stress the team approach that we used at Woodbridge – Engineers, Managers, Maintenance, Quality, Human Resources, Health and Safety, Ergonomists (myself and Josie Blake) and other teammates all worked together to share resources and implement solutions.

Thank you Woodbridge Group and Taylor'd Ergonomics for offering me this fantastic learning experience.

Jacob recently accepted a position as an ergonomist in Michigan. We wish him all the best!

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We'll let you in on a little secret:

We have all heard that, "Sitting is the new smoking." After a few years, the news has suggested that prolonged standing is also bad for us. Find each word in this paragraph that has five or more letters. The remaining letters will spell out the magic solutions to preventing back pain in the office.

Missed our blog?

Here's what we've been talking about lately:

- Packing, moving, and dodging back pain (tips for moving your office, student, etc, without causing a back injury)
- 150 years of ergonomics in Ayr (newspaper evidence that we've been using ergo here for as long as Canada has been around!)
- Fanshawe's first set of "ergo" grads

Ask for links to our e-news (info@taylorordergo.com). Alternatively, follow us on facebook or twitter @taylorordergo. Thank you for "liking" and "sharing" our content—your support helps us grow!



Don't miss these fall Taylor'd Ergo training dates!

For more details, or to register online, please visit our website www.taylordergo.com/workshop/.



Please register me for:



☐ **Lifting train-the-trainer** Wednesday, October 4, 2017

In this one-day session, participants get hands-on practice, learning how and why to lift using 15 proper lifting techniques. They will also learn to effectively coach others to use these tips. Participants get coaching plans with sample "takeaways" to reinforce all 15 messages. \$370+hst HST#89765 6377



☐ **Office Ergo**, Wednesday, October 18, 2017

This one-day session will allow you to identify MSD hazards at office work stations, and develop cost-effective recommendations to address them. Includes suggestions for using and carrying laptops, introducing sit/stand stations, and more. \$375+hst HST#89765 6377



☐ **101 Solutions** Thursday, October 26, 2017

Participants, including engineers, safety coordinators, and ergo team members, will learn to incorporate effective ergonomic design features into new workstations, jobs, and layouts, using our detailed ergo design guidelines. Guidelines include height, reach, clearance, tool selection, work flow, and more. \$425+hst HST#89765 6377



☐ **Ergo Design** Wednesday, November 22, 2017

This course will invigorate your ergo or safety team by providing tons of ideas and case studies, and encouraging participants to look at problems with a different perspective. Learn to identify and train people to use best practices when appropriate. Learn about simple machines and how these basic mechanical concepts apply in work settings. \$370+hst HST#89765 6377

Register and pay online at www.taylordergo.com. Or complete and email this page to info@taylordergo.com, with your purchase order number. Your registration will be **confirmed by email, 1-2 weeks before the course**. Register early, as space is limited. Cancellations within one week of the workshop will be subject to a \$100 charge, although substitutions are welcome at any time.

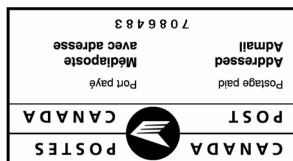
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