Building an International Educational Network in Work Disability Prevention

28

Patrick Loisel

Work disability prevention, a recently recognized major health-related social and financial burden, is in need of recognition and diffusion in search of appropriate solutions. An international educational effort to address it is described below.

28.1 Introduction

Throughout this book, there have been a number of ad hoc arguments on the emerging field of work disability prevention, which proposes a different perspective of work and health, bringing attention to new conceptualization, new thinking, and innovative interventions. This field requires the collaboration of several different disciplines and of many stakeholders whom can greatly benefit from sharing their multiple perspectives. In turn, this means that new teaching and practices are necessary in order to tackle the work disability problem affecting most developed and developing economies. Certainly, the diverse cultural and legal backgrounds that vary within a province, a state,

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or one country to the next must be taken into account. This was the rationale for developing a comprehensive training program able to exchange new knowledge in the field with a vision of international collaboration among researchers and educators. With an unexpected opportunity launched in 2001, a group of researchers in Canada embraced the challenge of proposing the first training program in work disability prevention that utilized transdisciplinary principles in order to foster new and innovative research worldwide. The proposal was submitted to the Canadian Institutes for Health Research (CIHR) via a request for application (RFA) entitled CIHR Strategic Training Initiative in Health Research for the 21st Century. One of the core objectives of the RFA was to provide leadership in building capacity within Canada's health research community through the training of researchers and to foster the development and ongoing support of the scientific careers of women and men in health research. This opportunity was seized by a group of 24 researchers working in different fields related to WDP and associated with nine different universities located across Canada. The group covered the following disciplines: anthropology, biomechanics, law, epidemiology, ergonomics, occupational therapy, ethics, engineering, kinesiology, medicine, neuropsychology, physical therapy, psychology, and biostatistics. Our successful application gave birth to the WDP CIHR Strategic Training Program.

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28.2 The WDP CIHR Strategic Training Program

28.2.1 Principles and Development

The proposal put forward in response to the RFA was based on six key elements:

- 1. Transdisciplinary approach: The program would convey to each participant a transdisciplinary perspective of work disability at the beginning of their research training experience. Delivery of this new approach was undertaken by the mentors involved in the training program who provided complementary disciplinary backgrounds and extensive experience in collaborating with researchers and stakeholders from multiple disciplines and different research settings. In addition, through a rigorous review process, the trainees were selected from multiple scientific backgrounds, which gave a unique opportunity for an exchange on the basis of close collaborations and applied transdisciplinary vision. In this way, transdisciplinarity would not be only a subject of study but also an implemented research experience shared by trainees and mentors from different disciplines.
- 2. Changing attitudes: The principles of rigor, openness, and tolerance (de Freitas et al. 2012) were adopted as the fundamental characteristics of the transdisciplinary attitude and vision. Rigor in argument takes into account all existing data and is the best defense against possible distortions. Openness involves an acceptance of the unknown, the unexpected, and the unforeseeable. It allows someone having a specific disciplinary background and perspective to accept perspectives from other backgrounds, jurisdictions, and disciplinary knowledge. Tolerance implies acknowledging the right to ideas and truths opposed to our own. The majority of the program's educational activities would allow trainees to develop these attitudes mainly through facilitated discussions with the program mentors and between the trainees themselves.

- 3. A unique program: At the time of the program's development, a literature search was conducted using several databases and university websites in order to check whether any other program on work disability existed (Loisel et al. 2005; Commonwealth 2000: Universities Yearbook Annulaire national des universités 2001). The result was that no advanced training program (at the PhD or postdoctoral levels) specific to WDP was found. Existing masters and doctoral programs were found to be mostly oriented towards professional training such as vocational rehabilitation, disability management, industrial hygiene, and occupational health and ergonomics. However, these programs were not geared to the training of researchers in the field of WDP nor did they have a transdisciplinary perspective.
- 4. A complementary program: The proposed program was developed as a complementary program to a single disciplinary PhD or postdoctoral education. Thus, it was intended for graduate students registered in a PhD, postdoctoral program, or a new researcher having recently graduated. The rationale behind selecting postgraduate trainees was to ensure that transdisciplinary training in WDP would not interfere with the needed in-depth knowledge acquired in a precise disciplinary field. The WDP training program would allow trainees to broaden their disciplinary vision in order for them to obtain a global view of all the components involved in the WDP field. The new knowledge attained would add to the trainee's own depth of disciplinary expertise the breadth of the WDP field.
- 5. Competency-based approach: A competencybased rather than an objective-based approach was chosen as a means of developing the program with more effective integration of knowledge, skills, and attitudes (Lasnier 2000). This approach has allowed the development of complex abilities designed to facilitate appropriate reflection and action in the researcher's professional life. The curriculum, teaching materials, and teaching

sessions were organized to ensure that at the completion of the program the expected competencies were achieved. This is more than the traditional cognitive knowledge usually taught in PhD training programs, postdoctoral studies, and for new researchers and addresses a specific need for skills in intervention implementation, collaboration with stakeholders, and knowledge exchange.

6. Collaborative learning: In the program, collaborative learning is used to facilitate the acquisition of the relevant complex knowledge, skills, and attitudes (Henri and Lundgren-Cayrol 2001). Collaborative learning allows participants (mentors and trainees) to combine resources within groups in order to enhance effectiveness in carrying out individual tasks and to foster the development of the skills required for transdisciplinary teamwork.

The training program proposed by the Université de Sherbrooke (Québec, Canada) to the CIHR competition was funded for 6 years starting in 2002 by four institutes of the CIHR and Quebec research agencies as CIHR partners in this endeavor.1 In accordance with CIHR requirements, the funding for strategic training programs is 70% of the grant must be disbursed in the form of stipends to successful program applicants. The trainee stipends were calculated to cover tuition fees to the Annual Summer Session, as well as travel and accommodation expenses, making this training education free for the registered trainees. In 2009, a new RFA submitted to CIHR to continue the WDP training program was successful. With another 6 years of funding, it was decided that the WDP program move to the University of Toronto Dalla Lana School of Public Health (Work Disability Prevention Program, Dalla Lana School of Public Health, University of Toronto 2012).

28.2.2 Program Main Characteristics

As mentioned above, this training program was structured to ensure that trainees registered in the 3-year training program had met the required competencies upon completion of the program. The following competencies were extracted and developed into more precise and operational subcompetencies:

- To analyze a research problem from a transdisciplinary and contextual perspective in order to maximize research relevance and impact
- 2. To integrate relevant ethical and legal issues into the design and implementation of WDP research
- To effectively communicate information on a specific research project or methods to all other researchers involved in disciplines in the WDP field
- 4. To incorporate the elements needed to develop a research approach that factor in the participation of relevant stakeholders
- 5. To participate in activities promoting knowledge exchange such as scientific presentations, presentations to stakeholders, or publications

The program was implemented at the highest level of education in order to train researchers who were expected to already be part of an educational setting such as research centers and universities. This was a train the trainer perspective allowing a large spin-off in capacity building for the WDP field. For these reasons, the following academic level entrance criteria to the program were required: registration in a PhD program, registration as a postdoctoral fellowship program, or being a new researcher (no longer than 5 years after PhD graduation) in a recognized Canadian or foreign university or research center. However, in order of transdisciplinarity to occur, admission criteria were based not only on the applicant's academic record and level of excellence but also on qualitative criteria such as the student's potential contribution to the field of WDP and his or her initial ability to work within a transdisciplinary team. In addition, the admission committee ensures that candidates are chosen from diverse disciplines, different geographical origins, and

¹ Institut de Recherche Robert Sauvé en Santé et Sécurité du Travail (IRSST), Réseau de Recherche en Réadaptation du Québec (REPAR), Fonds de Recherche en Santé du Québec (FRSQ).

| 1001C 2012 110gi | ani mentors with discipline, university, | and country | |
|-----------------------|--|-----------------------------------|-----------------|
| Anema, Han | Occupational physician | VU University Amsterdam | The Netherlands |
| Baril, Raymond | Anthropologist | Université de Sherbrooke | Canada |
| Breslin, Curtis | Clinical psychologist | Institute for Work and Health | Canada |
| Bültmann, Ute | Health science/epidemiology | University of Groningen | The Netherlands |
| Cassidy, David | Epidemiology | University of Toronto | Canada |
| Clermont, Dionne | Occupational therapy/ epidemiology | Université Laval | Canada |
| Cooper, Juliette | Occupational therapy | University of Manitoba | Canada |
| Corbière, Marc | Psychology, clinical psychiatry | Université de Sherbrooke | Canada |
| Côté, Pierre | Epidemiology | University of Toronto | Canada |
| Coutu, Marie-France | Psychology | Université de Sherbrooke | Canada |
| Dewa, Carolyn | Health economy | University of Toronto | Canada |
| Durand, Marie-José | Occupational therapy | Université de Sherbrooke | Canada |
| Feuerstein, Michael | Clinical psychology | Uniformed Services University | USA |
| Franche, Renée-Louise | Psychology | University of British Columbia | Canada |
| Gagnon, Denis | Biomechanics | Université de Sherbrooke | Canada |
| Guzman, Jaime | Rheumatology | University of British Columbia | Canada |
| Hogg-Johnson, Sheilah | Health Statistics | Institute for Work and Health | Canada |
| Koehoorn, Mieke | Epidemiology | University of British Columbia | Canada |
| Krause, Niklas | Occupational epidemiology | University of California | USA |
| Lambert, Cécile | Nursing/clinical and research ethics | Université de Sherbrooke | Canada |
| Lippel, Katherine | Lawyer | University of Ottawa | Canada |
| Loisel, Patrick | Orthopaedic surgeon | University of Toronto | Canada |
| Lötters, Freek | Physiotherapy | Erasmus University | The Netherlands |
| MacEachen, Ellen | Sociology | Institute for Work and Health | Canada |
| Mairiaux, Philippe | Occupational medicine | Université de Liège | Belgium |
| Pransky, Glenn | Occupational physician | Liberty Mutual Research Institute | USA |
| Rainville, Pierre | Neurosciences | Université de Montréal | Canada |
| Scardamalia, Marlene | Psychology | University of Toronto | Canada |
| Shaw, William | Occupational health psychology | Liberty Mutual Research Institute | USA |
| Tompa, Emile | Health economy | Institute for Work and Health | Canada |
| Vézina, Nicole | Ergonomics | Université du Québec à Montréal | Canada |
| | | | |

Table 28.1 2012 Program mentors with discipline, university, and country

involved in various projects. Approximately ten trainees are recruited each year in this 3-year parttime training program to allow small group training sessions, maximizing exchanges between educators (named "mentors") and trainees and between trainees.

The training program team consists of educators/researchers having applied to the CIHR competition, who have become de facto mentors of the training program (Table 28.1). The program director, CIHR grant principal investigator (PI), and several committees are responsible for the program leadership, and a program coordinator assists the program director in program management. A Mentors' Assembly brings all investigators together to determine general program governance and nominate management committees' members. A Program Executive Committee (PEC) is the program's general managing body, responsible for decision-making on all pedagogical issues, such as training activities, evaluation of the students, evaluation of the program, and program advancement. The PEC has seven members including the program director, five mentors, and the program coordinator. The PEC meets five times a year, usually through video or teleconferencing. A Program Advisory Committee (PAC) consists of the PEC members plus five stakeholders (representing employers, unions, injured workers, and insurers public and private) and two trainees. The PAC meets once a year and brings an external vision to the training program management and development. An Admissions Committee, made up of three mentors and the program director, assesses and evaluates applications according to program admission criteria and recommends a ranking of candidates to the PEC for final admission decisions.

In order to allow enlargement or renewal of the program's training workforce, the Mentors' Assembly may recruit new mentors, upon request of the PEC. Basic requirements to join the team of mentors include being a university professor with a specific expertise in WDP and teaching capability with a TD spirit. Alumni of the training program holding a university position are preferred choices as they have learned the "spirit" of the program.

The training program structure was developed as a part-time 3-year training program based on several activities. A core portion of the program consists of a 2-week intensive summer session (June) assembling all trainees in Canada. Each year the summer session is dedicated to one of the three themes: "methodological challenges," "sociopolitical challenges," or "ethical challenges" in WDP. During the summer session, three cohorts of trainees (first, second, and third years) attend a mix of joint and separate training seminars. Joint seminars are dedicated to the theme of the year, while other training seminars are specific to a cohort year of trainees and discuss various topics linked to WDP, for instance, determinants of work disability, interventions for return to work, or vulnerable workers.

An important activity that occurs during the summer sessions is the trainees' seminars facilitated by the mentors. Trainees must annually present a seminar on his/her research project to their cohort classmates. The trainees' seminars provide an opportunity to broaden their perspective on their own project. The presentation and topic are critically appraised during a designated time slot, allowing for a long discussion time among all the trainees coming from different disciplinary backgrounds. The trainees face the challenge of presenting their project with enough *rigor*, but avoiding too much specific disciplinary jargon, and at the opposite end explaining and clarifying the fundamentals and significance of their research. For example, a trainee may be preparing a project involving the development of an ergonomic tool designed to measure lumbar effort in the workplace for patients with disability caused by back pain. Presenting their tool development rationale and methods to other trainees who have a background in psychology, disability management, clinical studies, and program evaluation will provide them with an opportunity to be challenged on issues such as the impact of psychological stress at work on physical measures, the feasibility of using complex measurement devices in the course of work, the usefulness of such devices for clinicians working in a work rehabilitation context, and the way such tools may be used to assess program effectiveness. In order to prepare their presentation to colleagues from other disciplines, they may need to conduct a broader literature review that can help them to discuss variables, possible biases, and methodological points from other perspectives than the one in which the project has been based on. This broader discussion might facilitate a better understanding of research uptake and elucidate ahead of time some of the possible obstacles to collaboration and implementation of WDP research. Openness to a more collaborative vision about their own research results is promoted. They also have an ongoing opportunity for improving their skills on knowledge transfer and for improving project's quality. Two mentors (named chair mentors) from different disciplines supervise all training activities in each cohort year. They offer the trainees supportive critique and explanations, and they serve as a link between program management, lecturers, and other trainees. Every morning starts with a half-hour morning forum gathering all trainees and chair mentors to answer students' comments, questions, and any relevant thoughts that arose from the previous day learning. This allows general discussions among trainees and mentors to reach a deeper level and to help rethink or correct any ideas about the topics. The morning forum is also an important moment to moderate ideas or beliefs generated from the previous day's activities.

June sessions are preceded by mandatory 6-week eLearning courses. One course is specifically designed for first year trainees to introduce them to the basics of WDP through e-discussions of selected readings under mentor's supervision. The other course is for all trainees and is designed to prepare them for the theme of the year (methodological, sociopolitical, or ethical challenges). Lectures or appropriate activities are organized with ongoing online discussions between trainees and the supervising chair mentors. At the beginning of the June session, a feedback session is organized allowing a general discussion on the e-training learning and experience. Approximately 30/35 trainees and an average of 25 mentors and 10 invited guest speakers attend the annual June session. As previously mentioned, the June summer session is a series of lectures in which all three trainee cohorts attend some, while other lectures are trainee cohort year specific. For example, all trainees attend the lectures on transdisciplinarity, disability insurance issues, and the "theme of the year" (methodological, sociopolitical, or ethical challenges). First year trainees have a case study on work disability, quantitative/qualitative methods issues in WDP, a workplace structured visit; second year trainees have introduction to evaluative research, RTW outcomes, and interventions in WDP; and third year trainees have introduction to health economics, work disability in vulnerable populations, effects of cancer on work and implementation science. Third year trainees are also required to work in small groups to develop and present a project proposal that is assessed by a jury of mentors through a small competition. Trainees' performance and behavior are assessed by their chair mentors in a formative way at the end of the first week and in a summative way at the end of the session.

Finally trainees must complete one or two optional courses during the 3-year program. They may choose between writing an article to be published in a scientific journal or deliver a presentation in a scientific meeting and deliver a knowledge exchange activity for stakeholders in the WDP field. These courses have to be supervised by a mentor (selected from outside of their usual research setting with a different disciplinary background) and approved by the PEC.

28.2.3 Program Evaluation

The WDP training program has attracted PhD candidates, post-doctoral fellows and young researchers from a very large number of primary disciplines (Fig. 28.2, 28.3). It has been assessed in different ways. First, CIHR has required and conducted a peer-review evaluation several times during the funding period with the program management and the program trainees. Also, the June session provides an excellent opportunity to evaluate its own program through questionnaires to mentors and trainees on the quality of program activities. Finally, the PEC has conducted a special study with program alumni and trainees through interviews and focus groups (Loisel et al. 2009). Each year the program coordinator writes a report from the June session evaluations. The report is presented and discussed by the PEC, and appropriate program changes may be decided. This has led to progressive improvements and updates of the training program. CIHR evaluations have been regularly very positive, acknowledging by the end of the first granting period that the Program continues to be recognized as innovative and the only formalized advanced training program for WDP in the world. In the interviews and focus groups, alumni and trainees have said that the most appreciated aspect was the networking with mentors and other trainees, which allowed them to forge long-term professional relationships (Loisel et al. 2009). They also underlined the opportunity to collaborate on new research projects with a large diversity of expertise. In fact many joint international articles have been published from 2003 to 2009 (Fig. 28.5). The trainees appreciated the *atmosphere* as positive and open and facilitating collaboration between trainees. In addition, the value of the close relationships with the caliber and the number of mentors was highlighted as well. The few negative points that emerged were directed at the June session venue or at the organizational level.

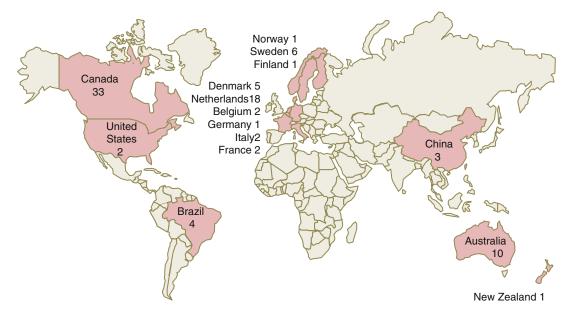


Fig. 28.1 Characteristics of trainees distributed following their nationality 2003–2012

They were mostly technical points (classroom distribution, meals quality, etc.) that the program management tried to address for the following year. Also there has been an expressed desire to develop a platform that would allow an ongoing networking between June sessions. Clusters of trainees created discussion groups, but more formal platforms developed by the program itself were needed. This point was addressed in the program renewal through request for the development of a Community of Practice (CoP) in WDP, and preliminary steps have been taken for its development (e.g., the creation of a CoP Steering Committee and a workshop which included stakeholders' participation in 2010). In addition, because knowledge transfer and exchange are at the core of the program's objective, many alumni and trainees of the training program have either attended or been involved in the organization of the first scientific meeting of the Scientific Committee "Work Disability Prevention and Integration" (WDPI) of the International Commission for Occupational Health (ICOH), held in Angers, France (2010). Worth noticing has been the program's capacity

to rapidly expand internationally. Starting as a Canadian program with a team of Canadian researchers, it has rapidly gained an international recognition as trainees from many countries have applied and been enrolled (Fig. 28.1). The first expansion happened in Europe, mainly the Netherlands and Northern Europe. This is likely due to early research developments in WDP in this region. The program's growing reputation led to extending the program mentorship internationally, recruiting university educators from the Netherlands, the USA, and Belgium, as well as program alumni hired by universities as new mentors. These international mentors participate as well in the program leadership through the various governing committees. Also trainees have registered from both more economically developed to less economically developed countries from four continents, extending worldwide the network of WDP researchers and trainers at the highest level of education (Fig. 28.4). The expected transdisciplinary participation has been maintained with 15 different disciplines now recorded and having more and more international transdisciplinary scientific production (Fig. 28.5).

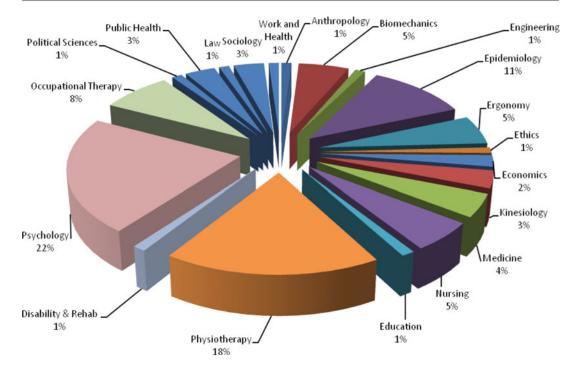


Fig. 28.2 Characteristics of trainees distributed following their primary discipline 2003–2012

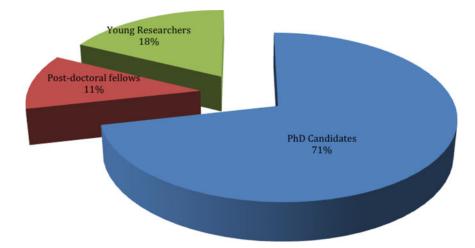


Fig. 28.3 Characteristics of trainees: status at enrollment 2003–2012

28.2.4 Future of the Program

CIHR funding of this training program has allowed its development and continues to support it throughout many years; however, its support cannot be expected to be endless, and alternative funding is needed to guarantee the program's sustainability. Since the program has an international scope, it should not rely only on Canadian funds, and this is an important subject being discussed and explored among the program mentors who are spread across the globe.

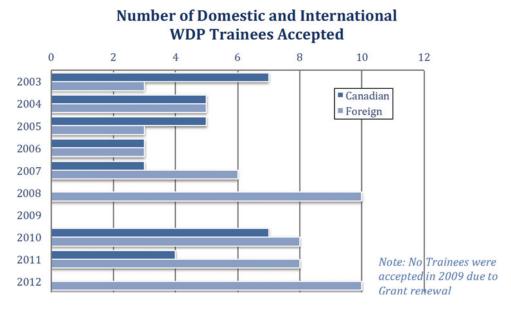
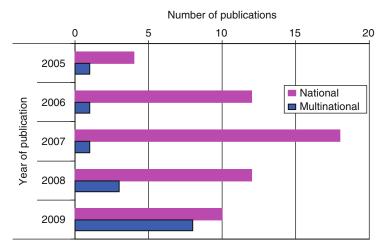


Fig. 28.4 Expanding the number of international students 2003–2012



Nationality x publications of students WDP-program

Fig. 28.5 Number of joint publications including international students

The development of a CoP in WDP may be a viable means to seek solutions to this problem. The CoP's main aims are the following: (1) to maintain and to develop a network of program mentors, alumni, and trainees allowing continuous sharing on scientific topics and research projects development and (2) to develop knowledge exchange with the WDP field stakeholders,

mainly workplace employees, public and private insurers, and healthcare providers involved in work disability treatment, management, and prevention. Thus far, this training program has not only trained researchers but also *trained the trainers* in WDP from diverse countries. These researchers/trainers are important knowledge brokers often involved with building capacity in



Fig. 28.6 Running for a diagnosis of disorder without finding the work disability issues

WDP research, policymaking, and academics. This is not an easy task given the constant nature of the realm of work and socioeconomic transformations occurring in the world. A particular helpful example of a hands-on transferring of WDP research into "real-world" practices is the development of a Return to Work Coordinator (RTWC) training program described below.

28.3 Training Return to Work Coordinators

Assisting workers to reassume work after work disability of more than 2 months duration has proven to be a challenge in many cases, as previously outlined in many chapters of this book. The challenge is mainly due to the multifactorial causes of work disability involving many systems and players in the arena of RTW (see Chap. 6). A further obstacle is legislation that often targets determination of impairment rather than a full consideration of what work disability might represents beyond the causes of impairment itself. In other words, *running* in the arena of work disability may be an impossible challenge for a disabled worker alone and even for the involved stakeholders (Fig. 28.6).

Evidence of success in RTW from interventions involving interdisciplinary teams has shown that when skillful professionals are able to manage and coordinate actions between the disabled worker and the different stakeholders, then they can obtain successful outcomes (see Chaps. 18 and 22) (Loisel et al. 2009). From this piece of scientific knowledge came the idea that specialized professionals appropriately trained might be key players in preventing work disability by facilitating RTW coordination and by promoting stakeholders' agreement. In a recent survey of 12 principal investigators of successful RTW interventions (mostly RCTs), "all principal investigators identified the RTW coordinator as the most important person related to the success of their interventions more important than administrators, medical staff, or others involved in the RTW process" (Gardner et al. 2010). Even if there exist some individuals or groups playing this role, there is little formal training and professional recognition of it. In eight focus groups consisting of approximately 75 RTW coordinators representing three countries (Canada, USA, and Australia) the RTW coordinators were asked to describe the knowledge, skills, attitudes, and behaviors required for effective RTW coordination and to express them as specific competencies (Pransky et al. 2009). An affinity mapping process (Holtzblatt and Jones 1993) followed by a survey of approximately 148 RTW coordinators allowed reducing and regrouping the 904 competencies reported condensed into 100 classified by ranking of perceived importance and distributed

| Item | Mean rating | Standard deviation |
|--|-------------|--------------------|
| Respecting and maintaining confidentiality | 4.80 | 0.480 |
| Having ethical practices as an RTW coordinator | 4.67 | 0.621 |
| Having listening skills | 4.60 | 0.625 |
| Ability to communicate well verbally (phone, in person) and in writing (including email) | 4.59 | 0.604 |
| Being consistent between what you say and what you do | 4.56 | 0.574 |
| Being approachable and available | 4.52 | 0.644 |
| Being committed to the goal of early RTW | 4.51 | 0.705 |
| Ability to relate well to workers and employers | 4.50 | 0.655 |
| Ability to respond to others in a timely fashion | 4.49 | 0.724 |
| Ability to instill trust and confidence in your role as the RTW coordinator | 4.49 | 0.589 |
| Having organizational and planning skills | 4.47 | 0.694 |
| Being respectful of other people: their role, their beliefs, and their cultures | 4.43 | 0.701 |
| Ability to sort through data and identify what is important | 4.40 | 0.687 |
| Being able to communicate in a nonthreatening way | 4.40 | 0.697 |
| Ability to uncover and evaluate underlying problems affecting RTW | 4.39 | 0.725 |
| Being honest and frank in communications | 4.35 | 0.689 |
| Ability to adjust communication to a particular situation and individual people | 4.35 | 0.755 |
| Ability to evaluate and accurately describe job requirements | 4.35 | 0.736 |
| Having patience with each stakeholder involved in the RTW process | 4.34 | 0.667 |
| Having relationship-building skills | 4.34 | 0.752 |
| Ability to focus on facts and accurate information | 4.33 | 0.684 |
| Being diplomatic and tactful | 4.33 | 0.741 |
| Ability to work effectively as part of a team | 4.33 | 0.794 |
| Being fair and objective in judgment and actions | 4.33 | 0.664 |
| Ability to effectively deal with stress, deadlines, and expectations | 4.32 | 0.692 |
| | | |

Table 28.2 The 25 highest rated competency items (5 = essential, 1 = less important)

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in six affinity groups: professional credibility, communication, individual personal attributes, administrative skills, conflict resolution skills, problem solving skills, evaluation skills, and information-gathering capacity (Pransky et al. 2009). The 25 highest rated competency items are presented in Table 28.2.

Most of these competencies are of behavioral nature and are not characteristic of a specific recognized profession, albeit some professions may include some of them. These findings have significant implications for selection, training, and development of RTW coordinators (Pransky et al. 2009). They may have learned through a specific training program, but most were confident that essential RTW coordination skills could only be acquired by on the job training, mentorship, supervision, and feedback. Presently, few training programs worldwide are based on such competencies. In Canada, NIDMAR training and certification is based on e-courses and multiple choice question e-examination (National Institute on Disability Management and Research 1999). In the USA the Disability Management Employer Coalition, in conjunction with the Insurance Education Association, offers certification as a professional disability manager after completion of online courses (Certified Professional Disability Manager 2012). In Australia, the Certification of Disability Management Specialists Commission offers a 2-day course for professionals having prior work in the field (Training for Return to Work Coordinators 2012). It looks unlikely that only short e-courses are enough to allow the attainment of the competencies and skills required for the complex role of an RTW coordinator who has to address the complexity of workers' situations and of the work disability arena. Recently, with the support of the Canadian Memorial Chiropractic College (CMCC) in Toronto, the author of this chapter has developed a specific Work Disability Prevention Advanced Certificate for Health Professionals wanting to specialize in RTW coordination (Work Disability Prevention, Canadian Memorial Chiropractic College 2012). This advanced training has been developed directly from the above-mentioned research on RTW coordinator competencies (Pransky et al. 2009) and includes four 36-h courses and a 4-month practicum. It is expected that all professionals issued certification in this program will be capable to well navigate in the arena of RTW which involves so many players such as disabled workers, workplace parties, insurers, and healthcare providers.

28.4 Conclusion

Work disability prevention is embedded in a specific paradigm with its own determinants and multiple stakeholders. Understanding the disability paradigm, knowledge of the evidencebased effective interventions, and the ability and skills for building appropriate relationships with the stakeholders are common grounds for those interested working in this field. Moreover, researchers need to familiarize themselves with methods and transdisciplinary work proven effective in this field. Further development in the field will only happen when appropriate education at diverse levels and within various disciplinary environments-including healthcare, rehabilitation, human resource management, policy, and law-is delivered. The two abovementioned programs are starting points for further great education development in this field: the first one geared towards researchers at the international level and the second one geared towards local practitioners with multiple backgrounds. Education for the public also needs to be developed, following the example of what was done in the Victoria State in Australia (see Chap. 24) (Buchbinder et al. 2001).

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