



## Career Counselling in the Emerging Post-Industrial Society

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**Abstract.** What are the major changes that characterise the emerging post-industrial society? More specifically, what are the changes in the world of work, education and leisure? What are the implications of these changes for career counselling theories and practices? Building on the ideas of Domenico de Masi and other authors, this paper describes the major characteristics of the post-industrial society and changes in the world of work, education and leisure. Further, it discusses the implications of many of these changes in terms of needs and directions in the field of career guidance.

**Résumé: Conseil d'orientation professionnelle dans la société post-industrielle en émergence.** Quels sont les changements majeurs qui caractérisent la société post-industrielle en émergence? Plus spécifiquement, quels sont les changements affectant le monde du travail, l'éducation et les loisirs? Qu'impliquent ces changements pour les théories et les pratiques relatives au conseil d'orientation professionnelle? Se fondant sur les idées de Domenico de Masi et d'autres auteurs, cet article décrit les caractéristiques essentielles de la société post-industrielle et les changements survenus dans le monde du travail, l'éducation et les loisirs. En outre, il discute les implications de maints de ces changements en termes de besoins et de directions par rapport au champ de l'orientation professionnelle.

**Zusammenfassung: Berufliche Beratung in der entstehenden post-industriellen Gesellschaft.** Was sind die wichtigsten Veränderungen, die die entstehende post-industrielle Gesellschaft charakterisieren? Genauer: Was sind die Veränderungen in der Welt der Arbeit, der Bildung und der Freizeit? Was sind die Konsequenzen dieser Veränderungen für Theorie und Praxis der beruflichen Beratung? Auf der Grundlage der Überlegungen von Domenico de Masi und anderen Autoren beschreibt dieser Artikel die wichtigsten Veränderungen in der post-industriellen Gesellschaft und in der Arbeitswelt, in der Bildung und in der Freizeit. Weiterhin werden die Implikationen vieler dieser Veränderungen im Hinblick auf Bedürfnisse und Entwicklungen im Feld der Beruflichen Beratung diskutiert.

**Resumen: La Orientación para la Carrera en la Sociedad Post-industrial emergente.** ¿Cuáles son los cambios más importantes que caracterizan a la sociedad post-industrial emergente? De forma más específica ¿qué cambios afectan al mundo del trabajo, de la educación y del ocio? ¿Cuáles son las implicaciones de estos cambios para la teoría y la práctica de la orientación para la carrera? Basándose en las ideas de Domenico de Masi y otros autores, este artículo describe las principales características de la sociedad post-industrial y los cambios en el mundo del trabajo, educación y ocio. Además, se examinan sus implicaciones para el campo de la educación de la carrera, en términos de necesidades y tendencias.

The dissemination of the term “post-industrial society” in the 1970s can be attributed to the sociologists Alain Touraine and Daniel Bell. According to Bell (1974), post-industrial society refers primarily to “changes in the social structure, the way in which the economy is being transformed and the occupational system reworked, and, with the new relations between theory and empiricism, particularly science and technology” (p. 13). Although many of the elements responsible for these changes in the social structure were present before, it was only after World War II that they took shape, and only in the past few decades, with the development of new technologies, that the scope and pace of these changes accelerated dramatically.

In two recently published books, *The Future of Work* (1999), and *The Post-Industrial Society* (2000), the Italian sociologist Domenico De Masi summarises the essential characteristics that distinguish the pre-industrial (agricultural), industrial and post-industrial eras and relates them to the evolution of the world of work. De Masi starts his dissertation *The Future of Work* by stressing the fact that people are living longer. In prehistoric times, a man would live an average of 30 years. In the 19th century – in the early days of the industrial era – he would live about 40 years. Nowadays, in some countries, life expectancy exceeds 75 years and, according to some projections, it could increase by up to 15 years by the year 2025 (Mayor, 1999).

One of the implications of an increased lifetime is the redistribution of time devoted to work, study, leisure and domestic/maintenance activities. Today, in many developed countries, the total amount of *free* time a person has in life has by far surpassed the total amount of time he/she will dedicate to work activities. De Masi illustrates this fact by pointing out that, while in the middle of the 19th century, people would spend half of their lives working, today, people who live an average of 80 years, and work until they are 60, will dedicate only one seventh of their lifetime to work. This fact alone implies a shift of mentality that affects our notions of a meaningful life and career, and our relations to work, education, leisure, and one that can influence our domestic life.

As career guidance (or counselling) represents an important pillar of the bridge linking the world of education and the world of work, whatever changes affect them will have implications for the theories and practices in the field.

What are the major changes that characterise the emerging post-industrial society? More specifically, what are the changes in the world of work, education and leisure? What are the implications of these changes for career counselling theories and practices?

This paper aims at providing an overview of these broad questions. Building on the ideas of Domenico de Masi and other authors, Section 1

describes the major characteristics of the post-industrial society and changes in the world of work, education and leisure. Section 2 discusses the implications of many of these changes in terms of needs and directions in the field of career guidance.

### **The post-industrial society**

The concept of post-industrial society can be considered a large generalisation. This new phase represents both a continuation and a break. Continuation in the sense that it incorporates and even amplifies some characteristics of the previous industrial society. On the other hand, it brings into play completely opposing elements that establish a break with previous paradigms. De Masi (2000) says this transition from one stage to another does not imply a radical replacement of the former by the latter, but that some elements become central while others lose their importance.

Today, many authors identify this new society with the development of information and communication technologies, and use the terms *digital society* or *information society* to characterise it. Others refer to it as the programmed society (Touraine and Hegedus), or as the *era of discontinuity* (Drucker). De Masi states that there are more than 300 expressions referring to it, each one prioritising one specific set of factors. Nevertheless, he maintains that the post-industrial society cannot be reduced to one single hegemonic factor or conflict. Indeed, he says that what may characterise this new social system and differentiate it from previous ones is its polycentrism. In other words, the social system is determined in a variety of ways, as a synergetic result of several different factors combined, none of them being able to determine the whole of it.

De Masi (1999, 2000), Rifkin (1995), Delors (1996), Mayor (1999), and Grantham (2000) provide a comprehensive view of the major changes in society and the world of work, education, and leisure. These authors mention some of the most salient characteristics of this new post-industrial phase as:

*Integration of countries in big political and economic blocks.* There is a decline of the nation-state, and an increasing number of democratic regimes. Neo-liberal approaches favour a free flow of trade and investment and reduce the role of the state, mainly through privatisation. There is a growing globalisation of markets, organisations, regulations and of cultures (e.g. Americanisation, multiculturalism, and the *world culture*).

*The ownership of techno-scientific knowledge determines the economic power.* Universities, laboratories, telecommunication, IT, and entertainment companies are the vital institutions of this high-tech era. The service sector becomes the predominant force in the formation of the national economy.

Although less predictable in its totality, future developments become more and more programmable through techno-scientific innovations. Professional and scientific knowledge becomes the most marketable commodity.

*The considerable growth of the third sector.* This is expressed in terms of number, diversity, and importance, of the voluntary and non-profit organisations.

*The world of work, education and leisure bear great changes* (see below). The move to a service society is marked by a great expansion in education, health, and other welfare services. Life expectancy is greatly increased by these improvements. On the one hand, the population growth slows down or even halts in developed countries, leading to the ageing of these populations. On the other hand, the population increases in the developing countries putting an unprecedented pressure on education, health and other systems. The overall world population becomes not just healthier, better housed, and better fed but also better educated. Migratory pressures also increase, contributing to growing social and cultural diversity in many countries. A growing number of female workers enter the formal labour market. The number of service sector workers exceeds the number of workers in the industrial sector. The roles of men and women, the elderly and the family experience great changes. The traditional conflict between classes is replaced by conflicts among a multiplicity of groups with different ideologies, interests, and styles. Social movements are increasingly supported by the growing power of NGOs that represent these different groups. Individuals play both subaltern and dominant parts depending on the actual roles, making exploitative relations much less clear. There is a great development of the arts and the entertainment industry (the so-called *free-time* or *leisure industry*).

*The progressive de-linearisation and de-synchronisation of both time and spatial relations.* The individuals, the economies and society as a whole become increasingly networked and interdependent. New information and communication technologies (ICT) allow instantaneous interactions at a distance and the creation of a virtual living space over the urban space (e.g. electronic communities, virtual offices, virtual schools and universities). Work, education, leisure and domestic life become progressively intertwined and inseparable. Free time exceeds working time. New concepts such as lifelong learning, elder education, and career shift challenge the traditional view of life as a linear sequence “education-work-retirement”.

*The progressive valorisation of feminine values* such as emotion, aesthetic, co-operation, and subjectivity, as a consequence of the increasing presence of women in social spheres traditionally occupied by men. There is increasing valorisation of the quality of life, and growing ethical, social and ecological concerns with the impacts of new technologies. Rising individualism comes

together with the quest for new spiritual values (e.g. growth of new age movement and post-modern religiosity). In the *global village*, personal identities become more complex. Individuals embody a multiplicity of roles and identities (e.g. national identity, cultural identity, ethnicity, occupational identity, etc.), sometimes even conflict with each other.

*A society where the individuals have to deal with a multiplicity of social roles and identities*, and where the work environments are more volatile and unstable, communities and personal networks acquire increasing importance in providing stability and reference to life and career paths.

Among these characteristics of the new post-industrial society, changes within the world of work, education and leisure need additional attention. These changes can have more direct implications for career paradigms and theories, and career counselling practices.

#### *Changes in the world of work*

*Changes in demographic characteristics of the workforce.* The ageing of the population (in most developed countries), the growing number of women workers, and the globalisation of the workforce cause a multiplicity of ethnicity and nationalities to interact and contribute towards increasing cultural and social diversity, transforming social relations in the work environments.

*An increasing global labour surplus.* One of the greatest problems of the post-industrial era is the problem of technological unemployment. Similarly to what happened at the time of the transition between the pre-industrial and the industrial era, when mechanisation of farms led to a reduction in of the agricultural labour force, the automation of the work processes forces a growing mass of labourers to migrate from the industrial to the service sector. And, within this sector, from routine production services (involving simple repetitive tasks) to in-person services (routinely serving people) and symbolic-analytical services (those involving problem-solving, planning and innovation). A large number of those labourers may never be re-employed either because they lack the necessary knowledge and skills or because there are not enough vacancies for them. Many of those who are skilled are hired for limited periods of time only. All these facts contribute towards creating of a global contingent workforce.

*Changes in organisations and jobs.* In all sectors, jobs have been affected by or reorganised in terms of the following factors:

- Relations between the organisations and the macro-environment: competing in global markets; new regulations generated by political, economic, social, ethical, and ecological pressures, etc.;
- Time distribution: reducing the working week and pushing back the age of retirement are being discussed world-wide; traditional lifelong jobs

are being replaced by more temporary ones, reshaped into part-time jobs and temporary work contracts, etc.;

- Spatial distribution: a high-flex and decentralised workplace, with the proliferation of distant work and virtual organisations;
- Work hierarchy and structure, and work processes: changes in organisational structure and work hierarchy; new management concepts and practices affecting work processes;
- Use of new technologies: increasing use of new information and communication technologies in organisations;
- Skill requirements: new requirements in terms of qualifications (see below) involving the training and retraining of workers, and affecting the acquisition of human resources;
- New working contract and relations between employers and employees: redistribution of rewards and responsibilities; workers become responsible for their career path, health care, and retirement funds, etc.;
- Quality of working life: on the one hand, the “brain work” provide for a more creative, collaborative, and happier work environment; on the other, sharp competition in the global market creates high levels of tension and stress.

*Changes in qualifications.* While millions cannot find jobs because their competencies are outdated or no longer needed, certain branches, where high-tech jobs are being created, suffer from a shortage of high-skilled personnel. As mentioned before, workers are increasingly being required to perform symbolic-analytic and heuristic tasks. Resnick and Wirt (cited in Nijhof, 1998, p. 21) refer to these tasks as not programmable, not routinized and “where only adaptive human intelligence can make the evaluations and decisions needed”. Some authors argue that in the long-term most human labour consisting of manual or mental algorithmic tasks will be performed by intelligent machines, making room only for creative work (Rifkin, 1995; De Masi, 1999). Berryman and Bailey (as cited in Nijhof, 1998) point out that, in the new work environments, workers need to (be able) to: make decisions, solve problems and operate more independently; work in a less defined environment; think creatively; have a broader understanding of the systems in which they operate; have a more abstract or conceptual understanding of what they are doing; acquire, organise and interpret information in a better way; develop social skills such as group problem solving and negotiation to better interact with their co-workers (p. 20).

These new *knowledge workers* will most probably engage, in not one, but several different jobs and work projects during their careers. The widely disseminated ideas that *up* is the only way, that one can hold a lifelong job as long as it is well done, and that if one works hard at job hunting he/she

will not remain unemployed are no longer valid (Harris-Bowlsbey, 1996). According to Streumer and Bjorkquist (1998), “because of the growing instability of employment, workers need to know how to move efficiently from one job to another . . .” and to “. . . manage their own retirement funds, health care, and other personal items previously taken care of by employers” (p. 252). In fact, “increased employee responsibility for his/her work and career path” is one of the top-ten organisational trends in the forthcoming years according to managers and HRD professionals from the US and The Netherlands (Streumer et al., 1999, p. 264). As a matter of consequence, the ability to managing one’s career, to choose one’s life-career goals, learning and working experiences in order to maintain career sustainability, becomes one of the most crucial strategic skills to be mastered, and a growing number of workers may need orientation and support to develop these skills.

#### *Changes in the world of education*

Continuing changes, as those mentioned above, have profound implications for both formal educational activities in schools or companies, and for informal free time activities.

According to UNESCO’s International Commission on Education for the Twenty-first Century (Delors, 1996) there is a relative increase in the number of children and young people attending school world-wide, and a substantial increase in demand for adult education. In some countries, like Sweden and Japan for example, around 50 per cent of the population are currently involved in adult education, which can take many forms, such as basic education in a non-formal setting, part-time enrolment in higher education, vocational training, distance learning and other courses. The commission also states that the educational environment is becoming more varied and crossing over the limits of the formal systems of schools and universities. This implies a greater number of opportunities and options in terms of educational paths and, indirectly, a greater number people seeking orientation in their decision making process.

Within schools, there has been an increase in the gap between the knowledge and skills acquired in both vocational and general education systems, and the newly created demands for knowledge and skills of the workplace (Brandsma & Nijhof, 1999). Among these systems, vocational education is the most affected. At the same time, its importance has grown considerably. According to Streumer and Bjorkquist (1998), vocational education is now increasingly being considered an equal alternative to general education. Among the reforms being carried out in the vocational education systems in many countries, the flexibilisation and modularisation of the system – by reducing the number of closed specialisation paths and offering an increasing

number of independent learning units – remains at the top of the agenda. But, a modularised curriculum, without proper guidance, makes it possible for students to choose an arbitrary combination of units leading to incoherent qualifications (Oates, 1998). The ability of students to manage their educational path, establish educational goals and choose educational experiences becomes even more important.

Within industry and business there is an increasing need for training programmes in order to develop much-needed knowledge and skills. Among the major trends in HRD, managers and HRD professionals point out that learning and work will become more integrated (Streumer et al., 1999). This means that the intervals between training and work are becoming shorter, if not disappearing completely with the dissemination of just-in-time and web-based training, and Electronic Performance Support Systems (EPSS). Rotwhell and Kazanas (1994), claim that “increasingly, employees are yearning for individualised counselling about personal and career growth” (p. 31). There will also be an increase in self-directed learning. As a consequence, the ability to set educational and training goals, and choose educational experiences has become crucial.

Given the new qualification requirements, employers are increasingly valuing learning and work experiences acquired outside the formal educational curriculum, such as living abroad, doing voluntary work, hobbies and sports etc. A rich informal education can mean a competitive difference between candidates with a similar formal educational background. It is important to notice that most of these activities are usually performed during leisure time.

#### *Changes in the world of leisure*

With the shortening of the workingday and the workingweek as a trend (Rifkin, 1995), and the increase in people’s life expectancy, even if they retire later and do overwork, people will have more free time than previous generations (De Masi, 1999). As illustrated before, people living an average life of 80 years will spend approximately one seventh of it working.

Formal education ignores this fact, given that most educational thinking is still strongly influenced by conceptions rooted in the industrial phase. *Learning to do* (preparing the individual for work) and *learning to know* have been the main focus of education, while *learning to be* and *learning to live together* have been largely disregarded (Delors, 1996). There is little room, if any, for learning the self-enriching use of free time.

De Masi (1999) asserts that, as work occupies a relatively smaller portion of our lifetime and becomes more integrated along with study and leisure activities, it will be necessary to re-educate individuals to acquire a more



positive view of leisure and to use their free time positively to promote personal development and well-being.

#### *The convergence of the three domains*

The need for constant problem solving and the innovation of a highly competitive and changing work require *knowledge workers* to constantly update their knowledge and skills. Learning becomes an inherent aspect of work. Conversely, educational systems are urged to close the existing skillsgap between work and education, e.g. by embedding work-related experiences in the school curriculum (Nijhof, 1998).

Education also gets closer to leisure. Proof of this is the rapid growth of the *edutainment industry*. Edutainment is a concept that refers to activities and technologies that integrate education and entertainment, like, for example, educational simulation games, which have been successfully used to develop critical thinking, decision making and creative problem solving skills (Khan, 1997). The number of these computer programs aimed at educational purposes is increasing every year.

#### **Implications for career counselling**

From the 1970s to the 1990s there was a remarkable progress in theorising and research, and the development of new approaches in career counselling. This was followed by a no-less remarkable expansion of different career services in many countries, offered by businesses, governmental agencies, schools, placement centres in colleges, and practitioners of all kinds (Dyankov, 1996; Holland, 1996).

Despite these progresses, today, more than before, the reality of clients' lives changes faster than the ability of practitioners to adapt their practices. Moreover, practitioners are used to changing their practices faster than theorists are able to create and test new theories (Harmon, 1996). As a consequence, the long-existing gap between career theory and practice has increased dramatically in the past few years. This can be partly attributed to the complexities brought on by the emerging post-industrial society (Savickas & Walsh, 1996b; Harmon, 1996), and partly attributed to the boundaries created by differences in training, institutional affiliation, information sources, terminology, problem orientation, and by cultural ethnocentrism on the part of researchers and practitioners (Herr, 1996; Leong, 1996).

Today, the field of vocational and career guidance faces many challenges. In order to keep pace with the changes and demands imposed by the emerging post-industrial society and to reduce the gap between theory and practice,

and between practices and the clients' demands, theorists and practitioners are urged to rethink paradigms and concepts, come up with new approaches, theories and techniques.

Several authors have recently requested many needs and directions in the field of career counselling. Many were brought together in the excellent compendium published by Savickas and Walsh (1996a). These generic needs and directions can be related to the changes and developments of the post-industrial society described in the previous section.

*Need to expand and improve the quality of counselling services.* A growing number of people in need of orientation about educational and career paths implies the need for expanding educational and career counselling services. This expansion must occur in quantity, but also in quality and range of services. The services must be available for working and non-working individuals across their life span (Harris-Bowlsbey, 1996). Special consideration should be given to women, immigrants, ethnic groups, minorities, adolescents at-risk and their relation with the world of work (Herr, 1996). Governmental support through proper incentives, policies, and regulations, as well as initiatives of the private and non-profitmaking sectors are crucial in promoting this expansion.

*Need to rethink paradigms, and to develop concepts and theories.* All the previously mentioned changes in the nature and structure of jobs, work, and organisations; the increase in free time that follows the increase in life expectancy; the spread of education throughout life; and the convergence of work, education, and leisure imply the need for rethinking paradigms, values and attitudes towards meaning in life and career. They demand a redefinition of the core problems in career theory, and of concepts such as career, career-choice, career progression, and career patterns (Harmon, 1996; Harris-Bowlsbey, 1996). New career counselling theories must also incorporate and emphasize the skills required for lifelong learning, life and career planning, as well as employability skills (Herr, 1996). With the increasing social and cultural diversity in school and work environments, more than ever it is necessary to develop concepts and theories to approach specific gender, social and cultural issues. In order to do that, it is necessary to adapt or expand the existing theories to make them applicable to different social groups, ethnic groups and minorities (Arbona, 1996), and to listen to the experiences of other countries. Some authors claim for an increased attention to concepts derived from economics, sociology, anthropology and organisational psychology (Herr & Cramer, 1995), while others recommend the development of new models and practices based on the complexity paradigm (Leong, 1996), action theory and post-modern psychology (Young & Valach, 1996), systems and holistic thinking, and quantum metaphors (Miller-Tiedeman, 1999). A

greater effort has to be made to structure, support, integrate, and test the validity and efficacy of these new approaches.

*Need for more preventive approaches.* According to Leong (1996), the field of career counselling has largely ignored preventive approaches. He claims that “the prevention of vocational and career problems needs to occupy a major position in our theoretical efforts and intervention programs” (p. 336). Many practitioners and the general public still see career guidance as a *treatment variable* (Herr & Cramer, 1995), i.e., an intervention aimed at repairing deficits such as choice anxiety, lack of occupational information, vocational immaturity, and indecisiveness. The accelerated changes in society call for more preventive, future-oriented approaches emphasising career guidance as a *stimulus variable*, i.e., not only aiming at existing problems, but also helping the individuals to acquire knowledge, attitudes and skills to self-manage their educational and work paths. One of the most valuable resources for helping students and workers to develop self-management skills is the incorporation of life career planning concepts and techniques into career guidance programmes. In this preventive approach, the role of career counsellors becomes similar to the role of a coach or consultant working together with the client in order to help clarify his/her difficulties and set individual strategies and plans for life and career.

*Need to develop new methods, techniques, and contents in career interventions.* The expansion of career services to a larger and diversified population, and across the life span, together with the development of new concepts, theories, and more preventive approaches imply the need to adapt current methods, techniques, and contents of career intervention, and develop new ones. As an example, the increasing instability and mobility in the work environment, together with the increasing self-responsibility attributed to new worker demand a shift in focus of career interventions. More than concentrating on decisiveness, counsellors should help clients to improve their decision-making skills and ability to cope with change (Krieshok, 1998), and should not only consider career decisions, but life and career as a whole. Among other contents, career interventions must include activities to promote the development of self-esteem and ego-strength, purposefulness, self-management and life-career planning skills, job search skills, and skills to cope with career transitions and unemployment (Harris-Bowlsbey, 1996). Such interventions will require the application of methods and techniques different from the ones used for assessing interests and personality traits. Another example is the need to provide up-to-date occupational information. As many jobs and occupations are created, while some others are abolished almost overnight, occupational information needs to be constantly updated. This update has to be carried out not only in terms of new and changing

occupations, but also in terms of new skill requirements and labour market trends, and, more specifically, in terms of threads and opportunities, positive and negative aspects of each occupation, according to the specialists in the field.

*Need to integrate different counselling theories and practices in career interventions.* The previously mentioned increasing gap between theory and practice, and the diversification of approaches in vocational and career guidance implies an effort towards integration. In order to integrate theory and practice, Holland (1996) recommends more productive exchanges among practitioners, researchers and theorists. He suggests that researchers, academics and journal publishers should place greater emphasis on studies concerning career interventions. Harmon (1996) suggests that theorists when expanding theories should remain focused on problems of practice. On the other hand, practitioners should keep acquainted with new theories and their possible applications, maintain caseloads to support themselves, and increase communication with other practitioners and academics. According to Leong (1996), it is necessary to facilitate and increase regular contact, communication, and collaboration between academics and practitioners in order to promote this integration between theory and practice. Other recommendations include: the need to integrate career and personal counselling (Herr, 1996; Richardson, 1996); to adhere to a practitioner-scientist model (Lucas, 1996) and to a technical and theoretical eclecticism, combining different theories and strategies in career interventions, according to the demands and context of the different clients (Savickas & Walsh, 1996b).

*Need to keep pace with political, economic, socio-cultural, and techno-scientific changes.* In order to develop new concepts and theories, and to offer more preventive interventions, academics and practitioners need to develop strategic and systemic thinking by reflecting on the profound changes that can have impact on education, leisure and work (Harris-Bowlsbey, 1996). To do this, they need to cross the boundaries of their own field and examine broad trends in the political, economic, socio-cultural, and techno-scientific arenas.

*Need to keep pace with new technologies.* The development and proliferation of new technologies provide counsellors with new tools and possibilities for career interventions (Gati, 1996; Herr & Cramer, 1995; Zunker, 1998). Among these technologies one can mention: Computer Assisted Career Guidance Systems (CACGS); multimedia software; simulation games; videos about occupations; and a variety of job and career services available through the Internet, such as job databases, job agents, career advisers and web-based occupational information which nowadays represent indispensable tools for making career decisions and searching for jobs (Zunker, 1998). All these new

technologies play a fundamental role in making career services available to a larger population.

### **Conclusions**

Many of these needs and directions have been identified since the late 1970s and the 1980s. The major difference is that, today, with the accelerated pace of social changes, the ability of the field to adapt and respond to the societal demands becomes critical. In a similar fashion to what happened in the late 1960s and early 1970s, when career guidance broadened the scope of vocational guidance to a larger set of interventions, to be effective in the 21st century, career guidance can no longer focus on career decisions alone, but needs to broaden its horizons to a more comprehensive approach in order to help the individuals to think strategically and holistically about work, education, leisure and other aspects of their life.

The above-mentioned needs and directions also have implications for the training of theorists and practitioners. The need to expand career-counselling services implies the need to train a larger number of career counsellors and career-service personnel. The need to develop and integrate concepts, theories, and approaches, and to reduce the gap between theory and practice requires an improvement in the scope and quality of the training programmes. In order to do this, programmes should “develop ways to get students to think about theoretical implications of their practices” (Harmon, 1996, p. 42). This can be done by presenting students with the opportunity to learn different theories and techniques and discuss to what extent theories and practices can be integrated. Lucas (1996) suggests that training programmes should be based on the practitioner-scientist model, instead of emphasising either experimental or theoretical orientations. Leong (1996) sustains that the training of counsellors would benefit from a problem-based or case-based learning approach. Other authors recommend that more opportunities to evaluate both experimental and clinical career interventions should be made available, although they recognise this is often difficult to implement (Harmon, 1996; Holland, 1996).

Finally, for counsellors to keep pace with the current changes and developments within the field and in society, and to provide more preventive approaches, it is important that the training develop their systemic and strategic thinking. The effective training of counsellors depends on a balanced combination of the two perspectives: the traditional (reactive) perspective to training, oriented towards giving answers to current problems and demands; and the strategic (proactive) perspective, aimed at analysing possible future scenarios and thinking of creative responses. This could be achieved by

emphasising or adding to the curricula more opportunities for the students to reflect upon certain themes concerning global trends and the future of the information/post-industrial society, such as: the future of work, education and leisure in the 21st century, trends in science and technology, and the emergence of new epistemologies and paradigms.

## References

- Arbona, C. (1996). Career theory and practice in a multicultural context. In M.L. Savickas & W.B. Walsh (Eds.), *Handbook of career counseling theory and practice* (pp. 45–54). Palo Alto, CA: Davies-Black Publishing.
- Bell, D. (1974). *The coming of post-industrial society: a venture in social forecasting*. London: Heinemann.
- Bradsma, J., & Nijhof, W.J. (1999). Bridging the skills gap: the search for powerful skills, tools and techniques. In W.J. Nijhof & J. Brandsma (Eds.), *Bridging the skills gap between work and education* (pp. 1–15). Dordrecht: Kluwer Academic Publishers.
- De Masi, D. (1999). *O futuro do trabalho: fadiga e ócio na sociedade pós-industrial* [*The future of work: tiredness and leisure in the post-industrial society*]. Rio de Janeiro: José Olympio.
- De Masi, D. (2000). *A sociedade pós-industrial* [*The post-industrial society*]. São Paulo: SENAC-SP.
- Delors, J. (1996). *Learning: the treasure within*. Paris: UNESCO Publishing.
- Dyankov, A. (1996) *Current issues and trends in technical and vocational education*. Paris: UNESCO/Section for Technical and Vocational Education.
- Gati, I. (1996). Computer-assisted career counselling: challenges and perspectives. In M.L. Savickas & W.B. Walsh (Eds.), *Handbook of career counseling theory and practice* (pp. 169–190). Palo Alto, CA: Davies-Black Publishing.
- Grantham, C. (2000). *The future of work: the promise of the new digital work society*. New York: McGraw-Hill.
- Harmon, L.W. (1996). A moving target: the widening gap between theory and practice. In M.L. Savickas & W.B. Walsh (Eds.), *Handbook of career counseling theory and practice* (pp. 37–44). Palo Alto, CA: Davies-Black Publishing.
- Harris-Bowlsbey, J. (1996). Synthesis and antithesis: perspectives from Herr, Bloch, and Watts. *The Career Development Quarterly*, 45, 54–57.
- Herr, E.L., & Cramer, S. (1995). *Career guidance and counseling through the life span: Systematic approaches* (5th ed.). Boston: Little, Brown & Co.
- Herr, E.L. (1996). Toward the convergence of career theory and practice: mythologies, issues, and possibilities. In M.L. Savickas & W.B. Walsh (Eds.), *Handbook of career counseling theory and practice* (pp. 13–35). Palo Alto, CA: Davies-Black Publishing.
- Holland, J.L. (1996). Integrating career theory and practice: the current situation and some potential remedies. In M.L. Savickas & W.B. Walsh (Eds.), *Handbook of career counseling theory and practice* (pp. 1–11). Palo Alto, CA: Davies-Black Publishing.
- Khan, B.H. (1997). *Web-based instruction*. Englewood Cliffs: Educational Technology Publications.
- Krieshok, T.S. (1998). An anti-introspectivist view of career decision making. *The Career Development Quarterly*, 46, 210–229.

- Leong, F.T. (1996). Challenges to career counseling: boundaries, cultures, and complexity. In M.L. Savickas & W.B. Walsh (Eds.), *Handbook of career counseling theory and practice* (pp. 333–345). Palo Alto, CA: Davies-Black Publishing.
- Lucas, M.S. (1996). Building cohesiveness between practitioners and researchers: a practitioner-scientist model. In M.L. Savickas & W.B. Walsh (Eds.), *Handbook of career counseling theory and practice* (pp. 81–87). Palo Alto, CA: Davies-Black Publishing.
- Mayor, F. (1999). *Un monde nouveau*. Paris: Éditions Odile Jacob/Unesco.
- Miller-Tiedeman, A. (1999). *Learning, practicing, and leaving the new careering*. Philadelphia: Accelerated Development/Taylor & Francis Group.
- Nijhof, W.J. (1998). Qualifying for the future. In W.J. Nijhof & J.N. Streumer (Eds.), *Key qualifications in work and education* (pp. 19–38). London: Kluwer Academic Publishers.
- Oates, T. (1998). A converging system? Explaining the difference in the academic and vocational tracks in England. In W.J. Nijhof & J.N. Streumer (Eds.), *Key qualifications in work and education* (pp. 91–116). London: Kluwer Academic Publishers.
- Richardson, M.S. (1996). From career counseling to counseling/psychoterapy and work, jobs and career. In M.L. Savickas & W.B. Walsh (Eds.), *Handbook of career counseling theory and practice* (pp. 347–360). Palo Alto, CA: Davies-Black Publishing.
- Rifkin, J. (1995). *The end of work*. New York: G.P. Putnam's Sons.
- Rothwell, W.J., & Kazanas, H.C. (1994). *Human resource development: a strategic approach*. Amherst, MA: HRD Press.
- Savickas, M.L., & Walsh, W.B. (1996a). *Handbook of career counseling theory and practice*. Palo Alto, CA: Davies-Black Publishing.
- Savickas, M.L., & Walsh, W.B. (1996b). Toward convergence between career theory and practice. In M.L. Savickas & W.B. Walsh (Eds.), *Handbook of career counseling theory and practice* (pp. xi–xvi). Palo Alto, CA: Davies-Black Publishing.
- Streumer, J.N., & Bjorkquist, D. (1998). Moving beyond vocational education and training: emerging issues. In W.J. Nijhof & J.N. Streumer (Eds.), *Key qualifications in work and education* (pp. 249–264). London: Kluwer Academic Publishers.
- Streumer, J.N., Van der Klink, M., & Van der Brink, K. (1999). The future of HRD. *International Journal of Lifelong Education*, 18(4), 259–274.
- Young, R.A., & Valach, L. (1996). Interpretation and action in career counselling. In M.L. Savickas & W.B. Walsh (Eds.), *Handbook of career counseling theory and practice* (pp. 361–375). Palo Alto, CA: Davies-Black Publishing.
- Zunker, V.G. (1998) *Career counseling: applied concepts of life planning* (5th ed.). Pacific Grove: Brooks/Cole Publishing Co.

