

Updated and Revised Methodologies for Evaluating Employability and Earning Capacity in Workers' Compensation, Civil, and Other Venues

Eugene E. Van de Bittner
Mirfak Associates, Inc.

Abstract. Methodologies for evaluating employability and earning capacity evolve over time in response to new laws, regulations, and court decisions, and evolutionary refinements in the vocational evaluation process. The methodologies may be used by vocational experts in ways that were initially not anticipated. Established methodologies for evaluating employability and earning capacity are analyzed, revised, and updated in this article to make them consistent with current expectations of vocational experts in developing defensible opinions in multiple jurisdictions.

Van de Bittner (2003) introduced the *LeBoeuf* Evaluation Process as a systematic methodology for conducting a vocational rehabilitation evaluation to assist the parties in understanding the level of permanent disability for individuals with serious disabilities. This methodology addresses the vocational feasibility and employability issues described in *LeBoeuf v. WCAB (1983)*, a California Supreme Court decision. Although this methodology was initially designed to create an empirical method for conducting a vocational evaluation in the California workers' compensation system, it applies to other states as well, and it has been used by vocational experts in personal injury, employment law, medical malpractice, and other types of cases.

The *LeBoeuf* Evaluation Process (Van de Bittner, 2003) includes the following:

- a. Medical records review
- b. Review of school, work, and vocational rehabilitation records
- c. Interview and test the injured worker
- d. Review deposition transcripts and sub rosa videotapes
- e. Evaluate self-initiated return to work efforts
- f. Complete a transferable skills analysis
- g. Determine vocational feasibility
- h. Analyze employability
 1. Labor market access
 - a) Medical labor market access
 - b) Vocational labor market access and placeability
 - 2) Labor market survey
- i. Reporting

Van de Bittner (2006) introduced the Workers' Compensation Earning Capacity (WCEC) Formula as an empirical method for calculating diminished future earning capacity in state workers' compensation cases. This method for evaluating earning capacity has been used throughout California in workers' compensation cases. It has also been used in other states in calculating earning capacity in workers' compensation and in civil cases.

Under the WCEC Formula (Van de Bittner, 2006), the calculation of DFEC is expressed in the following equation:

$$DFEC = f(WLE) \times \left[\frac{PRE - POST}{PRE} \right]$$

DFEC = diminished future earning capacity, after medical and vocational apportionment, if any

WLE = worklife expectancy

PRE = pre-injury earning capacity

POST = post-injury earning capacity

f = function of

Methodologies for evaluating employability and earning capacity evolve over time in response to new laws, regulations, and court decisions. Evolutionary improvements and refinements in the vocational evaluation process also result in the need to refine the underlying methodologies.

The 2003 *LeBoeuf* Evaluation Process and the 2006 Workers' Compensation Earning Capacity Formula are revised and updated consistent with statutory and judicial changes regarding the requirements of vocational experts in conducting vocational evaluations in multiple judicial venues. Relevant court decisions are discussed. A section regarding vocational apportionment has been added to both methodologies.

History of the Problem

There is a continuing strong demand for empirically-based evaluations of employability and earning capacity by highly qualified vocational experts who can develop opinions and write defensible reports that withstand challenges by opposing vocational experts and attorneys and are considered to represent substantial evidence by the court. The title of vocational expert was defined by Van de Bittner, Wallace, Cottle, and Simon (2012) as follows:

A vocational expert is a person who relies on graduate training in vocational rehabilitation or a related field, combined with additional training related to forensics, and skills and experience, to review medical, vocational, wage, and other records, interview and test evaluatees, analyze transferable skills, vocational feasibility, employability, and earning capacity, assess return to work efforts, develop opinions regarding pre- and post-incident employability and earning capacity, prepare comprehensive reports, and provide expert testimony at depositions and trials. (p. 101)

The qualifications of a vocational expert were described in detail at pages 101 to 107 of the same article (Van de Bittner, Wallace, Cottle, & Simon, 2012).

The continuing strong demand for vocational experts relates to their unique education, skills, experience, and clinical judgment in evaluating employability and earning capacity. Van de Bittner, Wallace, Cottle, and Simon (2012) explained that a vocational expert is the only expert witness in a litigation case that is properly qualified to:

1. Identify the occupational titles in the U.S. Department of Labor's *Dictionary of Occupational Titles* (1991) that are consistent with the jobs in an individual's work history while completing a transferable skills analysis
2. Determine the most suitable post-injury occupation or occupations for the person being evaluated
3. Determine the most reasonable post-incident starting wage
4. Determine the likelihood of post-incident wage increases
5. Determine whether an individual with a serious injury is employable or not at occupations in the open, competitive labor market
6. Determine whether an individual is able to benefit from vocational rehabilitation or be amenable to rehabilitation when considering all medical and vocational information. Recent court decisions support the ongoing need for a complete and thorough empirically-based vocational evaluation regarding employability and earning capacity. Among other things, in *Southern California Edison v. WCAB (Martinez)* (2013), the Court of Appeal concluded that, "Without resolving whether a physician may ever be qualified to opine that an employee is

wholly unable to compete in the labor market, we conclude that on the record below (*ACME Steel v. WCAB*) (2013), Dr. Levine's report does not provide substantial evidence to support that conclusion (p. 21). Southern California Edison had argued that "only a qualified vocational expert has the necessary expertise to support a finding of total disability or total DFEC (diminished future earning capacity)" (p. 20). However, the following court decisions indicate that vocational evaluations should be completed in an appropriate manner by qualified vocational experts to insure that vocational reports and opinions constitute substantial evidence. Most reports prepared by vocational experts are admitted into evidence and are relied upon by the court in rendering decisions. However, some vocational expert reports are rejected by the court for various reasons, such as those described in the following court decisions. They are presented to provide information that can be useful to vocational experts as they continue to develop their knowledge and skills.

In *Rodriguez v. WCAB* (2012), the court concluded that the testimony of the applicant's vocational expert did not constitute substantial evidence. Among other things, the vocational expert testified that the applicant had not been interviewed and that there had been no vocational testing. In *Mrozek-Payne v. State Compensation Insurance Fund* (2012), the court concluded that the testimony of a vocational consultant did not constitute substantial evidence. Among other things, the vocational expert admitted that the applicant had not been interviewed and a formal work evaluation had not been completed. The vocational expert had only reviewed records of the agreed medical evaluators. In *Bates v. WCAB* (2013), the court concluded that the opinions of a vocational expert did not constitute substantial evidence because the vocational expert had not conducted a labor market survey and had not done any research or exploration into the issue of whether the applicant could work outside the home.

In *Williams v. Long Beach Unified School District* (2013), a panel decision (including 3 of the 7 commissioners at the California Workers' Compensation Appeals Board), the commissioners concluded that the opinion of the applicant's vocational expert was insufficient to rebut the future earning capacity adjustment factor in the 2005 *Schedule for Rating Permanent Disabilities* (California Division of Workers' Compensation, 2005) because the vocational expert improperly addressed diminished access to the labor market rather than diminished future earning capacity as required by Labor Code section 4660 (a) (Melchoir, 2015). The vocational expert also relied on inaccurate assumptions regarding the applicant's vocational history and transferable skills in forming opinions. In addition, the vocational expert did not fully consider the work restrictions assigned by the agreed medical evaluator.

In *Meza v. Perma Steel* (2013), another panel decision, the commissioners concluded that the opinion of the applicant's vocational expert was unpersuasive based on several factors, which included the vocational expert's lack of credentials from any of the recognized vocational expert associations, lack of prior court experience, the mere recitation of information in the vocational evaluation reports, and an opinion based solely on subjective factors regarding the applicant's efforts during the course of a work evaluation. By contrast, the defense vocational expert was certified as a rehabilitation counselor and in other areas, considered the opinions of the agreed medical evaluators and panel qualified medical evaluator, conducted a transferable skills analysis using U.S. Department of Labor information, and identified suitable jobs that were currently available in the local labor market.

In *Lentz v. WCAB, Henry Mechanical* (2013), a petition for writ of review denied decision, the court found that the applicant's vocational expert's opinion was not substantial evidence because the vocational expert did not consider the applicant's pre-existing non-industrial disability and did not perform objective testing.

In *Joberg v. Illuminations, Inc.* (2014), a panel decision, the WCAB panel found that the workers' compensation judge (WCJ) must address the substantial apportionment found by the orthopedic and psychiatric evaluators, despite the defense's vocational expert's opinion that the applicant was 100% disabled. The vocational expert's testimony did not address the apportionment opinions of the orthopedic and psychiatric evaluators. The defense vocational expert did not conduct vocational testing.

There was no applicant's vocational expert in *Joberg v. Illuminations, Inc.* (2014). The defense vocational expert was provided incomplete orthopedic and psychiatric records by the defense attorney. The defense attorney instructed the defense vocational expert not to prepare a written report since the vocational expert's opinion was that the applicant was 100% disabled based on the opinions of the psychiatric evaluator. The applicant's attorney then contacted the defense vocational expert and requested a report at the applicant's attorney's expense. The vocational expert felt ethically and legally bound to the referring defense attorney and declined the applicant's attorney's request. The applicant's attorney subpoenaed the defense vocational expert to trial, where the vocational expert testified the applicant was 100% disabled. The defendant refused to pay the defense vocational expert's trial fee. The court ordered further development of the record, including the defense vocational expert meeting with the applicant to complete the rest of the vocational evaluation. The defendant still refused to pay the fees of the defense vocational expert and petitioned to have the judge removed. The defense vocational expert advised the applicant's attorney that a court order to pay the past and future fees would be

needed before proceeding. The defendant lost the petition to remove the judge and paid the defense vocational expert's invoices. The applicant's attorney requested sanctions and penalties against the defense because of failure to pay in a timely manner. The defense vocational expert was then provided the rest of the orthopedic and psychiatric records, which revealed significant orthopedic and psychiatric apportionment. The defense vocational expert was then scheduled to meet with the applicant to complete the remainder of the vocational evaluation and to prepare a written report.

In *Walter v. International Capital Group* (2015), a panel decision, the WCAB panel returned the matter to the WCJ after concluding that the applicant's vocational expert's report was not substantial evidence since the vocational expert failed to consider the orthopedic agreed medical evaluator's opinion on apportionment. The defense vocational expert's report was also not substantial evidence for failing to consider the opinion of the consulting psychiatrist. The matter was returned to the trial level with a recommendation that the parties select an agreed vocational evaluator to evaluate the applicant's future earning capacity.

In *Morris v. WCAB, San Gorgonio Hospital* (2014), a writ denied decision, the court concluded that an opinion from a vocational expert was necessary to rebut a scheduled permanent disability rating to show that the applicant was unable to compete in the open labor market. The decision held that it is improper for a physician to state an applicant is 100% disabled based on the physician's opinion that the applicant is unable to compete in the open labor market.

In *Graham v. Ecolab* (2015), the WCJ found that the opinion of the applicant's vocational expert was not substantial evidence. The applicant sustained an industrial injury to his back, digestive system, and psyche on 9/8/08, while working as a pest control employee. This was the subject of his workers' compensation claim. He returned to work and sustained a subsequent injury to one of his elbows in 2014. He worked as a truck driver as an employee and through his own trucking company in 2014. He stopped working as a truck driver because he could not do that job. He was awarded compensation for the elbow injury. The WCJ found that the vocational expert's report was not substantial evidence since it did not meet the requirements of subsections (b) and (c) of WCAB Rule 10606.5, Vocational Experts' Reports as Evidence (Melchoir, 2015). Among other things, subsection (b) states that the vocational expert shall disclose the names and qualifications of any person who performed any service in connection with the report. Subsection (c) states, among other things, the vocational expert's report should include the history of the injury, the employee's vocational history, and the injured employee's medical history, including injuries and conditions, and any residuals thereof. The WCJ determined that the defects in the vocational expert's report were substantial and not mere technicalities.

Therefore, the conclusions and opinions in the report could not be relied upon. Although one assistant had interviewed the applicant and another assistant had tested him, there was no indication that the vocational expert had ever met with the applicant. Additionally, the vocational testing was done by Skype and there was no indication of who had scored the tests. The WCJ stated, "Setting aside the appropriateness of conducting such tests via Skype, there is no indication in the report of whether this has any effect on the test results (p. 12)." There was no indication whether the interview was conducted in person, by telephone, or by Skype. The medical history was inaccurate since it did not mention the subsequent elbow injury or the limitations from the elbow injury. Regarding this, the WCJ noted that, "The failure of the report to address applicant's work injury in Texas is a crucial omission from the vocational analysis (p. 13)."

In *Holz v. WCAB, Gottchalks* (2013), a writ denied decision, the court held that an applicant can be compelled to attend a vocational expert evaluation when the applicant is attempting to rebut the future earning capacity adjustment factor in the 2005 *Schedule for Rating Permanent Disabilities* (California Division of Workers' Compensation, 2005) and has been evaluated by the applicant's vocational expert. In *Fetner v. WCAB, City of Long Beach/Long Beach Fire Department* (2014), another writ denied decision, the applicant obtained a vocational expert report. However, the applicant's attorney contended that the deposition procedures in *Labor Code section 5710* (Melchoir, 2015) must be followed during any evaluation by a defense vocational expert, including payment of the applicant's attorney's fees for the attorney's presence during the interview. The WCJ ruled that the defense vocational expert could interview the applicant without using the procedures in *Labor Code section 5710*. The reason cited was that a vocational expert is not a party to the case, and has no authority to schedule a deposition of a witness. The decision of the WCJ was upheld by the WCAB commissioners. A petition for writ of review was denied by the Court of Appeal.

There have been several recent court decisions that confirm the need for vocational experts to address apportionment in their evaluations of employability and earning capacity. Vocational experts are expected to analyze and provide an opinion on both medical and vocational factors affecting apportionment. Three representative court decisions are summarized below.

In *Acme Steel et al. v. WCAB and Michael Borman* (2013), the Court of Appeal annulled the WCAB order, which upheld the WCJ decision of 100% permanent disability for 100% hearing loss and other injuries. The agreed medical evaluator for hearing reported that the applicant's 100% hearing loss was 60% due to noise-induced occupational hearing loss and 40% due to non-occupational factors, par-

ticularly cochlear degeneration. The agreed medical evaluator also reported that the applicant informed him he had been awarded a 22% disability award due to hearing loss for a 1994 factory explosion. The court stated it was proper for the WCJ to use vocational expert evidence to find the applicant 100% disabled based on a combination of factors. However, the court cited *Brodie v. WCAB* (2007) in stating that the WCJ must address apportionment and compensate the applicant for only that portion of permanent disability attributable to the current industrial injury. The court rejected the WCJ's decision that there was no apportionment under *Labor Code section 4664* (Melchoir, 2015) since the applicant had continued to work with no related loss of earnings after the prior award. This finding indicates that it is necessary for a vocational expert to provide an opinion on apportionment of diminished future earning capacity for both the current and any prior industrial injuries.

In *Brewer v. California Department of Corrections High Desert State Prison* (2013), a panel decision, the applicant's and defendant's vocational experts concluded that the applicant was permanently and totally disabled and that his diminished future earning capacity was 100%. Neither vocational expert considered apportionment, including primarily pre-existing medical apportionment. The WCJ relied on the applicant's vocational expert's opinion. The panel found the applicant vocational expert's report and trial testimony were not substantial evidence. This was because the applicant's vocational expert's opinion that the applicant was unemployable was based on the applicant's medical disability. However, the WCJ found the medical disability in large extent to be apportionable, and the panel was in agreement. Moreover, the panel stated that a vocational expert cannot simply state that apportionment is not a consideration in a vocational evaluation. Ignoring or disregarding relevant factors does not constitute substantial evidence.

In *Dufresne v. Sutter Maternity & Surgery Center of Santa Cruz* (2014), a panel decision, the commissioners concurred with the WCJ that the applicant was 100% disabled, without regard to apportionment. The panel found that apportionment is permissible under *Labor Code section 4662(d)*, in accordance with the facts of the case. While the applicant's vocational expert concluded that the applicant was unemployable and had a total loss of earning capacity, the vocational expert did not demonstrate that the applicant's diminished future earnings were directly related to the work injury and not due to non-industrial factors. The decision held that the vocational expert's assessment of the applicant's loss of earning capacity must be apportioned to causation when the applicant's non-amenability to rehabilitation is due to a combination of industrial and non-industrial factors.

Revised Vocational Analysis Process

The *LeBoeuf* Evaluation Process (Van de Bittner, 2003) was presented as a systematic methodology for conducting a vocational rehabilitation evaluation to assist the parties in understanding the level of permanent disability for individuals with serious disabilities. This methodology has been used by vocational experts in workers' compensation and civil cases. Accordingly, the title of this vocational evaluation methodology will now be changed from the *LeBoeuf* Evaluation Process to the Employability Analysis Process (EA Process). The only other significant change in the methodology is to add a section for the analysis of apportionment of employability and earning capacity. The steps in the Employability Analysis Process (EA Process) are described in Table 1.

Revised Earning Capacity Analysis Formula

The Workers' Compensation Earning Capacity (WCEC) Formula (Van de Bittner, 2006) was presented as a method for evaluating diminished future earning capacity following a change in the workers' compensation laws in California. This methodology has been used by vocational experts in workers' compensation and civil cases. Accordingly, the title of this earning capacity analysis methodology will now be changed from the Workers' Compensation Earning Capacity Formula to the Earning Capacity Analysis Formula (EC Formula). The only other significant change in the methodology is to add a section for the analysis of apportionment of earning capacity. Under the Earning Capacity Analysis Formula (EC Formula), the calculation of any diminished future earning capacity is expressed in the following equation:

$$DFEC = f(WLE) \times \left[\frac{PRE - POST}{PRE} \right]$$

DFEC = diminished future earning capacity

WLE = worklife expectancy

PRE = pre-injury earning capacity

POST = post-injury earning capacity

f = function of

This formula provides the vocational expert an empirically-based methodology for calculating post-injury resultant earning capacity. The post-injury earning capacity figure can then be applied to the formula to determine diminished future earning capacity expressed as a percentage. The steps in the Earning Capacity Analysis Formula (EC Formula) are described in Table 2.

The EC Formula is consistent with the methodology recommended by Commissioner Ronnie Caplane (currently Chair of the California WCAB) in her opinion in *Ogilvie I* (2009), as follows:

The method that I propose is comprehensive, analytically sound, and operationally simple. It would require vocational or other experts to estimate the injured employee's post-injury earning capacity based upon medical opinions evaluating her permanent impairments and earning capacity had she not suffered the industrial injury, both to be determined from the permanent and stationary date through her projected years in the work force. Such expert testimony is common in marriage dissolution cases, personal injury cases, and employment cases. Indeed, the vocational experts in this case provided expert opinions that were remarkably consistent with each other, a fact that indicates that their methodologies are well enough understood to provide reliable evidence. (p. 44)

Additionally, in *Dahl* (2011), the commissioners referred to Commissioner Caplane's method in *Ogilvie I* in concluding that "a *LeBoeuf* (1983) type of analysis may be properly applied in a case involving less than 100% permanent disability when it is shown that the injury impairs the employee's rehabilitation as in this case" (p. 3) to rebut the future earning capacity adjustment factor in the 2005 *Schedule for Rating Permanent Disabilities* (California Division of Workers' Compensation, 2005). The panel decision concluded by stating:

Application of a *LeBoeuf* (1983) type of analysis in cases of partial permanent disability requires expert opinion on the effect of the injury's impairment on the worker's amenability to rehabilitation and the effect of that on DFEC. Such an analysis can be done even where there is less than total permanent disability, as in this case where the employee has rebutted the PDRS by showing that she will have a greater DFEC than reflected in the PDRS rating. (p. 5)

Summary and Implications for Practice

Two established methodologies for evaluating employability and earning capacity have been revised and updated in response to new laws, regulations, and court decisions along with refinements in the vocational evaluation process. The titles of the methodologies have been revised to reflect their use in workers' compensation, civil and other judicial venues. A review of court decisions confirmed the continuing need for reliable vocational evaluations by qualified vocational experts to clarify the employability and earning capacity of applicants and plaintiffs. A specific need for vocational experts to address apportionment of employability was addressed.

The revised methods and the information from court decisions and other sources can be used by vocational experts in multiple jurisdictions in conducting vocational evaluations to develop defensible opinions.

Table 1

Employability Analysis Process (EA Process)

The Employability Analysis Process (EA Process) is a 10-step methodology for empirically evaluating an individual's employability for occupations in the open, competitive labor market.

A. Review of Medical Records

First review any medical, psychiatric and psychological reports, and deposition transcripts. Look for permanent restrictions and opinions regarding the applicant's or plaintiff's ability to participate in the open labor market. Ask the referring attorney or attorneys to obtain an opinion on medical restrictions if there are none in the medical records. Also review functional capacity assessment reports for information regarding demonstrated work tolerances.

B. Review of School, Employment, and Vocational Rehabilitation Records

School and employment records provide valuable information about applicant's or plaintiff's employment skills that can be considered in relation to past, present, and future employment opportunities in the open labor market.

On some occasions, the applicant or plaintiff will have attempted vocational rehabilitation, either self-directed or with professional assistance. Assess the outcome of any vocational rehabilitation efforts.

C. Review Deposition Transcripts and Videotapes

If unable to interview the applicant or plaintiff, review his or her deposition transcript and view surveillance videos, if available, to gain a better understanding of his or her vocational strengths and weaknesses and his or her ability to perform physical activities. In some cases, it will be appropriate to comment on any inconsistencies between an in-person interview and information learned from the review of a deposition transcript or surveillance video of the applicant or plaintiff.

D. Interview and Test the Applicant or Plaintiff

A comprehensive in-person interview of the applicant or plaintiff is the best way to obtain first-hand information from and about the applicant or plaintiff to be used to develop opinions regarding employability. An interview outline is recommended for this purpose. The interview should be designed to provide all of the information needed for a subsequent analysis of transferable skills and an ultimate analysis of employability. Vocational testing provides a more detailed and specific measure of an applicant's or plaintiff's academic and employment skills and potential for training. Should the applicant or plaintiff not be available for the interview and testing, those skill levels can be established through a review of school, employment, and vocational rehabilitation records, as well as deposition transcripts.

E. Evaluate Self-initiated Return to Work Efforts

Thoroughly explore all self-initiated efforts by the applicant or plaintiff to return to work through self-directed activities or with professional assistance. In addition, explore any volunteer, childcare, elder care, training, and other work-like activities.

F. Complete a Transferable Skills Analysis

A comprehensive transferable skills analysis is completed and compared with other information available to that point. Consider a computerized program, such as the *McCroskey Transferable Skills Program* (MTSP) (McCroskey, 2014), *OASYS* (Truthan, 2015), *SkillTRAN* (Truthan, 2015), or consider a manual method for analyzing transferable skills, such as described by Weed and Field (2012).

G. Determine Vocational Feasibility and Amenability to Rehabilitation

Assess the applicant's or plaintiff's ability to benefit from vocational rehabilitation services to return to work in the open, competitive labor market. Determine whether the applicant or plaintiff is amenable to rehabilitation. Consider all relevant medical and vocational factors.

H. Analyze Employability

The overall purpose of the employability analysis is to assess the applicant's or plaintiff's ability to obtain and maintain employment in the open, competitive labor market when considering medical and vocational factors.

Table 1 (continued)

1. Labor Market Access

The employability analysis begins with an analysis of the applicant's or plaintiff's labor market access, the percentage of his or her access to jobs in the open labor market.

a. Medical Labor Market Access

Medical labor market access addresses the availability of occupations in the open labor market that are compatible with the medical restrictions, functional limitations, and psychiatric impairments of evaluating and treating physicians in a combined, interactive, and synergistic manner. Various scenarios of medical opinions may be needed based on the opinions of different physicians. Medical apportionment is also considered.

Government, private, university, and other sources of occupational, employment, and disability statistics are consulted to develop an empirically-based opinion regarding measurable medical labor market access.

b. Vocational Labor Market Access and Placeability

Vocational labor market access and placeability consider both medical and vocational factors in a combined, interactive, and synergistic manner. They address an individual's ability to obtain and maintain employment. As such, vocational labor market access and placeability consider the opinions of the evaluating and treating physicians. In addition, vocational factors, such as the individual's work and school history, test scores, transferable skills, personal presentation, demonstrated ability to perform work-like activities, the effects of pain and medication, the effects of outward signs of disability, the results of vocational rehabilitation efforts, apportionment, and the requirements of employers are also considered in assessing the individual's vocational labor market access and placeability. Vocational feasibility, one's ability to benefit from the provision of vocational rehabilitation services, is also considered in assessing an individual's vocational labor market access and placeability. Amenability to rehabilitation is also assessed.

2. Labor Market Survey

A labor market survey is conducted to determine whether or not job openings exist in the open labor market that are compatible with the opinions of the evaluating and treating physicians and vocational factors affecting employability.

I. Analyze Apportionment of Employability

An analysis of apportionment of employability is then completed based on medical opinions regarding apportionment and any vocational factors affecting apportionment, such as a learning disability, limited education, limited ability to speak English, or a felony conviction.

J. Reporting

A summary of the evaluation findings is then developed into a written report or file notes with the conclusion that the applicant or plaintiff is employable or not. If employable, the report will show specific examples of job options through direct placement or following vocational training. Occasionally, the referring attorney will request that a formal report not be prepared. In those instances the vocational expert will testify from file notes at a deposition or trial.

Table 2

Earning Capacity Analysis Formula (EC Formula)

Through the Earning Capacity Analysis Formula (EC Formula), the calculation of diminished future earning capacity is expressed in the following equation:

Where:

$$DFEC = f(WLE) \times \left[\frac{PRE - POST}{PRE} \right]$$

DFEC = diminished future earning capacity

WLE = worklife expectancy

PRE = pre-injury earning capacity

POST = post-injury earning capacity

f = function of

- I. This formula provides the vocational expert an empirically-based methodology for calculating post-injury employability and resultant earning capacity. The post-injury earning capacity figure can then be applied to the formula to determine diminished future earning capacity expressed as a percentage.
 - A. Clarify Worklife Expectancy.
 - B. Clarify date of birth, date of injury and permanent and stationary or maximum medical improvement date.
 - C. Determine pre-injury worklife expectancy. Determine post-injury worklife expectancy.
- II. Analyze Apportionment of Employability and Earning Capacity.
 - A. Clarify any medical factors affecting apportionment of employability and earning capacity.
 - B. Clarify any vocational factors affecting apportionment of employability and earning capacity.
 - C. Note that an opinion on apportionment of employability may be different than an opinion on apportionment of earning capacity.
 - D. Apply the following steps to determine diminished future earning capacity for the current injury alone.
- III. Establish Pre-injury Earning Capacity.
 - A. Clarify wages at time of injury.
 - B. Clarify benefits at time of injury, particularly if they are likely to be substantially different post-injury.
 - C. Combine wages and benefits to establish pre-injury earning capacity.
 - D. Consider wages alone, if you expect benefits to represent a comparable portion of earnings post-injury.
 - E. If necessary, convert partial workyear earnings to full workyear earnings.
- IV. Establish Post-injury Earning Capacity.
 - A. Use the total labor market access approach or the most suitable job(s) approach.
 - B. For the total labor market access approach, use the *McCroskey Transferable Skills Program* (MTSP) (McCroskey, 2014), *OASYS* (Truthan, 2015), *SkillTRAN* (Truthan, 2015), or a comparable program to determine the entry-level wage for the highest paying job or jobs for which the injured employee has some or all of the skills required for employment.
 - C. For the most suitable job(s) approach, use the *RAPEL Method* (Weed & Field, 2012) or a related method to identify the most suitable jobs to use as the basis for post-injury earning capacity, using MTSP (McCroskey, 2014), OES (California Employment Development Department, 2015), or another source of wage data.
 - D. Add a separate calculation for benefits if they are likely to be substantially different as a percentage of wages post-injury.
 - E. Calculate earnings after 3 to 5 years through the MTSP (McCroskey, 2014), OES (California Employment Development Department, 2015), or another source of wage data.
 - F. Add benefits, if substantially different as a percentage of wages post-injury.

Table 2 (continued)

- G. Determine earnings, if any, while in training.
- H. Calculate the average hourly earnings for the first 3 to 5 years post-injury.
- I. Calculate earnings for the remainder of the worklife post-injury.
- V. Calculate Future Earning Capacity.
- A. Earnings for the first 3 to 5 years plus training and job search time
- B. Plus earnings for the remainder of worklife
- C. Equals total post-injury EC
- D. Pre-injury EC less post-injury EC
- E. Equals DFEC
- F. Divided by pre-injury EC
- G. Equals the percentage of DFEC
- H. Add any training related costs
- I. Determine DFEC including training related costs
- VI. Calculate Future Earning Capacity for Evaluatees with Fewer Than 5-10 Years (Average 7.5 Years) of Worklife Expectancy.
- A. For evaluatees with fewer than 5-10 years (average 7.5 years) of worklife expectancy, there is usually insufficient time to allow for the usual increases in wages in a new job as a worker acquires job skills and work experience. For such individuals, comparing pre-injury earning capacity with the expected post-injury earnings for 7.5 years of employment will therefore likely result in the most accurate percentage of diminished future earning capacity.
- B. Consider a reasonable amount of time for training.
- C. Counselor expected reasonable training costs.
- VII. Calculate the Impact of Any Additional Disability Factors on DFEC.
- A. Medically necessary use of a mobility aid such as a cane, crutches, walker, or wheelchair.
- B. Artificial member or brace.
- C. Limited to part-time work, e.g., 4 hours per day only or 3 days per week only.
- D. Need for extra or extended rest breaks, lie-down breaks, or unscheduled absences due to flare-ups.
- E. Absences from work for anticipated surgeries and other treatment.
- F. Need for ready access to a bathroom.
- G. Special environmental limitations.

References

- Acme Steel v. WCAB (Borman)*, California District Court of Appeal, A137915, 78 CCC 751 (2013).
- Bates v. Workers' Compensation Appeals Board, Valley Vintners Wine Company*, 78 CCC 1322, 2013 Cal. Wrk. Comp. LEXIS 176 (2013).
- Brewer v. California Department of Corrections High Desert State Prison*, Panel Decision, WCAB No. ADJ2957389, 2013 Cal. Wrk. Comp. P.D. LEXIS 411 (2013).
- California Division of Workers' Compensation. (1997). *Schedule for rating permanent disabilities*. Sacramento, CA: Publications & Information Unit.
- California Division of Workers' Compensation. (2005). *Schedule for rating permanent disabilities*. Sacramento, CA: Publications & Information Unit.
- California Employment Development Department, Labor Market Information Division, *Occupational employment (May 2014) and wage (2015 - 1st Quarter) data for Alameda and Contra Costa Counties. Occupational Employment Statistics (OES survey results) for Alameda and Contra Costa Counties*. Sacramento, CA [On-line] Available from <http://www.labormarketinfo.edd.ca.gov/?pageid=1039>
- Dahl v. Contra Costa County*, Opinion and Decision after Reconsideration, WCAB No. ADJ1310387 (2012).

- Dufresne v. Sutter Maternity & Surgery Center of Santa Cruz*, Panel Decision, Opinion and Decision after Reconsideration, WCAB Nos. ADJ2433639; ADJ4390999 (2014).
- Fetner v. WCAB, City of Long Beach/Long Beach Fire Department*, California District Court of Appeal, Petition for Writ of Review Denied, G049967, 79 CCC 1204 (2014).
- Graham v. Ecolab*, Findings, Award, and Order, WCAB No. ADJ6760838 (2015).
- Hines v. 3T 3C Transportation*, Panel Decision, WCAB No. ADJ834650, 2014 Cal. Wrk. Comp. P.D. LEXIS 150 (2014).
- Holz v. WCAB, Gottchalks*, California District Court of Appeal, Petition for Writ of Review Denied, B247018, 78 CCC 484 (2013).
- Joberg v. Illuminations, Inc.*, Panel Decision, Opinion and Order Granting Petition for Reconsideration and Decision After Reconsideration, WCAB No. ADJ1801230 (2014).
- LeBoeuf v. WCAB*, 34 C3d 234, 193 CR 549, 48 CCC (1983).
- Lentz v. WCAB, Henry Mechanical*, California District Court of Appeal, A137915, 78 CCC 103 (2013).
- McCroskey, B. J. (2014). *McCroskey transferable skills program (MTSP) version 2014*. Brooklyn Park, MN: Vocationology.
- Melchoir, J. M. (Ed.). (2015). *Workers' compensation laws of California* (2015 ed.). San Francisco, CA: Matthew Bender.
- Meza v. Perma Steel*, Panel Decision, WCAB No. ADJ4532950, 2013 Cal. Wrk. Comp. P.D. LEXIS P.D. 441 (2013).
- Morris v. WCAB, San Geronio Hospital*, California District Court of Appeal, B257565, 79 CCC 1348 (2014).
- Mrozek-Payne v. State Compensation Insurance Fund*, Order Denying Reconsideration, Workers' Compensation Reporter, October 2012, WCAB No. ADJ4451171 (SDO 285915) (2012).
- Ogilvie v. City and County of San Francisco*, Opinion and Decision after Reconsideration, En Banc, WCAB No. ADJ1177048 (SFO 0487779), 74 CCC 248 (2009, February 3).
- Ogilvie v. WCAB and City and County of San Francisco v. WCAB*, California District Court of Appeal, A126344; A126427 (2011).
- Rodrigues v. Workers' Compensation Appeals Board, County of Sacramento*, 77 Cal. Comp. Cases 669, 2012 Cal. Wrk. Comp. LEXIS 81 (2012).
- Southern California Edison v. WCAB (Martinez)*, California District Court of Appeal, B245118 (2013).
- Truthan, J. (2015). *OASYS*. <http://www.skilltran.com/>
- Truthan, J. (2015). *SkillTRAN*. <http://www.skilltran.com/>
- U.S. Department of Labor, Employment and Training Administration. (1991). *Dictionary of occupational titles* (Vols. I and II, 4th ed.). Washington, DC: U.S. Government Printing Office.
- Van de Bittner, E. E. (2003). Evaluating workers' compensation claims for permanent and total disability in California: A vocational rehabilitation methodology. *Journal of Forensic Vocational Analysis*, 6, 77-88.
- Van de Bittner, E. E. (2006). Determining diminished future earning capacity in state workers' compensation: The California model. *Journal of Forensic Vocational Analysis*, 9, 19-31.
- Van de Bittner, E. E., Wallace, A., Cottle, R. B., & Simon, S. (2012). Evaluating employability and earning capacity to obtain the most accurate permanent disability rating in California workers' compensation cases after *Ogilvie III*. *The Rehabilitation Professional*, 20(2), 89-112.
- Walter v. International Capital Group*, Panel Decision, WCAB No. ADJ6875600, 2015 Cal. Wrk. Comp. P.D. LEXIS 32 (2015).
- Weed, R. O., & Field, T. F. (2012). *Rehabilitation consultant's handbook* (4th ed.). Athens, GA: Elliott & Fitzpatrick.
- Williams v. Long Beach Unified School District*, Panel Decision, WCAB No. ADJ3438054, 2013 Cal. Wrk. Comp. P.D. LEXIS 344 (2013).

Author Notes

Eugene E. Van de Bittner is a certified rehabilitation counselor, certified life care planner, certified vocational expert, and certified international psychometric evaluator. He is president of Mirfak Associates, Inc. in Walnut Creek, California.