2008

Evaluation of a career workshop program using multiple levels

Tracy Rosario
San Jose State University

Follow this and additional works at: https://scholarworks.sjsu.edu/etd_theses

Recommended Citation

Rosario, Tracy, "Evaluation of a career workshop program using multiple levels" (2008). *Master's Theses*. 3540.

DOI: <https://doi.org/10.31979/etd.9kd9-h39n>

https://scholarworks.sjsu.edu/etd_theses/3540

This Thesis is brought to you for free and open access by the Master's Theses and Graduate Research at SJSU ScholarWorks. It has been accepted for inclusion in Master's Theses by an authorized administrator of SJSU ScholarWorks. For more information, please contact scholarworks@sjsu.edu.

EVALUATION OF A CAREER WORKSHOP PROGRAM
USING MULTIPLE LEVELS

A Thesis

Presented to

The Faculty of the Department of Psychology

San José State University

In Partial Fulfillment

of the Requirements for the Degree

Master of Science

by

Tracy Rosario

May 2008

UMI Number: 1458132

Copyright 2008 by
Rosario, Tracy

All rights reserved.

INFORMATION TO USERS

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleed-through, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

UMI[®]

UMI Microform 1458132

Copyright 2008 by ProQuest LLC.

All rights reserved. This microform edition is protected against
unauthorized copying under Title 17, United States Code.

ProQuest LLC
789 E. Eisenhower Parkway
PO Box 1346
Ann Arbor, MI 48106-1346

© 2008

Tracy Rosario

ALL RIGHTS RESERVED

APPROVED FOR THE DEPARTMENT OF PSYCHOLOGY

Dr. Howard Tokunaga

Dr. Nancy Da Silva

Mr. Joseph Bucher, SJSU Career Consultant

APPROVED FOR THE UNIVERSITY

ABSTRACT
EVALUATION OF A CAREER WORKSHOP PROGRAM
USING MULTIPLE LEVELS

by Tracy Rosario

This study evaluated the effectiveness of a career workshop at a university career center using Kirkpatrick's (2006) first three levels of evaluation. Specifically, the levels of evaluation were: 1) Reaction, or how participants reacted to the overall workshop, 2) Learning, or how much of the information the participants retained, and 3) Transfer of behavior, or how often did the participants conduct the desired behaviors when in the field. The author hypothesized the results would positively support the effectiveness of the program. The level 3 evaluation (i.e., transfer of behavior) used two groups for data analysis: those who participated in the workshop and those who did not. Several analyses of the multiple levels of evaluation suggest an overall positive support for the workshop. The implications of these findings are discussed as well as recommendations for future research.

ACKNOWLEDGEMENTS

I am truly grateful for all the efforts put forth by my committee members, Dr. Howard Tokunaga, Dr. Nancy Da Silva, and Mr. Joseph Bucher. Thank you for your patience and your belief that I would soon be finished. I could not have done it without your support. I would also like to express my gratitude to my wonderful parents who also unduly supported me during my entire college experience. Thank you for laying down the resources, I hope I have made you proud. I would also like to thank my fellow colleagues; there is something to be said to be around people who understand the current strains behind the thesis. That being said: thank you to all who were a constant support. I greatly appreciate it!

Table of Contents

Section	Page
I. Introduction	1
Background Information on Usage of Career Center Services	1
Types of Services	2
Impact of Career Center Programs	3
Evaluations of Career Center Programs	4
Career Counseling Program Evaluations	4
Kirkpatrick's Evaluation Method	7
Evaluation of an Interview Skills Training Program	8
Current Study – situation, hypothesis and reasons for evaluating	11
II. Method	13
Participants	13
Measures	15
III. Results	18
Level 1 Evaluation: Reaction to Training	18
Level 2 Evaluation: Learning Outcomes	21
Level 3 Evaluation: Transfer of Learning	23
IV. Discussion	29
Findings of the Study	29

Theoretical Implications	31
Practical Implications	32
Evaluation of Study	32
Future Research	33
V. Conclusion	35
References	36

List of Tables

Table	Page
1. Reaction item means, standard deviations and correlations	20
2. Evaluation Correct Percentage	22

List of Figures

Figures	Page
1. Best Practices: Next Step?	24
2. General Resume Shows to Employers	25
3. Targeted Resume Shown to Employers	27
4. Verbal Portfolio Delivered to Employers	28

I. Introduction

It can be safely assumed that one of the main reasons students attend college is to prepare for their careers. College work allows students to understand theories and applicable practices before they enter the world of work. As a result, most universities and colleges have a designated student affairs center focused on providing career counseling/development services to their students. Service areas may include, but are not limited to career exploration, resume building, interviewing skills, personality survey analysis, or networking activities. In essence, services provided in career centers are geared toward developing students' overall portfolio while searching for and finding a successful career.

The idea of career center services is rational and realistic; however sometimes services may not be delivered in the most effective way, causing little effect in a students' career development and a waste of funds for the career center. The evaluation of a career center program may serve as a means of improving existing programs or deciding on which programs to eliminate and what kind of programs to create. The purpose of this study is to evaluate a career center's current workshop program designed to improve behaviors and skills during on-campus career fairs.

Background Information on Usage of Career Center Services

At most universities with a career-counseling center, students who visit are expecting some type of assistance with their job exploration or search (Brandt, 1977). Astin et al (1993) and Weissberg et al.'s study (as cited in Orndorff & Herr, 1996)

supports the idea that most students attend college to better prepare for the professional world and obtain a successful job after graduation. Specifically, Weissberg et al. (1982) found that well over half of their student participants expressed needs in identifying careers related to their major and obtaining experience in that field; otherwise looking for specific services from a career counseling center indicating their perception of the usefulness of career centers.

Types of Services

Oliver and Spokane (1988) referred to career interventions as activities that had the intent of growing an individual's knowledge regarding career decisions and best practices. These activities could be delivered in a variety of ways, such as workshops. Workshops allow a medium to large number of participants, depending on the size of the room and the amount of resources, to participate in a session designated to enhance a person's skills and knowledge about a particular subject. Workshops differ in the way they are delivered; for example, they can differ in the amount of participant interaction, discussions and/or types of activities. Another example of a career center program activity is coaching, such as interview coaching. Interview coaching, as defined by Maurer et al. (2001), is a type of intervention designed to enhance interview performance and consists of several techniques such as modeling, role-playing, lectures, discussions, media, and feedback from coach.

Career intervention activities can differ by university career centers in the way they are performed, and are generally performed in one or more of the following ways:

individual counseling, group processes, computerized surveys/analyses, inventories, and/or workshops (Whiston, Sexton & Lasoff, 1998).

While some career centers may provide diverse career interventions or activities, others may emphasize or focus on one or two. Whether a certain method is better than the other, is unknown and it ultimately depends on the individual being counseled as well as the counselor (Fretz, 1981). Holland suggested (as cited in Brandt, 1977) that career centers should offer as many levels of treatment as possible; referring to traditional individual service, group activities, workshops and inventories such as computerized assessments. While individual counseling provides a more comprehensive and dedicated type of counseling, group counseling and processes may be the most effective in a university setting (Brandt) as they are conducive to larger groups in a more efficient manner. Group processes also provide students an opportunity to interact with peers in similar situations and share common anxieties, questions and concerns. Moreover, data from a comprehensive career center showed that resume assistance was the most popular service provided (Pennsylvania State University, 1994).

Impact of Career Center Programs

Previous literature and research on the overall benefits of career counseling programs suggest that there are significantly more positive results in engaging in career counseling activities or interventions than not engaging in any (Orndorff & Herr, 1996; Campion & Campion, 1987; Oliver & Spokane, 1988; Austin & Grant, 1981). Orndorff and Herr found students had higher levels of certainty regarding their choice of major and

career choice after engaging in career development activities than students who did not participate. Johnson and Smouse (1993) found that participants who underwent a career-planning course scored higher in levels of decidedness regarding career related decisions. Other literature provides support that career intervention strategies improved interview performance (Austin & Grant, 1981).

Evaluations of Career Center Programs

While there is a lot of support for career development programs, there is very little research on the evaluation of their impact or effectiveness (Maurer et al., 2001; Dipboye, 1992). This could be due to the fact that career programs are for the most part under-evaluated. Evaluating programs requires time, money, and human resources. Specifically, it is very likely that career centers at universities have budget constraints; therefore evaluations would have to be conducted by staff members. Consequently, staff members may or may not have the time or the statistical background to conduct these types of evaluations (Whiston, 2001). Nevertheless, evaluation of a program is important in that it provides evidence that a program is working, therefore worth the time of both counselors and clients.

Career Counseling Program Evaluations

Maurer et al. (2001) assessed the effectiveness of an interview coaching session for candidates who were applying for a promotion into different fire and police department jobs in a city. Specifically, they wanted to investigate the relationship

between specific coaching methods used, and the candidate's answers and behaviors during actual interviews. Maurer et al.'s participants consisted of applicants who were applying for a promotion during a promotion in police and fire departments. Maurer et al. found that participants in the coaching sessions used more preparation strategies than those who did not participate in the coaching sessions. Maurer et al. found that participating in coaching sessions was positively related to organization response strategy, which was rated by the interviewers (i.e., organization response strategy refers to the individual's overall organization and preparation while answering questions in the interview). In other words, performance was viewed as more effective when candidates were organized and thoughtful in their answers. Overall, Maurer et al. suggested that coaching led to using preparation strategies which led to better response strategies which ultimately led to better performance in an interview. This study was able to assess and evaluate a development program in terms of its effect on the job related behavior. While this is an excellent method of evaluation, it is important to also assess whether or not participants are satisfied with coaching programs and whether or not they learned what they were intended to learn. This study did not assess the amount of promotions; there were no analyzes conducted to see the relationship between coaching and being promoted.

Piggot-Irvine (2006) evaluated the effectiveness of a leadership program used within various schools in New Zealand. The leadership program was designed as part of career development for teachers. Piggot-Irvine hypothesized that an effective training program would result in changed practice or in changed behaviors. The leadership

program included seminars with topics covering leadership, team building, change management, time management and others. Piggot-Irvine conducted a multi-method assessment consisting of both short and long-term evaluations. Their short-term evaluation consisted of assessing participants' overall satisfaction with the administration and quality of the program. The long-term evaluation was conducted a year after the program and data for this evaluation was collected via two focus groups. Overall, Piggot-Irvine found that teachers in the focus groups responded positively toward the effects of the program on their long-term development. Piggot-Irvine used a comprehensive method of evaluating the leadership program in this academic setting as they were able to use the longitudinal data to compare against original data. It would be interesting for future research to follow the same method of evaluation using a larger sample size and incorporating the assessment of learned objectives as a result of the program. Assessing the learning objectives allows visibility into what participants really learned and if they learned what they were intended to learn.

While there are many methods of evaluation, it is important to consider what makes a good case when describing an effective training program. Did the participants enjoy it? Were they satisfied with their facilitator? Would they recommend it to a colleague? Were learning objectives clearly stated, and if so, did the participants learn those objectives? Will participants use their newfound knowledge and skills in the applicable setting? Were there some messages in the program that participants learned more than others? Is there a clear relationship between the use of a training program and metrics of an organization or company? Many of these questions can be addressed by

using a multi-level evaluation such as Kirkpatrick's (2006) levels of evaluation. The next section describes in detail the different steps used in Kirkpatrick's method of evaluation.

Kirkpatrick's Evaluation Method

Kirkpatrick's Evaluation Model (2006) is often used to evaluate training programs in academic and corporate settings. Kirkpatrick devised a model in which training programs could be evaluated in four levels; each level representing different analyzes of a program.

The first level of evaluation is known as Level 1 or Reaction and it measures how participants reacted to a program. In other words, it measures participants' levels of satisfaction to different aspects of a program, such as content, facilitator, media used, etc. Level 1 evaluations are the most commonly used surveys as they are quick, simple and efficient for both the evaluator as well as the participants. These evaluations are generally done right after a training program for immediate reaction and feedback. While a Level 1 evaluation can provide information on whether participants enjoyed the training or not, it does not supply information on whether the participants learned the content nor does it provide future information on whether the participants will apply their knowledge.

The second level of evaluation is known as Level 2 or Learning, and it assesses whether the content provided in the workshop changed the attitude, improved knowledge, and/or increased the participant's skill. These evaluations can be conducted in various occasions: immediately after a training program, a projected number of days after the training program or both. All occasions provide different insight into what the

participants learned. Conducting the evaluation right after the training program allows for immediate assessment of knowledge gained while testing at another time will allow assessing for retention of information.

The third type of evaluation is known as Level 3 or Behavior. Level 3 evaluations assess whether the content provided in a program is applied in the environment it was designed to, such as the work setting. Kirkpatrick (2006) wrote that in order for people to change their behavior, four conditions were necessary: 1) The participant must want to change, 2) The participant must know what to do and how to do it, 3) The participant must work in the right environment, and 4) The behavior must be rewarded. Training programs influence the first two conditions; training can influence participants to change and will show participants what they need to know and how to go about doing it.

The final level is known as Level 4 or Results and many times also referred to as the “bottom-line.” Level 4 evaluations assess what were the final results after participation in the training program such as increased productivity, reduced turnover, etc. It is the least frequently used method in training evaluations due to the complexity in finding a direct relationship between training and the bottom-line.

Evaluation of an Interviewee Skills Training Program

Campion and Campion (1987) conducted one of the few studies where a career development program was evaluated using all of Kirkpatrick’s level of evaluation. Guided by the lack of research in evaluating career development programs, Campion and Campion decided to evaluate one of the main foci of common career development

programs – interviewee skills training. They used a broad sample in a real-world setting from a large electronics company and also included a control group: participants who used self-study methods of preparation for interviewing versus participating in the program. Budget resources allowed only up to a certain amount of employees to participate in the interviewee skills training program; randomly selected participants were assigned to participate in the program or to a self-study (i.e., control group).

The number of participants in the training program (experimental group) was 158; the control group had 140 employees. As past research has resulted in mixed answers regarding the most effective method of teaching interviewee skills training, the program they used was a combination of lecture, discussion, role-playing and feedback. The program consisted of three sections: 1) “Advice on How to take Interviews,” a combination of lecture and discussion with several subject areas such as appearance, preparation, etiquette, etc. 2) “Preparing and Practicing Answers to Likely Questions,” which asked participants to develop answers to commonly asked interview questions (i.e., such as identifying strengths and long-term goals, what interested them most about the position), and they were divided into groups where they could role-play with one another, 3) “Characteristics of Interviews and Interviewers,” consist of a video-tape designed to train managers on how to conduct interviews. One of the topics covered in the video was the identification of negatively weighted items in interviewee answers such as lack of planning for career.

Again, Campion and Campion used all of Kirkpatrick’s levels of evaluation as measures during the study. Level 1 was assessed with a survey asking overall reaction

items such as “To what extent did the program improve your knowledge/skills in the interview taking process?” Learning was assessed by a three-question essay test before and after the training program. A sample test question was “What are some likely questions you might be asked in the upcoming interview(s)?” The transfer of behavior was collected by evaluations completed by both the employer and the candidates. Questions such as “How well did the candidate perform in the interview” and “Overall, how did the interview go?” were asked. Finally, the number of job offers received determined the results portion finalizing all the steps of the evaluation.

As hypothesized, Campion and Campion found that on average, well over half of participants responded favorably to the program, therefore generating successful Level 1 evaluation results. Pre and posttest questions revealed an increase in correct answers, suggesting that the Level 2 evaluation was also successful. Interestingly, there were no differences between the experimental and control group when it came to the interviewer assessments of candidates. Also, there were no differences between groups on the amount of job offers. Both of these results could be due to certain confounding effects of management already having a bias and familiarity with candidates, as they were all employees of the same company. Also, the length of the training program was four hours long – a longer, more detailed and individualized program may prove more effective.

Campion and Campion’s study is a great example of why multiple methods of evaluation are paramount to the overall evaluation of a program – while the program would have been perceived as effective using Level 1 and 2 evaluations, it would have not have been deemed as successful with the results of the Level 3 and 4 evaluations.

The present study aims at also evaluating a program using multiple methods of evaluation. Unlike Campion and Campion, the current study uses a control group with no previously assigned preparation during the Level 3 evaluation.

Current Study – situation, hypothesis and reasons for evaluating

To briefly summarize, career center programs are widely used as part of many career center programs in university settings. While many services at universities have been found to be effective, the evaluation of programs is seldom done due to various reasons. Some of the few authors who have evaluated training programs have been mentioned here. Their findings support the idea that some type of career counseling yields overall more positive results when it comes to interview performance, making career decisions and better awareness. At the same time, certain findings require more investigation that take into consideration many existing confounding variables that potentially negate the effectiveness of a career program.

The present study attempts to delve more into the realm of career program evaluations by providing another multi-level assessment of a university career center program. Unlike the studies mentioned previously, the current study uses university students as a sample to evaluate the effectiveness of a career development workshop called “Job Fair Success Workshop” which aims at coaching and preparing students for their participation of an upcoming job fair. The first three levels of evaluation (Kirkpatrick, 2006) were utilized to assess the workshop program in use at the career center. Level 1 and Level 2 evaluations were conducted during the workshop and Level

3 evaluation was conducted at the job fair. The main focus of the study is to assess whether participants were satisfied with the program, whether or not they are learning from the workshop and lastly, whether or not they will use their newfound knowledge and skills at the job fair.

Hypotheses:

- 1) Students will respond favorably to the overall training program.
- 2) Students will be successful in answering the learning outcome questions.
- 3) Students who attend the workshop will display more encouraged behaviors (e.g., showing targeted and general resumes, performing verbal portfolios) than students who did not attend the training workshop.

II. Method

Participants

Job Fair Success Workshop. Participants consisted of students at San Jose State University who attended the Job Fair Success Workshop at the university's career center. There were 168 undergraduate students, 108 graduate students, and 11 other participants marked as "miscellaneous." Of the undergraduate participants, 67% were seniors. Engineering and Business majors made up most of the participants (46.9% and 38.2%, respectively). Participants had to remain the entire duration of the workshop to participate in the study.

Job Fair Success Workshop Details. The Job Fair Success Workshop was an hour and a half long session. Topics included during the workshop included tips on how to be successful at a job fair and learning how to verbalize a "one-minute commercial" also known as a verbal portfolio. The one-minute commercial ideally served as a summarized verbal version of the students' resume; including information such as education, previous work experience, interests and/or demonstrated interest in a specific employer at a job fair.

The workshop started off with an activity where participants were to partner with a fellow participant and discuss any apprehensions they had about going to a job fair. After the opening exercise, participants watched a video where different employers were interviewed and asked questions regarding what kinds of things they look for in candidates during recruiting events. After the video, students participated in a short exercise where they could create and practice their own one-minute commercials.

Additionally, as part of coaching “best practices” at a job fair, they were encouraged to take specific steps after the job fair such as following-up with “thank-you” letters to recruiters of prospective organizations. The workshop’s focus then turned to resume building and tips. Participants were encouraged to target their resumes to fit the needs and values of specific companies/organizations otherwise creating “targeted” resumes. The portion on resume building covered several areas such as creating an effective objective, portraying class projects as applicable experience, and work experience. A brief “question and answer” session was offered toward the end of the workshop; participants were then asked to share their workshop experiences in a survey in plans to improve future workshops.

Job Fair. The job fair is an activity for employers and job seekers to come together at one time. Representatives from companies and organizations are able to recruit for open requisitions; job seekers are able to have face-to-face contact with employers. Unlike the Job Fair Success Workshop evaluation, participants were randomly surveyed at the job fair. A total of 181 participants were surveyed using a paper and pencil questionnaire. The majority of the participants were San Jose State Students and members of the career center. Half of the participants ($N = 90$) were surveyed during the “early-bird window” to obtain information from participants who attended the workshop. The early window refers to early admittance offered to those who participated in the Job Fair Success Workshop (i.e., they were allowed two hours earlier than students who did not participate giving them the opportunity to speak with employers firsthand). The other half ($N = 91$) were surveyed during a later window

where all students were allowed in the job fair, whether they had attended the workshop or not. The majority of the students who were available during the window of surveying were willing to participate in the survey. Author collected all the data. One hundred and eighty-one participants were surveyed on the day of the job fair; the actual breakdown of those who attended the workshop and those who did not were $N = 136$; $N = 45$, respectively.

Measures

Level 1 Evaluation. Level 1 evaluation assesses initial reactions to a training program. (Kirkpatrick, 2006). Two measures were used to assess reactions. One was a previously used measure used by the career center. Three questions assessed initial reactions, while the rest of the questionnaire had demographic questions. The other measure was constructed independently of the previously used measure and it assessed both reaction and learning. Participants were surveyed after engaging in a training workshop aimed at improving their skills and behaviors for job fairs. They were instructed to answer the questions based on their initial reactions to the training workshops. They were also asked to answer a few questions aimed at assessing their learning. Participants were told their answers would remain anonymous and would aid in the future improvements of the career center programs. Please see Table 1, which shows the questions asked to assess reaction. Likert-type questions and scaling was used for questions assessing participant reactions. In order to assess initial reactions, participants rated statements such “Attending this workshop will help me during job fairs.” Seven

questions were used on this measure; all of them had five options ranging from “Strongly Disagree” to “Strongly Agree” with a neutral option in the middle. These items were created for the purposes of the current study.

Level 2 Evaluations. Level 2 evaluation assesses learning after a training program (Kirkpatrick, 2006). On the same measure used for Level 1 Evaluations, separate questions were asked to assess learning outcomes. Five multiple-choice questions were used to assess whether or not the participant learned the main objectives of the training programs. Questions such as “What is something you should do after a workshop?” were asked, and participants had three multiple-choice options to choose from. A Level 2 evaluation was also assessed during the job fair, specifically asking what the participants “next steps” were after the job fair; material that was covered during the workshop.

Level 3 Evaluations. Level 3 evaluation assesses the transfer of the learning outcomes to “real-life”. In other words, are participants using what they learned in the training program? Another independent measure was constructed to assess Level 3 evaluations. Five questions were used to gauge if participants used the expected behaviors during the job fair. Questions such as “How many employers did you show a targeted resume to today” were used to assess not only behavior, but also quantity of behavior. Participants were individually and randomly selected to participate in the survey on the day of the job fair. Time slots were assigned to collect survey data. The first batch of surveys was handed out during the “Early Bird” window. Data from these participants were automatically part of the Experimental group as they could only gain entry to the job fair at this time if they had participated in the Job Fair Success Workshop.

The second batch of surveys was handed out during a later window where the entire student population was allowed entry. All participants were asked to participate in a survey aimed at improving career center training programs. Participants were told their answers were anonymous and that they should not write their names or any other method of identification on their survey slips.

III. Results

Level 1 Evaluation: Reaction to Training

Data Entry Errors and Missing Data. There was no data entry errors found. Missing data was assessed at the subject level. Sixty-four participants were deleted as they were missing more than 70% of their responses, primarily the learning outcome questions. Missing data was also assessed at the variable level – no single item was missing more than 80% of the responses, therefore no variable item was deleted. The total number of subjects used in the analysis is $N = 214$.

Skewness/Kurtosis/Normality. To assess skewness and kurtosis, the skewness and kurtosis statistic was divided by the standard error. Most of the reaction items were negatively skewed indicating that most participants responded positively to reaction items. Most of the learning items were also negatively skewed indicating that most participants answered the learning outcome questions correctly.

Reaction to Training (Workshop). In order to conduct Level 1 evaluations; a series of analyses were conducted on reaction items; specifically items relating to how participants reacted to different aspects of the training.

Correlations. Please refer to Table 1 for inter-item correlations, means and standard deviations. Most of the items were strongly correlated, with reaction item stating “Attending this workshop will help me during job fairs” and item stating “I would recommend this workshop to someone interested in attending a job fair” having the strongest correlation ($r = .71, p < .01$). Due to the high correlations from several of the

items, reaction items were grouped together as one item and were analyzed as such in addition to the analysis of individual reaction items.

Means. Overall, participants reacted favorably to the workshop. All reaction items averaged a mean score of “4” or more. Please refer to Table 1 for all reaction item descriptives. The lowest average on reaction items was the question regarding satisfaction with length of the workshop ($M = 4.00$, $s.d. = .89$). The reaction item with the highest average rating was the question stating whether they would recommend the workshop to someone interested in job fairs ($M = 4.33$, $s.d. = .70$).

Most reaction items were highly intercorrelated and they were grouped together to achieve a total reaction average ($\alpha = .86$). The mean for the collapsed reaction items is $M = 4.18$, $s.d. = .57$.

Test of First Hypothesis. Using a sample size of 214, we wanted to determine whether the first hypothesis was supported. The purpose of this analysis is to evaluate if the hypothesis regarding Level 1 evaluations is supported. With the use of the new integrated reaction item mean, a hypothesized average could be compared against the results of the reaction item. Keeping in mind a Likert Scale of 1 – 5 with one being “Strongly Disagree, three being “Neutral” and five being “Strongly Agree” two scenarios were used in the one-sample t-test. If the training was not effective in meeting its learning objectives then at least two scenarios are possible: 1) the students will feel neutral about their overall reactions to the training or 2) they might disagree with some of the positive reaction items. When the reaction item was compared against a hypothesized average labeled as “Disagree,” the mean reaction item ($M = 4.18$) was significantly

Table 1. Reaction item means, standard deviations and correlations. ($N = 214$)

Reaction item	Mean	s.d.	1	2	3	4	5	6	7
"The learning objectives were clearly stated"	4.21	.72							
"The content provided was sufficient in meeting the stated objectives."	4.12	.70	.70 *						
"Attending this workshop will help me during job fairs."	4.23	.72	.53 *	.53 *					
"I would recommend this workshop."	4.33	.70	.54 *	.53 *	.71 *				
"The facilitator was prepared and organized."	4.31	.71	.50 *	.55 *	.52 *	.55 *			
"The length of the workshop was appropriate."	4.00	.89	.47 *	.50 *	.45 *	.39 *	.48 *		
"The presentation, handouts and other materials were helpful."	4.11	.89	.40 *	.40 *	.43 *	.41 *	.43 *	.45 *	

Note. * $p < .01$

higher than the hypothesized average ($M = 2.00$), $t(213) = 55.85, p < .001$. Also, when the reaction item was compared against a “Neutral” hypothesized average, the reaction item average ($M = 4.18$) was also significantly higher than the hypothesized average, ($M = 3.00$), $t(213) = 30.26, p < .001$. These two analyses indicate that students reacted very favorably to the training workshop.

Level 2 Evaluation: Learning Outcomes

Level 2 evaluations were assessed by questions answered correctly or incorrectly. Table 2 shows the percentage correct for all learning outcome questions. Almost all questions were over 85% correct. The last learning outcome question on the day of the training had the smallest percentage correct, 78% of participants scored it correctly. Specifically this question asked students what “was the best way to find out about job information”, a topic covered in the workshop.

Test of Second Hypothesis. In order to evaluate the effectiveness of the training program using a Level 2 evaluation, a chi-square was conducted comparing the two possible outcomes for each learning outcome (Correct or Incorrect) using the same sample as in the previous analysis. Correct/incorrect answers were compared against a hypothesized correct/ incorrect amount. Since the learning outcome questions were regarding topics in the workshop session, it was hypothesized that approximately 75% of the students would choose the correct answer on all five questions, while 25% of the students would not. Seventy-five percent was seen as a reasonable success rate for the purposes of this study.

Table 2. Evaluation Correct Percentage

Learning Outcome Item	Percentage Correct
"When should you use a targeted resume?"	89.2%
"What is the purpose of a targeted resume?"	86.3%
"What is something that should not be included in your resume?"	86.3%
"What are employers looking for in a candidate?"	90.0%
"What is the best way to find out about job fairs?"	78.1%
"What is your next step? [after the job fair?]"*	64.0%

*Note: This item was assessed on day of job fair and not on the day of the training.

In terms of the first learning item, “When should you use a targeted resume?”, the percentage of students that answered correctly was 89.2%, which was higher than the hypothesized amount (75%), $\chi^2 (205) = 25.69, p < .001$. Similarly, participants scored higher than expected on the following items: “What is the purpose of a targeted resume?” (86.3%), “What is something that should not be included in your resume?” (86.3)%, and “According to today’s presentation, what are employers looking for in candidates?” (90%), $\chi^2 (203) = 15.06, p < .001$; $\chi^2 (203) = 15.06, p < .001$; $\chi^2 (202) = 24.84, p < .001$; respectively. The learning item asked on the day of the job fair (i.e., different sample than the day of the workshop), “What is your next step [after the job fair]?” showed that participants scored significantly lower than expected (64%), $\chi^2 (178) = 12.22, p < .001$. Figure 1 shows the break out of correct and incorrect answers for the learning item asking what the participant’s next step was after the job fair. The only learning outcome item to show no significant difference against the expected amount was “What is the best way to find out about job fair information?” (78%), $\chi^2 (202) = 1.20, p = .27$.

Level 3 Evaluation: Transfer of Learning

Test of Third Hypothesis. All questions regarding frequency of behavior were compared against groups. The experimental group ($N = 136$) was participants who had attended the training workshop. The control group ($N = 45$) was participants who had not attended the training workshop. A chi-square comparison of groups was conducted on the three Level 3 assessment items. Figure 2 breaks down participants who showed a resume to at least one employer or who did not know what a general resume was. Overall, participants who attended the training had a higher percentage (96%) of showing a

Figure 1. Best Practices: Next Step?

Figure 2. General Resume Shown to Employers

resume to employers than those who did not attend (86%). There was a significant difference found in participants who attended the training and those who did not in relation to showing employers a “general” resume, $\chi^2(1) = 5.75, p < .05$. Specifically, an odds-ratio analysis suggests that those who attended the training were four times more likely to show a “general” resume to an employer than those who did not.

Figure 3 shows participants who showed a “targeted” resume to at least one employer or who did not know what a “targeted” resume was. Again, participants who attended the training had a higher percentage (96%) in terms of showing a targeted resume than those who did not attend the training (73%). There was a significant difference found in participants who attended the training and those who did not in reference to “targeted” resumes, $\chi^2(1) = 21.45, p < .001$. The odds-ratio suggests that those who attended the training were ten times more likely to show an employer a targeted resume than those who did not.

Figure 4 breaks down participants who delivered a one-minute commercial/verbal portfolio. Consistent with the two previous trends, participants who attended the training had a higher percentage (99%) of delivering verbal portfolios than those who did not attend the training (69%). There was also a significant difference found in participants who attended the training and those who did not in reference to delivering a one-minute commercial or verbal portfolio, $\chi^2(1) = 40.75, p < .001$. In this case, participants who attended the workshop were 60 times more likely to deliver a one-minute commercial or verbal portfolio to employers than those who did not.

Figure 3. Targeted Resume Shown to Employers

Figure 4. Verbal Portfolio Delivered to Employers

IV. Discussion

Findings of the Study

The purpose of this study was to further the amount of research conducted in the field of evaluation, specifically in the evaluation of career development. For various reasons mostly dealing with lack of resources and time; career development programs are seldom evaluated and therefore their proof of effectiveness is not clearly demonstrated. In order to improve or enhance career development programs, it is important to know what is working and what is not. Evaluations serve this purpose by assessing different levels of effectiveness and providing statistical support for these initiatives. Using Kirkpatrick's (2006) three levels of evaluation, this study aimed at assessing a current career development program current in place to determine how successful it was in achieving the development of students it aimed to achieve.

It was hypothesized that students who attended a career development program would react positively to the training program as it was designed to help them with what they were looking for: preparing for a job fair which ultimately meant finding a job. Our first hypothesis was supported: Students reacted favorably to the training workshop. Overall, they were strongly satisfied with the content, the facilitator and felt that it better prepared them for the upcoming job fair.

It was also hypothesized that the training program would be effective in reaching its learning objectives; students would succeed in the learning assessment portion of the evaluation. For the majority of the learning outcome questions, students did better than was expected. Specifically, students retained information regarding the main objectives

of the training program such as knowing the difference between a “general resume” and a “targeted resume”. They also understood what kind of content should be included in a verbal portfolio. However, some questions such as “What is the best way to find out about Job Fairs?” or “What is your next step? [after the job fair]?” had lower percentages correct than the other questions. Specifically for the first question, the lower percentage correct could be due to the timing of when this specific content was presented in the training. This material was the last to be covered in the presentation; the attention span might have been more limited at that point or the material simply wasn’t covered as effectively as others. The latter question was asked during the job fair and therefore at least two weeks since the training had passed. This gap in time may have caused some of the retention of information to decrease. Also this question could be perceived as more subjective than others. Regardless of the recommendations made in the training, students may have their own beliefs as to what steps they should take after a job fair (i.e., sending a Thank-You note, or waiting for a follow-up phone call). According to the workshop, sending a Thank-You note to recruiters was seen as a “best practice” after attending a job fair.

Lastly, it was hypothesized that students who attended the workshop would be better prepared to meet with employers. This means having both general and targeted resumes available for employers to view, as well as performing their verbal portfolio. We assessed three different behaviors: whether or not they showed a general resume, whether or not they showed a targeted resume and whether or not they performed a verbal portfolio. In all cases, students who attended the career workshop training were

significantly more likely to do all the above-mentioned preferred behaviors.

Theoretical Implications

The implications of this research, again, further add to the growing body of knowledge regarding evaluation of career development programs. It supports previous research that suggests there is an overall positive effect of attending a career development program (Orndorff & Herr, 1996; Campion & Campion, 1987; Oliver & Spokane, 1988; Austin & Grant, 1981). Students reported significantly higher levels of satisfaction and preparation. Students who feel prepared to interview or prepared to share a resume with an employer have more confidence and will most likely present themselves in a way that sells their ability as an excellent job candidate more than those who do not. In general, research that has evaluated career development training suggests that there were more positive results for students than not. As there is not a lot of research to compare against, there were no clear contradictions in this study with the results of others. However, unlike Campion and Campion's (1987) results that found no difference in their Level 3 evaluations (i.e. Transfer), this study found significant differences in behaviors in those who attended the workshop and those who did not. These differences could be due to the participant population. Campion and Campion used managers as their Level 3 evaluation feedback. These managers knew most of the candidates and there could have been some confounding biases in their assessments. The Level 3 evaluation in the current study was done via a self-report of performed behaviors.

Practical Implications

As we have mentioned several times, there were significant positive results when assessing students' reaction to the training and their learning. The training was successful in the delivery and in the transfer of knowledge. The most telling aspect of the evaluation was how significantly different the actual preferred behaviors were. In terms of showing both types of resumes and presenting themselves effectively (i.e., verbal portfolio) students who attended the workshop were significantly more likely to do these at the job fair than those who did not. This means students were better prepared and will be better able to present themselves not only at the job fair but anytime they meet with employers at other campus recruiting events or at interviews.

These strong results suggest the importance of performing multi-level evaluations. Analysts of the data are able to provide more scrutiny to what is actually working in the evaluation and are able to see the results of their efforts. They are also able to improve current processes and content. For instance, there were some learning outcome questions that did not produce as many positive results as others. The way this content is presented could be revised, redone, etc. In any case, any type of evaluation is absolutely better than none. Fortunately, in many cases you can assess more than one aspect at once.

Evaluation of Study

Strengths. The multi-level approach taken in this study was certainly a strong point. In many cases, data at the third level of evaluation is quite difficult to assess in a

field study, as participants don't usually come back to a common area, as was the case in this study. In this study, we were able to assess those who went to the career training workshop as well assess what they learned when they participated in the "field" or at the job fair. This study was also able to incorporate a small assessment of learning a few weeks after the actual training; retention of information was better portrayed in this aspect.

Limitations. The opportunity to conduct a Level 4 (i.e. Results) evaluation was not available. This would have offered all of Kirkpatrick's (2006) levels of evaluation and therefore provide more useful feedback to the career center. Unfortunately, resources and anonymity constraints did not allow for the data gathering needed to conduct a Level 4 evaluation. In terms of data, the data gathered at the job fair would have been more powerful and telling if we had gathered a more equal distribution of students who attended the job fair and those who did not. Only 25% of the students surveyed had not attended a workshop; a more equal distribution will make a stronger case for the statistical results.

Future Research

If a study like this were to be replicated or done in a similar way, the importance of a Level 4 evaluation should be strongly communicated. Level 4 evaluations are not only useful for practical reasons, but also for theoretical reasons. A Level 4 evaluation in the current study would have gathered data on the results after the job fair. Research would be conducted on the number of job offers students received as a result of attending

the workshop and the job fair. These success factors could then be shared with university staff to encourage the continuance and funding of these programs. Only one study was found in the current literature review that conducted all types of evaluations in the career development program setting. Adding this additional level of evaluation will provide essential knowledge to this area of study.

As this study used field data, future research should continue to use only field data. Lab or mock instruments and situations would not be useful in this type of evaluation. Also, opportunities for comparison groups should be taken advantage of, as a comparison point is always a great data point when explaining the effectiveness of an evaluation.

V. Conclusion

One of the main purposes of attending college is to better prepare for the world of work. Career development programs such as the one in this study aim at providing the skills and resources for students so that they may succeed in their endeavors after they graduate. While the motivations may seem right, it is always important to continually evaluate the effectiveness of these programs so as to better serve the student population using multiple levels of evaluation. As seen in the past and current study, using only one avenue of evaluation does not always tell the whole story. In a time of frequent budget cuts, data and numbers tell a powerful story that will encourage the perception of career development programs to be common sense and absolutely necessary.

References

- Austin, M.F. & Grant, T.N. (1981). Interview training for college students disadvantaged in the labor market: Comparison of five instructional techniques. *Journal of Counseling Psychology*, 28, 72-75.
- Brandt, J.D. (1977). Model for the delivery of career development programs by the college counseling center. *Journal of Counseling Psychology*, 24, 494-502.
- Campion, M.A. & Campion, J.E. (1987). Evaluation of an interviewee skills training program, in a natural field experiment. *Personnel Psychology*, 40, 675-691.
- Fretz, B. R. (1981). Evaluating the effectiveness of career interventions. *Journal of Counseling Psychology Monograph*, 28, 77-90.
- Fretz, B.R. & Schmidt, L.D. (1967). Comparison of improvers and nonimprovers in an educational skills course. *Journal of Counseling Psychology*, 14, 175-176.
- Maurer, T.J., Solamon, J.M., Andrews, K.D. & Troxtel, D.D. (2001). Interviewee coaching, preparation strategies, and response strategies in relation to performance in situational employment interviews: an extension of Maurer, Solamon and Troxtel (1998). *Journal of Applied Psychology*, 86, 709-717.
- McCormack, C. & West, D. (2006). Facilitated group mentoring develops key career competencies for university women: a case study. *Mentoring & Tutoring*, 14, 409-431.
- Noe, R. A. & Wilk, S. L. (1993). Investigation of the factors that influence employee's participation in development activities. *Journal of Applied Psychology*, 78, 291-302.
- Oliver, L.W. & Spokane, A.R. (1988). Career-intervention outcome: What contributes to client gain? *Journal of Counseling Psychology*, 35, 447-462.
- Orndoroff, R.M. & Herr, E.L. (1996). A comparative study of declared and undeclared college students on career uncertainty and involvement in career development activities. *Journal of Counseling & Development*, 74, 632-639.
- Piggot-Irvine, E. (2006). Establishing criteria for effective professional development and use in evaluating an action research based programme. *Journal of In-service Education*, 32, 477-496.
- Repetto, E. (2001). Evaluation of a career development program in Spain. *International Journal for Educational and Vocational Guidance*, 1, 107-120.

- Whiston, S.C., & Brecheisen, B.K. (2001). Evaluating the Effectiveness of Adult Career Development Programs. *Adult career development: Concepts, issues, and practices*. Alexandria, VA: National Career Development Association.
- Whiston, S.C., Sexton, T.L. & Lasoff, D.L. (1998). Career-intervention outcome: A replication and extension of Oliver and Spokane (1988). *Journal of Counseling Psychology*, 45, 150- 165.