

DEVELOPING RESEARCH SKILLS FOR UNDERGRADUATE BUSINESS STUDENTS: EXPERIENTIAL LEARNING ON INTRODUCTION TO PERSONNEL ADMINISTRATION AND INDUSTRIAL RELATIONS COURSE

Carmen I. Figueroa, Ph.D.

University of Puerto Rico,
Mayagüez Campus

Cándida González, PHR

University of Puerto Rico
Mayagüez Campus

ABSTRACT

This paper reports on research into developing research skills in human resources management of apprentices through experiential learning. The target groups were undergraduate business students registered in the Introduction to Personnel and Industrial Relations course. The research identified the appreciation level of importance and satisfaction from apprentices since the acquisition and development of research skills for human resources management discipline. Data analysis indicates, firstly the importance of acquisition and development research skills in human resources management are congruent with the needs required for the contemporary organization and career objectives of the apprentices and future human resources professionals. The results obtained have positive implications on apprentices from research skills statements such as organizational goal's achievement, job analysis, human resources audit, strategic planning, statistical analysis, and evidence-based in human resources management to diminish the skills gap through the curriculum development in human resources management.

INTRODUCTION

The upward trend in contemporary organizations its focus on work performance at individual, group and inter-organizational levels, enforcing the business education to promote on undergraduate students the acquisition and development of basic skills to deal with themes such as: diversity, learning organization, strategic-based metrics, talent management, workforce planning, among others. McLagan (1998:179) identified several essential competencies for human resources development practitioners aggregated into four competency clusters: business competencies, interpersonal competencies, technical competencies and intellectual competencies. Particularly, this research revealed competencies such as: business and industry understanding, cost-benefit analysis skills, group process skills, career development understanding, research skills, model building skills, among others.

Basically, the concern of skills shortages in the accessible labor pool emerges to be rising. The higher education environment needs to understand the necessity of the contemporary employers to generate graduates with the required skills for the today's workplace. The Society of Human Resources Management details on the executive summary report of the SHRM 2007 Symposium on the Workforce Readiness of the Future U.S. Labor Poll, "employ-

ers have not clearly stated the skills and capabilities they desire, and the U.S. educational system is not producing the quantity and quality of graduate needed." Dohm and Sniper (2007) highlights the projections from the Bureau of Statistics (BLS) on the U.S. Department of Labor, between now and the year 2016 twice as many job openings – 33.4 million – will be the result of replacements needs as compared to 17.4 million due to economic growth.

Furthermore, the Association for Training and Development (ASTD) (January 2013) redefined the competency model on 2013 focus on the skills and knowledge required for human resources development practitioners. The 2013 ASTD Competency Model emphasizes on foundational competencies (business skills, global mindset, industry knowledge, interpersonal skills, personal skills, and technology literacy) and mainly details training and development areas of expertise such as: integrated talent management, change management, knowledge management, change management, performance improvement among others. The *Introduction to Personnel and Labor Relations* course was designed to accommodate multiple learning styles and maximize the learner's experience. In this study, the course combines multiple student-centered activities to accomplish judgments, and engaging their learning styles to particular course curriculum or instructional design.

REVIEW OF LITERATURE

Institutional Background

The Mayagüez Campus of the University of Puerto Rico (UPRM) originated in 1911 as the College of Agriculture. The development and diversification of academic programs maintains its reputation as the key institution in higher education in the Caribbean and Puerto Rico. Sharma and Dika (2007) emphasize that certain aspects of the vision of UPRM should ensure continuity as a leading institution of higher education in Puerto Rico and the Western Hemisphere so that meets the needs of modern society considering the dynamic global environment and the constant search for truth, knowledge, justice and peace. The quality of the students and graduates of UPRM has been recognized globally for organizations that recruit students for permanent positions, internships in Puerto Rico and the United States as well as exchange programs worldwide.

Predominantly, the history of the College of Business Administration at UPRM spans over forty years. The vision of the College of Business Administration of the Mayagüez Campus following points; “*in Puerto Rico be the best option in Business Administration for the best students, faculty and recruiters.*” Similarly, the mission of the College of Business Administration of the Mayagüez Campus outlines the statement that follows: “*prepare qualified graduates for the business world through a comprehensive education and promote research excellence recognized locally and internationally.*”

The *Introduction to Personnel Management and Industrial Relations* (ESOR 4008) is a core curriculum undergraduate course in Business Administration. Essentially, ESOR 4008 allows the student to understand processes such as personnel management, recruitment, selection, training and administration of salaries and wages. The course is designed to enable students to develop interpersonal skills, ethical and professional conduct, the acquisition of knowledge and skills from the perspective of business nationally and internationally and the development of skills, abilities and knowledge related to business. The teaching-learning course design includes active learning through class discussions, case studies, exercises, experiences, among others.

Experiential Learning Theory

Experiential learning theory involves active learning mainly from experience with positive outcomes. The primary focus should be on engaging students in a process that best enhances their learning (Dewey 1987). Also,

Lewis and Williams (1994) highlight the significance of the twenty-first century on the transformation from formal to experience-based. Prior research has reveal that learning styles are influenced by personality type, educational specialization, career choice, current job role and tasks, and cultural influences (Kolb, 1984; Kolb & Kolb, 2005). Also, experiential learning may be obtained from a variety of sources, such as work experience, training activities, cooperative education opportunities, among others. The learning process as a cyclical process focused on the four framing stage-cycles such as concrete experience, reflective observation, and abstract conceptualization and planned experimentation.

Education and pedagogy discipline offers many ways to drive the learning experience between the facilitator and apprentices. As well, experiential learning theory suggests an approach to study management as a learning process that is dynamic and holistic, working at three different levels (individual, team and organization). The main question commonly determines the best group of learning techniques to establish formal educational experience to promote knowledge. The upward trends from contemporary organizations requesting knowledge and skills development on business research and the usage of metrics in promoting better results place challenges on business education. The experiential learning process provides several learning constructs such as knowledge, skill, and value directly from the experience and outcomes. To meet these trends, organizations are placing alliances and partnerships with universities including a range of experiential opportunities extending from internships, cooperative education, experiential fields experiences, among others to expand the content understandings and challenge the apprentices.

Development of Research Skills

The higher education environment in the twenty-first century aims to further develop the abilities, skills and competencies, particularly in the area of human resources management. Mainly, the contemporary organizations enforced the undergraduate student's background with the business research skills appropriate to addressing managerial challenges and organizational goals. Ulrich (2012) argued about the capability of the human resource professional to acquire and develop the essential competencies as strategic thinker, change agent, talent expert, data oriented, and credible leader. Also, Ulrich (2012) mentioned about the contemporary challenge to Business Schools to consider the transformation of undergraduate business students and prepare them with the essential competencies such as active strategist, organization navigation expert, technology champion, active leader,

and human resources mastery to deal in the 21st organizations scenario. Business Schools should consider the curriculum development to promote the essential competencies domain in undergraduate business students such as capability and talent management, credible leader, business and human resources integration, strategic planning, change management.

Descriptive studies suggest intellectual gain is associated with undergraduate research (KHakim 1998, Kardash 2000, Raukhous and Czaja 2002, Hathaway et al. 2002). The development of research skills place based learning when carefully selected experiences are supported from classroom interaction promoted by reflection exercises, critical analysis, among others on special themes, simulation exercises, synthesis, case analysis portfolio, written reports, and oral presentations, among others. The instructional design for the development of research skills includes the consideration of both practical and traditional research on human resources development. Apprentice's experiences are structured to require the learner to take the initiative, make decisions, and to be accountable for the results. The purpose of this study is to examine an instance of significance change of apprentices in higher education for the acquisition and development of knowledge in research methodology in human resources management. This study aims to develop the first stage as complete a picture as possible of process, challenges, and outcomes necessary to develop the research methodology in human resources management and labor relations course.

The principle research questions this work seeks to answer are:

1. What research skills do apprentices most hope develop in research skills in human resources management?
2. How did the apprentices learning experiences through the classroom practices contribute to the awareness and the acquisition of knowledge in research methodology in human resources management?

METHODOLOGY

Data for this study were gathered from 71 undergraduate students (apprentices) enrolled in the *Introduction to Personnel Administration and Labor Relations* course at a public university in the western region of Puerto Rico. The study design is quantitative and descriptive. The first phase of this study comprises the first academic semester (Fall 2012). The aim of the study was to derive an insight in developing research skills in human resources manage-

ment by the appreciation of the apprentices through the classroom experiential learning activities.

The undergraduate business students at the College of Business Administration are requiring completing the *Principles of Management* course (ESOR 4006) as prerequisite of the *Introduction to Personnel Administration and Labor Relations* course. Also, the undergraduate students enrolled in the course of 4008 were categorized as ESOR indicator study for analyzing the acquisition and development of research skills in the management of human resources. The instructional design based on experiential learning includes a combination of methods such as case analysis, simulations, role playing, among others. A first pilot test (with four apprentices) helped to identify a number of problems of wording. The population size of apprentices enrolled in the Introduction to Personnel and Labor Administration was 75 undergraduate business students from the College of Business Administration at University of Puerto Rico – Mayaguez.

At the end of the semester, a total of 71 apprentices were asked to fill out a questionnaire at classroom and could be used for statistical analysis. They complete a self-administered questionnaire/assessment with closed questions labeled as five-point Likert-scales (5=strongly agree, 1=disagree) to identify the acquisition and development of the research skills in the *Introduction to Personnel Administration and Labor Relations* course. The instrument was reviewed by experts in the field of human resources and was administered before the end of the First Semester 2012-2013 (Fall 2012). The responses received from apprentices overpass the minimum quantity of responses with a confidence level of 95% and 5% in the margin of error.

Table 1 details the nineteen of statements corresponding to the design of the questionnaire comprising the research skills in human resources management based on the main themes of the course textbook. The *Organizational Statements Cluster* comprise seven statements summarize the relevant concepts in research on what human resources management it's important to all managers in organization. The *Workforce Planning Statements Cluster* consist of six statements includes the important viewpoints on research that managers should know what they want to accomplish strategically before formulating and putting in place specific humans resources management policies and practices. The *Human Resources Management Statements Cluster* elaborates the main research features the strategic human resources management process, human resource management metrics and analysis. Also, the questionnaire includes five statement lines academic and demographic data (degree, major, minor, year of study, and gender).

TABLE 1 RESEARCH SKILLS IN HUMAN RESOURCES MANAGEMENT LIST OF STATEMENTS*	
Cluster	Definition
Organizational Statements Cluster	
Goal's Achievement	The research methodology in human resources management supports the strategic goal's achievement in the organization.
Business Plan	The research methodology in human resources management supports the creation of the business plan and improves productivity through Human Resources Information Systems (HRIS).
Management Decision Support	Strategic planning is important to all managers in order to supports decisions using Human Resources Systems Activities Metrics.
Benchmarking	Benchmarking figures (By Industry, Employer Size, Company Revenue, and Geographic Region, among others) enables employers to compare their own HR-related metric results with those of other companies.
High Performance Work Practices	Employers today often views all the staff-train-reward activities as part of a single integrated talent management process using HR strategic-based metrics.
EEO Laws Compliance	Equal Employment Opportunity (EEO) laws compliance should be able to apply procedures regarding HR activities like employment selection, record keeping, and preemployment inquires using research methodology.
Scientific, Evidence-Based Approach	One reason to measure, benchmark, and scientifically analyze human resources management practices is to identify and promote high-performance work practices.
Workforce Planning Statements Cluster	
Talent Management Process	Today employers often view all the staff-train-reward activities as part of a single integrated talent management process using HR Strategic-based metrics.
Workforce/Talent Analytics and Data Mining	Employers increasingly us workforce analytics (or "talent analytics") software applications to analyze their human resources data and to draw conclusions from it.
Data Mining	Data mining systems use tools like statistical analysis to shift through data looking relationships; also the manager can discover patterns that he or she can use to make predictions.
Methods of Collecting Job Analysis Information	The methods for collecting job analysis information include interviews, questionnaires, observation, participant dairy/logs, and quantitative techniques such as position analysis questionnaires.
Strategic Planning	Strategic-based metrics are metrics that focus on measuring the activities that contribute to achieveing company's strategic aims.
Human Resources Audit	For managers, the key point of being "scientific" is to make better human resources management decisions.
Human Resources Management Statements Cluster	
Human Resources Trends and Metrics	The management process depends on human resources trends and metrics to audit both the firm's environment, and the firm's strengths and weaknesses.
Human Resources Methods	The huge impact on how people work, and therefore on the skills and training today's workers needs illustrates how human resources management methods can boost organization's profitability and competitiveness.
Benefits of Metrics	The HR managers use the benefits of metrics (organizational data, compensation data, and employment data, among others) by which to gauge whether his or her new policies and practices are producing the required employee competencies and behaviors.
Strategic-Based Metrics	Data mining shifts through huge amounts of employee data to identify correlations that employers then use to improve their employee selection and other practices.
Statistical Analysis	Human Resources audit generally involves an analysis by which organization measures, compasses, and determines the accomplishments to develop HR function.
Evidence-Based Human Resource Management	Human Resources Managers should be able to apply evidence-based human resource management, which means the use of data, facts, analytics, and scientific rigor, critical evaluation to support HRM proposals, decisions, practices, and conclusions.
*The list of statement and the corresponding definition was based on the main topics included in the textbook selected (Dessler, 2013) for the Introduction to Personnel Administration and Labor Relations.	

FINDINGS

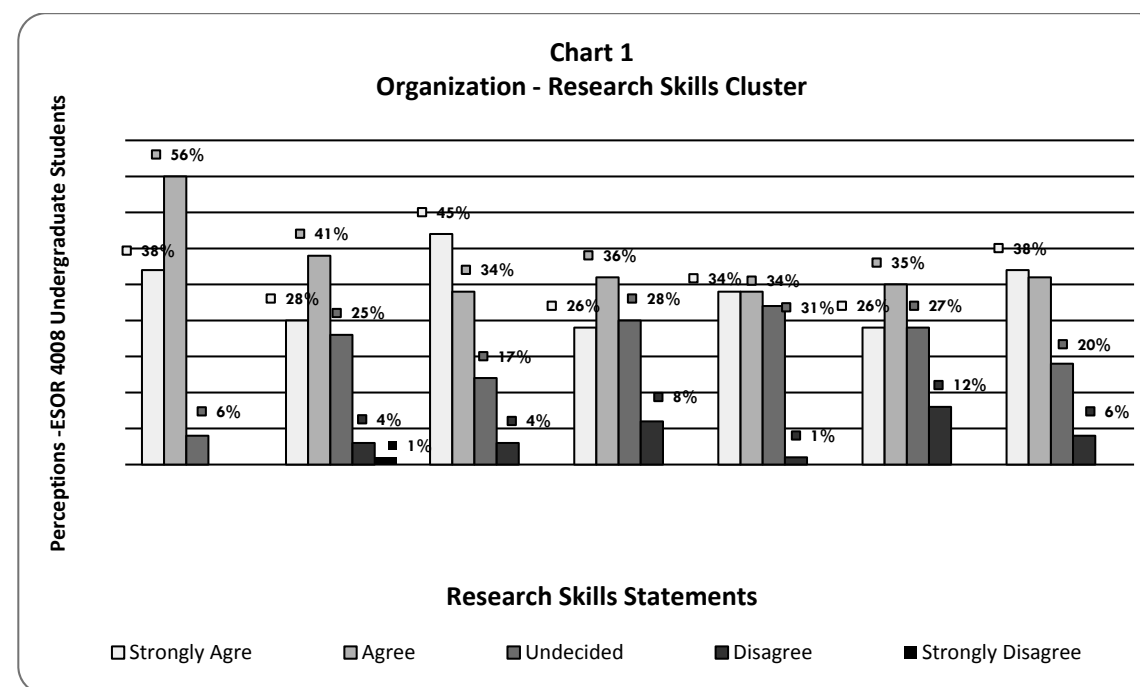
Chart 1 shows the organizational cluster from the list of statements on research skills in human resources management. The organizational cluster includes the skills development on the following statement such as: organizational goal achievement, business plan, management decision support, benchmarking, high performance work practice, and EEO laws compliance. The apprentices enrolled on the undergraduate course *Introduction to Personnel Administration and Labor Relations* provided their appreciation of the research skills acquisition and development.

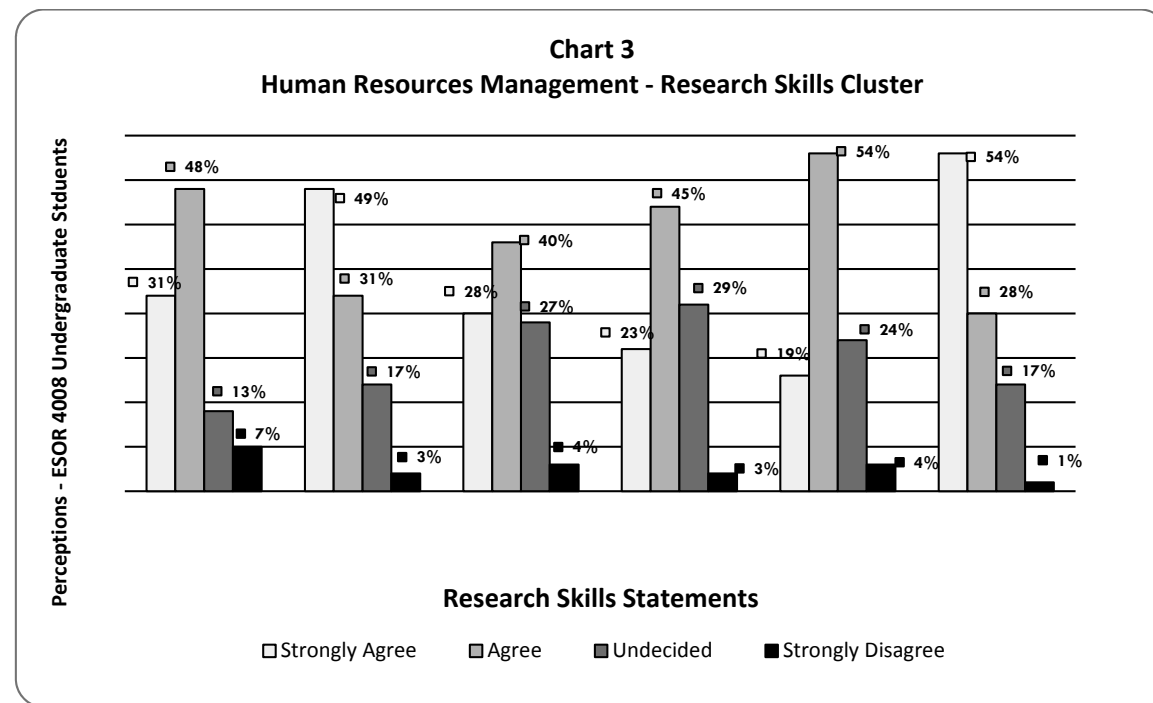
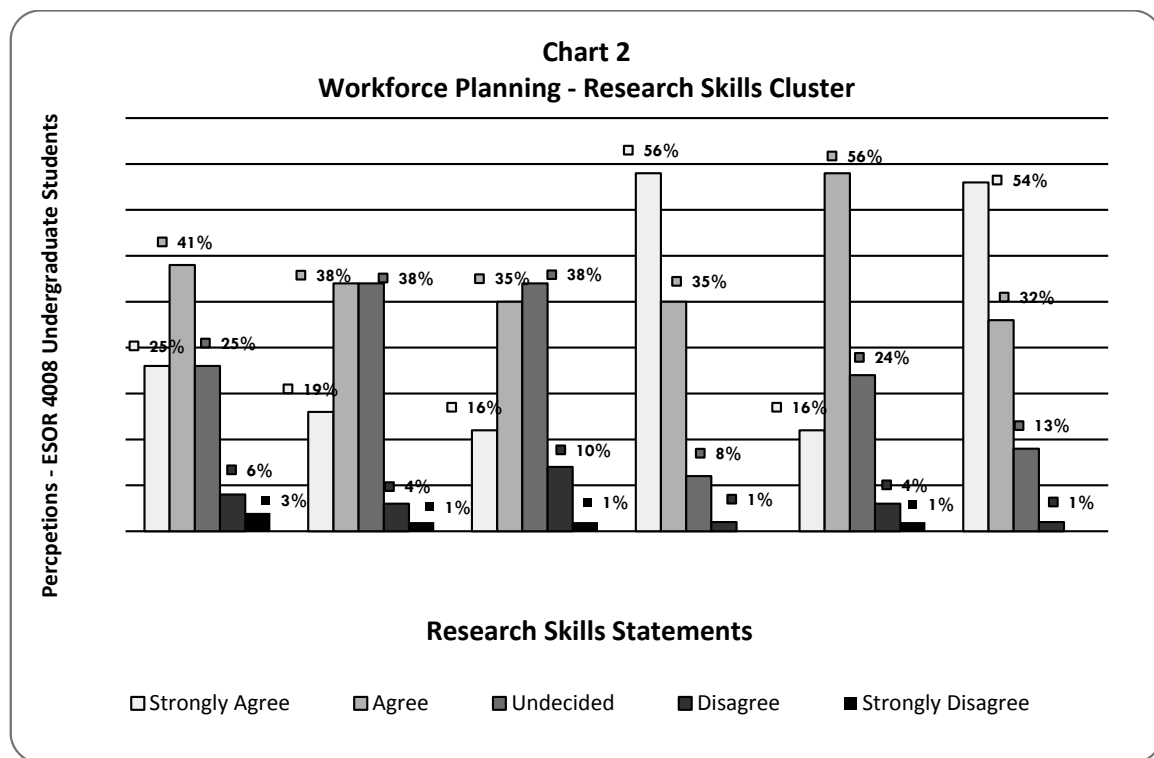
The Organizational Cluster demonstrates three research skills in human resources management statements were acquired and developed by apprentices: Organizational Goal's Achievement (n=40, 56%), Management Decision Support (n=32, 45%), and Business Plan (n=29, 41%). The second group of research skill in human resources management statements obtained by apprentices through the experiential learning were EEO Law Compliance (n=27, 38%), Benchmarking (n=26, 36%), and High Performance Work Practices (n=24, 34%). Therefore, the research skills statements focus on High Performance Work Practices (n=22, 31%), Benchmarking (n=20, 28%), Scientific-Base Approach (n=19, 27%) illustrate complex management concepts to apprentices and should be accentuate in the advance undergraduate courses in human resources management. Further, gaps that currently exist in among the human resources professionals population also

point to the need for increase exposure to business acumen and strategic thinking development opportunities to apprentices. The main factors influencing the acquisition and development of research skills is based on the experiential learning activities emphasizing the strategic implications of a dynamic human resources management environment, and the fundamentals issues related with the organizational external influences, global environment and equal employment opportunity compliance.

Chart 2 demonstrates the perceptions from undergraduate business students on the acquisition and development of Workforce Planning Research Skills Cluster. The main research skills development are Methods of Collecting Job Analysis Information (n = 39, 56%), Human Resources Audit (n = 39, 56%), Strategic Planning (n = 38, 54%), and Talent Management Process (n = 29, 41%). Furthermore, Workforce/Talent Analytics and Data Mining (n=27, 38%) and Data Mining (n= 27, 38%) represent the two research skills that shows a similar trend on the Workforce Planning Cluster. The recognition and the necessity for field experience to analyze human resources data and statistical analysis offered through internships and cooperative education by the College of Business Administration during the fourth year of study explains this trend and responds to the 21st century organization request and skills gap of labor pool.

The College of Business Administration professors have been recognized by their achievements and intellectual





contributions such as academic administration in higher education, business education, entrepreneurial environment, finance environment, strategic management, and industrial management. Also, the Research Center at the College of Business Administration supports laboratory research process for faculty, students, and administrative staff.

the interrelationship among human resources management functions, and the role of Human Resources Professionals in developing high performance work organizations.

CONCLUSIONS AND IMPLICATIONS

Findings of the research are that undergraduate students enrolled in the *Introduction to Personnel and Labor Relations* have defined evaluation as the integration of both description and judgment, in which statements description emphasizes the objective part of the assessment, and the judgment parts dwells on its subjective aspects. The 19-item instrument provides a means for potentially enhancing the objectivity of the descriptive part of the evaluation. The questionnaire results found significant evidence of the acquisition and development of research skills using several experiential learning techniques. The data obtained from this study can serve as both summative assessment of apprentice’s acquisition of specific research skills during the experiential learning activities designed through the *Introduction to Personnel and labor Relations* course.

This study revealed the engagement in research experiences from undergraduate business students as well as formative feedback regarding which research skills they have acquired, and which require further improvement. Consequently, experiential learning holds great potential

Chart 3 reveals the predominant appreciation of acquisition and development from apprentices on the Human Resources Management Skills Cluster. The predominant research skills are Evidence-Based Human Resources Management (n=38, 54%), Statistical Analysis (n=38, 54%) reveal the advantages receive from the inclusion of experiential learning on the instructional design and significance to apprentices be aware of the human resource planning and job analysis in the contemporary organization. This trend demonstrate the experiential learning allowed the apprentices enrolled in the introductory course in human resources and labor relations course to understand the importance of the usage of metrics to categorize the results considering the strategy and objectives of the organization. The appreciation develops by apprentices such as Human Resources Methods (n= 34, 48%), and Human Resources Trends and Metrics Strategic-Based Metrics (n=34, 48%), Benefits of Metrics (n=28, 40%) sustains the general learning goals from the *Introductory to Personnel and Labor Relations* course. The apprentices should able to identify the research metrics, also describe

in learning that is occurring. Future research could examine the dynamics between the student and teacher interaction. With the changing demographics and more international students and minorities entering post-secondary education, more research is needed on the learning styles of human resources management students. Further development and empirical research on implementation, it nevertheless provides a conceptual platform from which to explore additional complex areas on the acquisition and development of research skills in human resources management considering the influence of learning style and delivery.

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